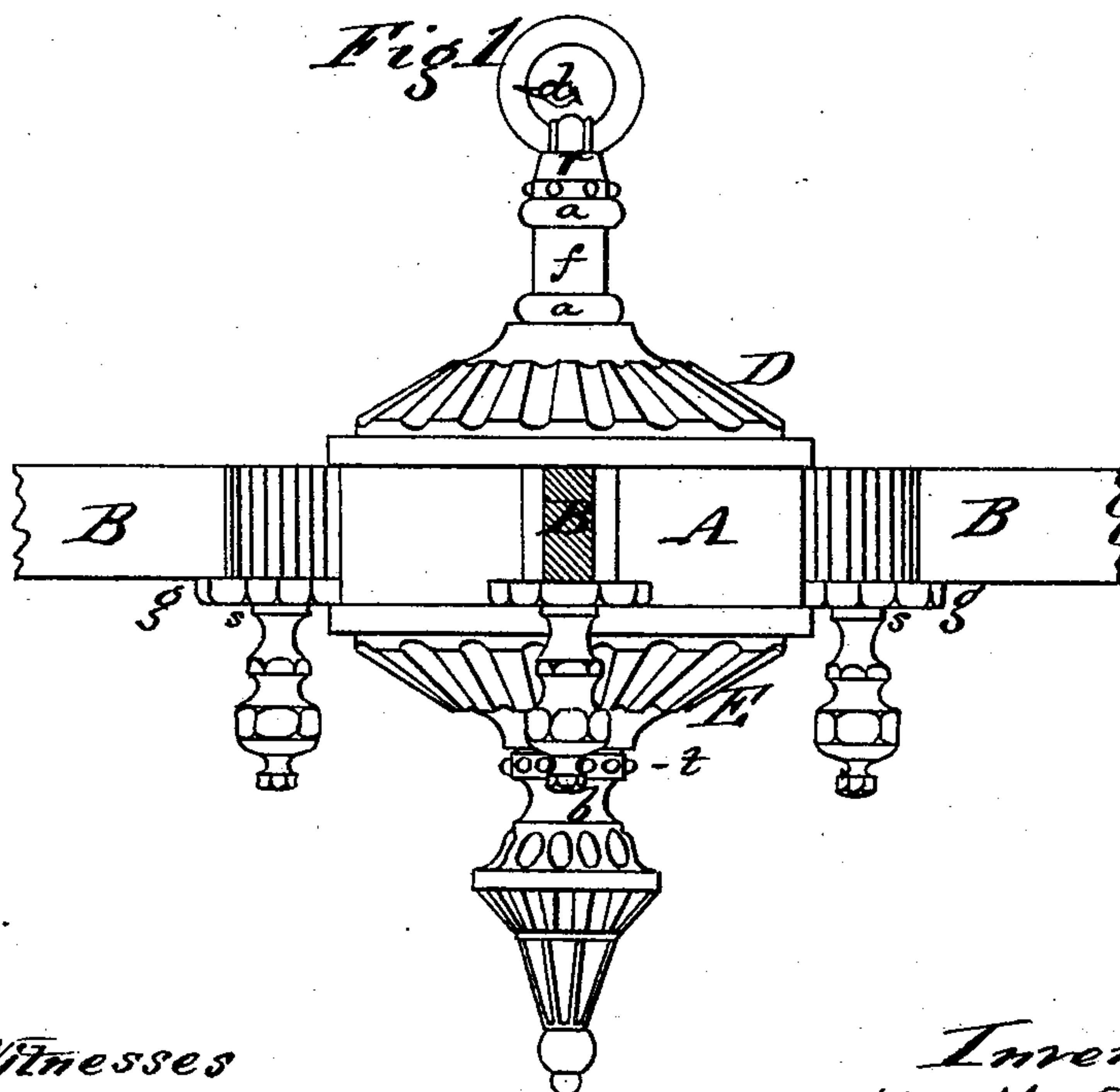
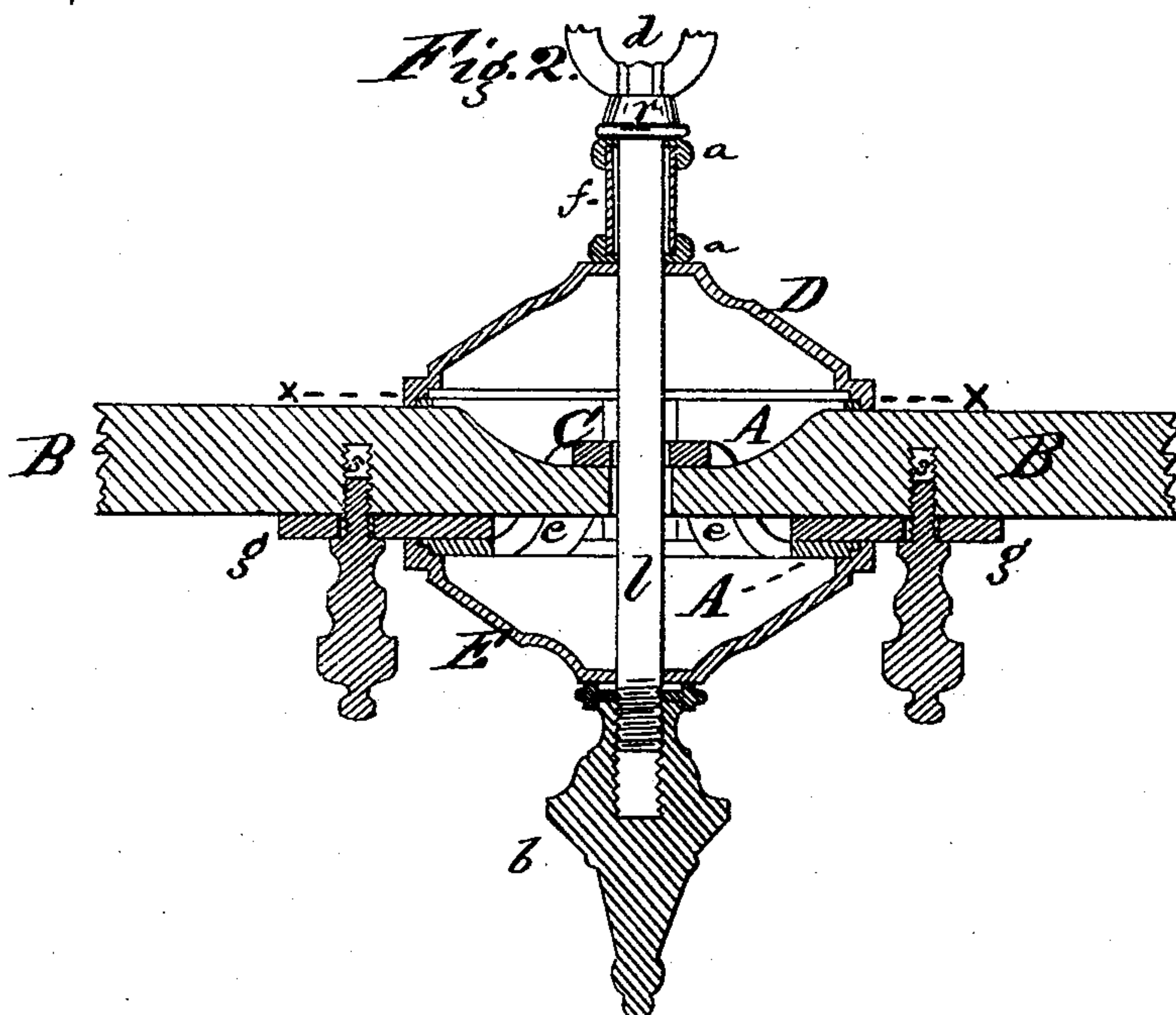


M. W. HOUSE.

Chandeliers and Brackets for Lamps.

No. 151,982.

Patented June 16, 1874.

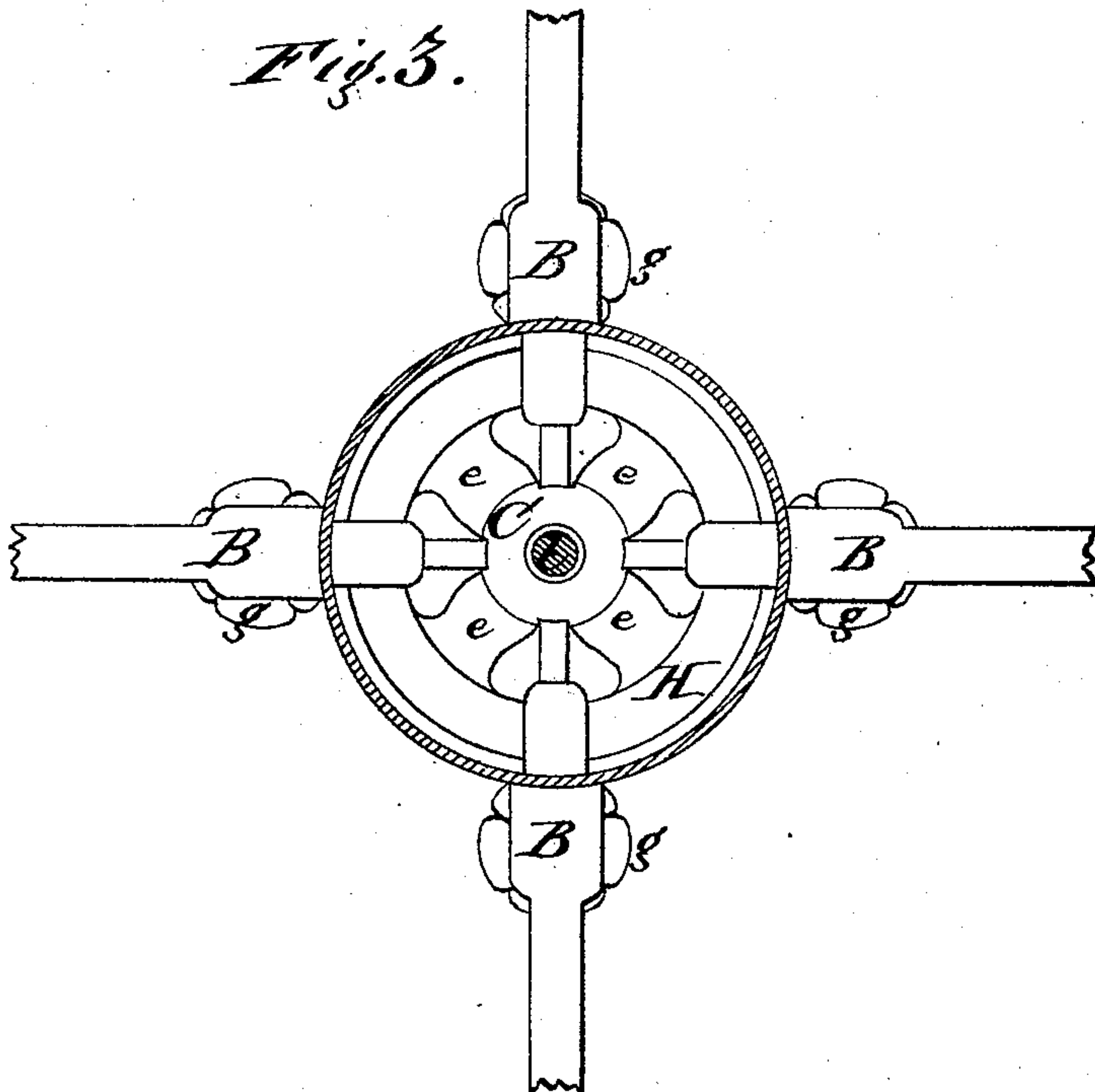


Witnesses  
W. L. Bennett.  
W. H. Isaacs.

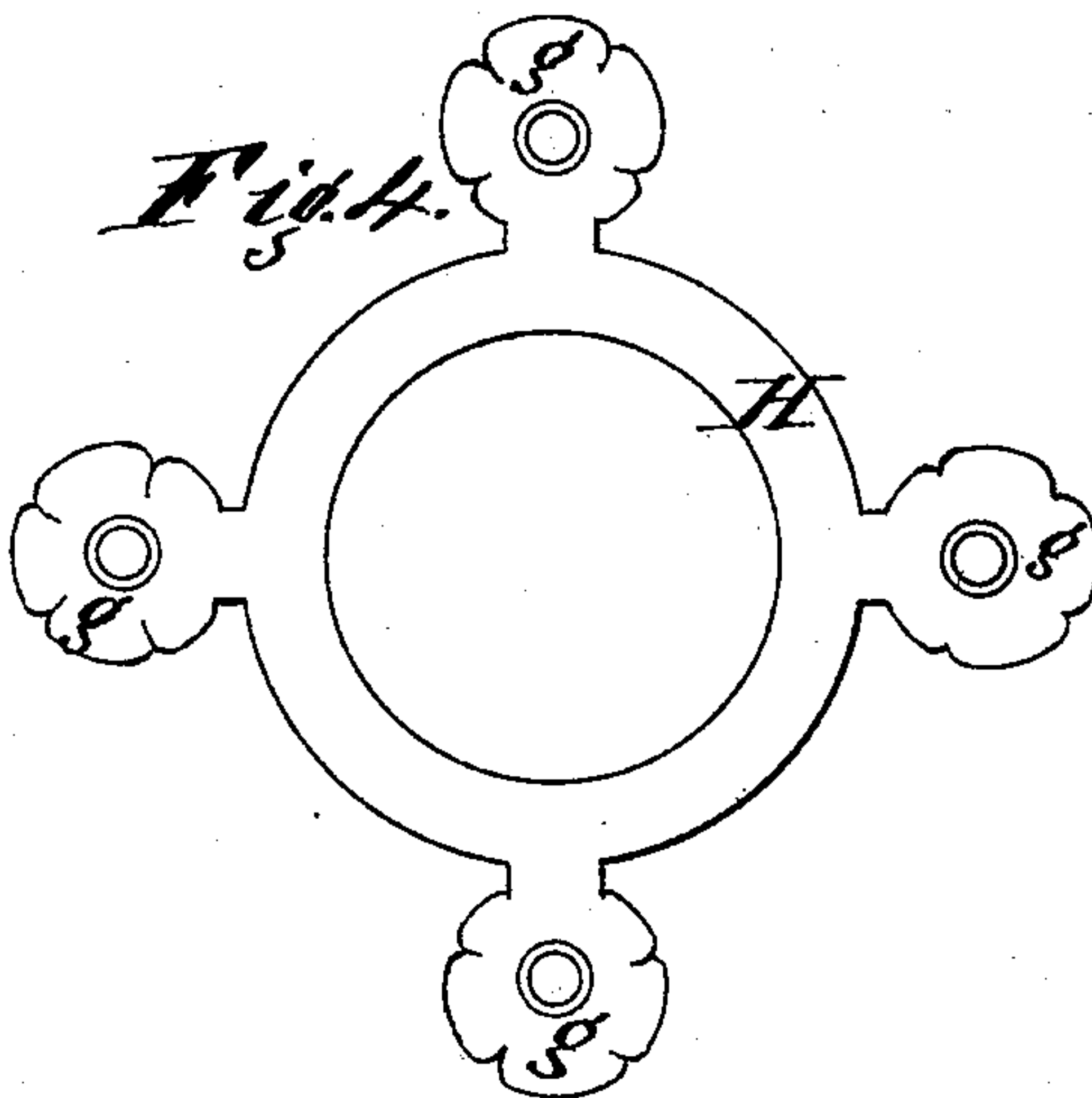
Inventor  
M. W. House  
by his att.  
C. S. Remick

**M. W. HOUSE.**  
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*Fig. 3.*



*Fig. 4.*



*Witnesses*  
*W. L. Bennett.*  
*W. H. Isaac.*

*Inventor*  
*M. W. House*  
*by his att.*  
*C. L. Penwick*



# UNITED STATES PATENT OFFICE.

MARK WIGGINS HOUSE, OF CLEVELAND, OHIO.

## IMPROVEMENT IN CHANDELIERS AND BRACKETS FOR LAMPS.

Specification forming part of Letters Patent No. **151,982**, dated June 16, 1874; application filed November 20, 1873.

*To all whom it may concern:*

Be it known that I, MARK WIGGINS HOUSE, of Cleveland, in the county of Cuyahoga and State of Ohio, have made an invention of certain new and useful Improvements in Chandeliers and Brackets for Lamps and similar articles; and that the following is a full, clear, and exact description and specification of the same.

The object of my invention is to enable hanging fixtures with two or more arms for supporting lamps or other articles to be constructed at a low cost; and to this end my invention consists of certain new combinations of instrumentalities, which are specified at the close of this schedule.

In order that the said invention may be fully understood, I have represented in the accompanying drawings, and will proceed to describe, a chandelier embodying all my improvements.

In the said drawings, Figure 1 represents a side view of the chandelier with parts of the perforated hub, the lugs, and the lug-fastenings for the said arms. Fig. 2 represents a vertical central section of the same. Fig. 3 represents a horizontal section of the same at the line *xx* of Fig. 2. Fig. 4 represents a plan of the lugs and the ring, which, in this instance, connects them.

In the said chandelier there is a hub, A, which is perforated with slots, to permit the arms B to project through it. The arms, in this example, are four in number, and each extends through a slot of the hub A. The inner end of each arm within the hub is smooth and straight at its upper and lower edges, so that it may be slipped in radially beneath an internal or central bearing, C, which is connected, by arms *e*, with the hub A, so that the under side of each arm is sustained by the said hub; and the inner end of the arm is prevented from tipping up by the central bearing C. In order to hold the arm from being drawn out longitudinally from the hub A a lug, *g*, is connected with said hub, and is arranged below the arm, there being as many lugs as there are arms. The lug is perforated to permit a screw, *s*, to be inserted through it; and the arm is drilled and tapped, so that the screw *s* may engage in it, and fasten it to the lug.

Any other suitable fastening may be substi-

tuted in place of the lug-screw, so as to fasten the arm after it is slipped into the hub.

The upper side of the hub is covered by the upper head D; and the lower side of the hub is closed by a lower head, E.

The lugs *g* may be cast fast to the hub A, or to the lower head E, or to the upper head D; but I prefer to cast the lugs in one piece with a ring, H, which is dropped into the hub before the arms are put into place; and the lugs extend through the same slots as their respective arms.

The hub and heads above described are rigidly connected by the suspension-rod *l*, which is inserted through corresponding holes at the central parts of the upper and lower heads D E, and of the central bearing C. The lower end of this rod is fitted with an ornamental nut or pendant, *b*, and its upper end is fitted with a ring, *d*, by which the fixture may be suspended. The ring is, by preference, cast in one piece, with a hub *r*, which is screwed upon the rod *l*. An ornamental ring, *t*, is applied to the screw-rod above the ornamental nut *b*. The portion of the screw-rod which extends above the upper head D is covered by a tube, *f*, which is centered relatively to the screw-rod by two socket-rings, *a a*. The length of the portion of the rod, and the length of the tube-covering *f*, may be varied as circumstances render expedient; and, in place of employing a covering-tube in one piece, several pieces of tubing, separated by one or more ornamental rings, may be used.

The several parts of the fixture above described may be made plain-surfaced, or may be ornamented. They may also be made of such forms as the taste or judgment of the constructor may determine.

The screws *s* and lugs *g* may be arranged at the upper sides of the arms B; but I prefer to apply them as represented in the drawing, as they are then more ornamental, and the screw-heads may form ornamental pendants. The lugs also, when below the arms, extend the bearings for the under side of the arms to a greater distance from the center of the fixture.

The end of the arms B may be fitted in the usual manner with cups to hold lamps, or with sconces for candles.

If preferred, the central bearing C for the

upper sides of the inner ends of the arms may be cast in one piece with the ring H, which extends under the arms B, or with the upper rim of the hub A, instead of with its lower rim.

The essential features of the fixture are that the inner ends of the arms are prevented from tipping up by the central bearing over the upper sides of those ends, while the lower sides of the arms are supported beneath and at a distance from the center of the fixture; and that the bearing for the ends of the upper sides, and the support for the lower sides, are rigidly connected together. Also, that the arms may be slipped into and out of the hub without slacking the suspension-rod l, the arms thus constituting what may be termed slip-arms.

I claim as my invention—

1. The combination, substantially as before set forth, of the slip-arms, the central bearing above their inner ends, and the perforated hub through which the said arms extend.

2. The combination, substantially as before set forth, of the slip-arms, the central bearing above their inner ends, the perforated hub, the lugs, and the fastenings.

3. The combination, substantially as before set forth, of the slip-arms, the central bearing above their inner ends, the perforated hub, and the suspension-rod.

4. The combination, substantially as before set forth, of the slip-arms, the central bearing above their inner ends, the perforated hub, the heads of said case, and the suspension-rod.

Witness my hand this 10th day of November, A. D. 1873.

MARK WIGGINS HOUSE.

Witnesses:

CHARLES GORDON,  
FREDK. L. HALL.