

(No Model.)

C. H. LYMAN.
LAMP.

No. 376,716.

Patented Jan. 17, 1888.

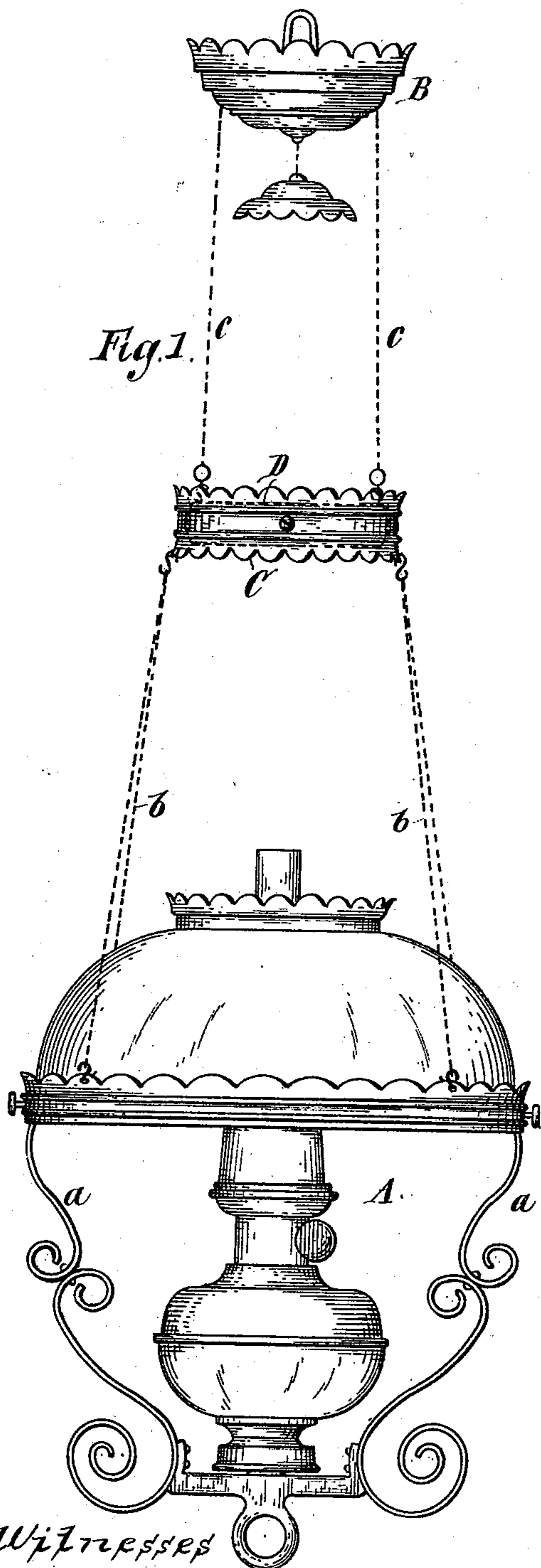


Fig. 1.

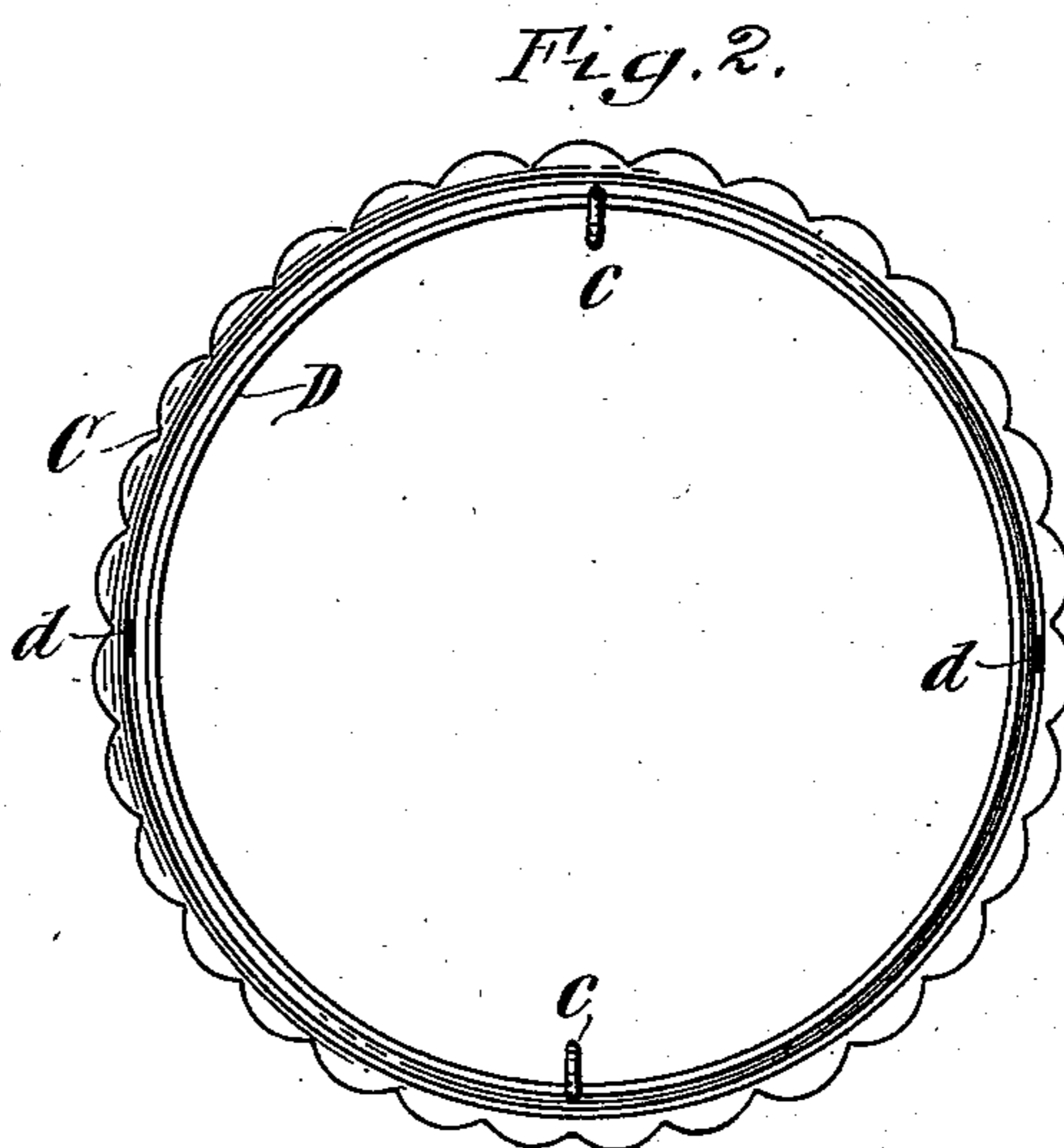


Fig. 2.

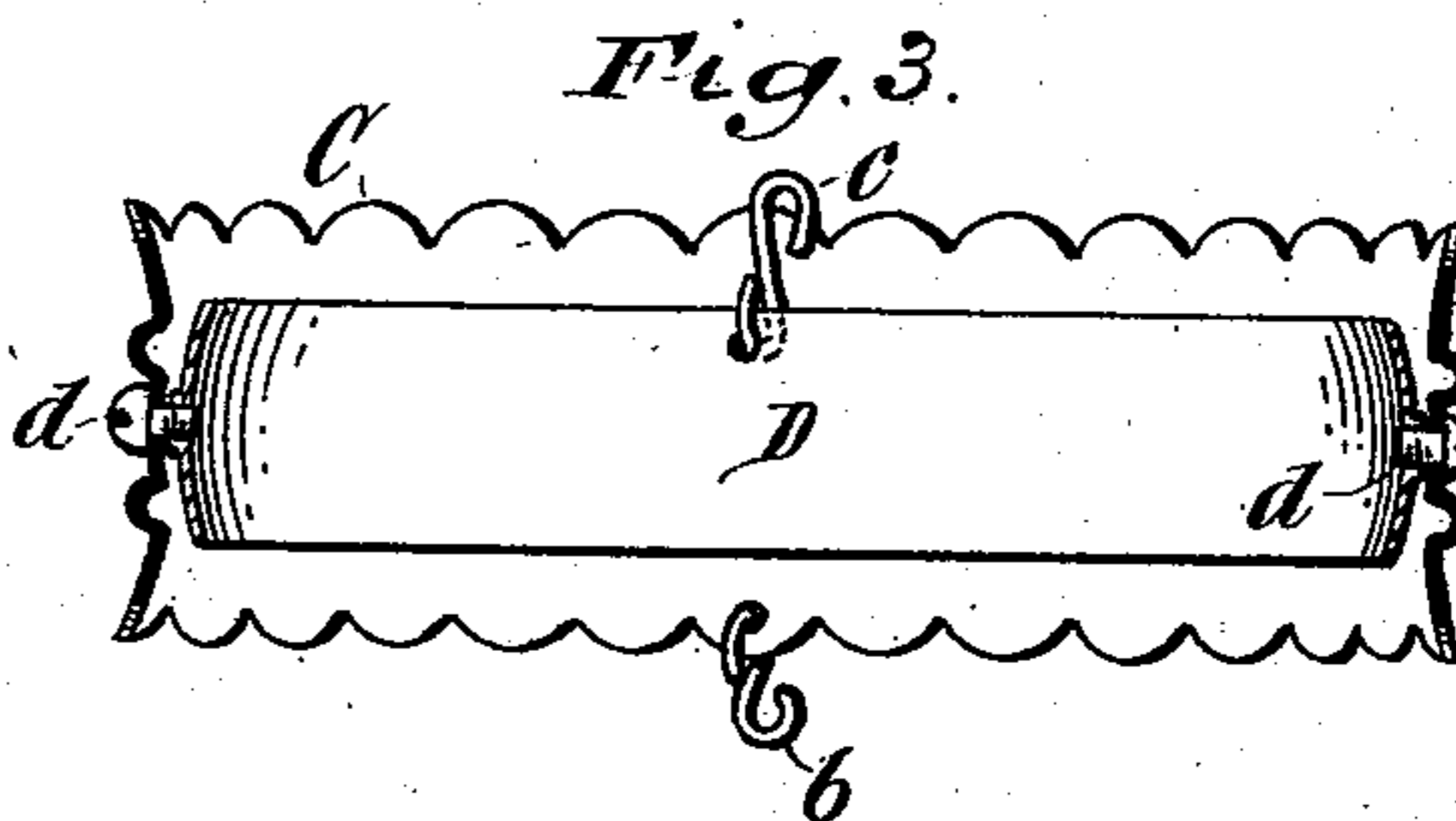


Fig. 3.

Witnesses
Geo. Wadman
James D. Griswold

Inventor
Charles H. Lyman
by his Attorneys
Gifford & Brown

UNITED STATES PATENT OFFICE.

CHARLES H. LYMAN, OF ANSONIA, CONNECTICUT, ASSIGNOR TO THE ANSONIA BRASS AND COPPER COMPANY AND WOLCOTT A. HULL, BOTH OF NEW YORK, N. Y.

LAMP.

SPECIFICATION forming part of Letters Patent No. 376,716, dated January 17, 1888.

Application filed January 24, 1887. Serial No. 225,342. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. LYMAN, of Ansonia, in the county of New Haven and State of Connecticut, have invented a certain new and useful Improvement in Lamps, of which the following is a specification.

My improvement relates to hanging lamps, and particularly to that class of hanging lamps which comprise or are used with a suspending device having a spring-actuated barrel upon which suspending chains are wound. In lamps of the class last referred to it is common to employ two chains or like contrivances extending upwardly from the lamp, and two other chains extend downward from the suspending device. It often happens that the chains belonging to the suspending device wind up unevenly, so that the pendent end of one will be longer than the other.

The object of my improvement is to compensate for variations in the chains, so that the lamps will always be properly suspended.

Another object of my improvement is to provide such means for compensating for variation in the chains that said means will not be subjected directly to the heat and smoke ascending from the lamp-chimney and that the smoke-bell may be suspended from a suspension device concentrically above the lamp-chimney, to which the heat and smoke from the chimney may pass directly without coming in contact with the compensating device.

Still another object of my improvement is to provide means for suspending the smoke-bell above the compensating device, the latter being so constructed that it may be moved into a position where the smoke-bell will extend through it, thus enabling the compensating device and the lamp to be brought nearer the ceiling than it could be if the smoke-bell were suspended from the compensating device.

In the accompanying drawings, Figure 1 is a side view of a lamp, a suspending device, and other parts embodying my invention. Fig. 2 is a top view of two rings, included in Fig. 1, intermediately of the lamp and suspending device. Fig. 3 is a transverse section

of these two rings, taken parallel with their pivotal connections.

Similar letters of reference designate corresponding parts in all the figures.

A designates a hanging lamp, which may be of any ordinary style. It comprises a frame, *a*, and chains or suspenders *b*, (shown as two in number,) connected to the upper part of the frame *a* at opposite points.

B designates a suspending device, which is of a well-known kind, comprising a rotary drum or barrel, chains *c*, wound upon the exterior of the drum and depending at the ends from said drum, and a convolute spring arranged within the drum and connected to it and the arbor, about which it rotates, so as to tend to effect the rotation of the drum in such direction that it will wind up the chains *c*. I may here remark that in using the term "chains" in this specification I mean to cover as well all analogous contrivances, among which I may mention cords. The spring within the drum sustains or contributes toward sustaining the weight of the lamp, so as to hold it in any desirable position. With a suspending device of the character described is frequently combined a brake for aiding the spring of the device in suspending the lamp.

C D designate two rings, which may be made of sheet metal or any other suitable material. They are arranged one within the other and pivotally connected together diametrically. The means shown for connecting them are screws *d*, extending through the outer ring, C, and entering sockets which extend from the exterior to the inner ring, D. The pivots thus formed are, it will be seen, at diametrically-opposite points of the rings.

The chains *c* of the suspending device are connected to the inner ring, D, in the present example of my improvement, and the chains or suspenders *b* of the lamp are connected with the outer ring, C. Obviously the chains or suspenders of the lamp might be secured to the inner ring and the chains of the suspending device to the outer ring. The chains may be secured to the rings by hooking their lower

links into holes provided for their reception in the rings.

It will be seen that the lamp, the rings CD, which latter I designate a "compensating device," and the suspension device are concentric.

Any irregularity or want of uniformity in the chains or suspenders will be compensated for by the oscillation of the inner ring relatively to the outer ring. It may often happen that the chains of the suspending device will wind up on or wind off the drum irregularly; hence the need of some means such as I have described for compensating for their irregularity.

It will be observed that by the use of rings constituting the compensating device, which are arranged concentric with the lamp and the suspension device, means are afforded whereby the heat and smoke from the lamp-chimney will pass through the compensating device without subjecting the latter to their influence, and also that by this construction the smoke-bell may be arranged on the suspension device and concentrically with the rings and the lamp-chimney, so as to directly receive the heat and smoke from the lamp. This is advantageous, because the compensating device, if subjected to heat from the lamp, would soon become discolored and unsightly. It is further advantageous because the compensating device, by providing for allowing the products of combustion to pass through it to a smoke-bell which is arranged on the suspension device, admits of the compensating device being arranged nearer to the lamp than it otherwise could be, as the smoke-bell is not suspended from the compensating device. The lamp may also be moved nearer to the ceiling than is possible when the smoke-bell is suspended from the compensating device, as the smoke-bell may extend through the latter when the latter is moved upwardly.

I am aware that it is not new to connect together two bars or plates at or near the middle of their lengths by a loose connection and

to connect cords or chains to said bars or plates near their ends, certain of said cords or chains extending to a lamp and certain other of said cords or chains extending to a suspension device. I am also aware that gimbal-joints, one portion of which is connected to a rigid support, are old for various purposes, and I do not lay claim to either of these constructions.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of a lamp, chains or like devices attached to the lamp, a suspending device, chains depending from said suspending device, and a compensating device comprising two rings arranged one within the other at a distance above the lamp, said rings being pivotally connected together diametrically and connected, intermediate of their pivotal connections, one with the chains or like devices of the lamp and the other with the chains of the suspending device, the lamp, the said compensating device, and the suspension device being concentric with one another, substantially as specified.

2. The combination of a lamp, chains or like devices attached to the lamp, a suspending device, chains depending from said suspending device, and a compensating device comprising two rings arranged one within the other at a distance above the lamp and pivotally connected together diametrically, the outer ring being considerably wider than the inner ring, said rings being connected, intermediate of their pivotal connections, one with the chains or like devices of the lamp and the other with the chains of the suspending device, the lamp, the said compensating device, and the suspension device being concentric with one another, substantially as specified.

CHAS. H. LYMAN.

Witnesses:

WM. POWE,
JOHN W. DREW.