

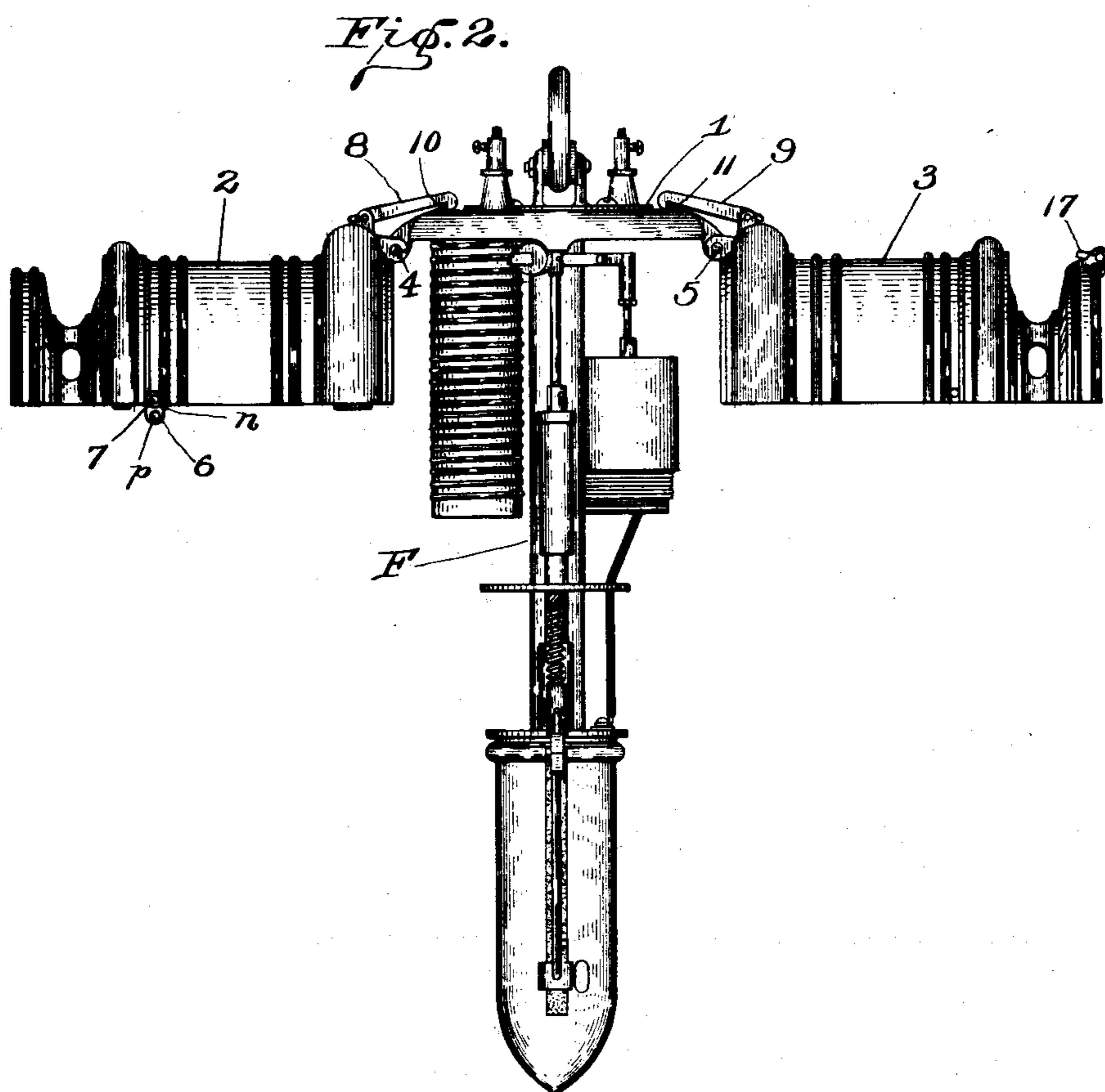
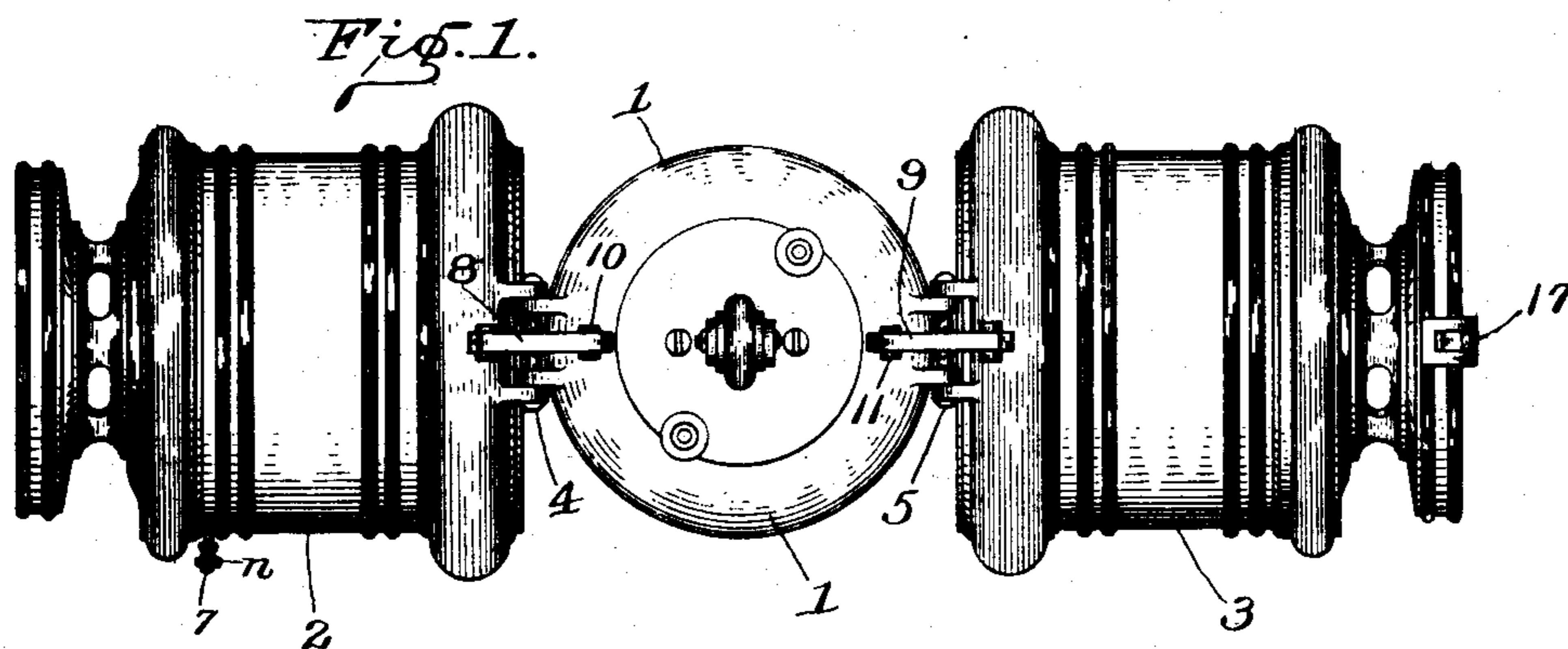
W. H. NORTHALL.

## INCLOSING STRUCTURE FOR ELECTRIC ARC LAMPS.

(Application filed Nov. 12, 1900.)

(No Model.)

2 Sheets—Sheet 1.



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2 Sheets—Sheet 2.

Fig. 3.

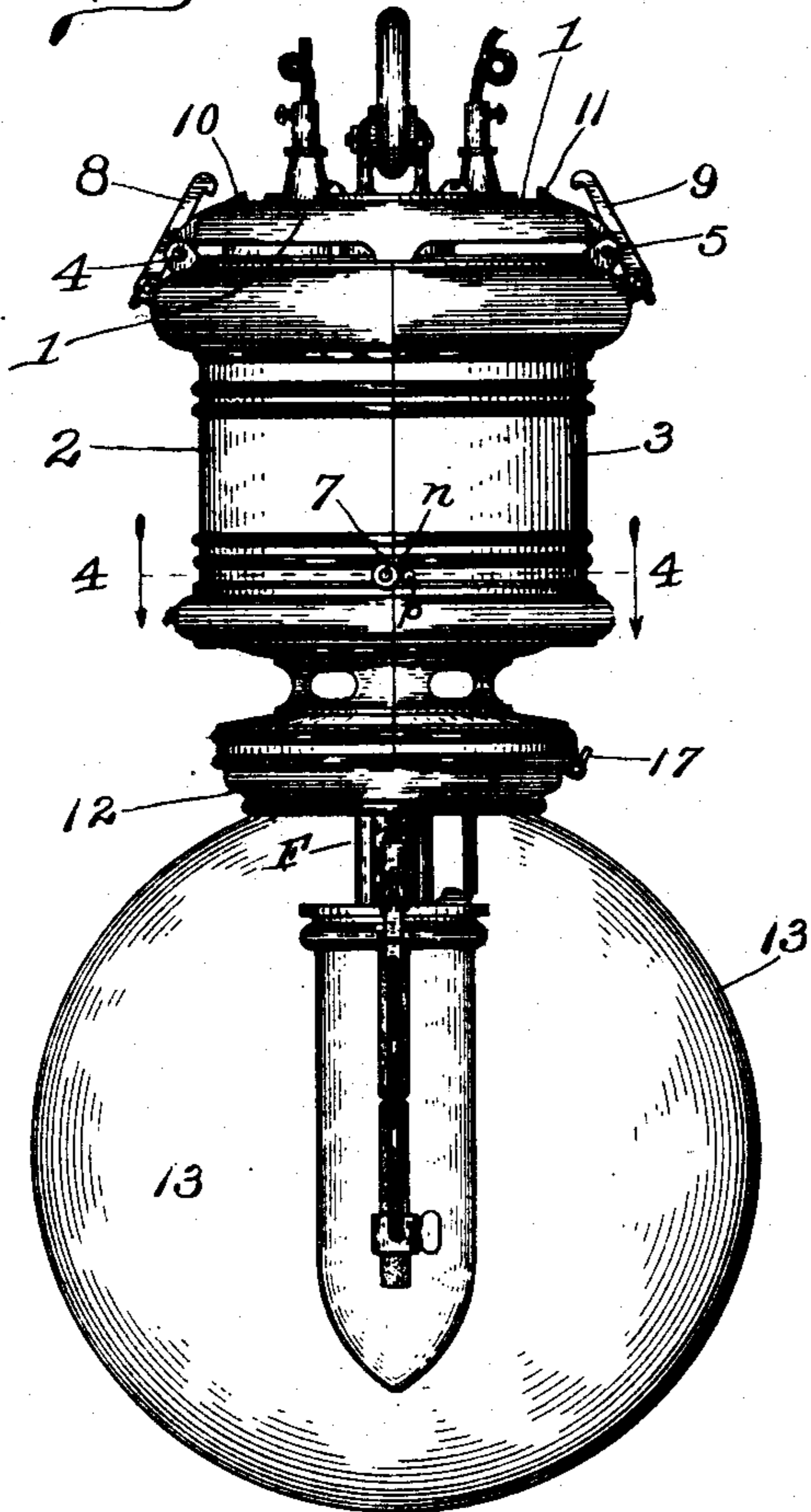


Fig. 4.

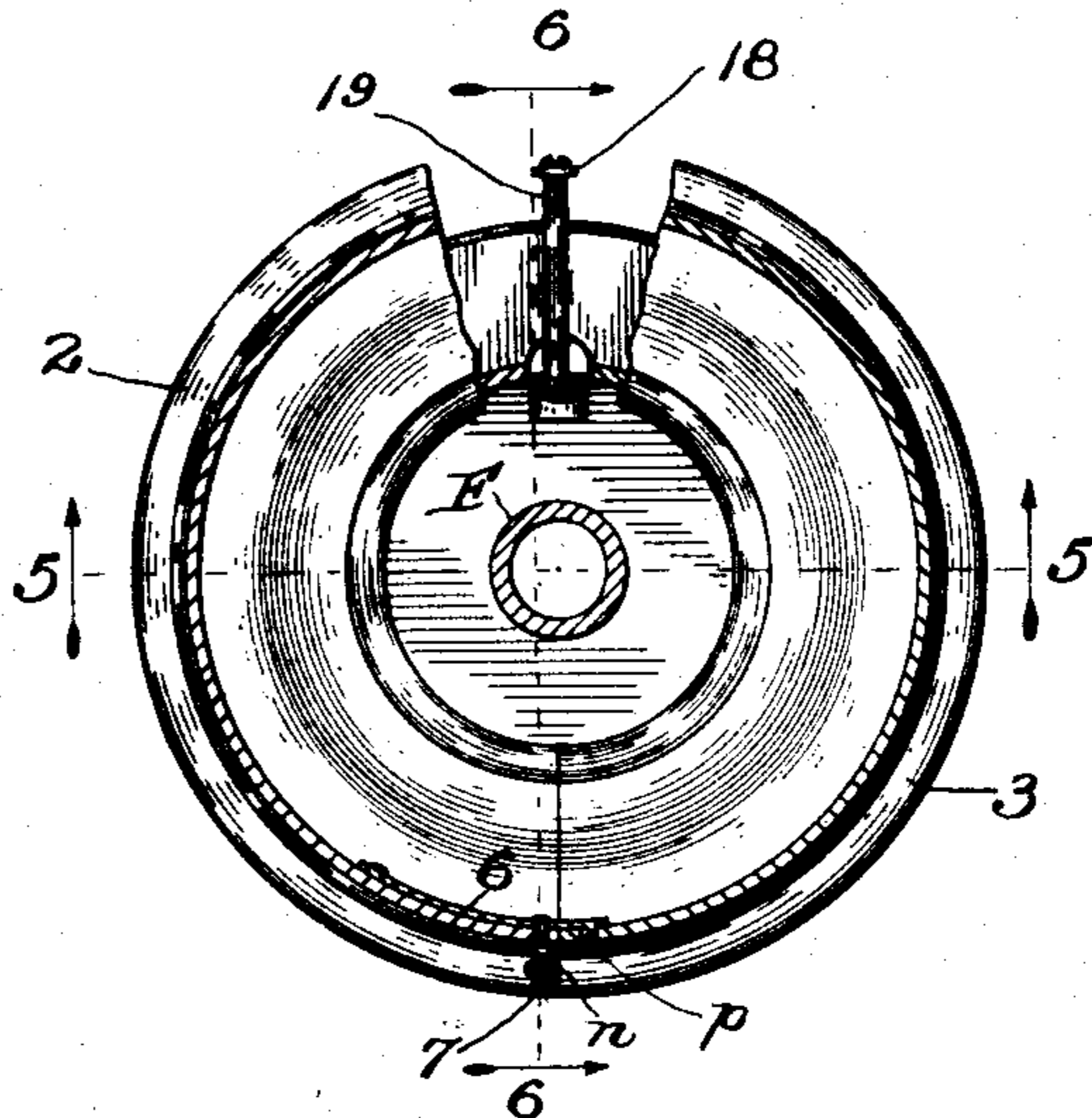


Fig. 5.

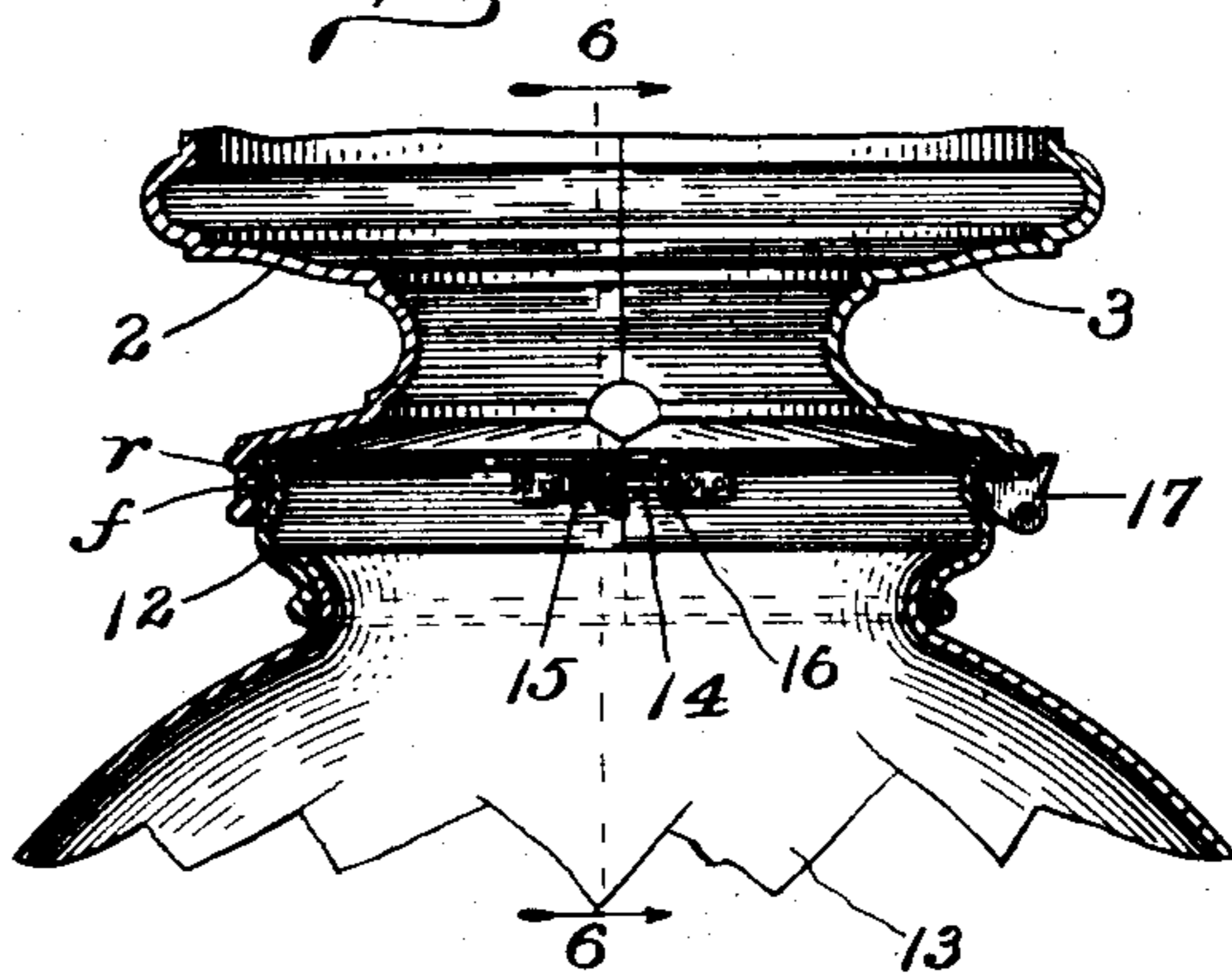


Fig. 6.

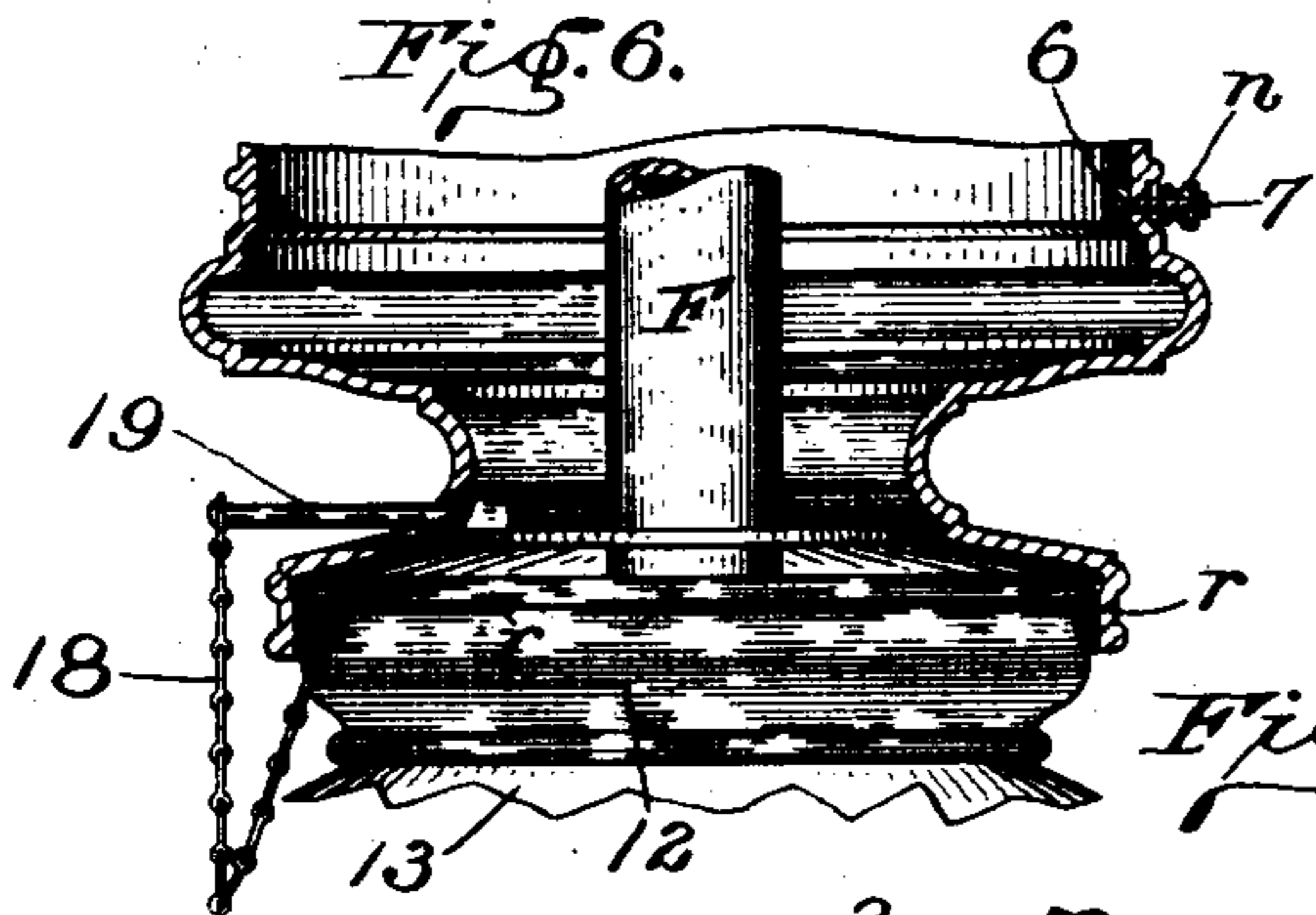


Fig. 7.

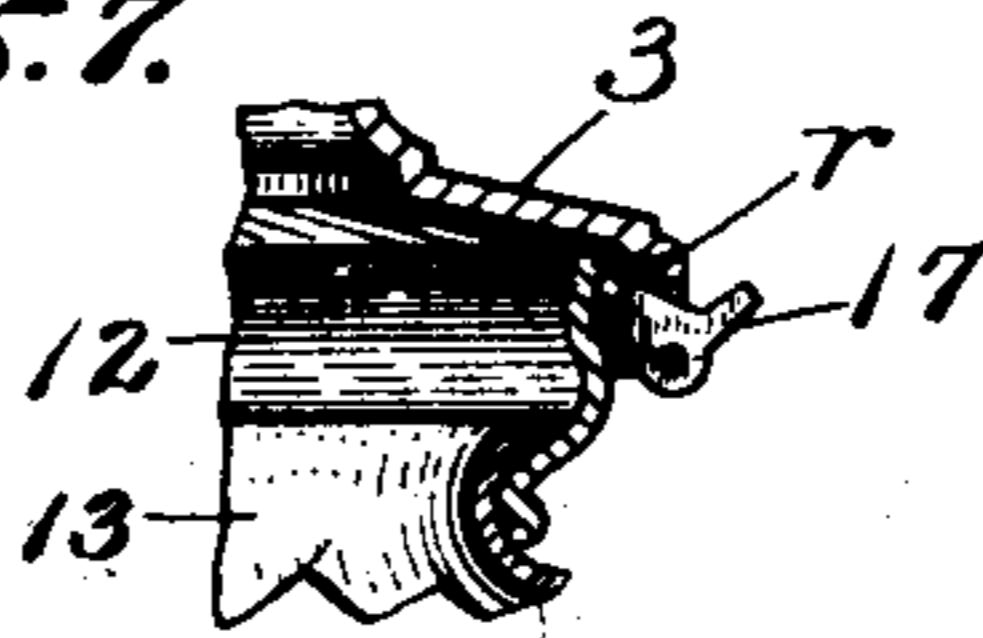
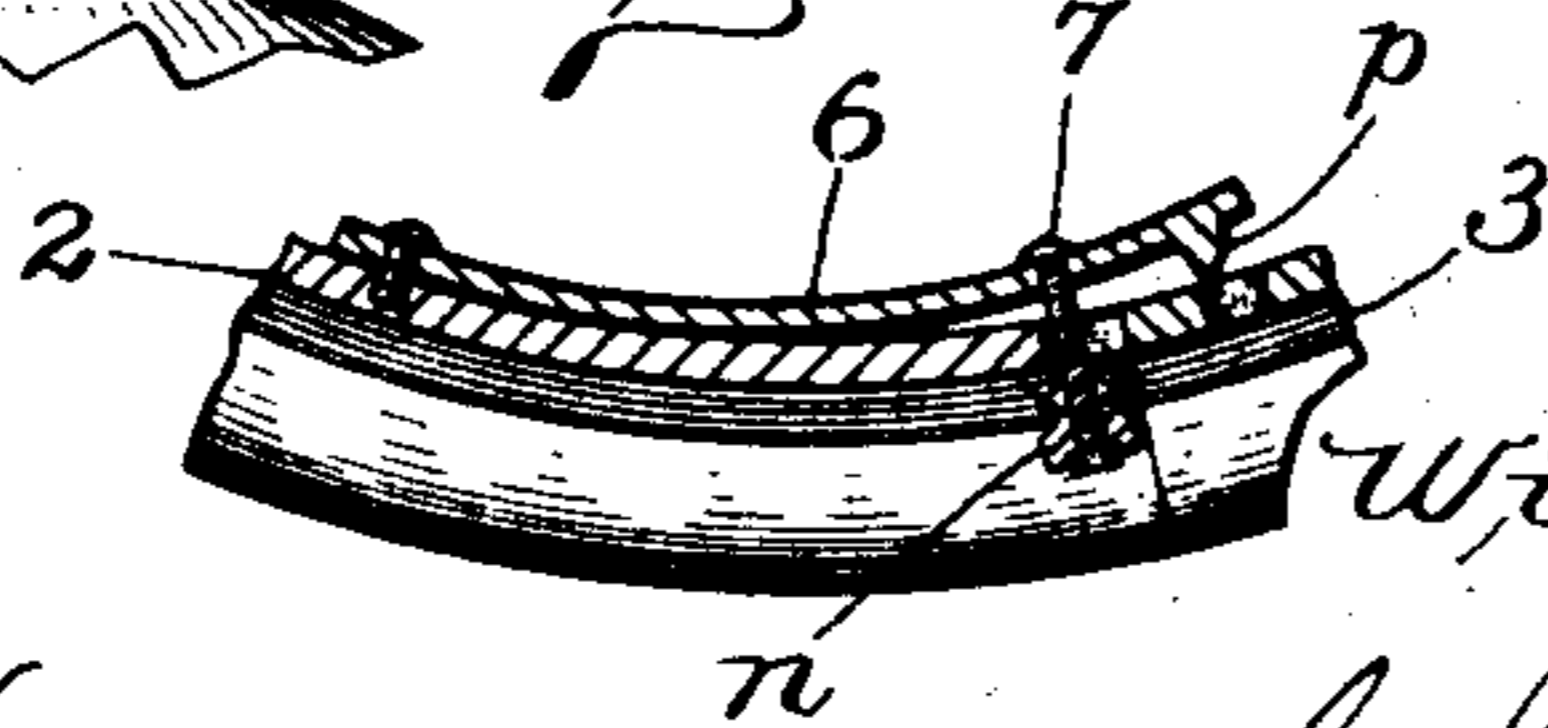


Fig. 8.



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# UNITED STATES PATENT OFFICE.

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## INCLOSING STRUCTURE FOR ELECTRIC-ARC LAMPS.

SPECIFICATION forming part of Letters Patent No. 683,062, dated September 24, 1901.

Application filed November 12, 1900. Serial No. 36,280. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. NORTHALL, a citizen of the United States, residing at Elwood, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Inclosing Structures for Electric-Arc Lamps, of which the following is a specification.

The object of my present invention is to provide a convenient and efficient inclosing casing for electric-arc lamps by means of which convenient access may be had to the interior of the lamp when desired.

An electric lamp provided with the inclosing devices embodying my said invention will be first fully described and the novel features thereof then pointed out in the claims.

Referring to the accompanying drawings, which are made a part hereof and on which similar reference characters indicate similar parts, Figure 1 is a top or plan view of such a lamp, the sides of the principal inclosing casing being opened out or extended as when the lamp is open for inspection, repair, or renewal of parts; Fig. 2, a side elevation of the same; Fig. 3, a side elevation thereof when the lamp-casing is closed; Fig. 4, a horizontal sectional view as seen when looking downwardly from the dotted line 4 4 in Fig. 3, a portion being broken away at one side to better show the pin to which the globe-holding rim of the inclosing casing is connected; Fig. 5, a detail vertical sectional view as seen from the dotted line 5 5 in Fig. 4; Fig. 6, a detail sectional view on the dotted line 6 6 in Fig. 4, showing said pin and immediately adjacent parts in elevation; Fig. 7, a fragmentary view similar to a portion of Fig. 5, but showing the latch which holds the globe-holding portion to the side parts of the casing in its other position; and Fig. 8, a detail view similar to a portion of Fig. 4, but on an enlarged scale, showing the catch for holding the sides together more plainly and also showing said catch in its pushed-in position.

To the frame F of the lamp a cap-plate 1, which forms the upper part of my improved inclosing structure, is rigidly connected. Two side parts 2 and 3 are hinged to this cap-plate by hinges 4 and 5. These when closed down into the position shown in Figs. 3 to 6, in-

clusive, are connected together by a spring-catch 6, as shown in Figs. 4 and 6, which catch is secured to one half and has an engaging point *p*, adapted to enter a corresponding notch or perforation in the other half. A push-pin 7, mounted on this spring-catch, extends through to the outside, and disengagement is effected by pushing on the knob on the other end of said pin, as will be readily understood. A nut *n* on the push-pin 7 is adapted to be turned down against the side of the side part through which it passes, thus holding the push-pin and the spring-catch from movement and locking the parts together.

Pivoted to the sides 2 and 3 at points near the hinges 4 and 5 are the catches 8 and 9, which are adapted when the parts are swung up into the position shown in Figs. 1 and 2 to engage with corresponding projections 10 and 11 on the cap-plate 1, and by this means the sides are held up (into the position best shown in Fig. 2) while any desired work is being done in the lamp.

The metal portion of the inclosing casing or structure terminates in an annular flanged ring 12, which holds the upper end or mouth of the outer globe 13, and this ring is adjustably clamped onto said globe by any suitable means. Such means may consist of a clamping-bolt 14, engaging with ears 15 and 16, respectively, on the two ends of the piece of metal forming said ring, as best shown in Fig. 5. This ring as a whole can be easily inserted in and removed from that portion of the structure composed of the sides 2 and 3 by manipulating the latch 17. As shown in Fig. 5, the rim *r* of the edge of the part 12 at one side passes over and above and rests upon a flange *f* within the lower side of the part 2, while at the other side the latch 17 passes below said rim-like edge. The part 12, together with the globe, is easily removed from its closed position after merely turning the latch 17 to the position shown in Fig. 7. The globe-ring 12 is secured against accidental dropping by means of a chain 18, carried from a pin 19, as is best shown in Fig. 6.

The structure described forms a very neat and inexpensive inclosing casing for an electric-arc lamp and one which is easily manipulated and very convenient.

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

1. The combination, in an inclosing casing for electric-arc lamps, of a cap carried by the frame of the lamp, two side parts hinged to said cap, and a globe-holding rim adapted to engage with and be carried by the lower edges of said side parts when the same are swung together, substantially as set forth.

2. The combination, in an inclosing casing for electric-arc lamps, of an overhanging cap or top piece carried by the frame of the lamp, side parts hinged to said cap-piece to swing under the same when in closed position and close the top of the casing, and hooks mounted on said side parts and adapted when said parts are swung open to engage with suitable engaging points on said cap-piece and hold them open, substantially as set forth.

3. The combination, in an inclosing casing for electric-arc lamps, of a central top cap-piece secured to the frame of the lamp, side parts hinged thereto and adapted to swing under and against the same to close the top of the structure when the parts are in closed position, and to swing open and uncover the mechanism when desired, and a spring-catch for holding the parts together provided with a push-pin whereby it may be disengaged, substantially as set forth.

4. The combination, in an inclosing casing for electric-arc lamps, with two side parts

hinged to swing together, of a spring-catch for holding said side parts together, a push-pin carried by said spring-catch for operating the same, and a nut on said pin whereby said catch may be held from being pushed out of engagement and the parts thus locked together.

5. The combination, in an inclosing structure for electric-arc lamps, of a cap-piece, two side parts hinged thereto, a globe-holding rim adapted to fit into the bottom edges of said side parts, said globe-holding rim being formed at one side to rest on a ledge on one of said side parts and at the other to rest on a latch pivoted to the other side part, and said latch, substantially as shown and described.

6. The combination, with an electric-arc lamp, of the cap-piece 1 secured to the frame thereof, side parts 2 and 3 hinged to said cap-piece, a globe-holding ring, 12, detachably secured to the lower edge of said side parts, and a globe 13 secured in said ring, the whole forming an inclosing casing for the lamp, substantially as shown and described.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 8th day of November, A. D. 1900.

WILLIAM H. NORTHALL. [L. S.]

Witnesses:

CHESTER BRADFORD,  
JAMES A. WALSH.