

No. 648,295.

Patented Apr. 24, 1900.

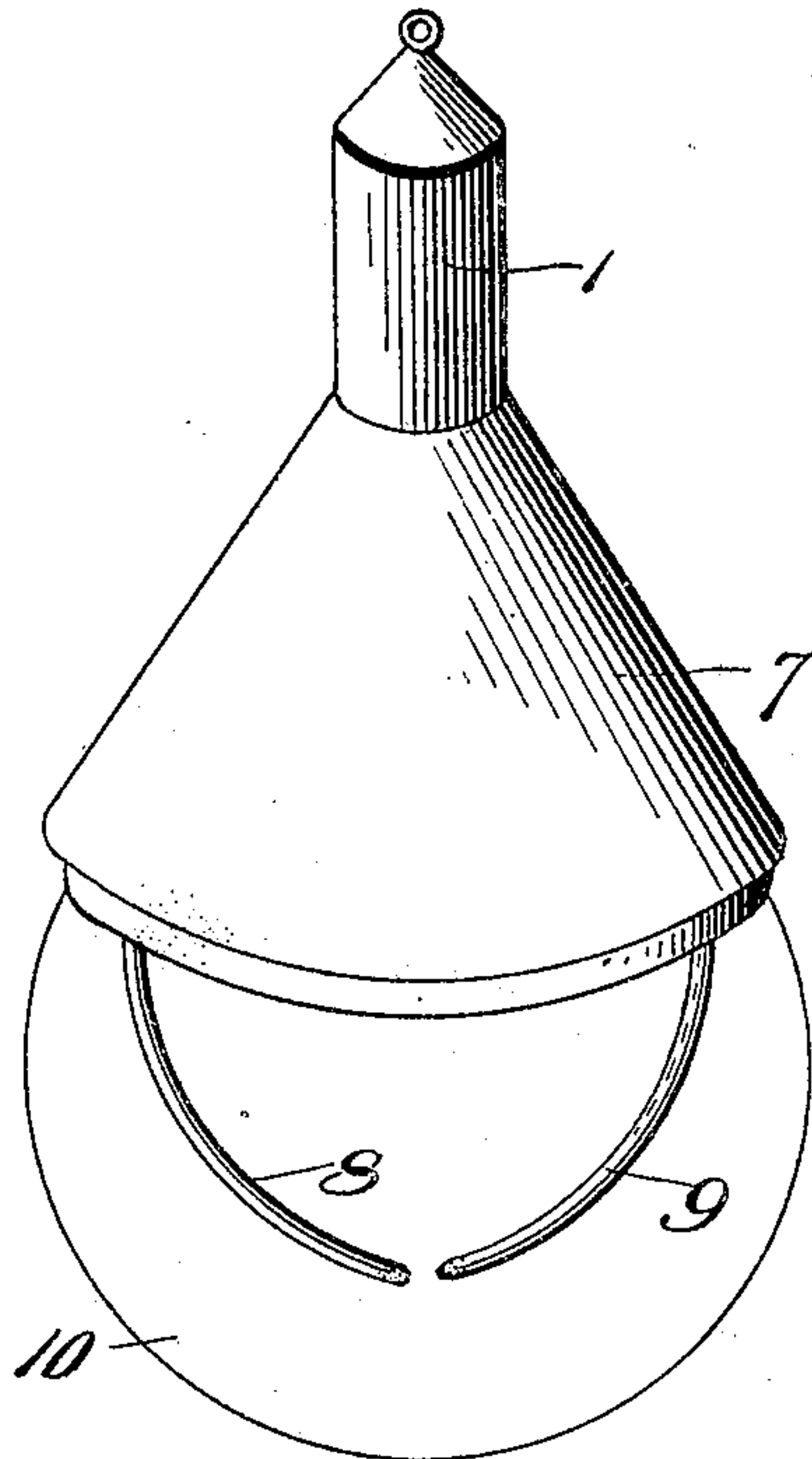
W. E. PUGSLEY.  
ELECTRIC ARC LAMP.

(Application filed Sept. 29, 1899.)

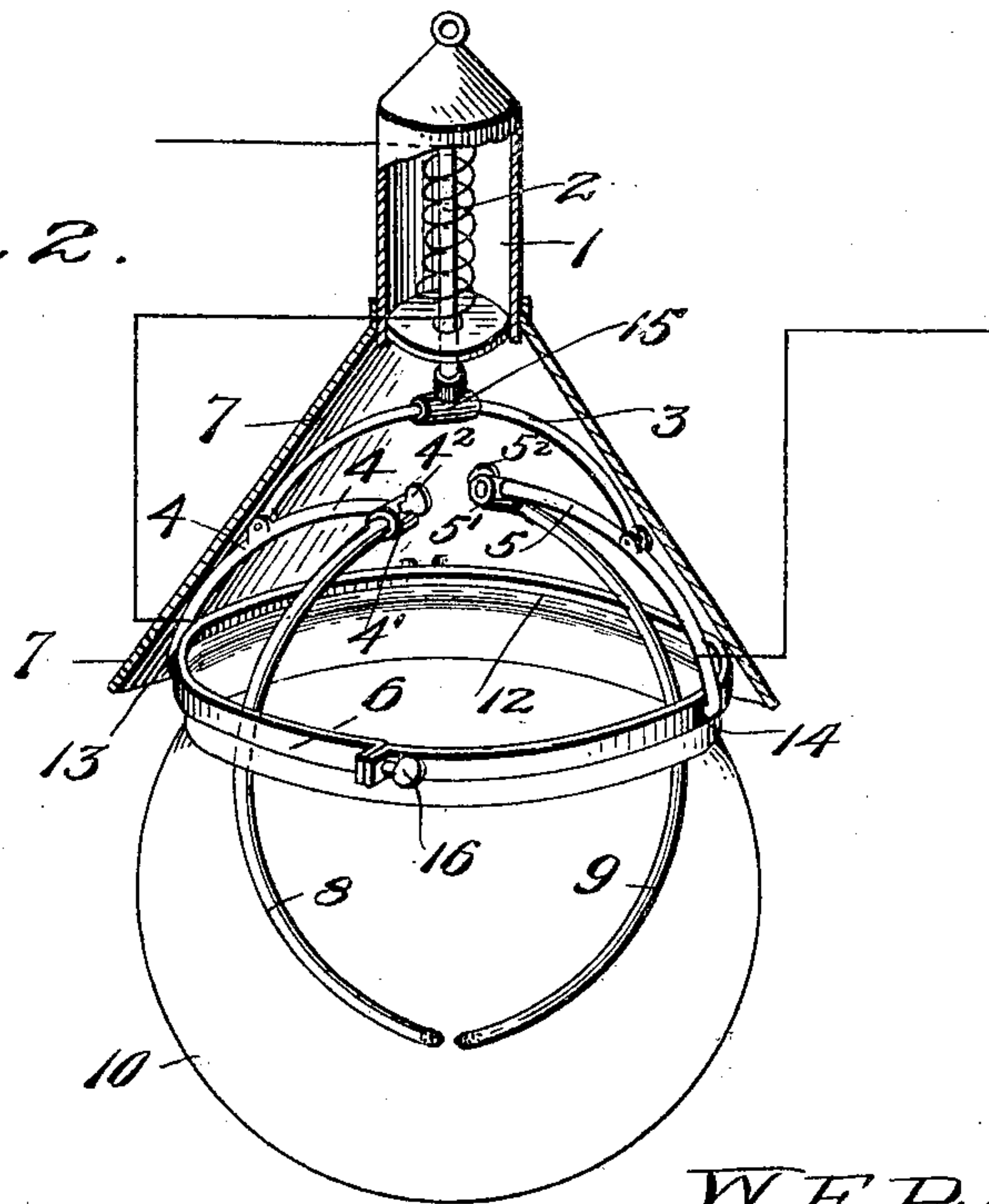
(No Model.)

2 Sheets—Sheet 1.

*Fig. 1.*



*Fig. 2.*



Witnesses

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*W. E. Pugsley*

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Attorneys

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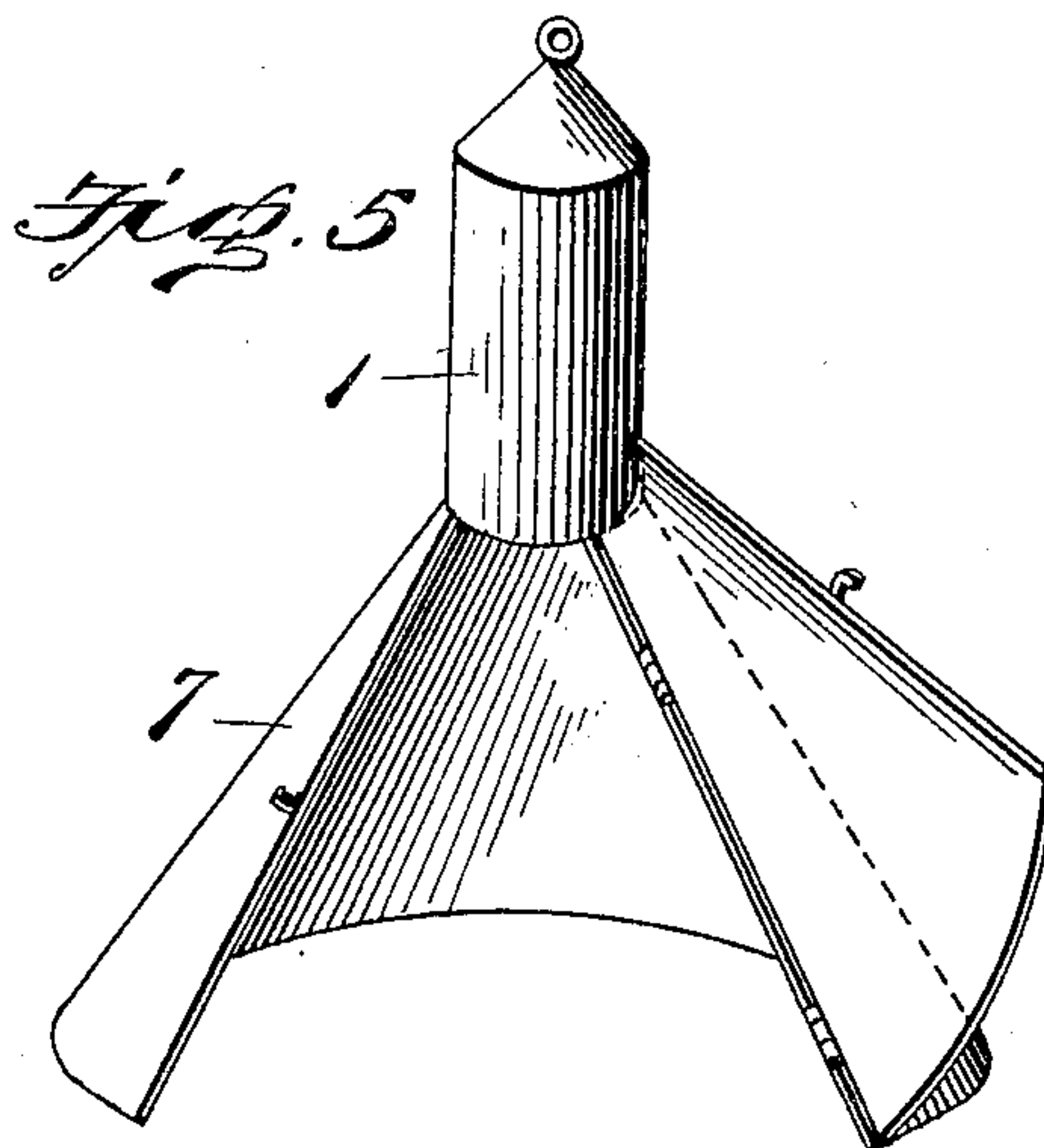
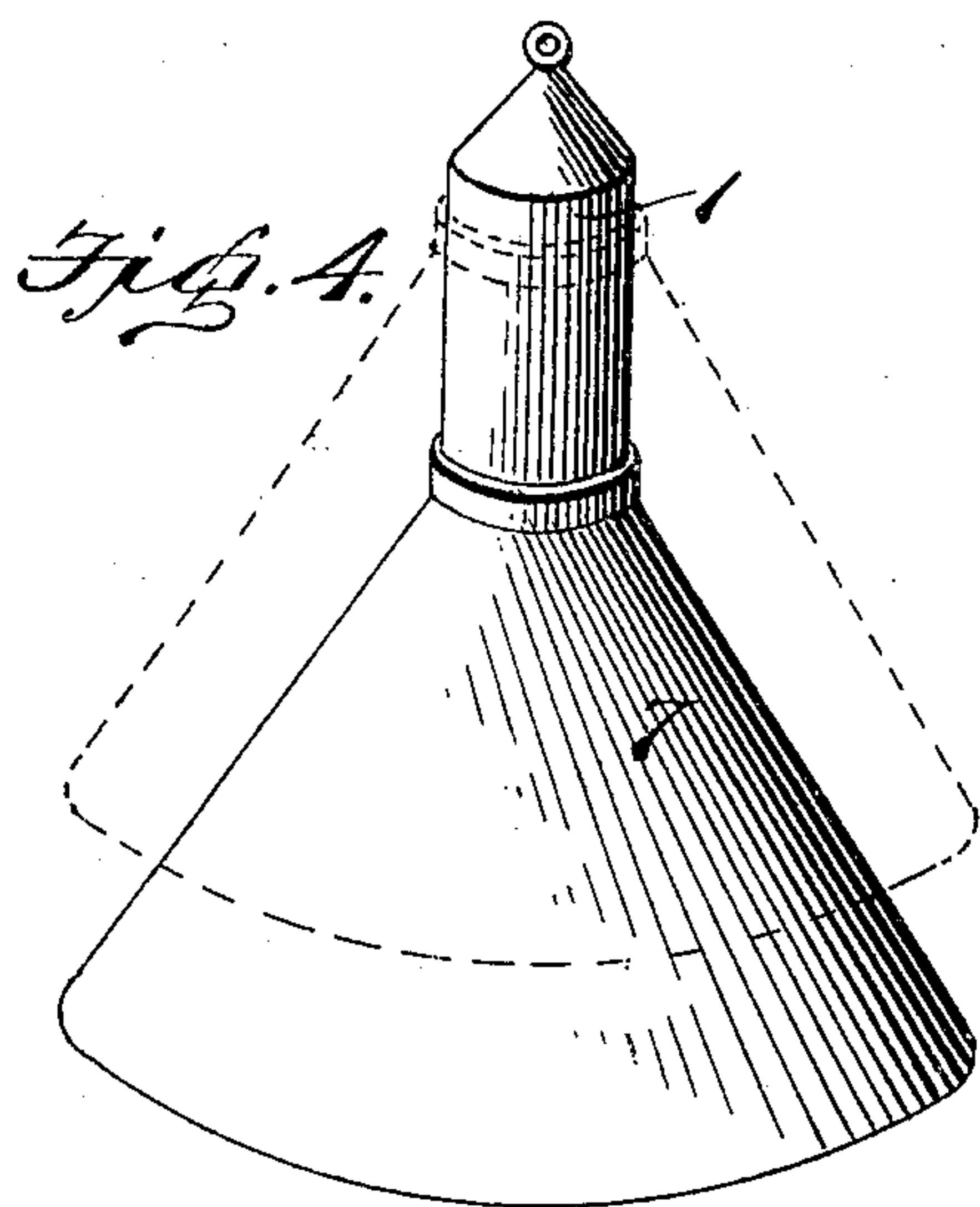
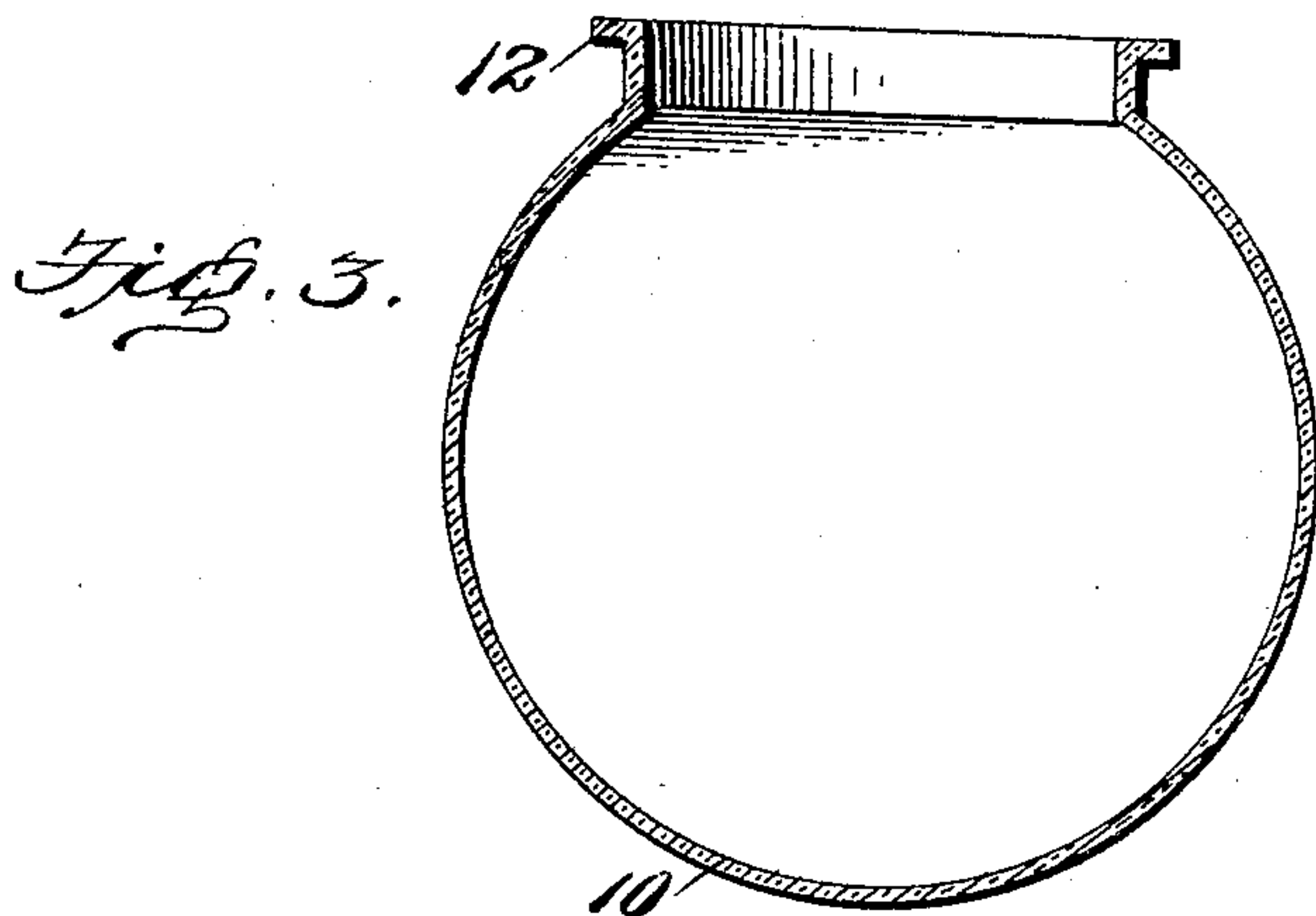
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Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM EDWARD PUGSLEY, OF LINCOLN, NEBRASKA.

## ELECTRIC-ARC LAMP.

SPECIFICATION forming part of Letters Patent No. 648,295, dated April 24, 1900.

Application filed September 29, 1899. Serial No. 732,048. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM EDWARD PUGSLEY, a citizen of the United States, residing at Lincoln, in the county of Lancaster and State of Nebraska, have invented certain new and useful Improvements in Electric-Arc Lamps; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain novel improvements in arc-lamps; and the object is to simplify and improve the construction and increase the efficiency of the lamp.

To this end the invention consists in the construction, combination, and arrangement of the several elements of the lamp, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same reference characters indicate the same parts of the invention.

Figure 1 is a perspective view of my improved arc-lamp. Fig. 2 is a similar view with a portion of the hood and case broken away. Fig. 3 is a detail view of the glass globe. Fig. 4 is a detail perspective view of the hood. Fig. 5 shows another form of hood.

1 denotes the casing in which the solenoid is located, and 2 the magnetic core, which has a vertical sliding engagement with the solenoid, and its lower end carries a flexible bowed yoke 3, the free ends of which are pivoted to the curved bracket-arms 4 and 5, which are pivoted to the flanged ring 6, supported by the hood 7, fixed to the solenoid-casing 1. The free ends of the curved arms 4 and 5 terminate in sockets 4' 5', provided with thumb-screws 4<sup>2</sup> 5<sup>2</sup>, by means of which the curved carbons 8 and 9 are secured in place.

10 denotes the globe, which is supported by its annular flange 12, resting on the ring 6.

13 and 14 denote the insulated connections between the arms 4 and 5 and the ring 6, and 15 represents the insulated connection between the magnetic core 2 and the bow 3.

In replenishing the carbons the clamping-screw 16 may be slackened up and the globe removed, or, as shown in Fig. 5, the hood may have a sliding engagement with the casing 1 to accomplish the same object.

By this construction it will be seen that an important advantage is attained by hinging the carbon-supporting arms at the sides or outside of the arc, thus leaving an open space above the arc, so that the heat produced between the points will not injuriously affect the hinge-joints or any of the working parts of the lamp.

The accompanying drawings show my invention in the best form now known to me, but many changes in the details might be made within the skill of a good mechanic without departing from the spirit of my invention as set forth in the claim at the end of this specification.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

In combination with the solenoid, its core, 2, and the insulated bow, 3, the supporting-ring, 6, the insulated arms, 4 and 5, fulcrumed on said ring and pivotally connected to said bow, and having their free ends terminating in the sockets, 4' 5', substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM EDWARD PUGSLEY.

Witnesses:

A. D. BORGELT,  
GEO. E. TOBEY.