

No. 887,996.

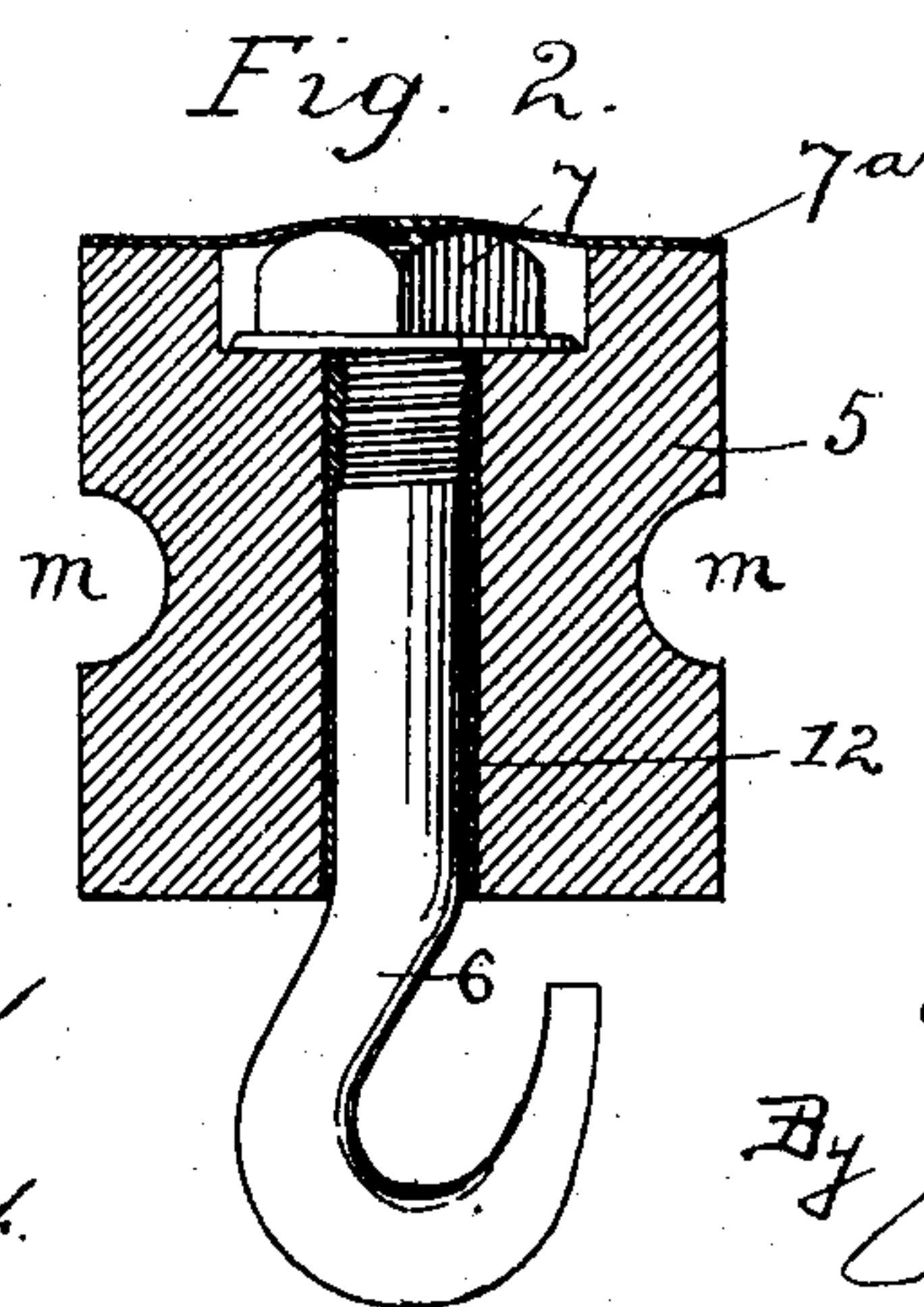
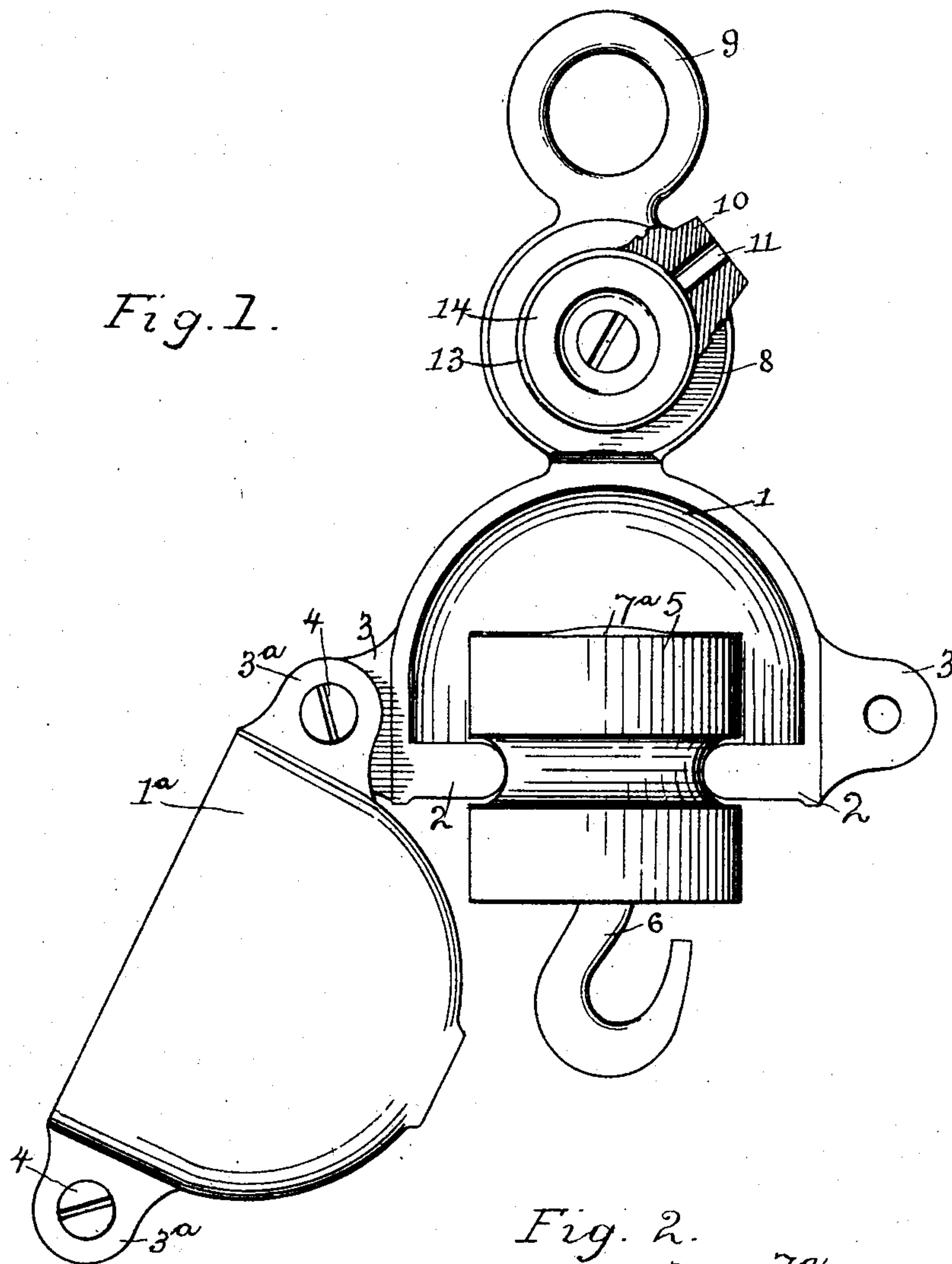
PATENTED MAY 19, 1908.

J. M. BURGE.

COMBINED INSULATOR AND LAMP HANGER.

APPLICATION FILED OCT. 5, 1908.

3 SHEETS—SHEET 1.



Witnesses.

Harriet Major
Ruth L. Hughes.

Inventor

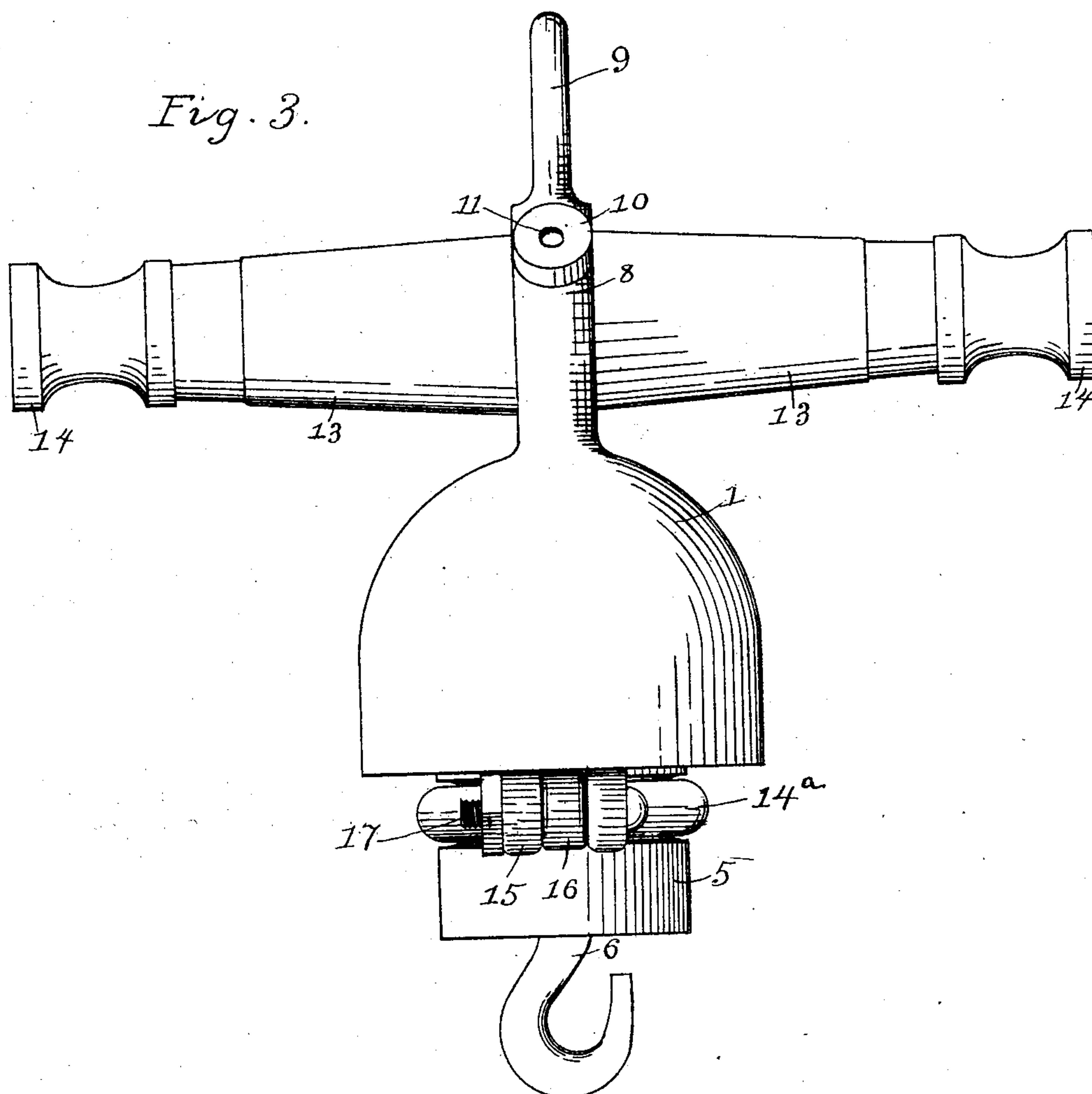
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3 SHEETS—SHEET 2.



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3 SHEETS—SHEET 3.

Fig. 4.

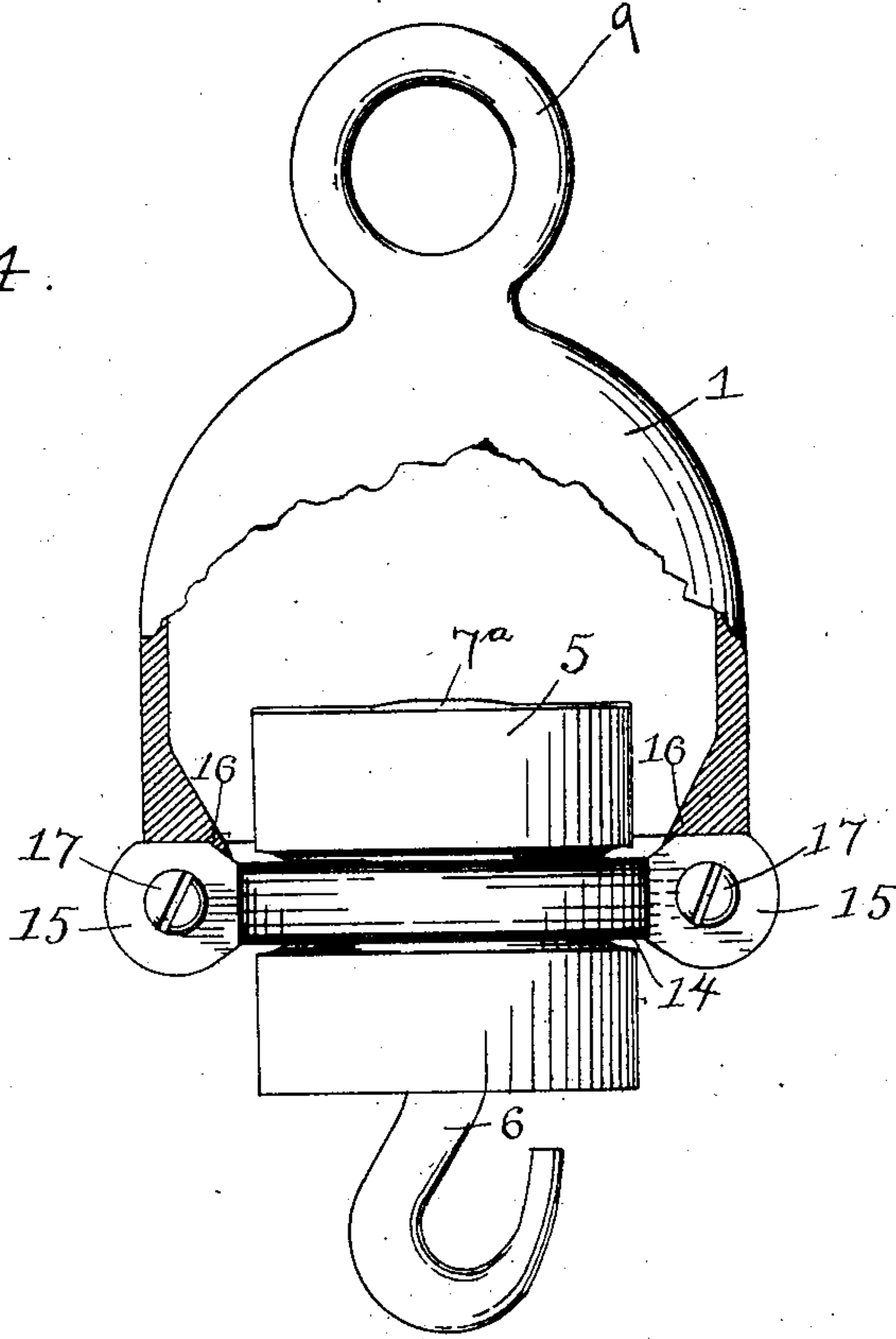
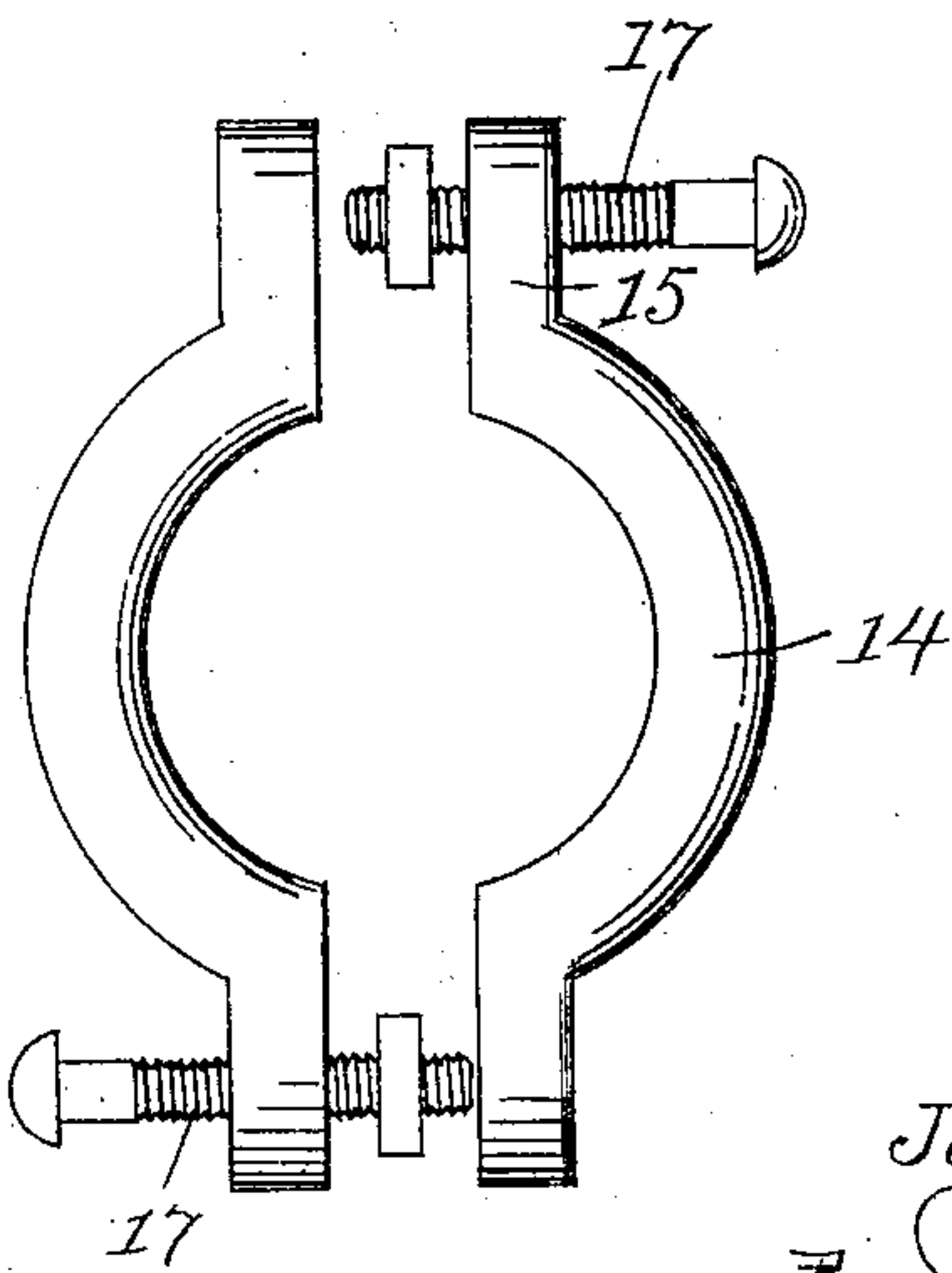


Fig. 5.



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UNITED STATES PATENT OFFICE.

JAMES M. BURGE, OF DECATUR, ILLINOIS.

COMBINED INSULATOR AND LAMP-HANGER.

No. 887,996.

Specification of Letters Patent.

Patented May 19, 1908.

Application filed October 5, 1906. Serial No. 337,623.

To all whom it may concern:

Be it known that I, JAMES M. BURGE, of the city of Decatur, in the county of Macon and State of Illinois, having invented certain new and useful Improvements in a Combined Insulator and Lamp-Hanger, of which the following is a specification.

This invention is designed to supply, simplify and improve the means for insulating and hanging street arc lamps.

It is embodied in the structure hereinafter described and is defined in the appended claims.

In the drawings forming a part of this specification, Figure 1 taken as a whole shows the lamp hanger with ring 9, cross arm 14 and dome 1 and 1^A into which is fastened grooved spool 5. Fig. 2 is a cross section view of non-conducting grooved spool which is made of glass, porcelain or other non-conductive material. Fig. 3 is the side view of the lamp hanger as shown in Fig. 1 showing similar means of attaching non-conductive spool as shown in Fig. 2. Fig. 4 is a cross section of the insulator in another form showing means for holding non-conductive spool and Fig. 5 is a face view of yoke like rings which attach to the same for holding non-conductive spool.

In constructing insulator or lamp hanger in accordance with my invention the whole Fig. 1 as shown including dome of body 1, cross arm ring 8 and suspension ring 9 is cast in one piece in iron or similar metal and 1^A of Fig. 1 is cast of like metal, attached thereto and made a member of 1 by means of bolts for clamping arms 3 when 1^A is arranged so that 3^A rests on 3 and is made fast there by bolts closing the access to 2 and completing the dome of the insulator or hanger.

The grooved spool as shown in Fig. 2 fits closely between the arms 2 as shown in Fig. 1 said arms 2 being one continuous ring formed inside of the dome and cast with same, being cast in two equal parts as 1 and 1^A, and said arms clamping said grooved spool 5 in Fig. 2 at grooves M, hooked bolt 6 externally screw threaded extending lengthwise through the said grooved spool 5 having attached at its opposite end an internally screw threaded nut 7 through which the said hook shaped externally screw threaded bolt 6 is held firmly in position and bolt 6 being surrounded by an asbestos sheath 12 in Fig. 2 and the upper surface being covered by an asbestos washer or covering 7^A. The ring 8 as shown

in Figs. 1 and 3 surrounds cross arm 13, said cross arm having at its opposite ends porcelain spools of non-conducting material 14. The said ring 8 as shown in Figs. 1 and 3 has a shoulder 10 and drilled opening 11, said drilled opening being used for the purpose of attaching said cross arm 13 substantially and rigid to the said ring 8. Fig. 3 shows an exterior view of said improvement with dome 1 cross arm ring 8 and rope ring 9 and shoulder 19 substantially as shown in Fig. 1 cast in one piece whereon yoke shaped clamp ring 14^A as shown in Figs. 4 and 5 clamped on opposite sides of shoulder 16 in Fig. 3. The said grooves M of grooved spool 5 in Fig. 2 being held substantially in the yoke shaped clamp rings 14^A thereby holding said grooved spool 5 rigidly in position and serve the same purpose as the shoulders 3 and arms 2 in Fig. 1.

With grooved spool in Fig. 2 when held in position within the dome 1 by shoulders 2 or yoke like clamps 14 in Fig. 5 is under and beneath the cross arm and suspension rope ring (entirely within suspension and rope ring) 8 and 9 entirely within and beneath dome 1, said grooved shoulders 2 in Fig. 1 clamping groove in Fig. 2 or as shown at 14^A in Fig. 3 leaving the outer surface of dome 1 as shown at B free and beyond the surface and any part of such grooved spool 5 as shown in Figs. 1, 3 and 4 making it impossible for water when coming in contact with the outer edge of the dome to drip or run on to any part of the said grooved spool 5, said hooked member 6 in grooved spool 5 being held rigidly in place holds the arc lamp and from this hook a street arc lamp is suspended, it being impossible for the rain or water to drip or run on to said spool 5, therefore it is likewise kept free from coming in contact with hooked member 6 from which the lamp suspends thereby preventing the reaction of the water upon any charge that might be contained in hooked member 6, and cuts off communication between the charge that might be contained in said dome and the arc lamp, making a complete insulation from the lamp and the dome from which the spool 5 is suspended preventing breakage of the spool or dropping of the lamp as has been and is the fault with present arc lamp hangers, likewise is the relative positions of the outer surface of the dome and the means of suspension of grooved spool 5 as shown in Figs. 3 and 4.

The clamping of the spool 5 within the

dome as hereinbefore set forth places same in a rigid position, and that position forms an arch or expanse making the inner surface of the dome equal distance from the nut 7 of hooked member 6 and said distance being so evenly divided between the said nut 7 and the inner surface of dome 1 as to make it impossible to form at any time an electric arc between the charged hooked member 6 and any surface of said dome 1 as may be charged, therefore, composing or forming a breaker, so to speak, in the communication of the charge from the lamp to the dome like, it being completely insulated by the use of said grooved spool composed of glass or porcelain or other non-conductive material and which prevents such communication, and thereby prevents breakage of said spool and insulator and the dropping of the arc light.

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

1. In an insulator and arc lamp hanger, the combination of a dome having cast thereon a suspension ring, shoulders extending from the walls and beneath the dome on opposite sides of said dome, and the interior of said dome being hollow, substantially as described.

2. In an insulator and arc lamp hanger, the combination of a dome having a suspension ring attached thereto, shoulders exteriorly attached to and extending downward from the sides of and beneath the dome, the dome provided with a hollow space or cavity for the receipt of other members, substantially as described.

3. In an insulator and arc lamp hanger the combination of a dome and suspension ring exteriorly attached and shoulders to said dome exteriorly attached upon opposite sides and beneath said dome, yoke like members attached to said shoulders by screw threaded members means of clamping

grooved non-conducting spool, said spool containing a rotatable hooked member and forming an arch in the dome about the arc lamp, substantially as set forth.

4. In an insulator and arc lamp hanger, the combination of a grooved spool containing a rotatable bearing member and a sheath covering one end of the spool and the member and means of separating the spool and the member, substantially as described.

5. In an insulator and arc lamp hanger a combination of a spool 5 with a groove M running around and being contained in the outer surface of said spool, a hooked member 6 running longitudinally through the spool 5 and being screw threaded on its opposite end and being attached thereto by means of nut 7, an asbestos cover, covering entire end of spool 5 opposite hooked member 6 and cover nut 7 as at 7^A and clamped and held in the said dome 1 for the purposes as herein set forth.

6. In an insulator and arc lamp hanger the combination of a dome with exteriorly connected suspension ring, shoulders attached exteriorly and on the outer surface at the lower edge on opposite sides of said dome, an exterior rim forming shoulder, means for opening and closing said shoulder and means for clamping and holding in said shoulder non-conducting spool with rotary grooved spool containing a longitudinal bolt hook, said bolt hook being screw threaded on its end opposite to the hook and being substantially attached to said non-conducting spool and means for attaching to said spool an arc light substantially as described.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

JAMES M. BURGE.

Witnesses:

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