

No. 756,412.

PATENTED APR. 5, 1904.

A. ROMAIN & J. D'AYGUESVIVES.  
SUPPORT FOR INCANDESCENT ELECTRIC LAMPS.

APPLICATION FILED OCT. 10, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1

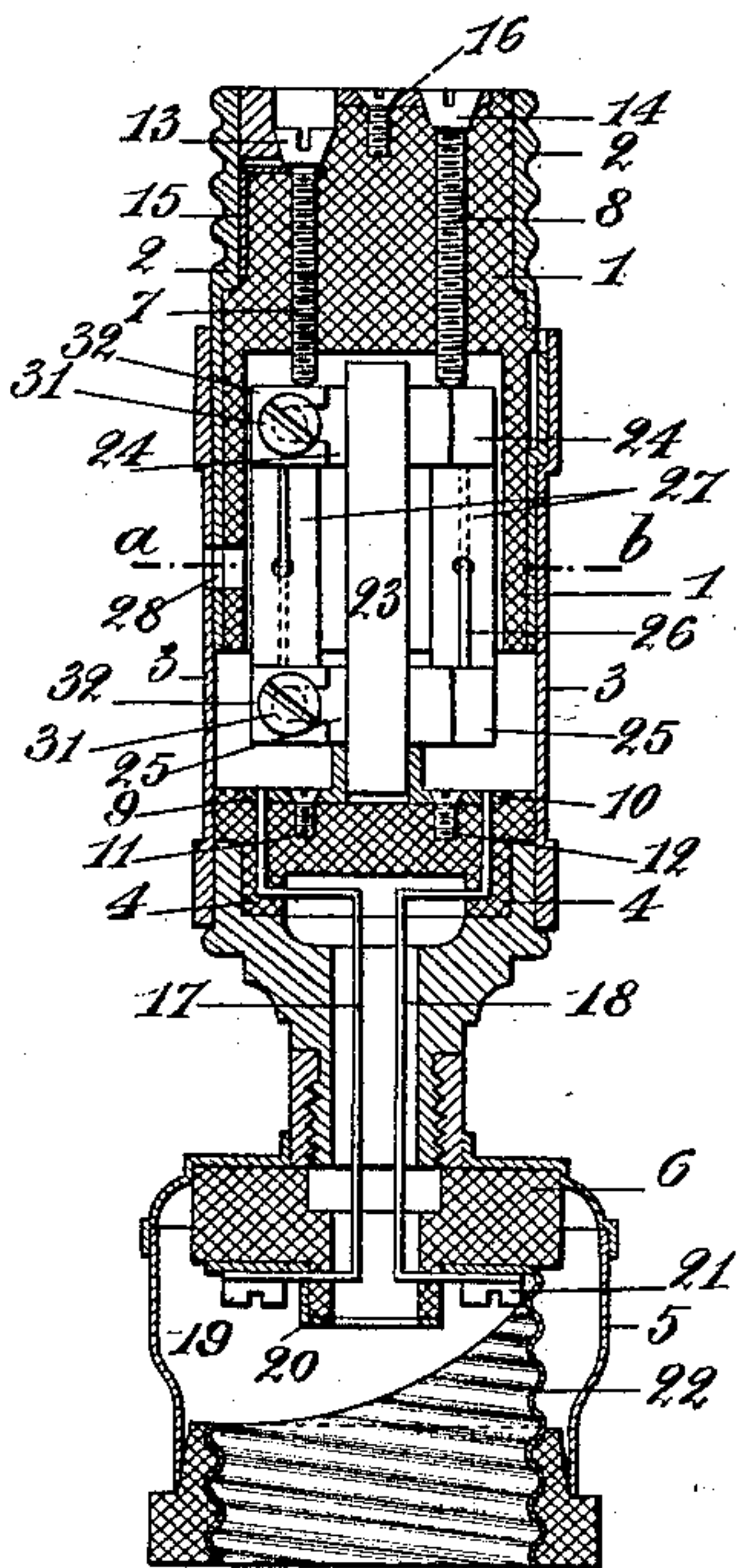


Fig. 2

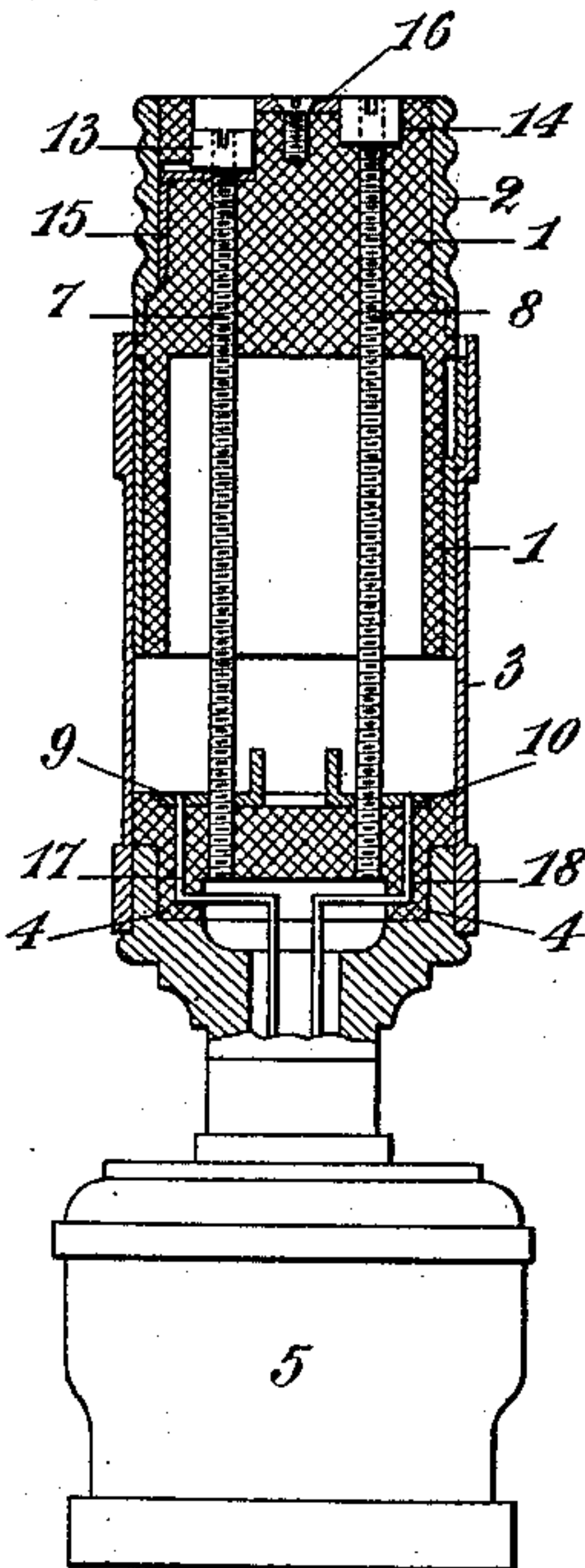


Fig. 4

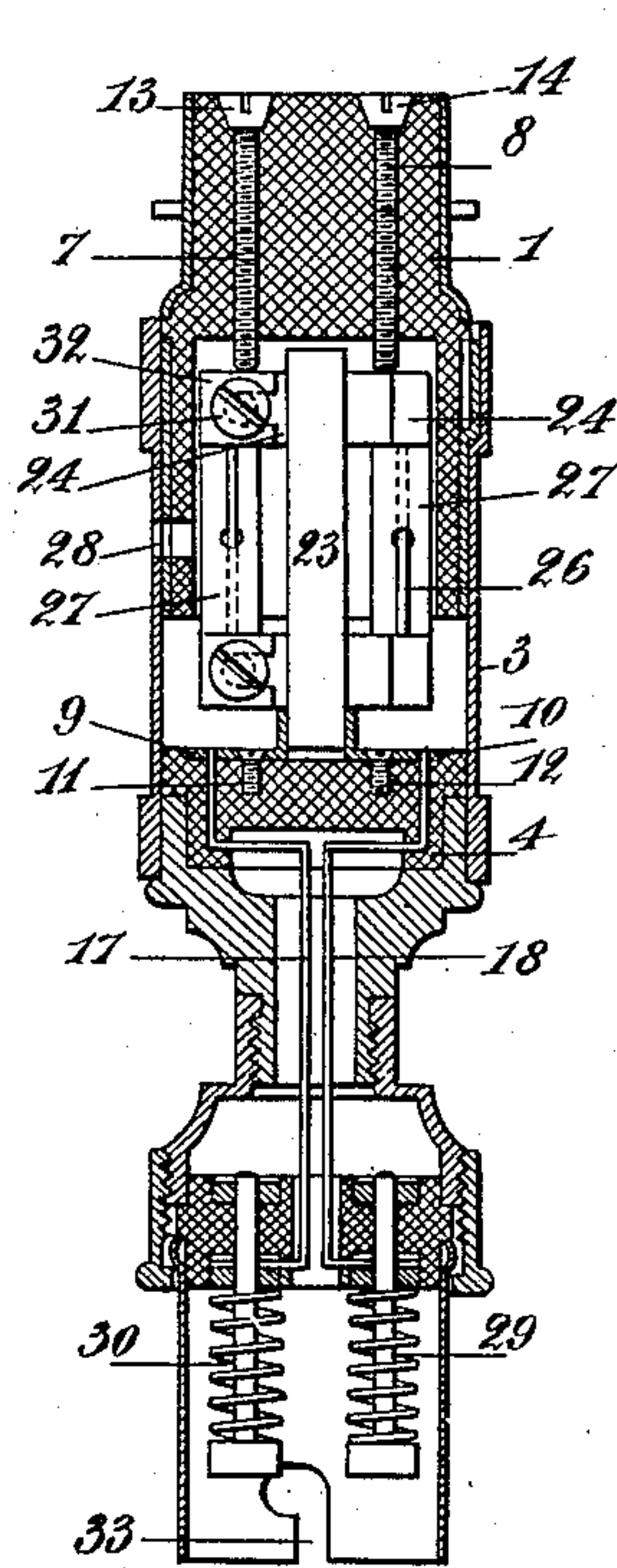
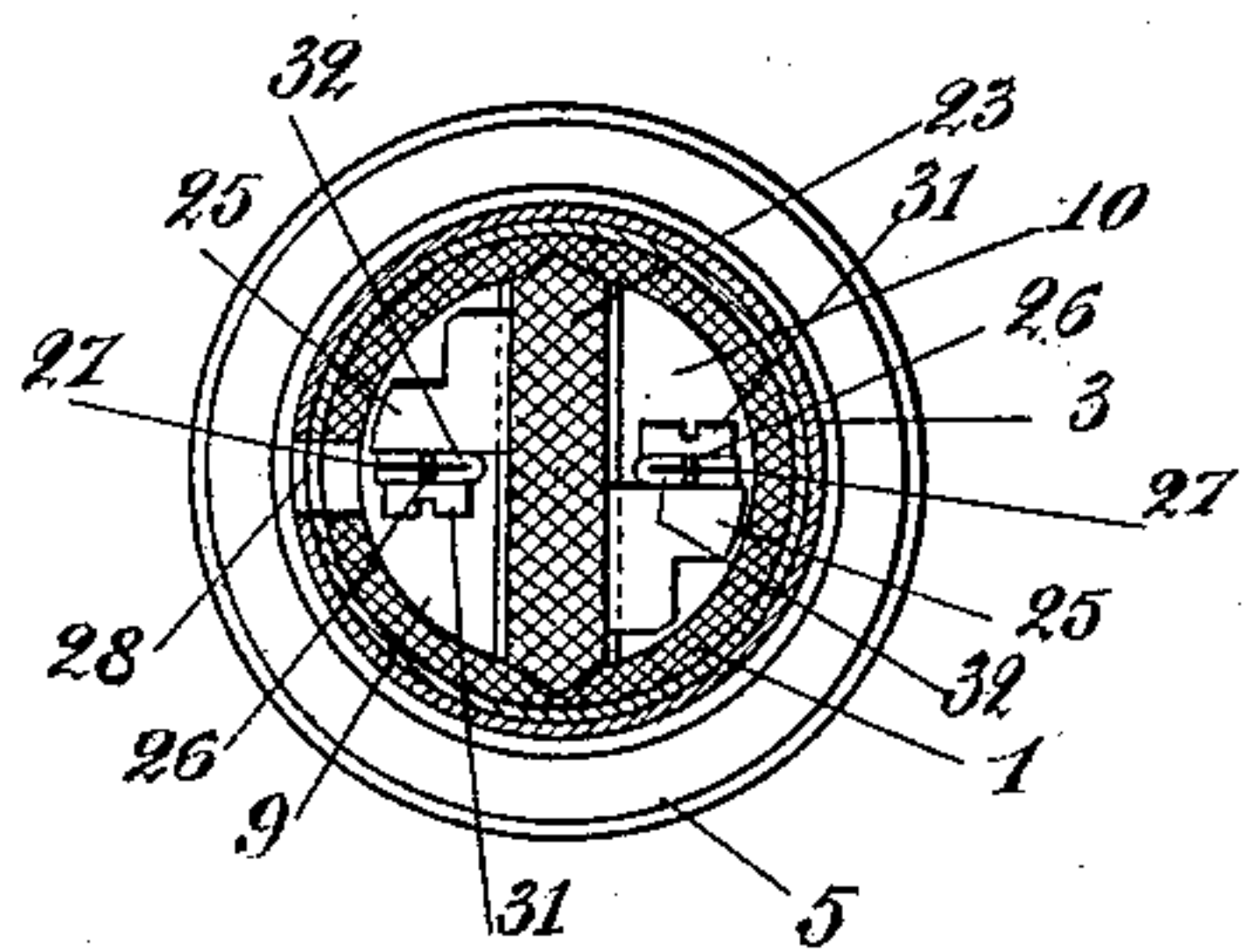


Fig. 3



WITNESSES

J. M. Thorne  
J. M. Dowling

INVENTORS

Adolphe Romain  
and  
Jean d'Ayguessvives

By *Richardson*

ATTORNEYS

No. 756,412.

PATENTED APR. 5, 1904.

A. ROMAIN & J. D'AYGUESVIVES.  
SUPPORT FOR INCANDESCENT ELECTRIC LAMPS.

APPLICATION FILED OCT. 10, 1902.

NO MODEL.

2 SHEETS—SHEET 2.

Fig- 8

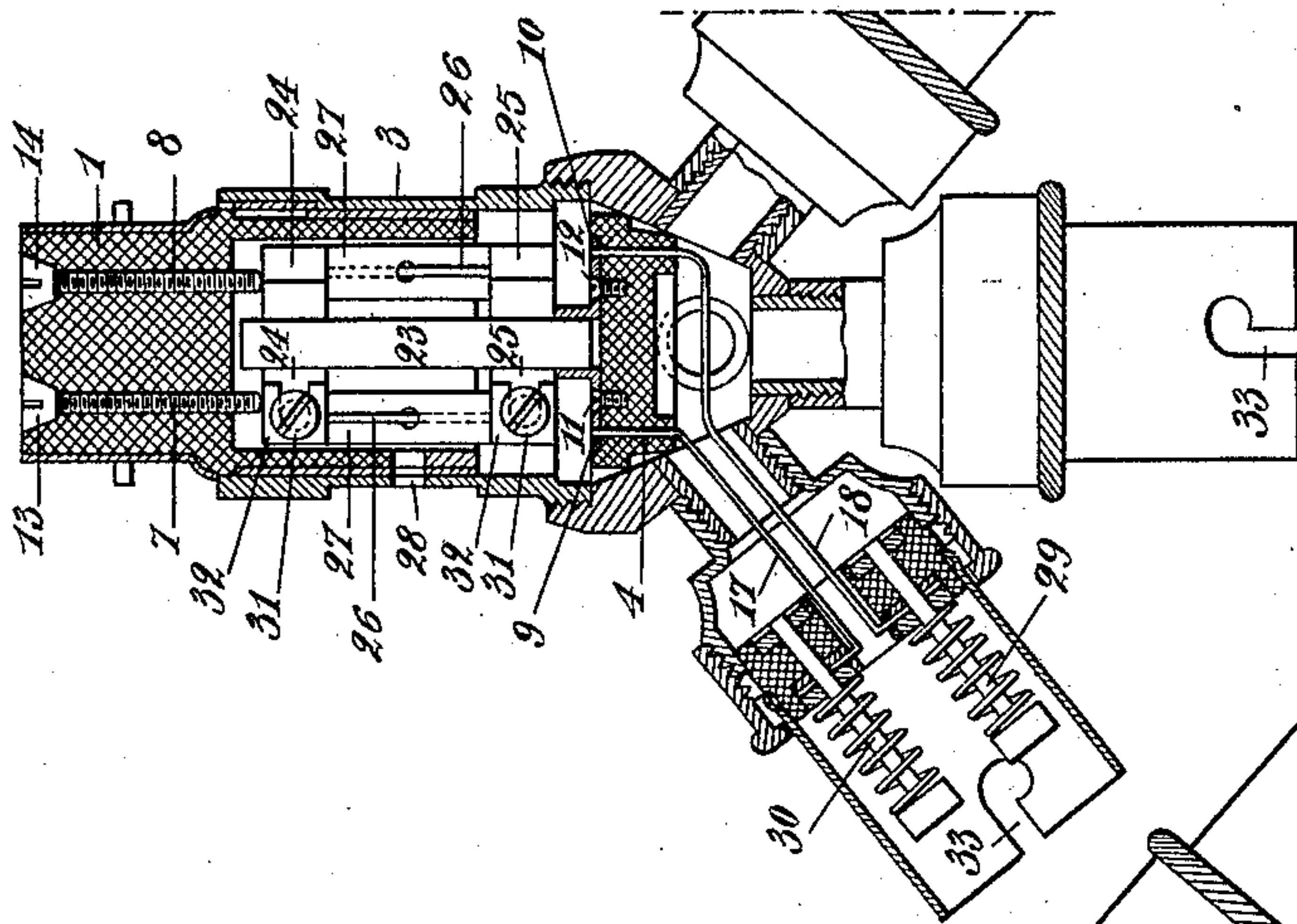


Fig- 7

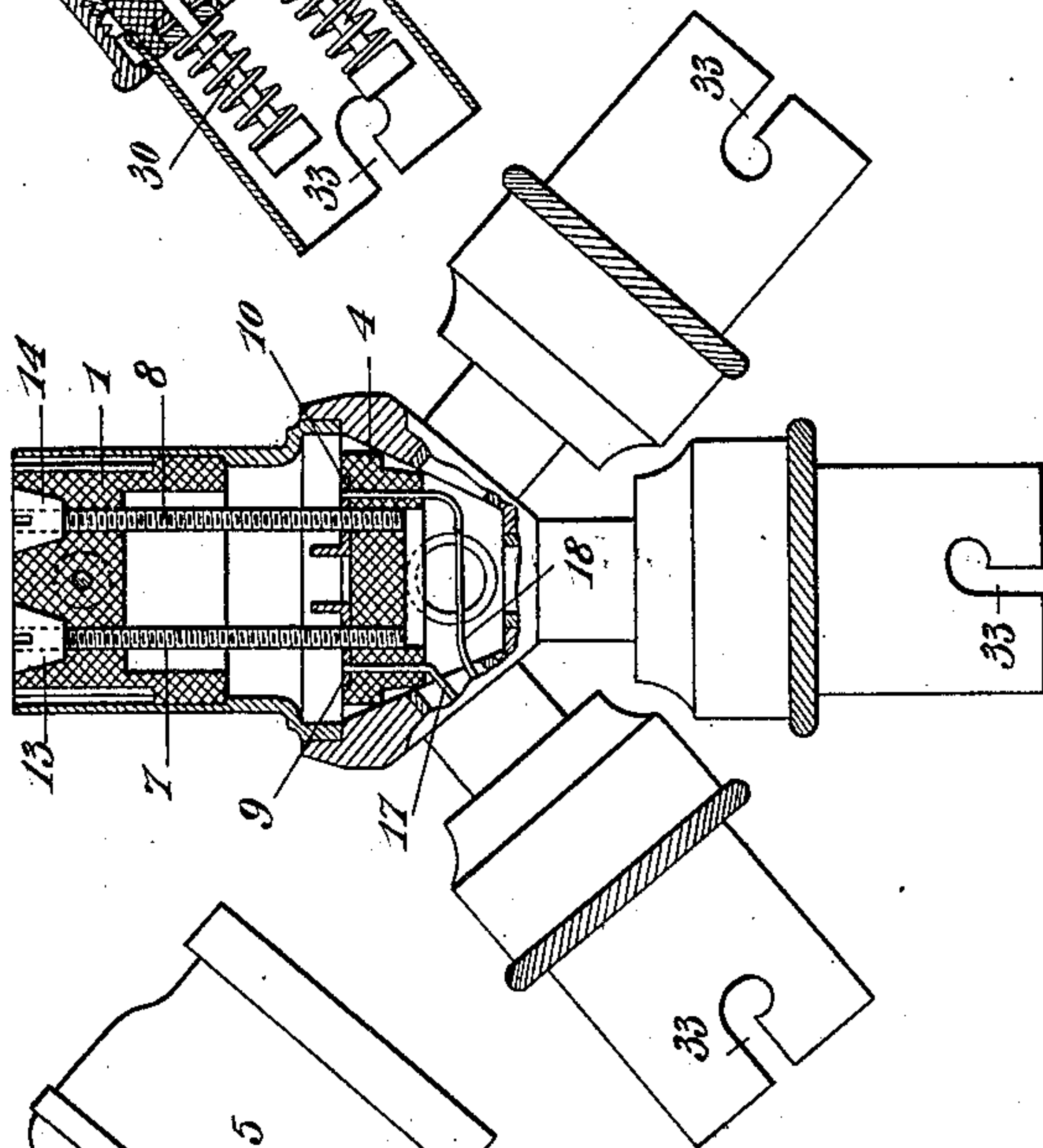


Fig- 5

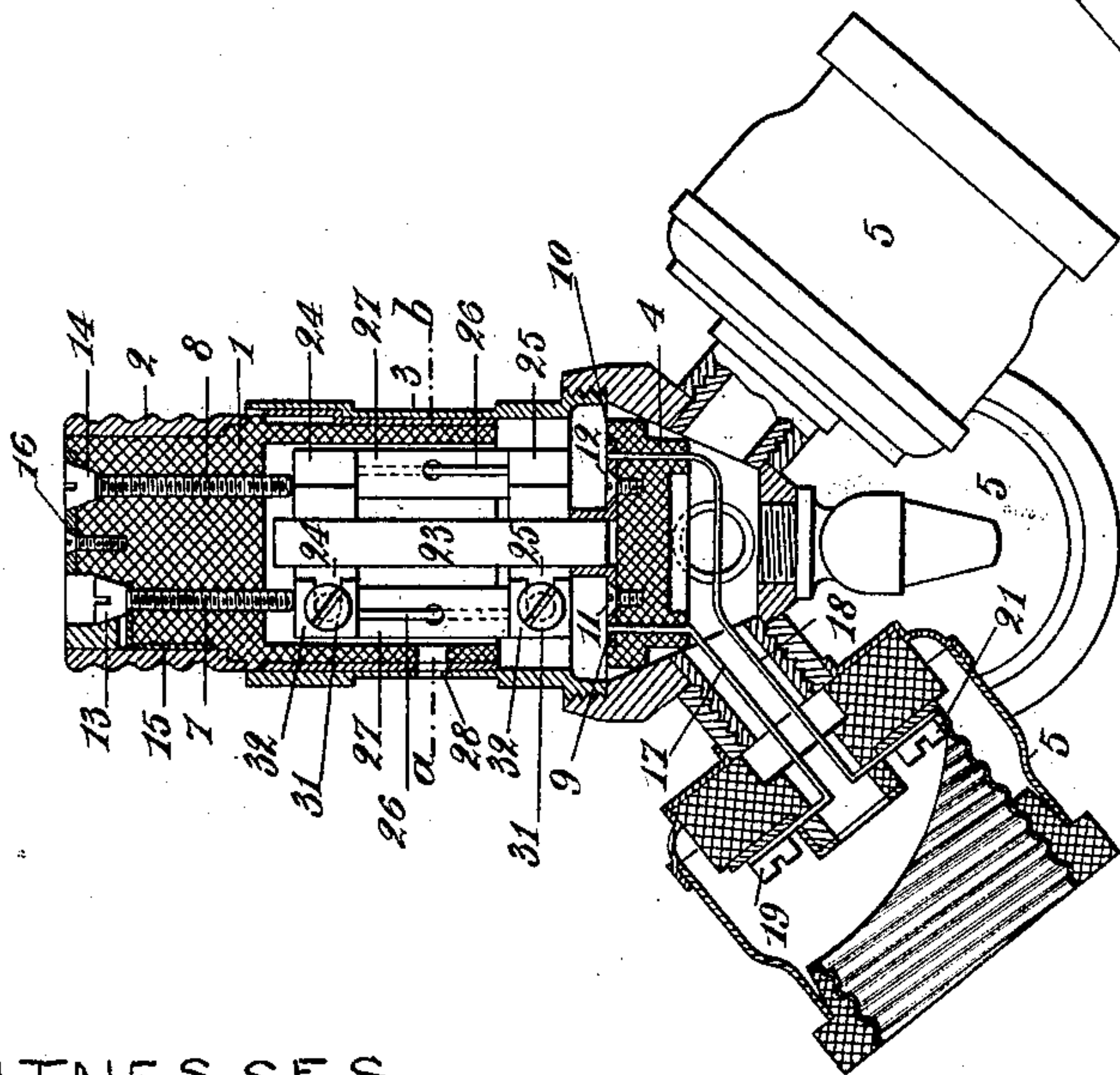
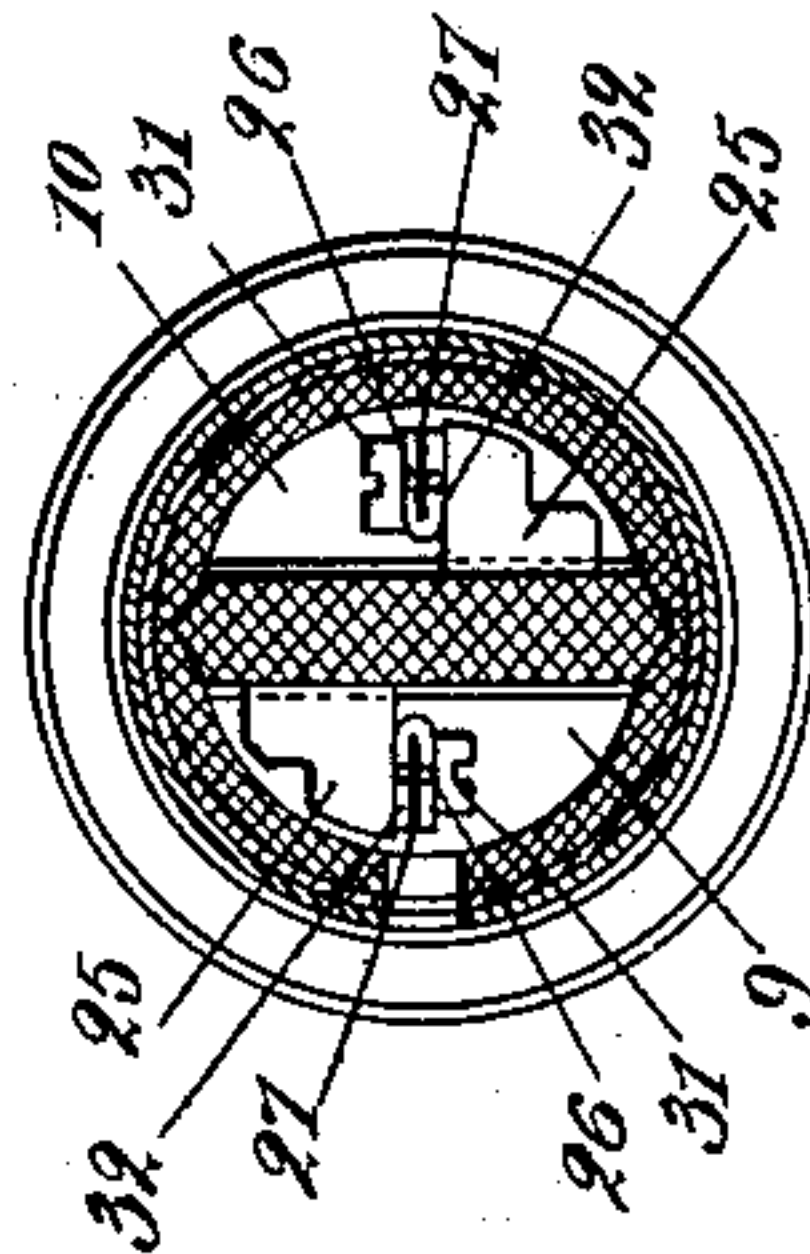


Fig- 6



WITNESSES

H. M. Kuehn  
J. M. Downing

INVENTORS

Adolphe Romain  
and  
Jean d'Ayguessvives

By *Richard*  
ATTORNEYS



# UNITED STATES PATENT OFFICE.

ADOLPHE ROMAIN AND JEAN D'AYGUESVIVES, OF PARIS, FRANCE.

## SUPPORT FOR INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 756,412, dated April 5, 1904.

Application filed October 10, 1902. Serial No. 126,769. (No model.)

*To all whom it may concern:*

Be it known that we, ADOLPHE ROMAIN and JEAN D'AYGUESVIVES, citizens of the Republic of France, and residents of Paris, France, have invented certain new and useful Improvements in Supports for Incandescent Electric Lamps, of which the following is a specification, applications for patent having been filed as follows: in France, No. 320,048, dated March 29, 1902; in Great Britain, No. 7,834, dated April 3, 1902; in Austria, dated April 5, 1902; in Russia, dated April 7, 1902, and in Germany, dated April 9, 1902.

The improvements in supports for electric incandescent lamps which form the object of the present invention are applicable to screw-holders, and relate, essentially, to the manner in which we effect the taking of the current, which is much simpler than with the arrangements at present employed, and are also applicable to screw-supports and bayonet-joints and relate to the general construction of the supports and to arrangements for breaking the circuit which we have designed for enabling us to avoid having a whole group of lamps useless, as is the case with the lamps at present employed when short-circuiting takes place.

In the accompanying drawings, Figure 1 is a sectional elevation of a screw lamp-holder fitted with a circuit-breaker. Fig. 2 shows a similar view of a modification. Fig. 3 is a section on the line *a b* of the holder shown in Fig. 1. Fig. 4 is a section of a bayonet-joint holder comprising our various improvements. Fig. 5 is a sectional elevation of a multiple joint arranged in accordance with our invention for use with a screw socket-lamp. Fig. 6 is a sectional plan view on the line *a b* of Fig. 5. Fig. 7 is a sectional elevation of a multiple joint on the same system, but arranged for use with lamps having bayonet-joints; and Fig. 8 is a similar view to Fig. 7, but without the circuit-breakers shown in Figs. 5 and 7.

The screw-support shown in Figs. 1 and 2 comprises the following parts: a hollow socket 1, formed of some suitable insulating material, (the upper part of this socket is cut down to form a circular recess in which a screw is lo-

cated,) and a screwed ring 2, which serves to fix the support in the internally-threaded socket of the fixed apparatus. The screwed ring 2 may for that matter be replaced by a simple screw-thread formed in the upper part of the socket 1. On this socket 1 a second metal socket 3 is mounted by means of a screw-thread, which second socket may, if necessary, be strengthened above and below and serves to support a lower ring-piece 4, arranged as shown in the drawings, on which piece is fixed a shell 5, which serves to receive the screwed shank of the lamp. In this shell 5 is placed a breech-block 6, formed of insulating material, on which the socket of the screwed lamp bears.

The passage of the current is effected by means of the following parts: Two threaded rods 7 and 8 pass freely through the main socket 1 and penetrate into the ring part 4, Fig. 2, each running through small metal channels or angle-pieces 9 10, fixed to the ring part 4 either by means of screws 11 12, Fig. 1, or by the threaded rod itself. Each of the heads 13 14 of the screwed rods 7 8, on which they are screwed, is respectively in contact, the one, 13, with a little bent-over band 15 of metal, which is in contact with the threaded ring 2, if such ring exists, or simply with the threaded fixed socket, if such ring does not exist, the other, 14, with a little metal plate 16, which is embedded and fixed at the summit of the hollow socket. To prevent the head 13 of the threaded rod 7 from coming in contact with the metal plate 16, care is taken to embed this head in the insulating material of the socket 1. The current is conducted from the two angle-pieces 9 and 10 to the lower part of the support by means of two wires 17 18, one of which, 17, ends under a screw 19, which brings it in contact with a projecting plate 20, and the other wire, 18, ends under a screw 21, which places it in contact with the part of the threaded socket 22 which serves to receive the breech-piece of the lamp.

Instead of effecting the connection of the threaded rods 7 and 8 with the angle-pieces 9 and 10 directly, as shown in Fig. 2, we interpose between these parts a circuit-break-



ing arrangement, which is arranged in the following manner: We insert a small plate 23 of insulating material, sliding in the interior recess of the hollow socket 1, as shown in Fig. 3, and adapted to lodge at its lower part in the interval which exists between the two vertical arms of the channels or angle-pieces 9 and 10. On each of the faces of this plate 23 there are two little metal studs 24 25, one pair, 24, of which are respectively in contact with the two screw-rods 7 and 8 and the other pair, 25, with each of the channels or angle-pieces 9 and 10. The studs 24 25 are respectively connected one with another by means of fusible wires 26, held up by a sheet 27 of insulating material, on each side of which they pass, so as to be better held up. These fusible wires act in the manner of circuit-breakers in case short circuit is produced. The sheets 27 of insulating material are held under the studs 24 25 by means of screws 31, which in order that they may not cut them press upon them through the intermediary of a small cover 32 of thin tin-foil or metal sheeting. An aperture 28 is provided, which allows of the escape of the gas which is produced in consequence of the fusion of the wires 26.

In the arrangement shown in Fig. 4, which is adapted for a system of support by bayonet-joints, the parts are the same and are grouped in the same manner, with some differences which the difference of mounting necessitates. Thus in this case the two screw-heads 13 14 lie at the upper level of the socket 1, while the lower wires 17 18 each come in contact with rods 29 30, fitted with springs, on which the breech-blocks of the bayonet-joint lamps press. Otherwise the whole of the construction remains the same as the foregoing, with the option of using the circuit-breaker or otherwise, as preferred. The spikes of the bayonet-joints penetrate in the ordinary manner into notches 33, which constitute one of the elements of this connection.

It will be easily understood that instead of having two wires 17 18, each respectively connected with angle-pieces or channels 9 and 10, it is possible to have a series of wires 17 18, each connected in the same manner with these angle-pieces, so that a multiple joint may be formed in the simplest manner which allows of the connection of several incandescent lamps with two wires, positive and negative, serving for the passage of the current to be instantly effected either to the ceiling of a room or to any vertical wall without its being necessary to effect the numerous and long splicings which this work necessitates when carried out by the ordinary methods. The channels or angle-pieces 9 and 10, Figs. 5 to 8, which receive the current, as has been hereinbefore specified, in this case no longer each receive a single wire from a contrary pole passing to the pole of the same denomination

in the socket, whether it be a screw-socket or a bayonet-socket; but each of the channels 9 10 of the contrary poles receives as many wires 17 18 as there are to be lamps in connection, the said wires, which are of course insulated to avoid short-circuiting, each passing through a ring part 4 in order to be soldered at one end to one or other angle-piece or channel 9 10 and to be fixed at the other end to the corresponding terminals 19 21 of the lamp which they are to feed, the current-takers being for each of these lamps arranged in the manner hereinbefore specified. The circuit-breakers 26 27 in this case are arranged in the manner hereinbefore described and are applied in the same manner.

The forms, dimensions, proportions, and accessory parts of these lamp-supports may be varied, and such materials as may be deemed suitable may be employed in their construction without departing from the scope of the invention.

We declare that what we claim is—

1. A support for incandescent electric lamps comprising a casing, an upper portion of insulating material, contact-plates on said upper portion, screw-threaded rods engaging with said plates and extending through said portion, a lower portion of insulating material, contact-plates on said lower portion, a fusible wire connecting said rods and the lower contact-plates, a support for said wire and a lamp-socket electrically connected to said contact-plates, substantially as described.

2. In a support for incandescent electric lamps the combination with a casing, an inverted socket of insulating material in the upper end of said casing, contact-plates on the outer end of said socket, screw-threaded rods passing through the same, a ring of insulating material in the lower part of said casing and contact-plates secured thereto, of a vertically-extending strip of insulating material in said casing, metal projections thereon adapted to engage with said contact-plates and said rods and a lamp-socket electrically connected to said contact-plates, substantially as described.

3. In a support for incandescent electric lamps the combination with a casing, an inverted socket of insulating material in the upper part of said casing, contact-plates on the outer end of said socket, rods passing through the same, a ring of insulating material in the lower part of said casing and contact-plates secured thereto, of a strip of insulating material in said casing, upper and lower metal projections on the opposite sides of said strip adapted to engage said rods and the lower contact-plates, a fusible connection for said metal projections, a lamp-socket secured to said casing and wires connecting said lower contact-plates with said socket, substantially as described.

4. In a support for incandescent electric



lamps, the combination with the casing, upper  
and lower contact-plates secured therein, a  
fusible wire connecting said upper and lower  
contact-plates, a support for said fusible wire,  
5 a plurality of wires each respectively secured  
to the lower contact-plates, the said wires  
passing through a ring of insulating material  
in the lower part of said casing, a plurality of  
lamp-sockets secured to this lower part, the  
10 terminals of each of these sockets being re-  
spectively connected to the ends of two wires,

positive and negative, secured to the lower  
contact-plates, so that the terminals of sock-  
ets are thus connected in parallel with respect  
to each other, substantially as described. 15

In witness whereof we have hereunto set our  
hands in presence of two witnesses.

ADOLPHE ROMAIN.

JEAN D'AYGUESVIVES.

Witnesses:

EDWARD P. MACLEAN,

EUGÈNE PICHON.