

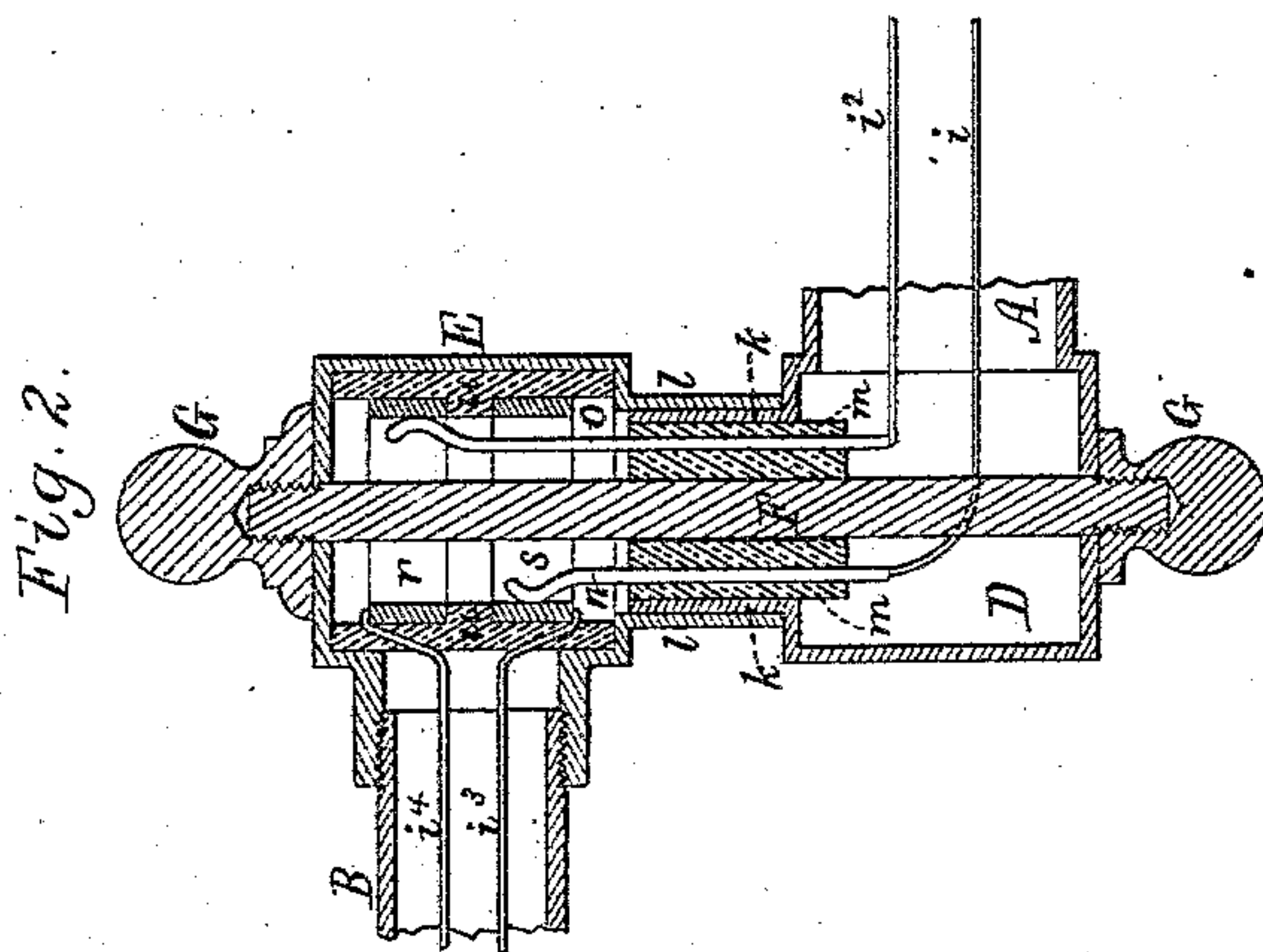
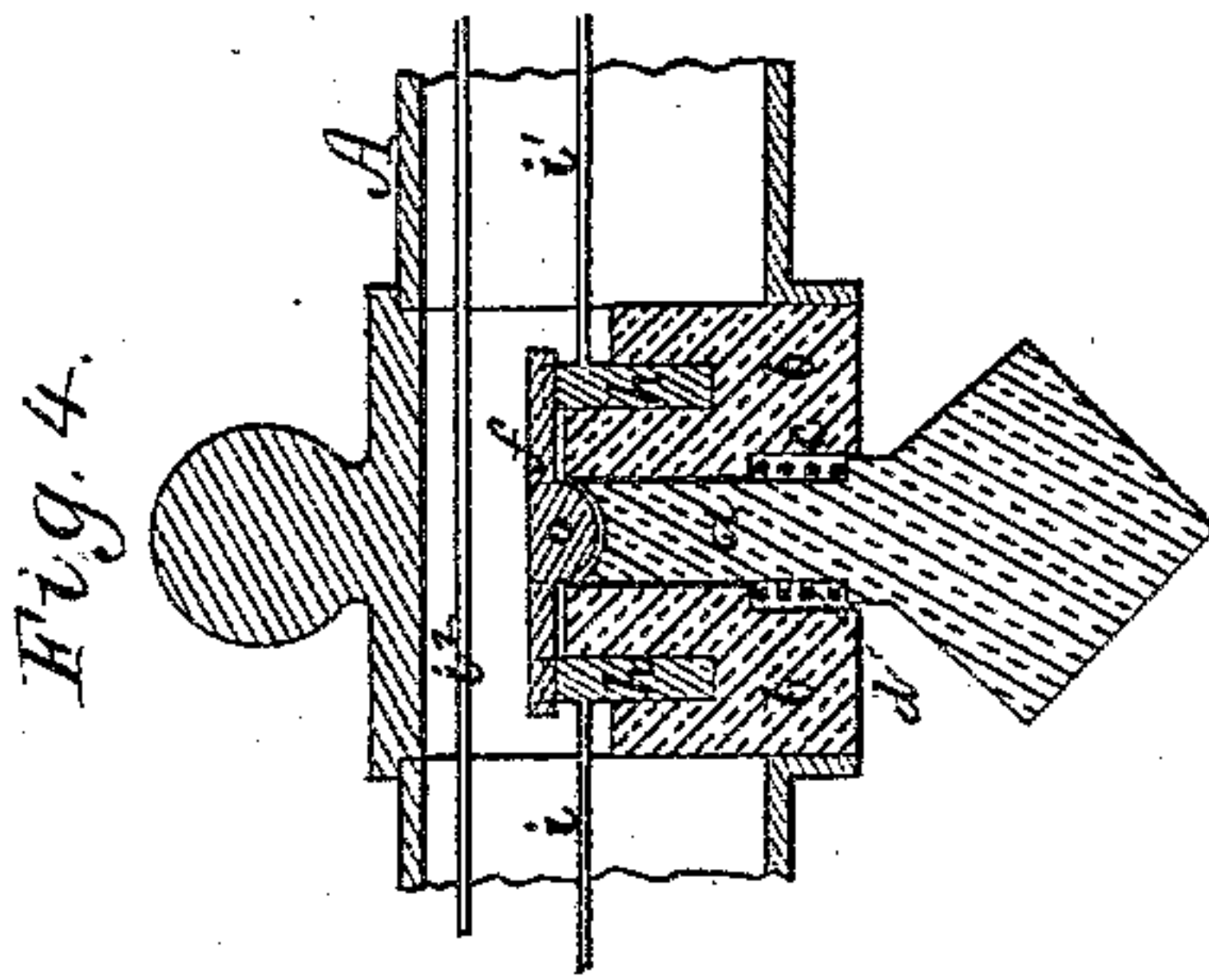
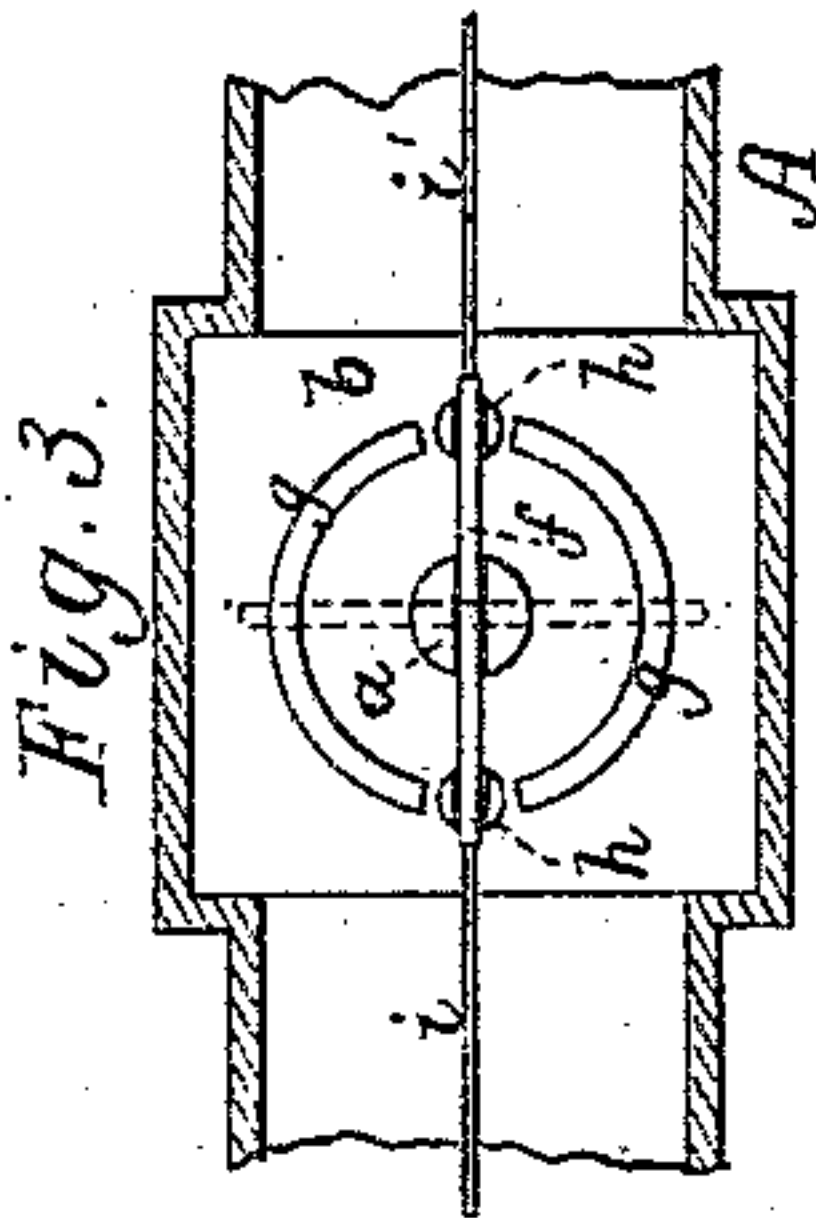
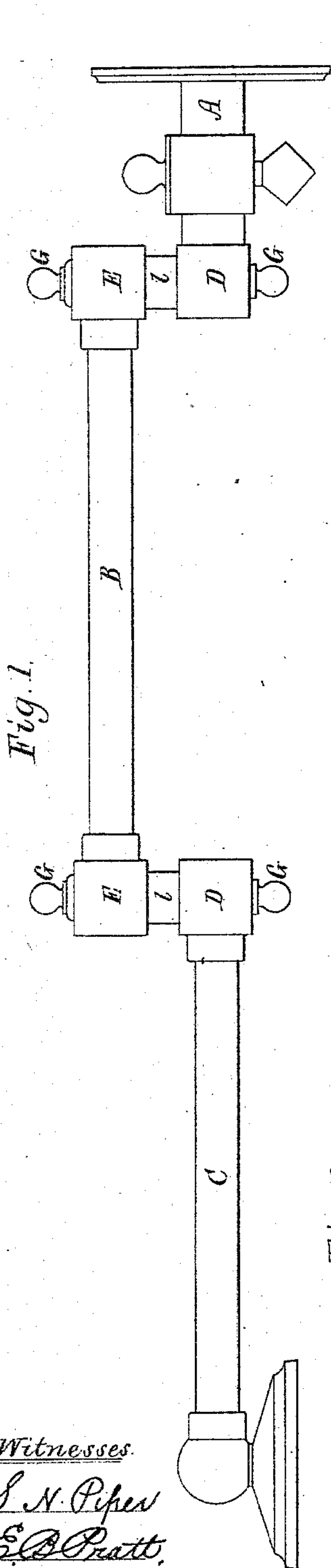
(No Model.)

J. RITCHIE.

SWINGING BRACKET FOR ELECTRIC LAMPS.

No. 296,355.

Patented Apr. 8, 1884.



Witnesses.
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SWINGING BRACKET FOR ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 296,355, dated April 8, 1884.

Application filed December 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN RITCHIE, of Brookline, in the county of Norfolk, of the Commonwealth of Massachusetts, have invented a new and useful Improvement in Fixtures or Swinging Brackets for Electric Lamps; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side view of one of the said brackets; Fig. 2, a vertical section, on an enlarged scale, of one of its joints. Fig. 3 is a top view, and Fig. 4 a vertical section, on an enlarged scale, of the key and switch of the circuit-wires of such bracket.

The nature of my invention is defined in the claims hereinafter presented.

The swinging bracket, in its external appearance, is similar to such as are usually employed for supporting a gas-burner and its glass shade, or such and a chimney, the principal parts or members being jointed, to operate in a manner similar to that in which those of the gas-burner bracket can be worked. These parts (shown at A, B, and C,) are tubes jointed to one another, so that either of the parts B and C may be swung or turned around, either in a full circle or in an arc thereof, as occasion may require. The part A, which is supposed to be stationary, and when used fastened to a wall or other object, is provided with a rotary key of a suitable electrically-insulating material, as hard rubber. The stem *a* of the said key extends concentrically through a cylindrical or other proper shaped block, *b*, of insulating material or hard rubber, and is adapted thereto so as to be capable not only of being revolved, but of being moved lengthwise in such block, there being around the stem a chamber, *c*, and in such chamber a spiral spring, *d*, to draw the key downward. There is fulcrumed at its middle to the upper end of the stem a short metallic lever or switch, *f*, which extends in opposite directions from the stem, and rests on two metallic arcs or curved rails, *g g*, let into and extended up from the block *b*, they being arranged in a circle concentric with the stem. Between the two rails *g g*, at their ends, but out of contact therewith, are two metallic studs, *h h*, each of which is grooved on its upper end diametrically thereof, to receive the switch when turned upon it (the said stud) from

the rails. Electric-circuit wires *i i'* are respectively extended from these studs, as shown. On turning the key the switch may be moved either upon or off the studs, so as to break or close the circuit, as occasion may require, the rails serving to guide it properly to and from the studs, and to keep it from contact with and wearing the insulating-block *b*. The spring answers to keep the switch in contact with the rails or the studs, and to enable it to move from the studs to the rails, or from the rails to the studs, without any disturbance of its proper contact therewith. The other circuit-wire is shown at *i'*. It, with the wire *i*, goes through the tube A into its lower joint portion, D, whose tubular neck *k* extends up within the neck *l* of the upper joint portion, E, such joint portions being adapted so as to allow of the portion E being revolved on the neck *k*. Within the said neck *k* is a cylindrical block, *m*, of hard rubber, which has extending upward from it and down through it two springs or elastic wires, *n o*, which, near their upper ends, are bent laterally, so as to be borne by their elastic force against two metallic rings, *r s*, arranged one above and out of contact with the other, and within and supported by a tubular insulator, *u*, such rings and insulator being within the joint portion E, as represented. The two joint portions D and E are held to one another by a connection-pin, F, which goes down through them axially, and has two nuts, G G, screwed on it at its ends; or it may have a head at one end and a screw and nut at the other. From the two rings *r* and *s* circuit-wires *i'* and *i'* lead into and through the tube B to the metallic rings *r* and *s* of the upper portion, E, of the joint of the parts B and C, the said joint being constructed like that of the tubes or parts A and B.

The springs *n o*, that bear against the rings *r s*, may be constructed to do so by a torsion or twist strain, such construction being sufficient to admit of the easy removal of them and their joint part D together from the joint part E and its metallic rings.

From the above it will be seen that while either of the parts B and C may be in movement around in a circle or an arc thereof, the rings and the spring of its joint will be in contact and allow of such movement.

I am aware of the electric bracket devices

shown in the United States Patent No. 282,521, and do not claim such, as my bracket differs therefrom materially in its construction and operation. The contact-springs hereinbefore described are not concentric, and do not press against the rings in directions parallel with the axis of rotation of either joint-piece. Furthermore, there are in the electric fixture of said patent no lever-switch and curved bearing-rails to the key, as in my improved fixture.

I claim—

1. The combination of the rotary key of insulating material, provided with the switch fulcrumed to it, and also with the depressing-spring, with the concentric or surrounding insulating-block, its metallic studs, and curved rails, all being adapted in manner and for use with electric-circuit wires, substantially as set forth.

2. The lower joint-section, D, provided with

the insulator *m* in its neck, and the spring circuit-wires *n o*, extending through and above such insulator, in combination with the upper joint-section, E, and its tubular insulator *u*, and metallic rings *r s*, arranged in and adapted to it, all being substantially and to operate as represented.

3. The combination of the joint-sections D and E, having the insulators *m u*, electric wires *n o*, and metallic rings *r s*, arranged as set forth, with the circuit-wires *i i' i''*, and the part A, provided with the rotary key *a*, switch *f*, spring *c*, insulating-block *b* and its metallic studs *h*, and curved rails *g*, all being adapted and to operate substantially as represented.

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Witnesses:

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