

M. KAY.  
INCANDESCENT GAS BURNER.  
APPLICATION FILED DEC. 13, 1904.

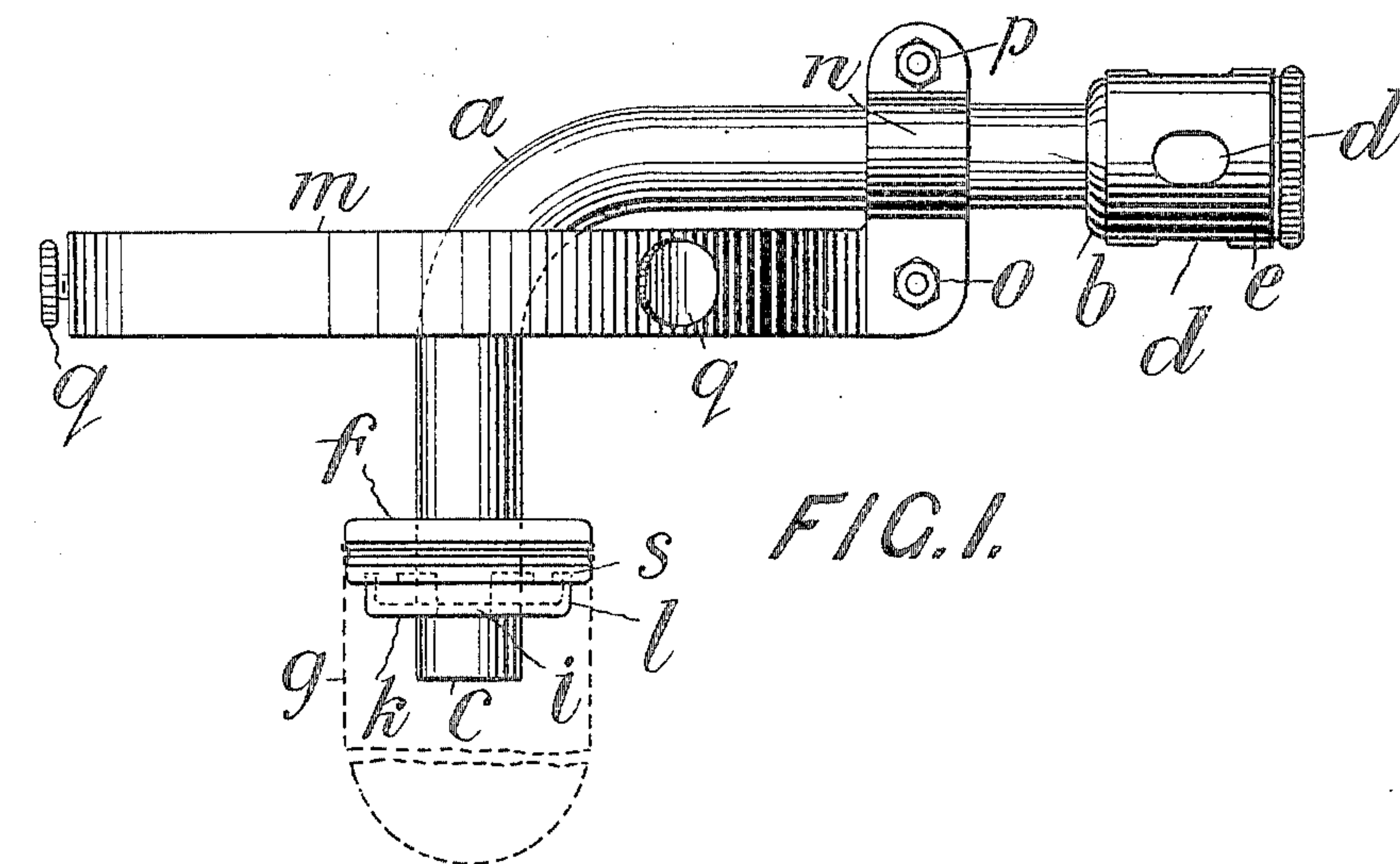


FIG. 1.

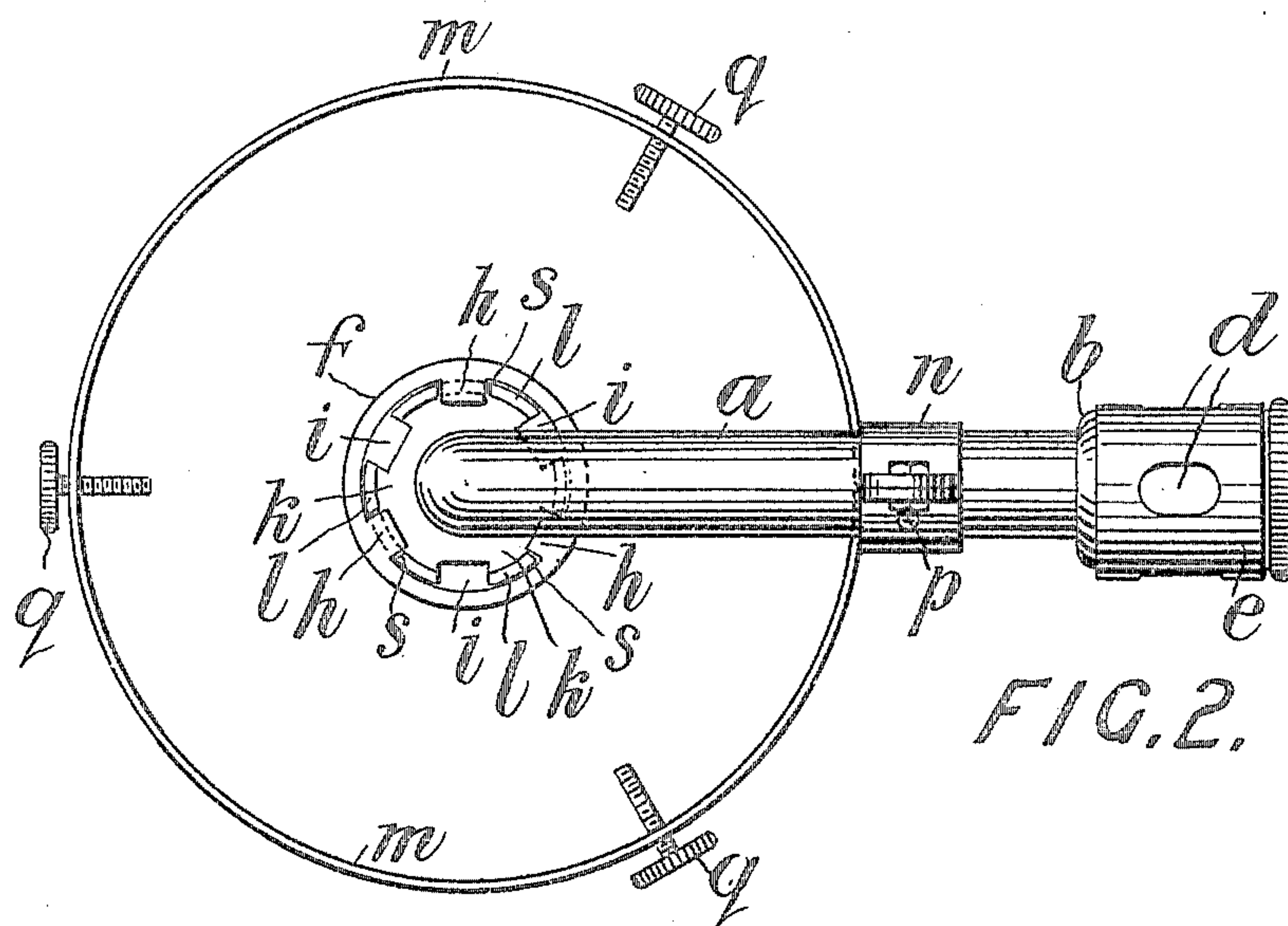


FIG. 2.

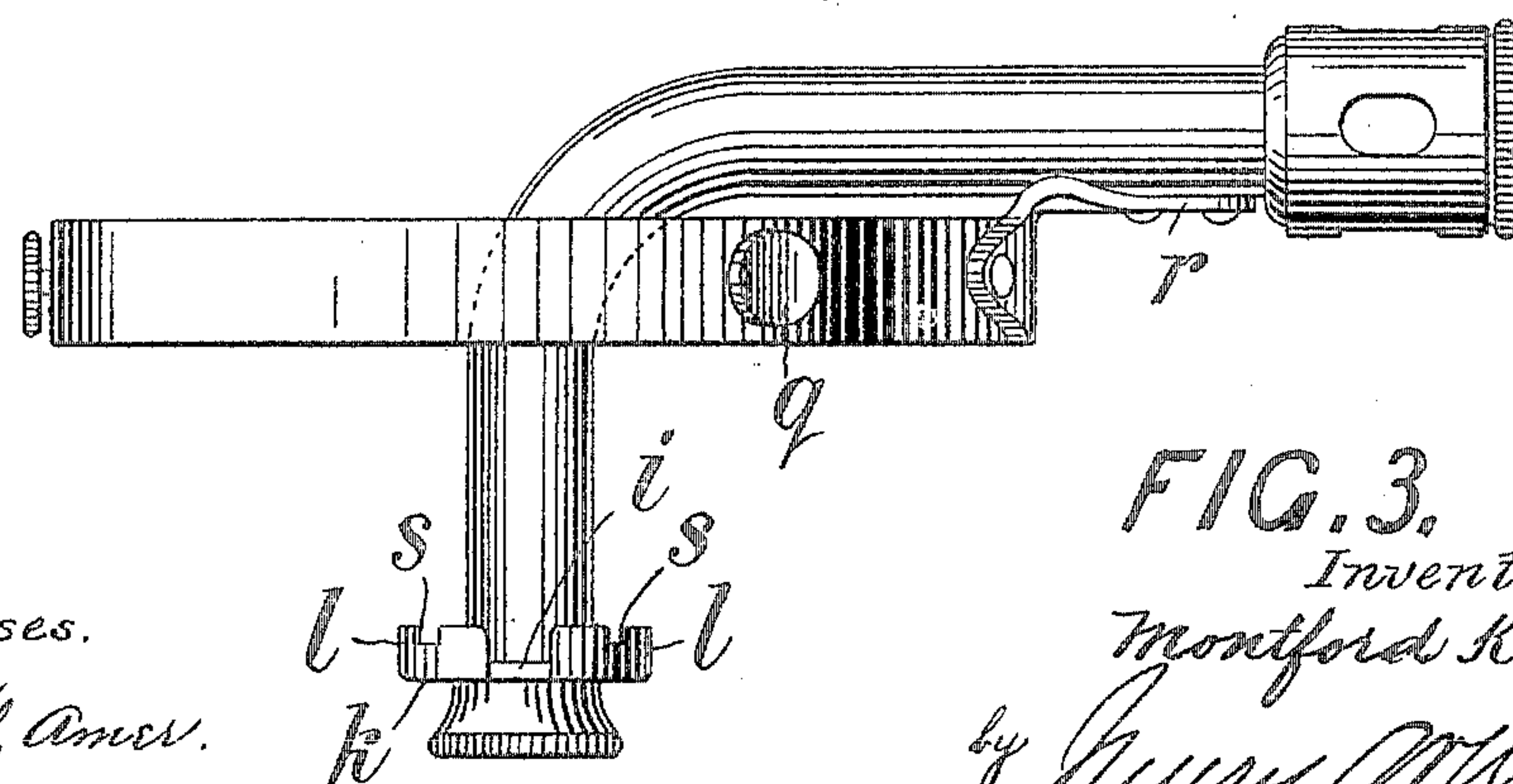


FIG. 3.

Inventor.

Montford Kay.

by *Jerry M. D. [Signature]*

Witnesses.

Harry L. Amer.

W. Romm



# UNITED STATES PATENT OFFICE.

MONTFORD KAY, OF CLAPTON, ENGLAND.

## INCANDESCENT GAS-BURNER.

No. 804,409.

Specification of Letters Patent.

Patented Nov. 14, 1905.

Application filed December 13, 1904. Serial No. 236,656.

*To all whom it may concern:*

Be it known that I, MONTFORD KAY, engineer, a subject of the King of Great Britain, residing at 54 London road, Clapton, in the county of Middlesex, England, have invented new and useful Improvements in or Connected with Incandescent Gas-Burners, of which the following is a specification.

This invention relates to atmospheric burners in connection with which incandescing mantles are employed, being of the inverted type. In burners of the kind as heretofore constructed difficulties have been experienced in keeping the head of the burner at a proper temperature and in preventing the inductive action of the gas issuing from the nipple from drawing in burned gases instead of pure air.

The invention comprises means whereby the burned gases do not come into contact with the head or mixing-chamber of the burner, the burner being constructed of any appropriate material, and suitable devices for supporting the mantle and globe or lantern are provided.

Figure 1 of the accompanying drawings illustrates in elevation an incandescent gas-burner constructed according to this invention. Fig. 2 is a plan thereof, and Fig. 3 is an elevation of a similar construction with the mantle-ring and mantle removed for the sake of clearness.

The burner illustrated in Figs. 1 and 2 consists of an atmospheric burner which is preferably bent or curved at or about the place marked *a*—that is to say, between the head or mixing-chamber *b* and the point *c* of the burner, which point delivers the mixture of gas and air to the mantle. The burner is prolonged or formed with a tubular continuation, which is, as aforesaid, bent or curved at *a* out of the straight line, and preferably, as shown, that part of the tube near the point *c* of the burner is at a right angle to that part of the tube adjoining the head or mixing-chamber *b*, which is, as usual, provided with holes *d* for the admission of air, a nipple inside for the gas, and a sleeve *e* with holes which are adapted to register more or less with the holes into the mixing-chamber, as is usual. By extending the burner and bending the tubular part of the same the burner-head or mixing-chamber *b* is removed from the path of the hot gases issuing from the mantle.

A suitable device for supporting a mantle

in a convenient position at or near the point *c* of the burner consists of a ring *f*, Figs. 1 and 2, to which the mantle *g* is attached, which ring has (say three) internal lugs *h*, Fig. 2, thereon, which pass up through (say three) slots *i* (see Figs. 1, 2, and 3) in a ring *k*, which is fixed to the burner. The ring *k* has up-standing sides *l* with vertical projections, the spaces between which form shallow notches *s*, in which the lugs *h* rest when the ring *f* has been turned round and allowed to drop into the said notches *s*; or other suitable means for supporting the mantle may be employed.

A suitable device for supporting a globe or shade consists of a ring *m* with lugs *n n* thereon, which clasp the burner-tube and are held there by a bolt or screw *o*, or, as shown, by two bolts *o* and *p* passing through the said lugs, while the ring is provided with screws *q* or the like for the attachment of the globe; or the ring may be attached to the burner by means of a bracket *r*, as shown in Fig. 3, which bracket is either screwed or riveted to the ring and screwed to the burner.

What I claim as my invention, and desire to secure by Letters Patent, is—

An inverted incandescent gas-burner comprising a horizontal limb, a vertical limb at right angles to said horizontal limb, a mixing-chamber on the free end of said horizontal limb provided with air-admission ports, a sleeve with registering ports mounted on said chamber, a burner at the free end of the said vertical limb, a mantle-supporting ring fixed to the vertical limb an appreciable distance above the free end thereof, peripheral slots in said ring, segmental flanges on said ring, recesses in said flanges intermediate said slots, a mantle-ring adapted to take over said supporting-ring, internal lugs on the mantle-ring adapted to pass through said slots and between said flanges and to seat in said recesses, and a globe-supporting ring mounted on the horizontal limb concentrically to the aforesaid rings and in a plane parallel with the plane of said rings.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MONTFORD KAY.

Witnesses:

WALTER J. SKERTEN,  
VICTOR JENSEN.