

No. 822,870.

PATENTED JUNE 5, 1906.

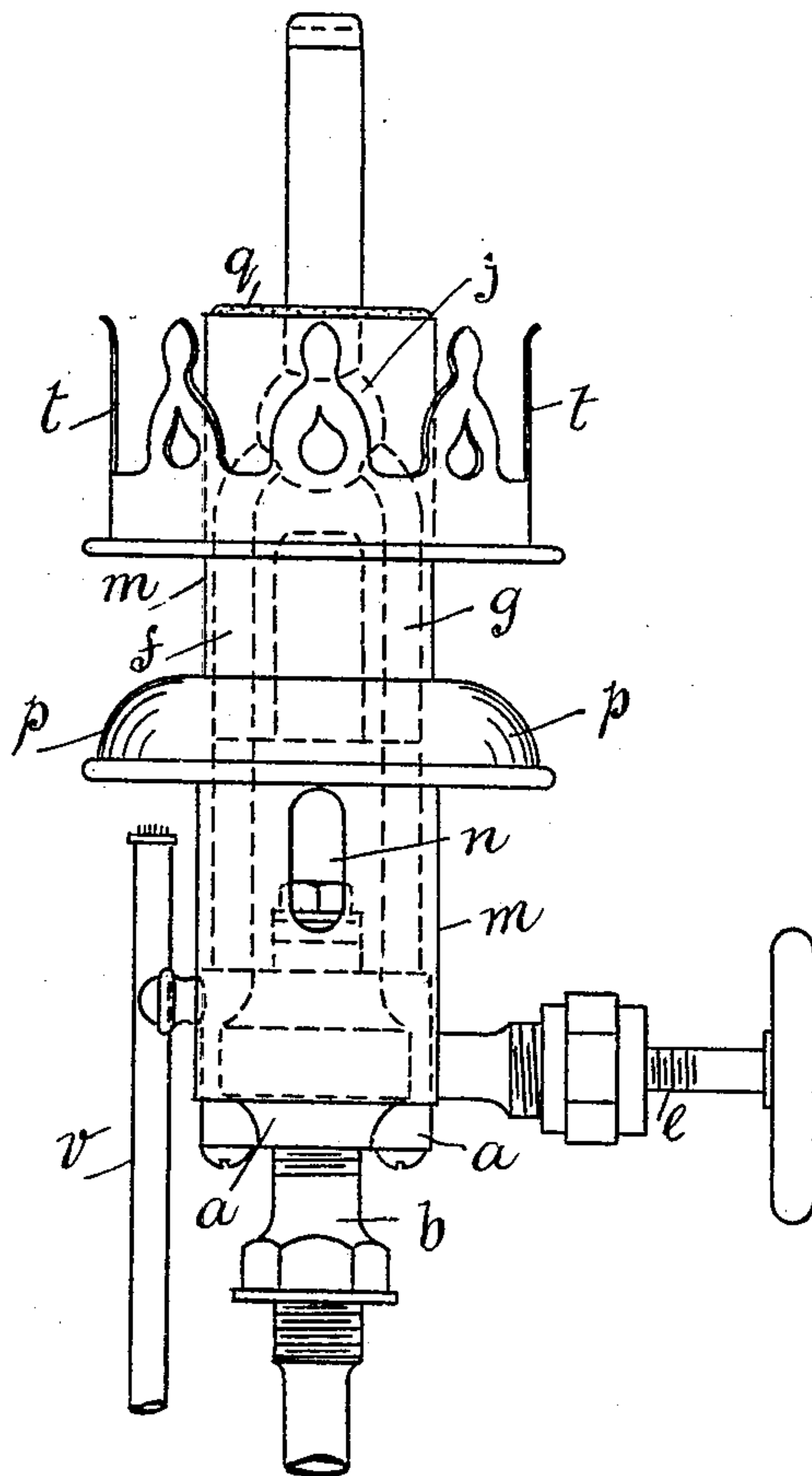
J. F. SCHNELL.

VAPORIZER AND WICKLESS BURNER FOR OIL LAMPS, &c.

APPLICATION FILED OCT. 31, 1904.

2 SHEETS—SHEET 1.

FIG. 1



WITNESSES:

F. W. Wright.
T. H. Birchhead.

INVENTOR

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2 SHEETS—SHEET 2.

FIG. 2.

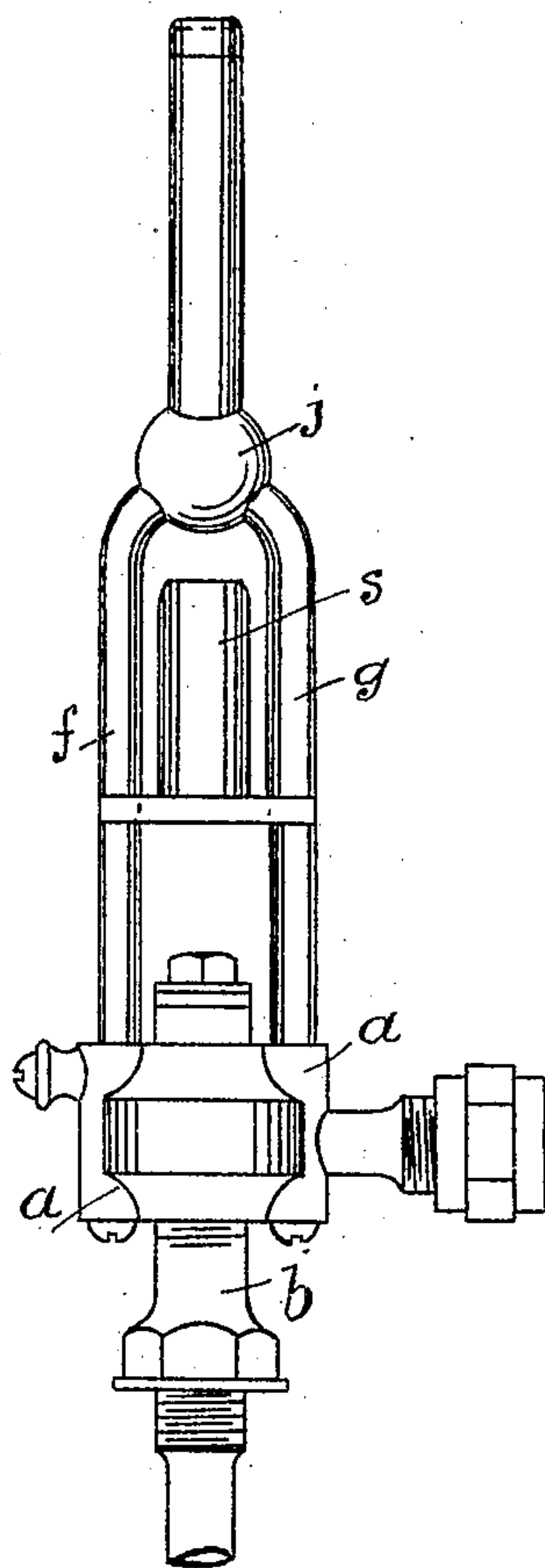
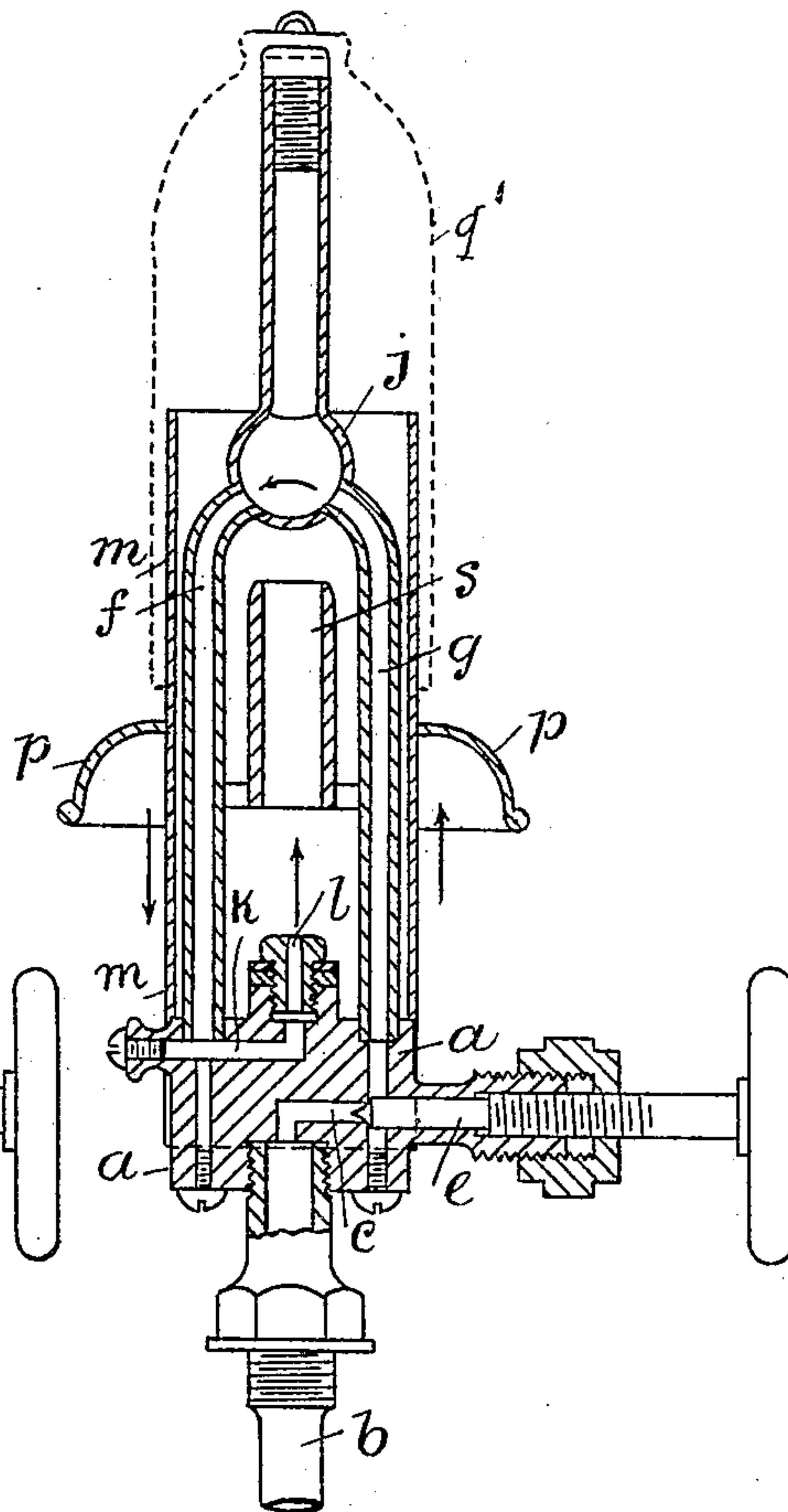


FIG. 3.



WITNESSES:

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INVENTOR

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UNITED STATES PATENT OFFICE.

JOHN FREDERICK SCHNELL, OF ARDWICK, ENGLAND.

VAPORIZER AND WICKLESS BURNER FOR OIL-LAMPS, &c.

No. 822,870.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed October 31, 1904. Serial No. 230,737.

To all whom it may concern:

Be it known that I, JOHN FREDERICK SCHNELL, a subject of the King of Great Britain, residing in Prince street, Ardwick, Manchester, in the county of Lancaster, England, have invented a new and useful Improved Vaporizer and Wickless Burner for Oil-Lamps and for other Purposes, of which the following is a specification.

10 This invention relates to a new or improved vaporizer and wickless burner for oil-lamps and for other purposes.

15 In the accompanying drawings, illustrating my said invention, and to which I herein-after refer, Figure 1 is a side view of my improved vaporizer and burner. Fig. 2 is a side view of the same with the case removed, and Fig. 3 is a vertical section of said vaporizer and burner with the case thereon.

20 In the views the same letters refer to like parts.

The burner shown on the drawings is attached to the reservoir of a lamp or other receptacle for oil by a tubular socket or stem *b*, screwed into or formed on the base *a*. An oil-passage *c*, Fig. 3, leading from the stem *b*, is formed in the base *a* and is opened and closed by a needle-valve *e*. Two vertical tubes *f* and *g* are fitted in the base *a* and are connected at their upper ends to a bulb generator or vaporizer *j*. One of these tubes *g* is connected to the passage *c*; but the admission of oil thereto is regulated by the aforesaid valve *e*, the tube *f*, connected to a passage *k* in the base *a*, leading to the jet or opening *l*. The tubes *f* and *g* are inclosed in an open-ended tube *m*, which has a slot, as *n*, on each side thereof, and a concave shield *p* is fitted on the tube *m* above the slots *n*. An ordinary wire-gauze cap *q* is placed on the tube *m* above the shield, and if the burner is intended to be used in combination with a

lamp the ordinary mantle and glass tube or globe may be placed on the gallery *t*.

In order to light the lamp or burner, the valve *e* is opened. The tubes *f* and *g* are warmed by a small jet, as *v*, leading direct from the reservoir, (or by other preferred means,) the heat from the jet collecting in the concave shield *p* passing in through the slots *n* and enveloping the tubes *f* and *g* and the vaporizer *j*, causing the oil to rise in the tube *g* and pass to the bulb *j*, where it is vaporized. The vapor passes down the tube *f* to the jet *l*, the vapor passing up through the tube *s*, where it is ignited, round the bulb *j* to the gauze cap *q* or other illuminating or heating jet. The jet *v*, which is not further required, is then extinguished.

I claim as my invention—

A vaporizer and wickless burner for oil-lamps and for other purposes, consisting of a base, an oil-reservoir, a tubular stem connecting said base and reservoir, vertical tubes fitted in the upper surface and respectively near each side of said base, a bulb vaporizer fitted to and uniting the upper ends of said tubes, an oil-passage in the base leading from the aforesaid stem to the bottom of one of said vertical tubes, a valve for regulating the supply of oil thereto, a passage in the base leading from the bottom to the other one of said vertical tubes, a jet connected therewith and fitted centrally in said base between the aforesaid vertical tubes, an open-ended cylinder or case inclosing the vertical tubes and bulb vaporizer, and a concave shield thereon.

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

JOHN FREDERICK SCHNELL.

Witnesses:

JNO. HUGHES,
J. ERNEST HUGHES.