

No. 817,297.

PATENTED APR. 10, 1906.

G. L. BETTS.
LAMP OR LANTERN.

APPLICATION FILED JAN. 24, 1905.

Fig. 1.

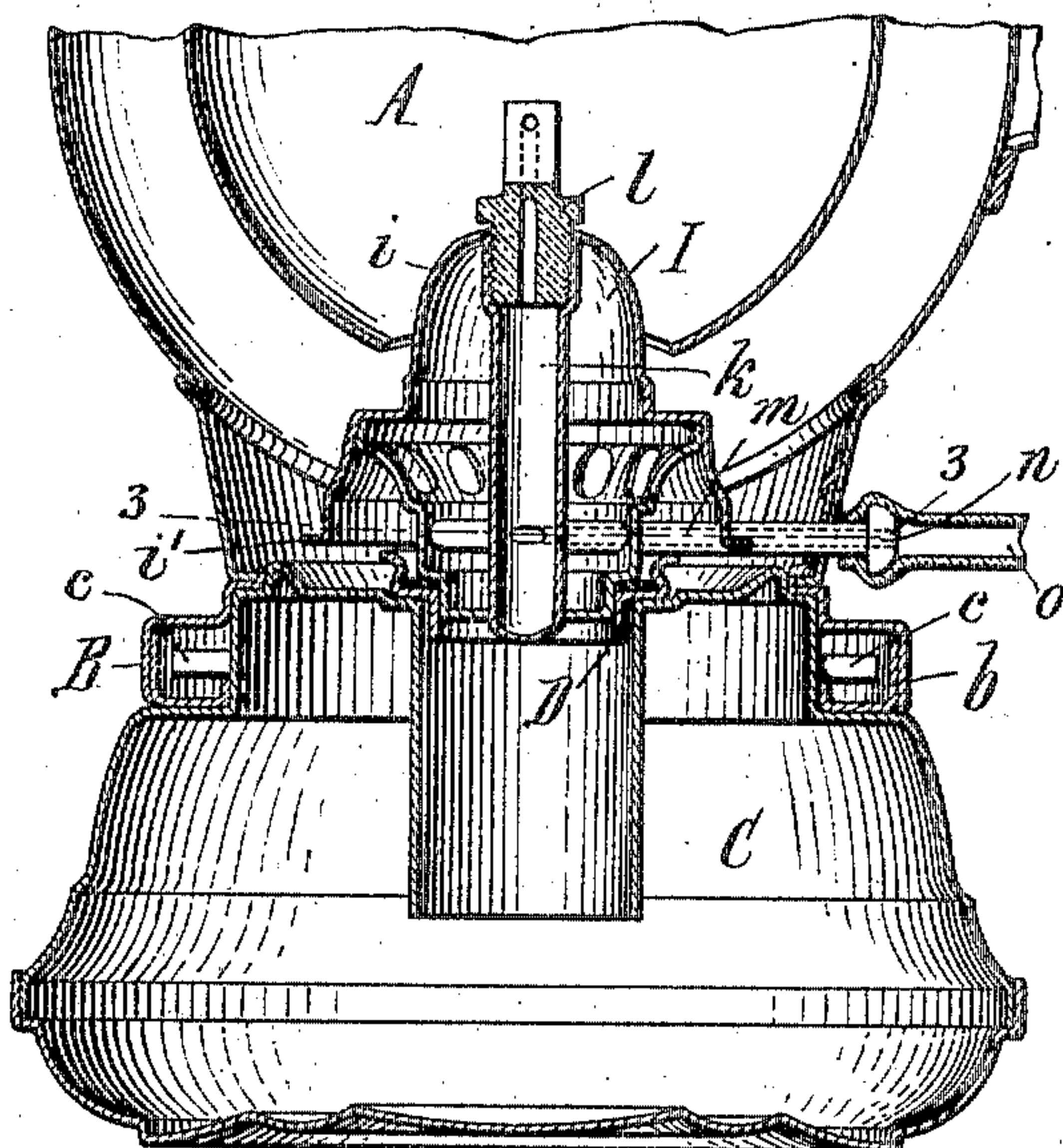


Fig. 2.

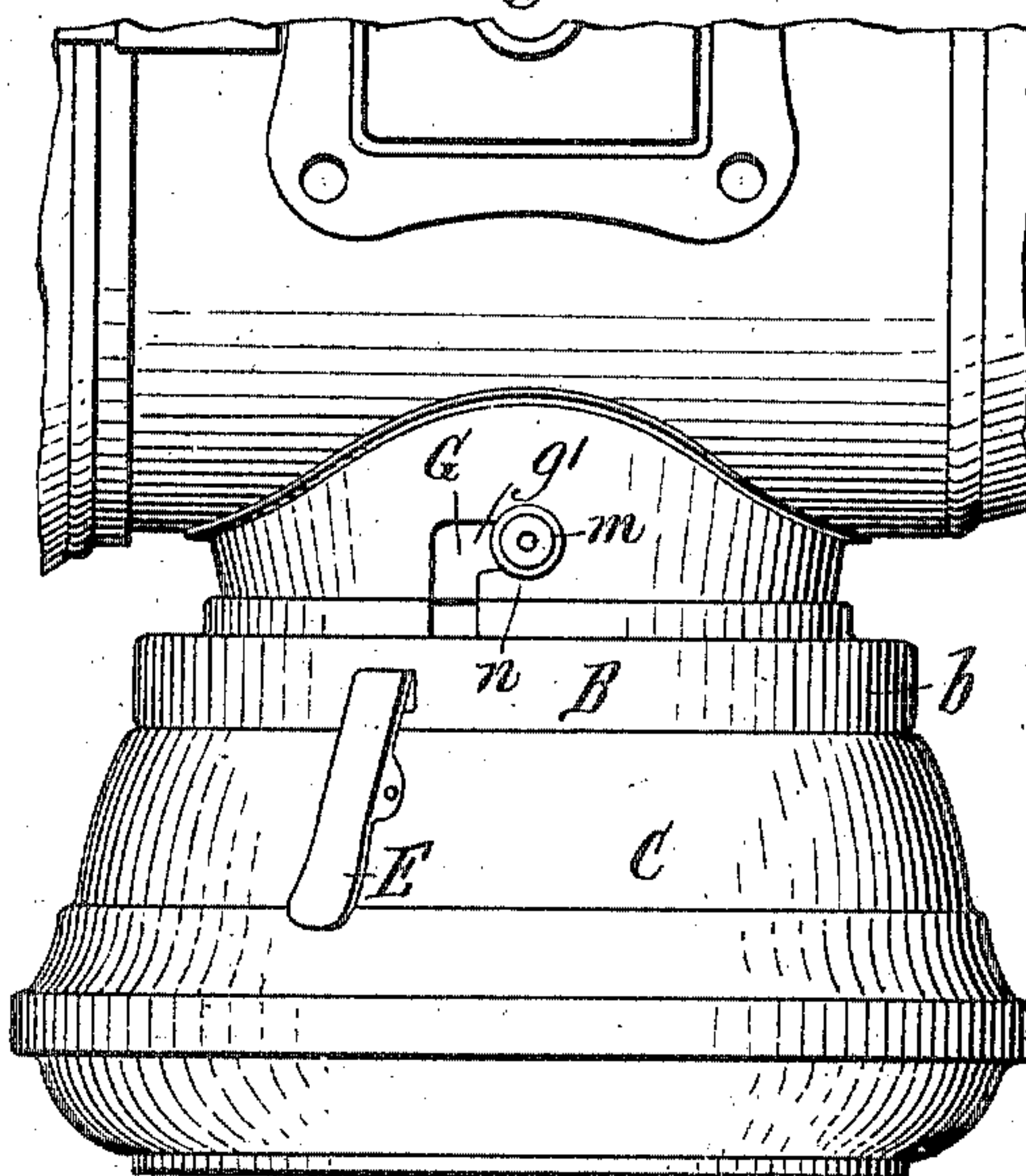


Fig. 3.

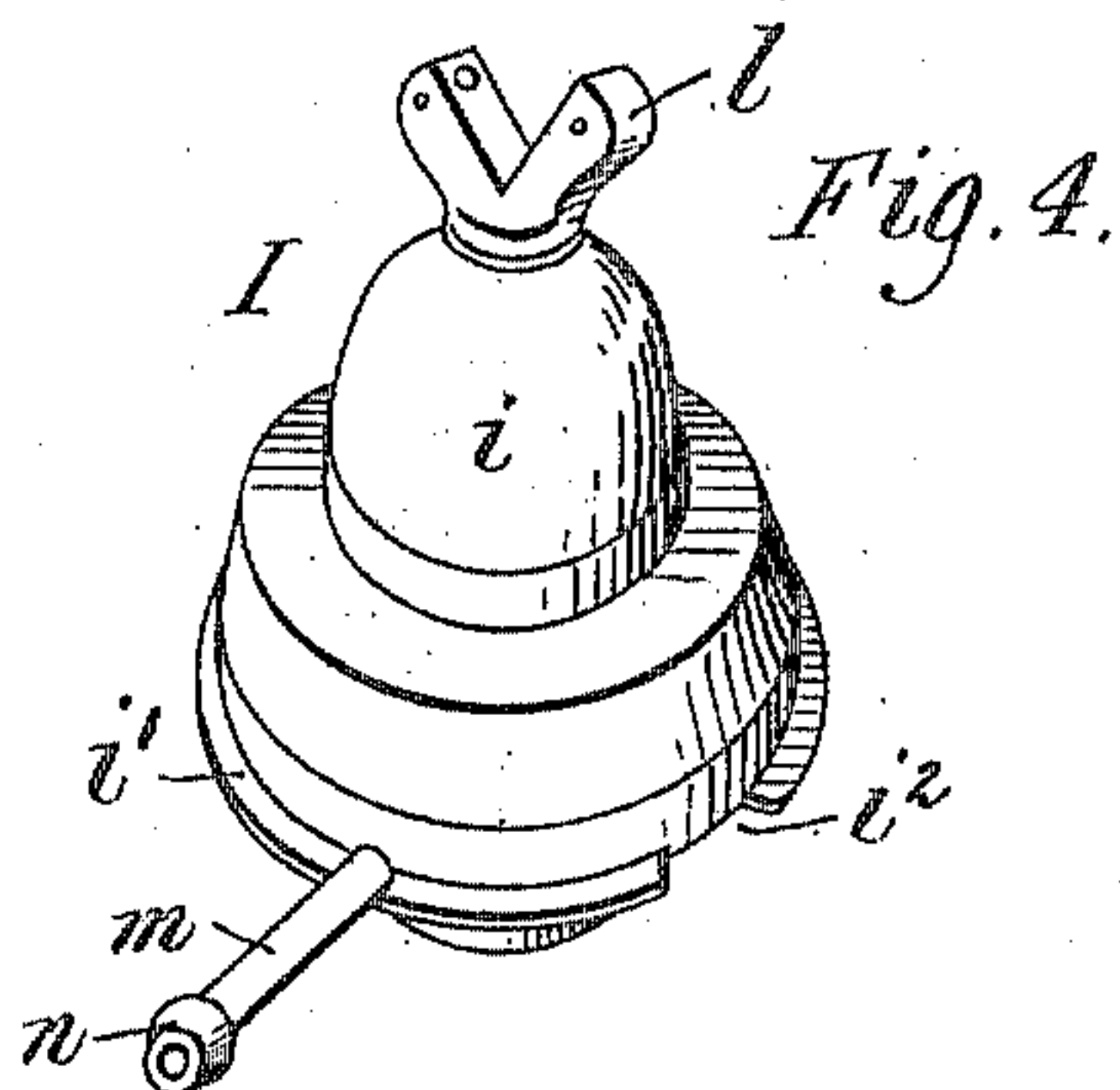
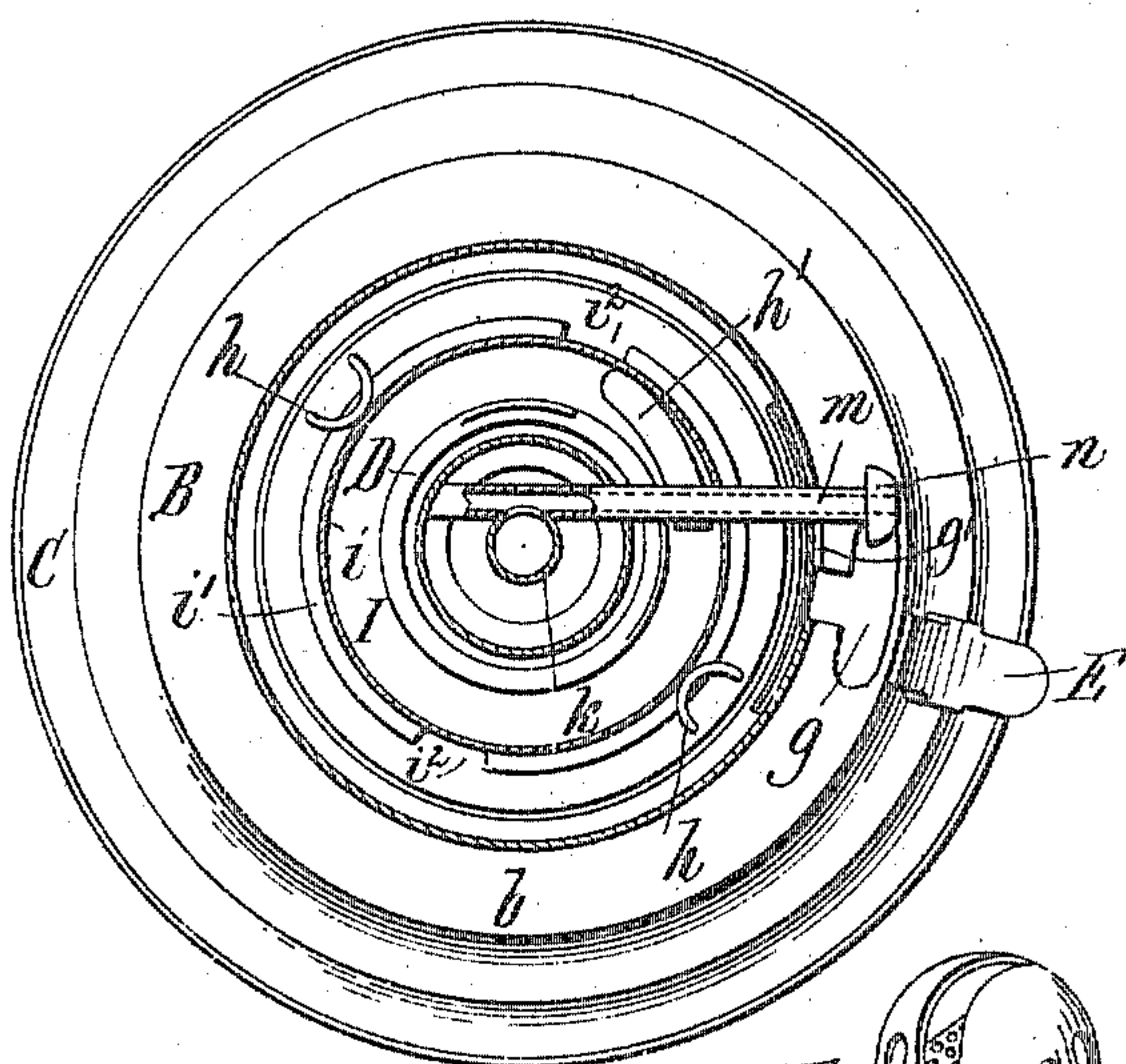


Fig. 5.

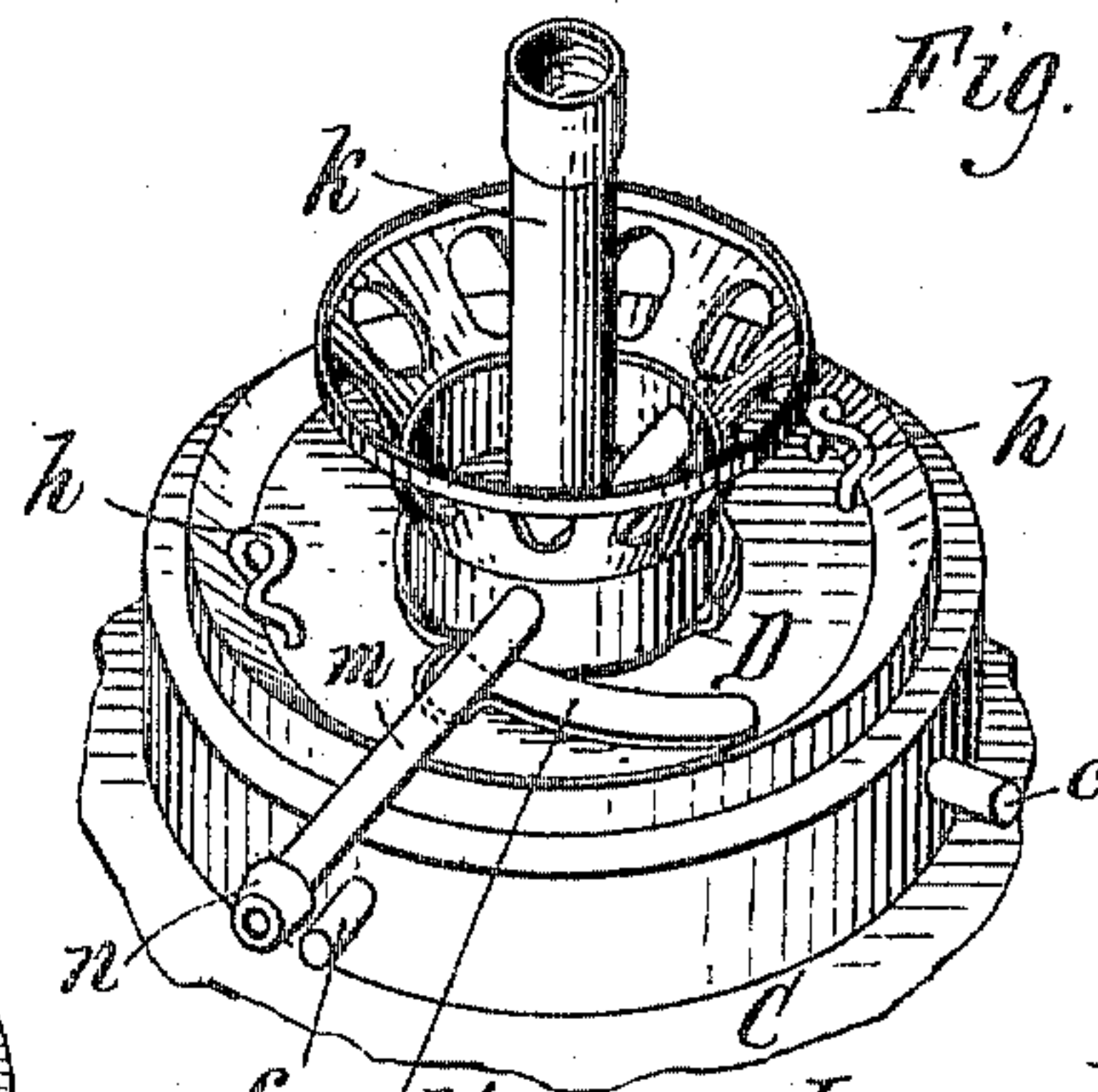
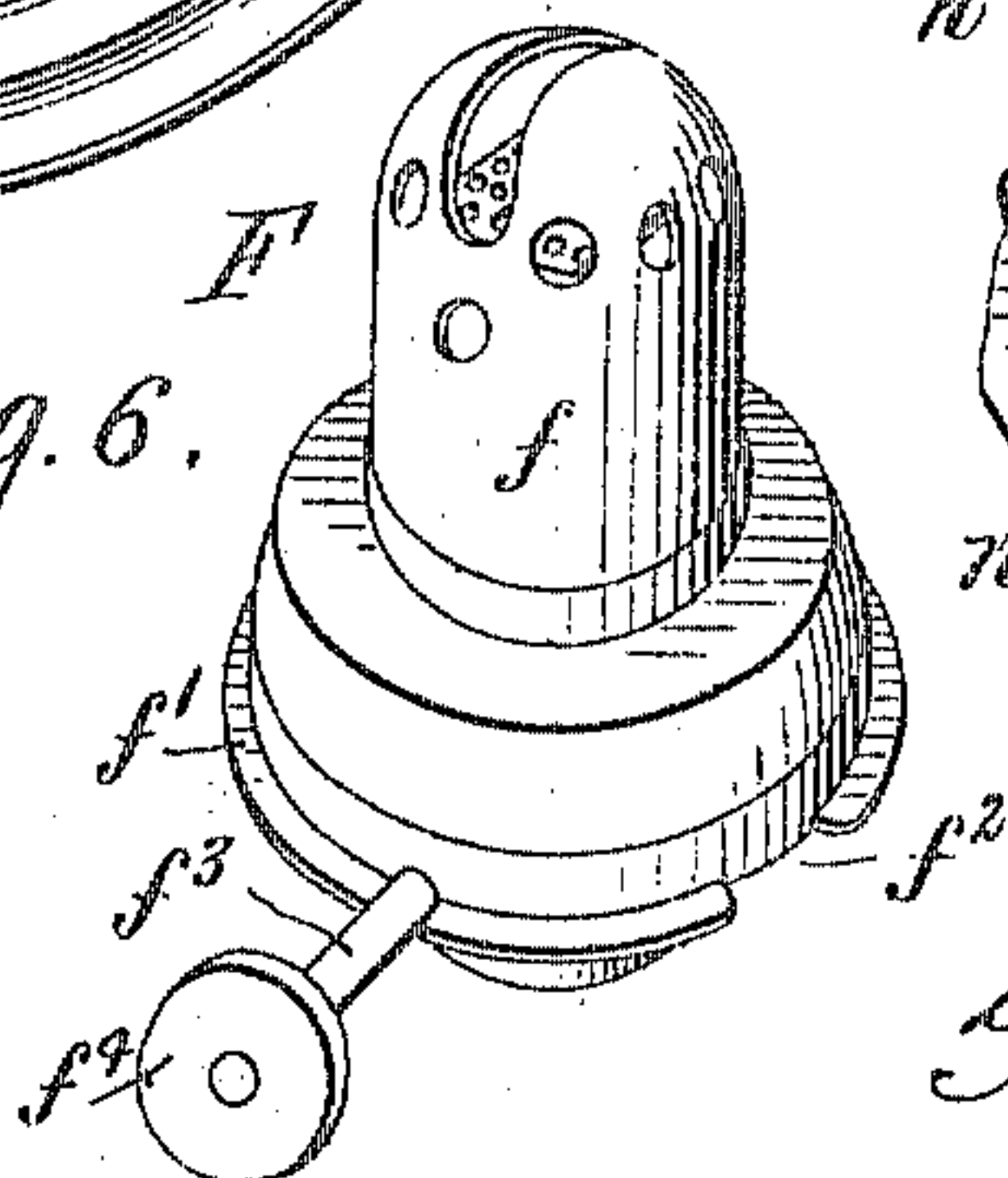


Fig. 6.



Witnesses:
E. A. Volk.
R. W. Rumer.

Inventor.
G. L. Betts
By Wilhelm Runkel & Hard
Attorneys.

UNITED STATES PATENT OFFICE.

CHARLES L. BETTS, OF BROOKLYN, NEW YORK, ASSIGNOR TO R. E. DIETZ
COMPANY, OF NEW YORK, N. Y.

LAMP OR LANTERN.

No. 817,297.

Specification of Letters Patent.

Patented April 10, 1906.

Application filed January 24, 1905. Serial No. 242,542.

To all whom it may concern:

Be it known that I, CHARLES L. BETTS, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Lamps or Lanterns, of which the following is a specification.

This invention relates to that class of oil-burning lamps or lanterns which are mainly used on vehicles and in which the oil-pot is detachable and inserted into the lamp-body from below. The wick-raiser shaft is often so arranged in this class of lamps or lanterns that it projects from the body and is exposed for manipulation when the oil-pot is secured to the body, and the base-ring or body-hoop of the lamp-body is in that case usually provided with an opening into which the shaft enters in connecting the oil-pot to the body and through which the shaft projects when the oil-pot is secured to the body.

The object of this invention is to enable such oil-burning lamps or lanterns to be quickly and conveniently changed from oil to gas—for instance, acetylene in the case of automobile-lamps—by substituting a gas-burner for the oil-burner and connecting the same with a gas-supply—for instance, an acetylene-generator.

In the accompanying drawings, Figure 1 is a vertical section through the lower portion of a lamp or lantern provided with my improvement. Fig. 2 is a side elevation thereof at right angles to Fig. 1. Fig. 3 is a horizontal section in line 3-3, Fig. 1. Fig. 4 is a detached perspective view of the gas-burner. Fig. 5 is a perspective view of the gas-burner with the cone and tip removed and arranged on the oil-pot. Fig. 6 is a detached perspective view of the oil-burner.

Like letters of reference refer to like parts in the several figures.

A represents the flame chamber or body of a vehicle lamp or lantern, and B the body-hoop or base-ring, forming the lower portion of the lamp or lantern body.

C represents the oil-pot, and D the burner-socket secured in the top thereof.

The body of the lamp or lantern, including the flame-chamber and body-hoop, as well as the oil-pot, the appurtenances of these parts, and the devices by which these parts are de-

tachably connected, may be of any suitable or well-known construction.

The device represented in the drawings for securing the oil-pot to the body are constructed substantially as shown and described in Letters Patent No. 744,952, dated November 24, 1903, and comprise, briefly stated, a notched hollow rim *b* on the lower edge of the body-hoop, with which projecting studs *c* on the oil-pot are engaged by a rotary movement of the oil-pot in the body-hoop and a spring-catch or locking-lever *E*, which is arranged on the oil-pot and engages in an opening in the body-hoop.

F represents the oil-burner of usual construction, having a burner-cone *f*, provided with a base-flange *f'*, having notches *f''* and having a wick-raiser shaft *f'''*, provided with a button *f''''*.

The body-hoop is provided with the usual wick-raiser opening *G*, having in the rim *b* of the body-hoop an enlarged lower portion *g*, through which the button of the wick-raiser shaft passes in inserting the oil-pot into the body-hoop or removing it therefrom and having an elbow-shaped or angular upper portion *g'*, which permits of the necessary rotation of the oil-pot in the body-hoop and through which the wick-raiser shaft projects when the oil-pot is secured to the lamp-body.

The fastening devices for securing the burner to the oil-pot are well known and are constructed as follows:

h represents lips which are secured to the top of the oil-pot and which overhang inwardly to engage over the base-flange *f'* of the burner-cone. This flange clears these lips by its notches *f''* and is engaged under the lips by a partial rotation of the burner. This rotation is arrested at the proper point by a spring-catch *h'*, which is secured upon the oil-pot and which has near its free end a depression in which the burner-shaft engages when the burner is in its normal position.

I represents the gas-burner, which is constructed to be seated in the burner-socket *D* of the oil-pot and secured to the latter by the same devices which are provided for securing the oil-burner *F* in place, so that the gas-burner can be substituted for the ordinary oil-burner without requiring any change to be made in the lamp. The gas-burner may be

provided with a surrounding cone or shell *i* and has a base-flange *i'*, provided with notches *i²* and adapted to engage under the fastening-lips *h* on the oil-pot in the same way in which the corresponding parts of the oil-burner are seated on the oil-pot.

k represents the upright pipe or post of the gas-burner, which is arranged centrally in the burner-shell *i* and carries at its upper end above the shell a tip *l* of any suitable construction. This upright pipe receives the gas from a horizontal or lateral inlet-pipe *m*, which is arranged in the same relative position on the gas-burner in which the wick-raiser shaft is arranged on the oil-burner and which communicates with the lower portion of the upright pipe, as represented in Fig. 3. The outer end of this lateral pipe is provided with a nipple or head *n*, suitable for connection with a gas-supply pipe *o*, Fig. 1, which supply-pipe in the case of an automobile acetylene-lamp is a flexible pipe or hose connecting with the acetylene-generator. The lateral gas-inlet pipe is of such size that it passes readily through the opening *G*, provided in the body-hoop for accommodating the wick-raiser shaft, so that when this gas-burner is mounted on the oil-pot the latter can be attached to the body of the lamp or lantern or be removed therefrom in the same way in which it is attached or removed when the oil-burner is mounted on the oil-pot. When the gas-burner is in place in the lamp or lantern, the inlet-pipe *m* projects laterally from the body of the lamp or lantern in a convenient position for connecting the flexible gas-supply pipe with the outer end thereof.

It will be apparent from the foregoing that an oil-burner or a gas-burner can be used with equal convenience on the same lamp or lantern and that the lamp or lantern can be quickly changed from oil to gas, or vice versa, as circumstances may require.

The fastening devices which are herein described and shown for securing the oil-pot to the lamp or lantern body and for securing the

burners to the oil-pot are very efficient and convenient, but may be replaced by fastenings of different construction, if desired.

I claim as my invention—

1. The combination with the body of a lamp or lantern having in its lower portion an opening, of a base portion detachably secured to said body, and a gas-burner mounted on said base portion and having a laterally-projecting gas-inlet pipe which enters said opening upon securing the base portion to the body, substantially as set forth.

2. The combination with the body of a lamp or lantern having in its lower portion an angular slot comprising upright and horizontal portions, of a base portion detachably secured to said body, and a gas-burner mounted on said base portion and having a laterally-projecting gas-inlet pipe which enters the upright portion of said slot upon connecting the base portion to the body and is engaged in the horizontal portion of said slot by turning the base with reference to the body in securing the base to the body, substantially as set forth.

3. The combination with the base portion of a lamp or lantern having in its top a burner-socket and outside of said socket fastening devices for the burner, of a gas-burner seated in said socket and provided with a lateral gas-inlet pipe and with a base adapted to engage with said fastening devices, substantially as set forth.

4. The combination with the base portion of a lamp or lantern having inwardly-overhanging fastening-lips for the burner, of a gas-burner mounted on said base portion and provided with a lateral gas-inlet pipe and with a notched base-flange adapted to engage underneath said lips, substantially as set forth.

Witness my hand this 21st day of January, 1905.

CHARLES L. BETTS.

Witnesses:

OSCAR WARNER,
OSCAR R. WEISS.