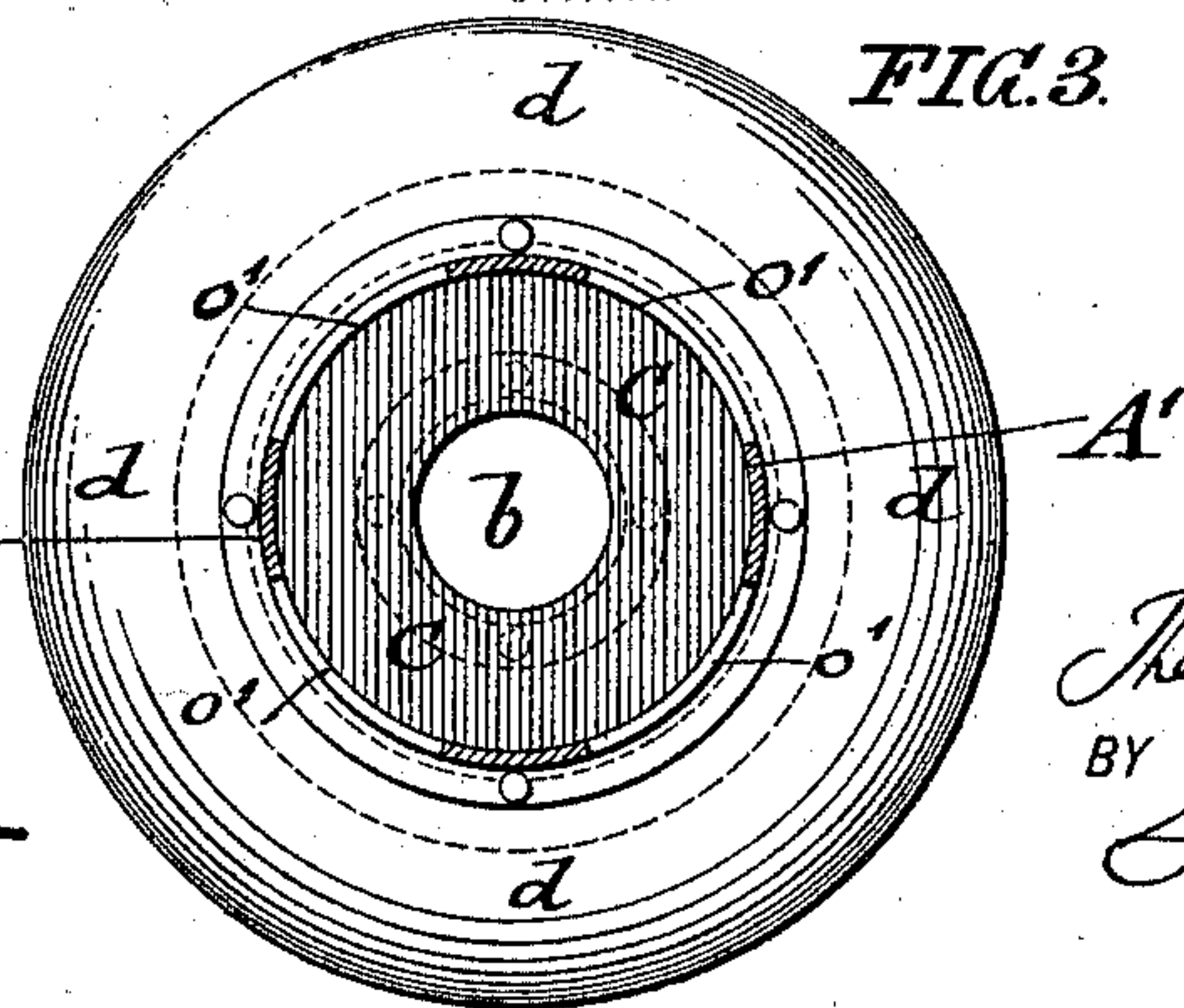
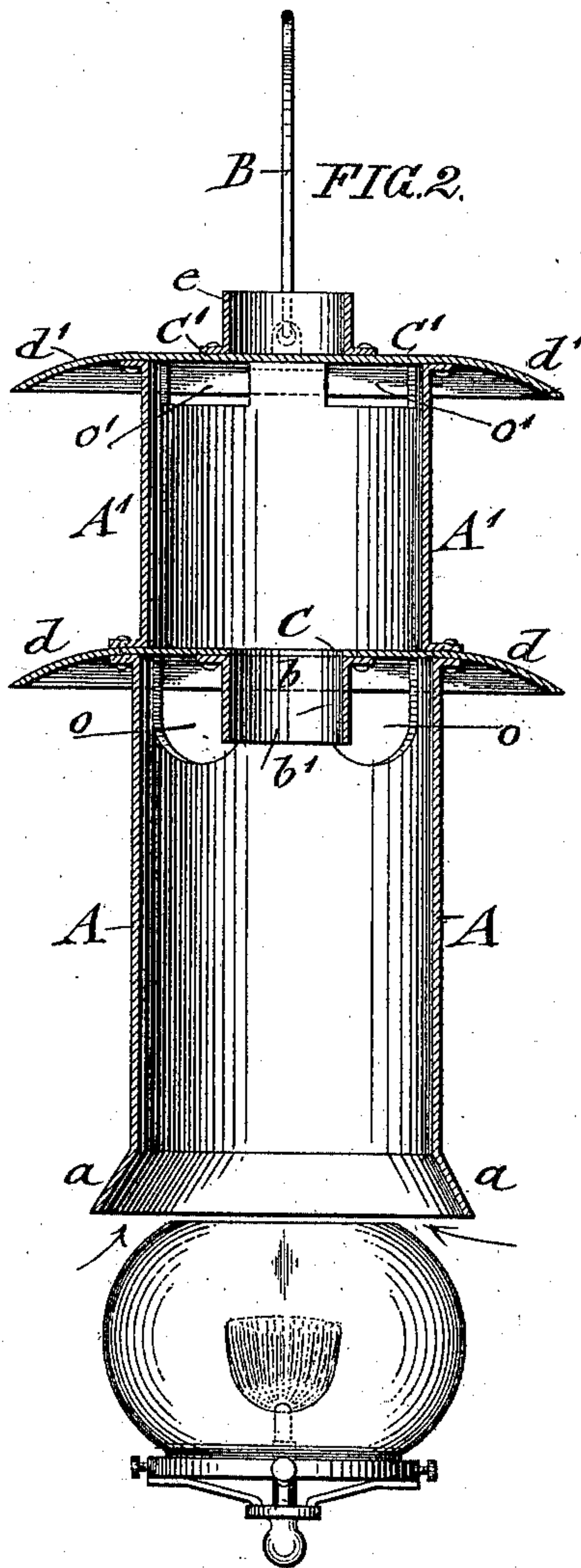
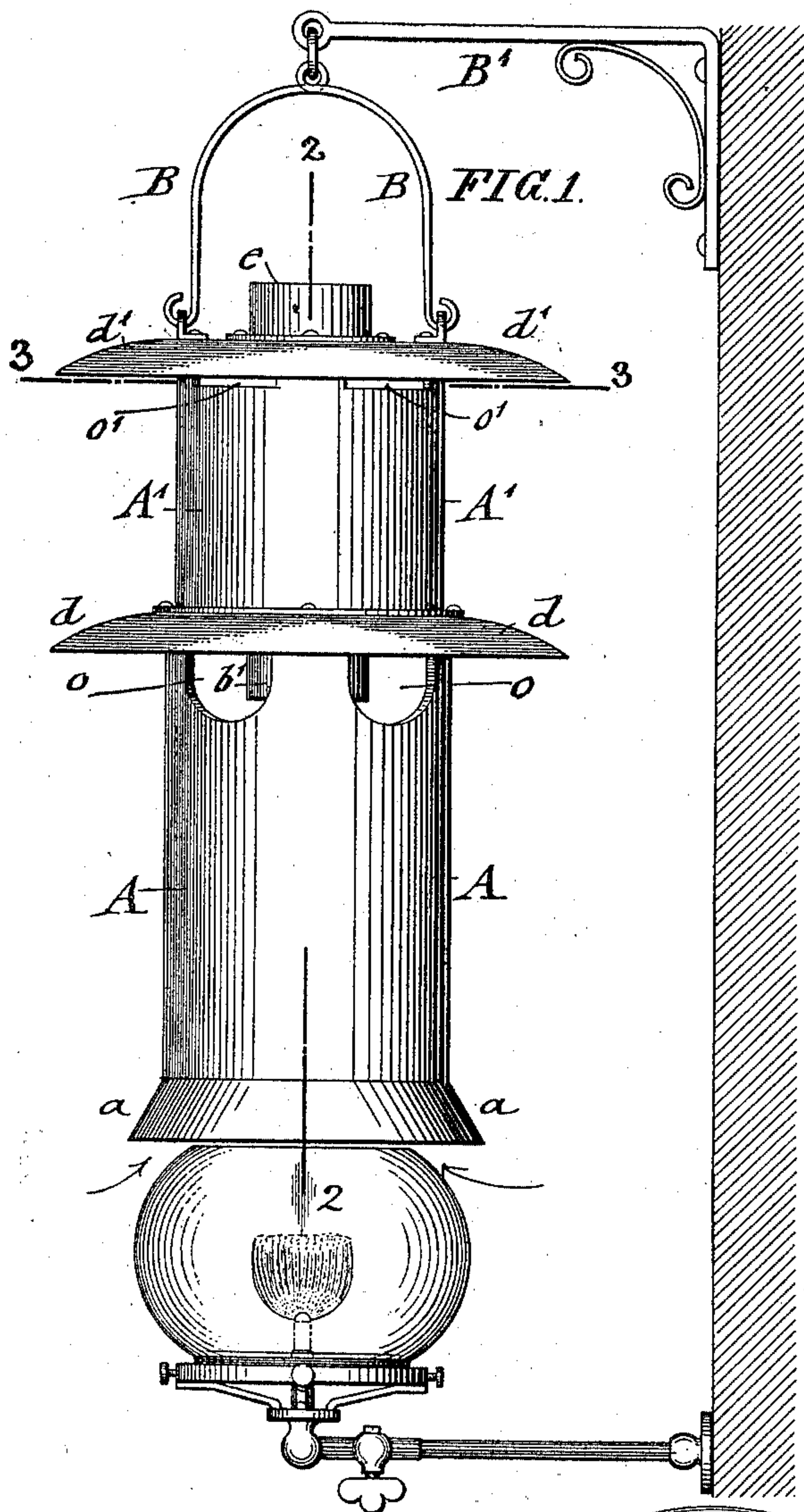


(No Model.)

T. GUHRING.
HEATING APPARATUS FOR GAS BURNERS.

No. 585,932.

Patented July 6, 1897.



WITNESSES:
Brüder von Bültzinghausen
Georg Falckel

INVENTOR
Theodore Guhring
BY *George Raegner*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

THEODORE GÜHRING, OF NEW YORK, N. Y.

HEATING APPARATUS FOR GAS-BURNERS.

SPECIFICATION forming part of Letters Patent No. 585,932, dated July 6, 1897.

Application filed January 30, 1897. Serial No. 621,332. (No model.)

To all whom it may concern:

Be it known that I, THEODORE GÜHRING, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Heating Apparatus for Gas-Burners, of which the following is a specification.

This invention relates to devices for heating rooms, and has for its object to provide a heat-distributing device which shall be adapted to the ordinary gas-jet or lamp and capable of effectively distributing the heat throughout a room and of utilizing the greatest proportion possible of said heat.

My invention consists of a heat-radiator adapted to be suspended above a gas-jet and comprising a metal cylinder provided with heat-deflecting diaphragms and openings to facilitate the distribution of the heated air.

In the accompanying drawings, Figure 1 is an elevation of my improved heat-radiator in position above a gas-jet. Fig. 2 is a vertical central longitudinal section thereof on the line 2 2 of Fig. 1. Fig. 3 is a cross-section on the line 3 3 of Fig. 1.

Similar letters of reference indicate corresponding parts.

My improved heat-radiator is made of two cylindrical portions A A', which form a chimney-like structure, that is made of sheet metal and of suitable size to operate in connection with an ordinary gas-jet and is provided with suitable means—such as a bail B and bracket B'—by which it may be suspended over said gas-jet. The lower cylinder A has a flared lower part or rim *a*, which serves to permit the free admission of the heat of the gas-jet and the air of the room. At the top of the cylinder A is secured a diaphragm C, having a central opening *b*, surrounded by a depending cylindrical flange *b'*. The diaphragm C projects beyond the sides of the cylinder A and is slightly curved, so as to form a deflector *d*. Openings *o* are provided in the sides of the cylinder immediately below the said diaphragm.

The second cylinder A' is secured above the diaphragm C to the first cylinder A and forms a continuation of the latter and may be of somewhat less diameter and length. The cylinder A' is provided with a closed diaphragm C', which is secured to the top and

extends beyond the sides thereof, forming a second deflector *d'* similar to deflector *d* of diaphragm C. On the top of the diaphragm C' is arranged an open cup *e* for receiving a vessel filled with water either for heating the same or for supplying moisture to the room. Openings *o'* are also provided at the top of the cylinder A close to the diaphragm C' to permit the free escape of the heated air in the cylinder to the deflector *d'*, by which it is distributed throughout the room, as in the case of the deflector *d*.

The heated air from the gas-jet passes into the lower cylinder A, carrying with it more or less of the warm air from the room. This hot air is thrown against the diaphragm C and thence through the openings *o* out into the room after having received a downward impulse from the deflector *d*. The residue of the hot air passes up through the central opening *b* of the diaphragm C into the upper cylinder A', where it impinges against the diaphragm C' and is thrown out through the openings *o'* against the deflector *d'* and is thus distributed throughout the room.

Various changes may be made in the construction of the above-described device without departing from the scope of my invention. For example, the upper deflector *d'* may be made considerably larger than the lower deflector *d*. So, also, the upper cylinder A' may be made very much longer; but the proportions shown and described are believed to be the best suited for the purpose.

The diaphragms C and C' may be constructed, as shown, in one piece with the deflectors *d d'*, or they may be constructed separately and each secured in its place by any suitable means.

My improved gas-heater permits the utilization of the heat of an ordinary gas-jet without interfering with the light of the same, so that smaller rooms—such as hall-rooms, bath-rooms, &c.—may be very economically heated, while larger rooms would require a heater over more than one gas-jet.

Having thus described my invention, what I claim is—

1. A heat-radiator, comprising a lower cylinder, a centrally-perforated diaphragm at the top of said cylinder, an exterior deflector, openings in the upper part of the lower cyl-

inder below said deflector, an upper cylinder, a diaphragm closing the top of the upper cylinder and a deflector at the upper end of the upper cylinder, said cylinder having outlet-
5 openings below the upper diaphragm, substantially as set forth.

2. A heat-radiator, comprising a lower cylinder having an outwardly-flaring lower end and openings at the upper end, a centrally-
10 perforated diaphragm at its top, a downwardly-extending lip extending around the central opening in the diaphragm, an upper

cylinder, a closed diaphragm at its upper end, openings adjacent to said closed diaphragm, and a deflector at the top of the upper cylinder above said openings, substantially as set forth. 15

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

THEODORE GÜHRING.

Witnesses:

PAUL GOEPEL,
GEO. W. JAEKEL.