A. GIORGI.

INVERTED INCANDESCENT GAS LAMP.

APPLICATION FILED JUNE 4, 1910.

985,580. Patented Feb. 28, 1911.

Fig. 1.

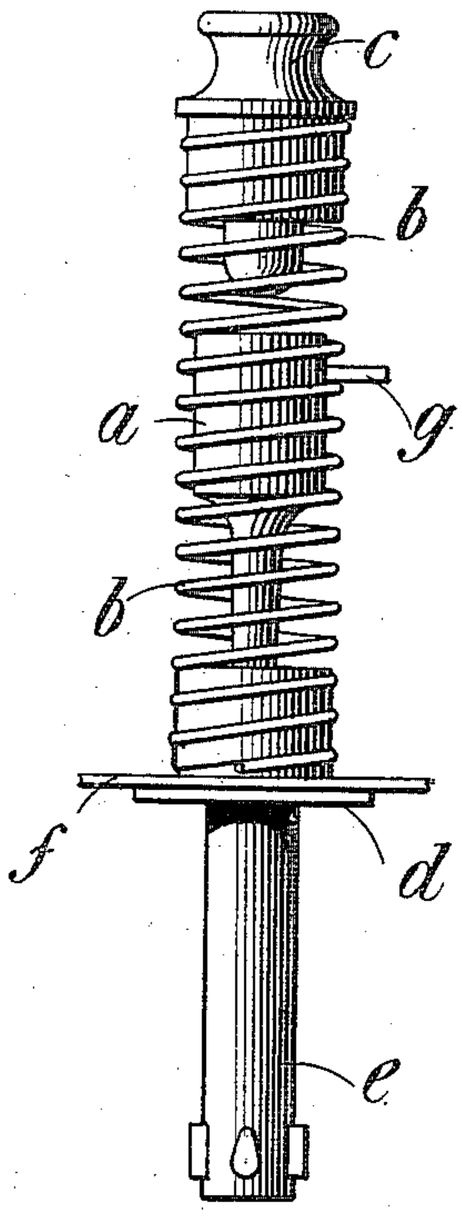


Fig. 2.

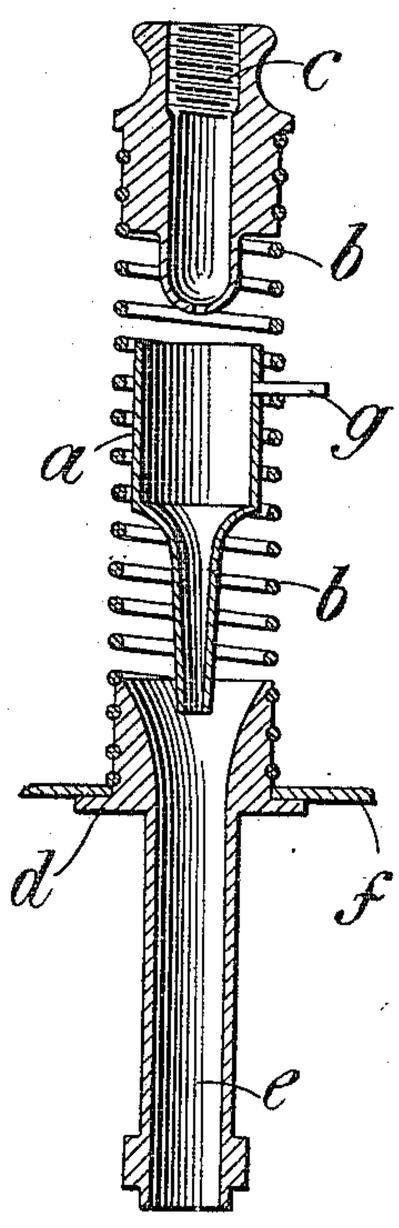


Fig. 3.

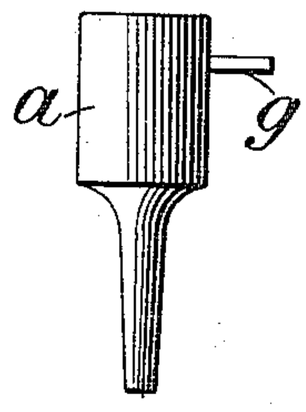
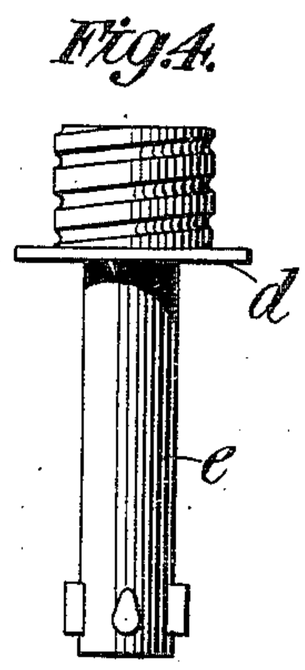


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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INVERTED INCANDESCENT GAS-LAMP.

985,580. Specification of Letters Patent. Patented Feb. 28, 1911.

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To all whom it may concern:

Be it known that I, AMEDEO GIORGI, a subject of the King of Italy, residing at Florence, in the Kingdom of Italy, have invented certain new and useful Improvements in Inverted Incandescent Gas-Lamps, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to inverted incandescent gas lamps, and it has for its objects to provide a plurality of means for supplying air to the burner in a uniform and regulatable manner, thereby utilizing the gas to the full extent; to maintain the fitting cool, where the lamp is attached; and to prevent vibration of the burner itself.

The invention essentially consists of a funnel adjustably interposed between the gas nipple or injector and the burner tube for the purpose of supplying air and serving to regulate the air and direct the mixed air and gas to the burner tube.

The adjustable funnel is supported axially within a spiral spring, one end of the latter being attached to the gas nipple or injector and from the other end the burner tube is suspended. This spiral spring, which practically forms part of the Bunsen burner, not only serves to support the funnel in its adjusted position, but also serves to prevent vibration of the burner tube and at the same time acts as a radiator. In other words, the entire burner, owing to its construction and arrangement, constitutes an anti-vibration device. And in order that my invention may be more readily understood, I will describe the same fully with reference to the accompanying drawings, in which:

Figure 1, shows in elevation, and by way of example, an inverted burner furnished with a single adjustable funnel. Fig. 2, is a vertical section thereof. Fig. 3 is an elevation of the funnel, detached, and Fig. 4 a similar view of the burner tube, detached.

In carrying out the invention, and according to a convenient arrangement, the spiral spring *b* is arranged between the gas nipple *c*, and the burner tube *e*, and the ends of said spring are secured, in any suitable manner, to these parts. For instance, the gas nipple is, in the arrangement shown in the drawings, formed with a spiral groove to receive one end of said spring *b*, the burner tube being likewise provided with a spiral groove to receive the other end of the spiral spring. This spiral spring forms an integral part of the burner and acts as an anti-vibrator. Within said spring is arranged a funnel *a*, (of any suitable material) forming two air supplies, one between its inlet and the gas-nipple or injector, the other at the outlet of the said funnel; and between the spires or convolutions of this spiral spring, the funnel is supported by any suitable means, as, for instance by a pin *g*. By means of this pin, the funnel *a*, may be raised, or lowered, along the spring *b*, so adjusting its position to the desired extent and regulating the air supply as required. The spiral spring, besides serving as an anti-vibrator for the lamp serves, at the same time, as a radiator for the conducted heat from the burner. The nose of the funnel, instead of entering the burner-tube (as shown in the drawings), may terminate above this latter.

Upon the burner tube *e*, and preferably at its upper end, is fixed a globe, shade, or a disk or deflector *f*, so as to prevent the products of combustion entering the air supplies. Any of such devices may be conveniently supported upon a shoulder *d*, on the burner tube.

With a burner constructed in the manner described, the gas, on issuing from the gas nipple or injector *c*, mixes with the air and passes into the funnel *a*, and this mixture, on passing out of the funnel, is again supplied with air, prior to entering the burner tube *e*, thereby utilizing the gas to its utmost extent and delivering it in a suitable condition to insure a better combustion.

In the construction illustrated, it will be seen that the gas is provided with a double air supply, but it will be obvious that by the employment of additional funnels, the air supply and mixture with the gas will be correspondingly increased.

Having now described my invention, what I claim and desire to secure by Letters Patent, is:—

1. An inverted incandescent gas lamp comprising a gas nipple or injector, a burner tube, a spiral spring connected to the gas nipple and burner tube and suspending the latter, a funnel adjustably associated with the spiral spring between the gas nipple and burner tube and forming two air supplies, and means for deflecting the products of combustion away from the air supplies.

2. An inverted incandescent gas lamp

comprising a gas nipple or injector, a burner tube, a spiral spring connected at its opposite terminals to the gas nipple and burner tube respectively and suspending said burner tube, a funnel adjustably disposed in the spiral spring between the gas nipple and the burner tube and having its lower extremity suspended in operative relation to the upper end of the burner tube, whereby a plurality of air supplies is provided, and means for deflecting the products of combustion away from the air supplies.

3. An inverted incandescent gas lamp comprising a gas nipple or injector, a burner tube, a spiral spring connected at its opposite extremities respectively to the gas nipple and burner tube and serving as the sole means for attaching the said latter devices to each other, a funnel adjustably mounted within the spiral spring and having a pin to engage the coils of said spring to maintain the adjustment of the funnel, the funnel forming two air supplies, and means for deflecting the products of combustion away from the air supplies.

In witness whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

AMEDEO GIORGI.

Witnesses:
ALFRED NUTTING,
CLARENCE P. LIDDON.