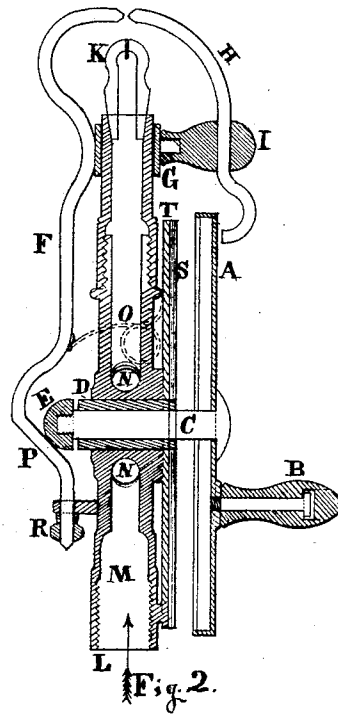
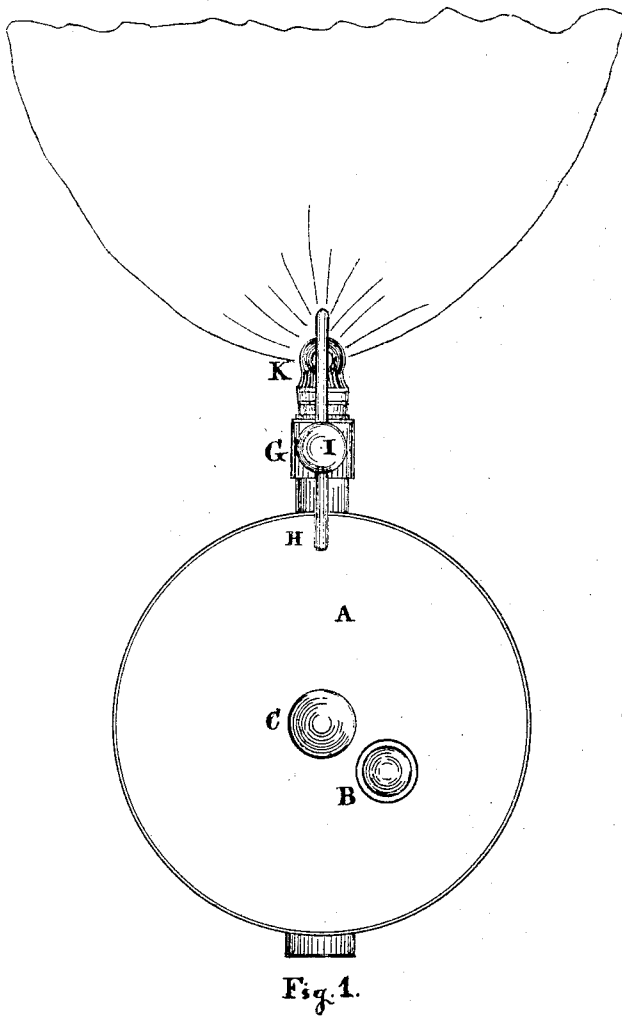


HENRY C. APPLEBY.

Improvement in Electrical Lighting Attachments for Gas-Burners.

No. 128,201.

Patented June 25, 1872.



Witnesses:

E. J. Murd
Le. Griswold

Inventor:

Henry C. Appleby

UNITED STATES PATENT OFFICE.

HENRY C. APPLEBY, OF CONNEAUT, OHIO.

IMPROVEMENT IN ELECTRICAL LIGHTING ATTACHMENTS FOR GAS-BURNERS.

Specification forming part of Letters Patent No. 128,201, dated June 25, 1872.

To all whom it may concern:

Be it known that I, HENRY C. APPLEBY, of Conneaut, in the county of Ashtabula and State of Ohio, have invented a new and useful Improvement in Electric Gas-Lighting Attachments; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a front elevation of my invention. Fig. 2 is a vertical section of the electrical lighting attachment, showing the parts of which it is composed and the manner in which they are arranged, the section being at right angles with Fig. 1.

My invention consists in connecting an electrophorus to a gas-burner in such a manner that, by separating the plates of the electrophorus, the conducting-wires are raised to the lighting-point of the gas, and by pushing the plates together the conducting-wires are brought down close to the orifice of the burner, and at this point they are not acted upon by the heat of the flame to such an extent as they would be were they allowed to remain at the lighting-point of the gas.

A represents the movable plate of the electrophorus. B is an insulated gutta-percha handle attached to A. C is a small shaft attached to the center of the plate A, and passes easily through the insulating tube of gutta-percha, D. E is a gutta-percha nut, or of other non-conducting material, secured onto C. F is one of the conducting-wires, and is soldered to the movable sleeve G. H is also a conducting-wire, and is attached to the sleeve G by means of the gutta-percha insulator I. K is the tip of the gas-burner, the main stem of which is attached to the gas-fixture by means of the screw at L. M is the passage-way of the gas, and by means of the circular branches N the gas on its way to the flame passes around the shaft C and tube D. O is a coiled spring attached to the stationary plate of the electro-

phorus, and is connected with the conducting-wire F in such a manner as to keep the inclined portion P in contact with the nut or button E. R is an adjusting-nut, and prevents the spring O from raising the conducting-wires only a certain distance or to the lighting-point of the gas. S is a gutta-percha disk cemented to the metal disk T.

On bringing the plates of the electrophorus together, and turning A by means of the handle B, the electricity thus generated is discharged by pulling out on the handle B till the plate A comes in contact with the lower end of the conducting-wire H, which instantly makes an electric spark between the points of F and H sufficient to light gas. By pushing in on the handle B the conducting-wires, which raised to the lighting-point when they were separated, will be brought down close to the burner-tip by means of the nut E coming in contact with the incline P. When the points of the conducting-wires are thus brought close to the burner tip they will be acted upon by the heat of the flame only in a slight manner.

By this plan of protecting the points of the conducting-wires from the heat of the flame one of the objections to electric gas-lighting attachments is overcome, and the danger of points burning off will be obviated.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of the movable conducting-wires F and H attached to the sleeve or collar G, the spring O or its equivalent, and the movable sleeve G, substantially as and for the purposes described.

2. In connection with an electrophorus attached to a gas-burner, the insulating-nut E attached to the shaft C, the incline P, and the adjusting-nut R, combined substantially as and for the purposes described.

HENRY C. APPLEBY.

Witnesses:

E. G. ATWOOD,
L. GRISWOLD.