

R. CORNELIUS.
Electric Gas Lighter.

No. 32,471.

Patented June 4, 1861.

Fig. 4.

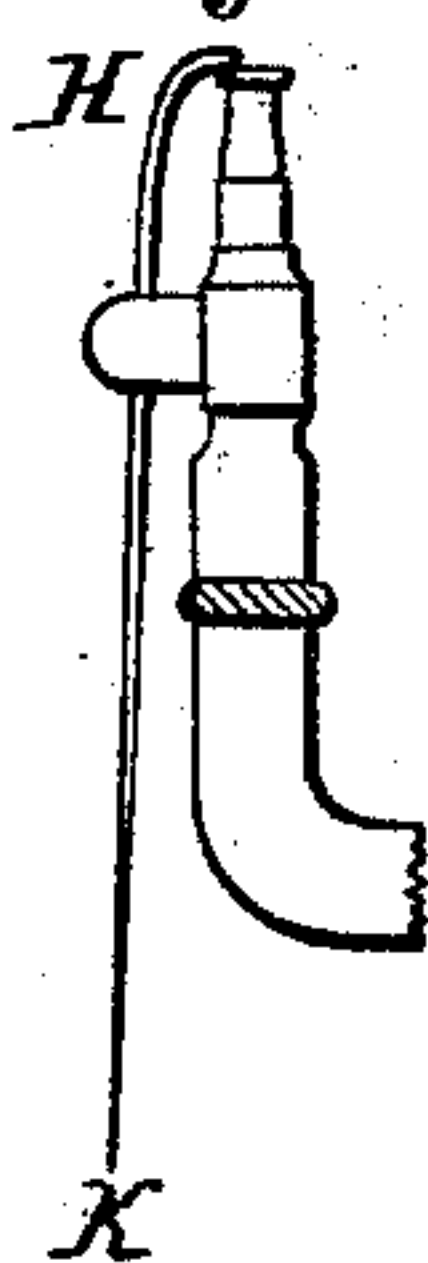


Fig. 1.

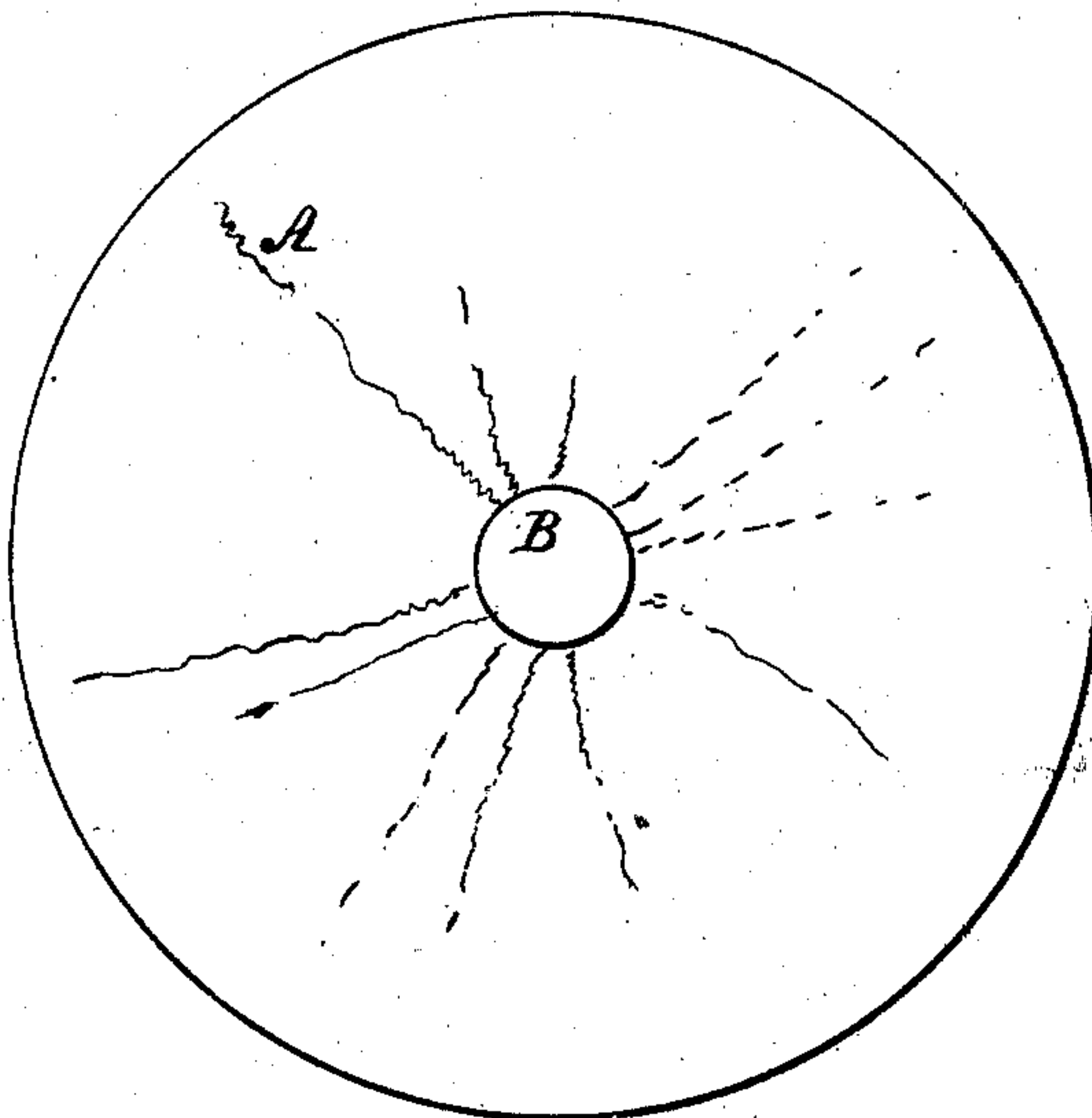


Fig. 3.

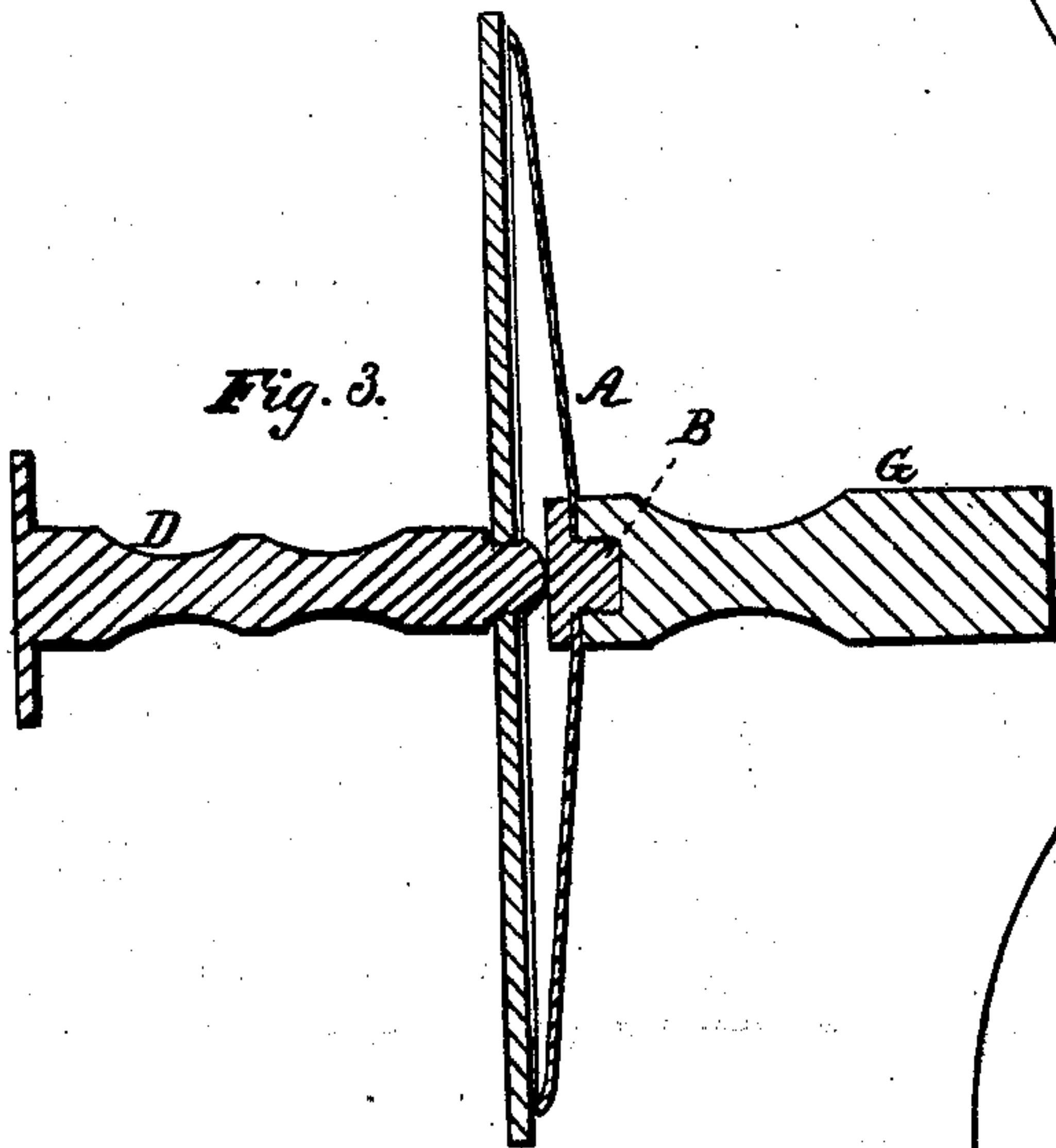
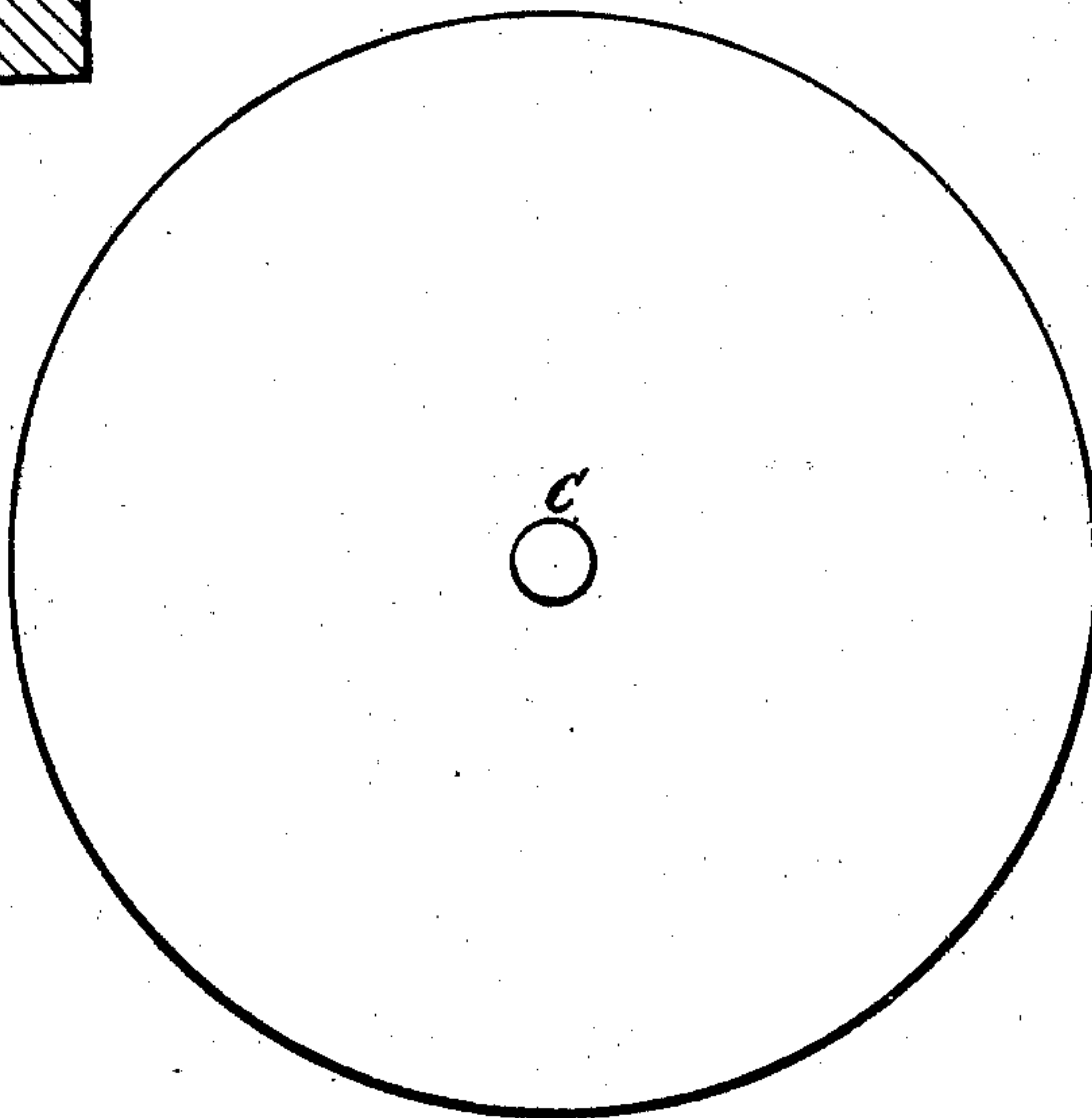


Fig. 2.



Witnesses:

F. D. Baquet
J. M. Child

Inventor:

Robert Cornelius

UNITED STATES PATENT OFFICE.

ROBERT CORNELIUS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVED METHOD OF LIGHTING GAS BY ELECTRICITY.

Specification forming part of Letters Patent No. 32,471, dated June 4, 1861.

To all whom it may concern:

Be it known that I, ROBERT CORNELIUS, of Philadelphia, State of Pennsylvania, have made certain new and useful Improvements in the Process of Lighting Gas by Electricity; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 represents a top view of the upper disk, A, having a central projection, B, one-eighth of an inch in height and three-fourths of an inch in diameter. This disk is slightly concave.

Fig. 2 represents a top view of a thin disk of hard rubber, of the same diameter as the upper (metallic) disk. This hard-rubber disk has a small button, C, one-eighth of an inch high and one-half of an inch in diameter.

Fig. 3 shows the two plates in section, and also shows a section of the two handles and the mode of attachment of these handles to the plates. D is a metallic handle—say about three inches high—and, passing through the hard-rubber disk, is attached to or terminates in the small button C described. G is a hard-rubber handle, which has passing into it the metallic button B, connecting the metallic plate A with the handle G, as above described.

Fig. 4 represents a small gas-burner, over which the small wire H is pointed immediately above the opening of the gas-burner, and extends downward a short distance toward K.

The mode of using the apparatus is as follows: The hard-rubber plate is held by its metallic handle in the left hand, the gas is turned

slightly on, and the metallic plate, held in the right hand, is then to be placed for an instant on top of the hard-rubber plate and immediately removed, and its surface is to be touched to or brought into proximity with the metallic wire, at K, extending to the burner. The metallic plate need not be brought into immediate contact with the metallic wire at K, but only into its vicinity. The electric spark which escapes from the metallic plate ignites the gas as it issues from the burner.

The advantage of the employment of a metallic handle, D, terminating in the small button C is that the electricity is always developed by the electrophorus by merely grasping the handles without touching the metallic plate with the hand.

Instead of the hard rubber other well-known non-conducting electric materials might be substituted.

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

1. The employment of the electrophorus in connection with the metallic wire attached to the gas-burner for lighting the gas, substantially as above described.

2. The attaching the metallic handle to the hard-rubber plate, the handle terminating in a small metallic button, C, substantially as above described.

ROBERT CORNELIUS.

Witnesses:

F. D. BAQUET,
JAMES McCAHON.