

(No Model.)

C. H. HINDS.

Electric Lighting Attachment for Gas Burners.

No. 235,769.

Patented Dec. 21, 1880.

Fig. 1.

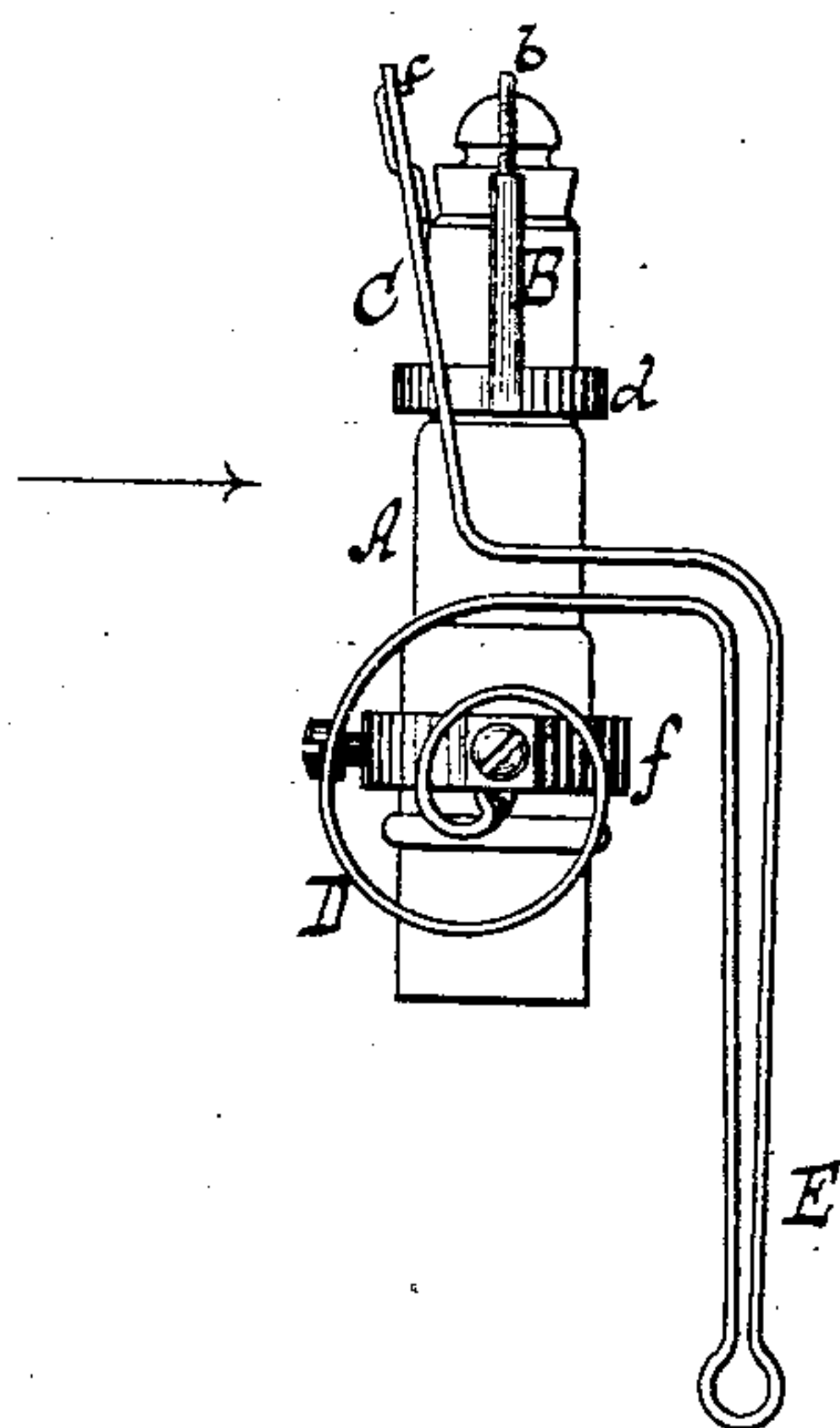
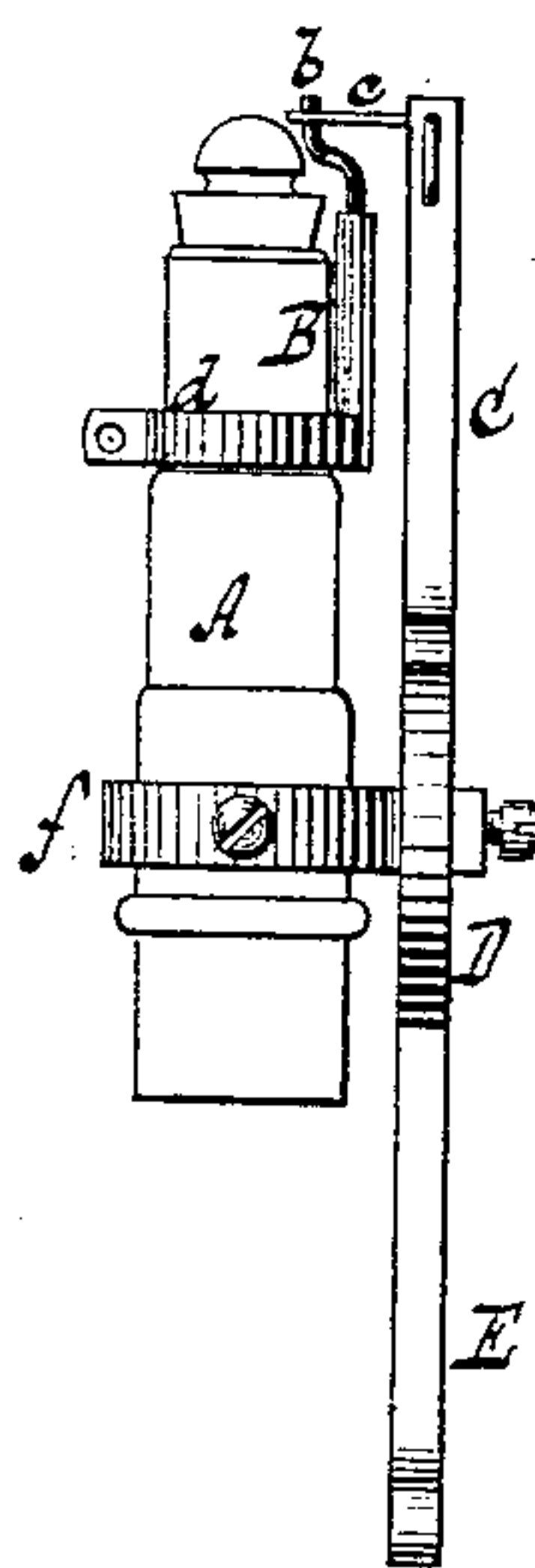


Fig. 2.



Witnesses

Otto Sufel and
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Inventor

Charles H. Hinds.

by Van Santvoord & Haupt
his attorneys

UNITED STATES PATENT OFFICE.

CHARLES H. HINDS, OF NEW YORK, N. Y.

ELECTRIC-LIGHTING ATTACHMENT FOR GAS-BURNERS.

SPECIFICATION forming part of Letters Patent No. 235,769, dated December 21, 1880.

Application filed April 7, 1880. (No model.)

To all whom it may concern :

Be it known that I, CHARLES H. HINDS, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Electric-Lighting Attachments to Gas-Burners, of which the following is a specification.

This invention consists in combining, with a gas-burner, an electric-lighting attachment consisting of an insulated fixed arm carrying one electrode and a vibrating arm carrying the other electrode, the vibrating arm being integral with a spiral spring and with a handle for its operation, so that if the handle is moved in a suitable direction to wind the spring, the one electrode is brought in contact with or sweeps across the other, and if the handle is then released the contact of the electrodes is repeated, while by the electric sparks thus produced the gas issuing from the burner is ignited.

This invention is illustrated in the accompanying drawings, in which Figure 1 shows a gas-burner in side view embodying my invention. Fig. 2 is a similar view, looking in the direction of the arrow marked opposite to Fig. 1.

Similar letters indicate corresponding parts.

The letter A designates the burner; B, the fixed arm, and C the vibrating arm, both of such arms carrying an electrode, *b* or *c*.

The fixed arm B is applied to the burner A by a collar, *d*, the latter being insulated from the burner in a suitable manner, and the electrode *b* on such fixed arm projects in a substantially vertical direction alongside and above the tip of the burner.

The vibrating arm C is formed by the end part of a strip of metal, which is shaped to form also a spiral spring, D, and a handle, E, and which is applied to the burner A by a collar, *f*. The electrode *c* projects from the vibrating arm C in a substantially horizontal direction, and it is situated in a plane above the tip of the burner A, while its length is

such that it sweeps across the electrode *b* in the motions of the vibrating arm C. In the normal position of the vibrating arm C—namely, the position in which it is held by the spring D—the electrode *c* is situated at a distance from the electrode *b*.

If it is desired to light the gas issuing from the burner A, the handle E is moved in a suitable direction to wind or tighten the spiral spring D, and to such a distance as to cause the electrode *c* to pass the electrode *b*. Said handle is then released, when the parts automatically return to their first position under the influence of the spring D, and the contact of the electrodes is repeated. In this manner two electric sparks, tending to insure the lighting of the gas, are produced by a single operation of the vibrating arm C. An important advantage is thus gained in the operation of the attachment, while the construction thereof, moreover, is rendered extremely simple by making the vibrating arm, the spring, and the handle integral with each other.

I am aware that it is old to combine with a gas-burner an insulated fixed arm, a pivoted arm, a chain or cord depending from the pivoted arm, and a spring acting on the latter; and such not being within the scope of my invention, I hereby disclaim the same.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, with a gas-burner, of an electric-lighting attachment consisting of an insulated fixed arm carrying one electrode and a vibrating arm carrying the other electrode, the vibrating arm being integral with a spiral spring and with a handle for its operation, substantially as shown and described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CHAS. H. HINDS.

Witnesses:

W. HAUFF,
CHAS. WAHLERS.