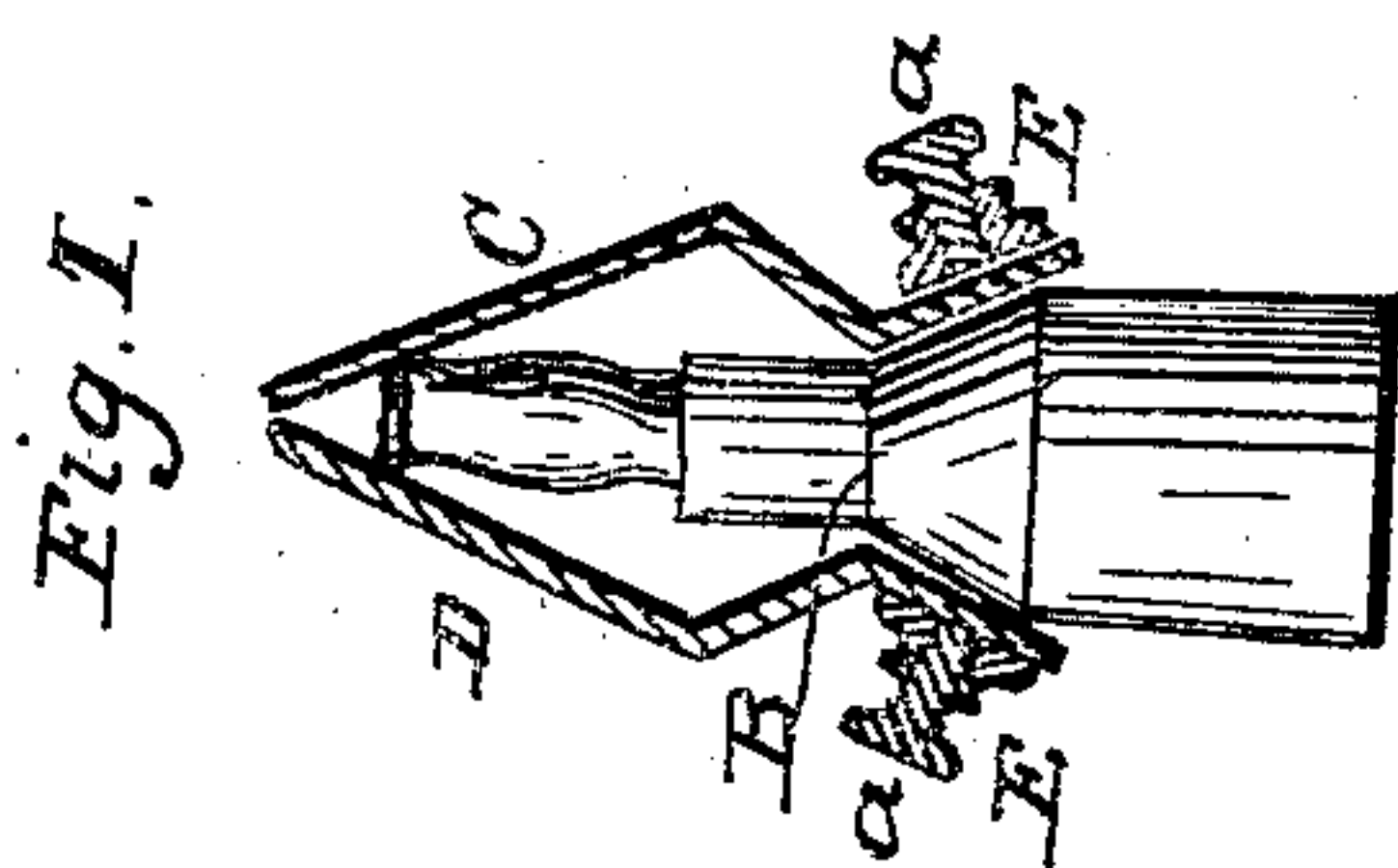
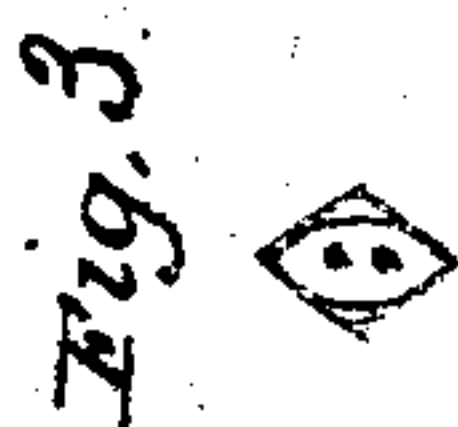
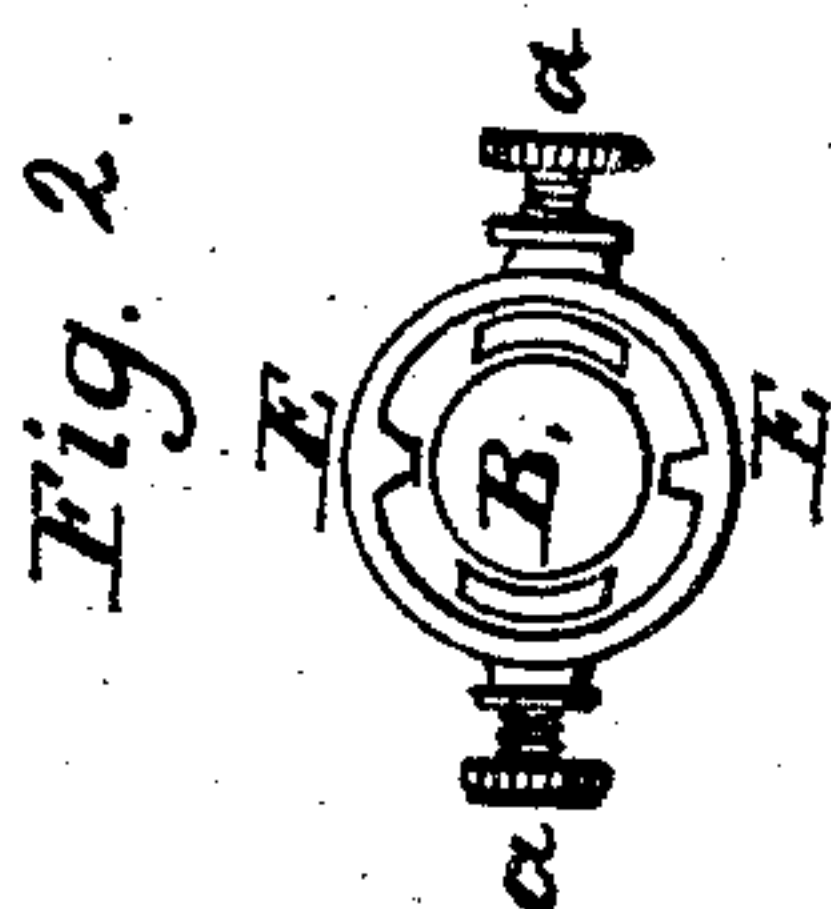
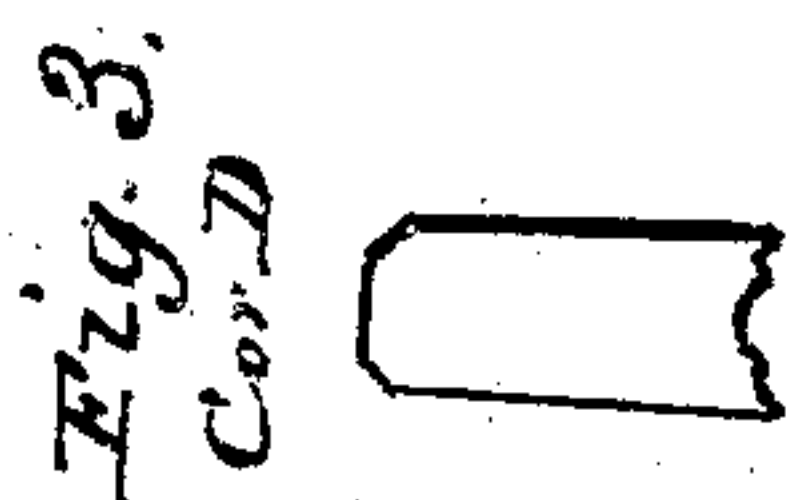


W. H. LINDSAY.

Gas Burner.

No. 18,289.

Patented Sept. 29, 1857.



UNITED STATES PATENT OFFICE.

WILLIAM H. LINDSAY, OF BROOKLYN, NEW YORK.

GAS-BURNER.

Specification of Letters Patent No. 18,289, dated September 29, 1857.

To all whom it may concern:

Be it known that I, WILLIAM H. LINDSAY, of the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Gas-Burners, and do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention consists in the use of certain deflectors with a fish tail or other burner of suitable construction for producing a more perfect combustion of the gas with an increased intensity of light.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction which will be readily understood by reference to Figure 1, which is a front vertical view with the deflectors and ring or socket for holding and adjusting them in section; Fig. 2, plan of the ring or socket for holding the deflectors by means of the set screws *a a*, with ears *c c*, on the interior, keeping it concentric with the socket of the burner B; Fig. 3, side view of the upper end of one of the deflectors; Fig. 4, face of the ordinary burner; Fig. 5, face of the burner as employed by me.

The angle pieces or deflectors C D, rising above and almost immediately over the orifices or slit in the burner B, are adjusted in the socket or ring E by means of the set screws *a a*, at or about right angles with the line of flame from the burner, between which and the socket of the burner their lower ends are inserted, or a slight steel spring attached to their lower ends and pressing against the burner socket or the ring will answer the same purpose. By these means

they can be adjusted with ease, so that the flame may be increased in breadth which decreases the height, or vice versa, simply by hinging their ends over the burner closer and farther apart. I make them of brass, yellow metal, or other suitable material.

The burner I prefer employing is of the description known as the Scotch or English tip screwed into the burner socket B, which I fashion on the face to the form shown in Fig. 5; by filing it away from the original circular form in which they are made as shown at Fig. 4, which I find to be a great improvement as by its means I am enabled to produce a flat flame without horns or jets protruding from it and a clearer and better light. I also find it of advantage to shape the upper ends of the deflectors somewhat after the manner shown in Fig. 3.

I do not confine myself to the particular or precise form or arrangement of the several parts as herein described and shown, as the same may be modified in various ways which I claim doing while producing results substantially the same.

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

The application to a gas burner or burners of angular pieces or deflectors or the equivalent thereof, for the purpose of increasing the light derived from one or more streams of gas issuing or escaping from a gas burner or burners of any suitable construction, by altering and directing the current or currents of gas and the form of flame.

WILLIAM H. LINDSAY.

Witnesses:

EDMD. ELMENDORF, Jr.,
JAMES M. RANKIN.