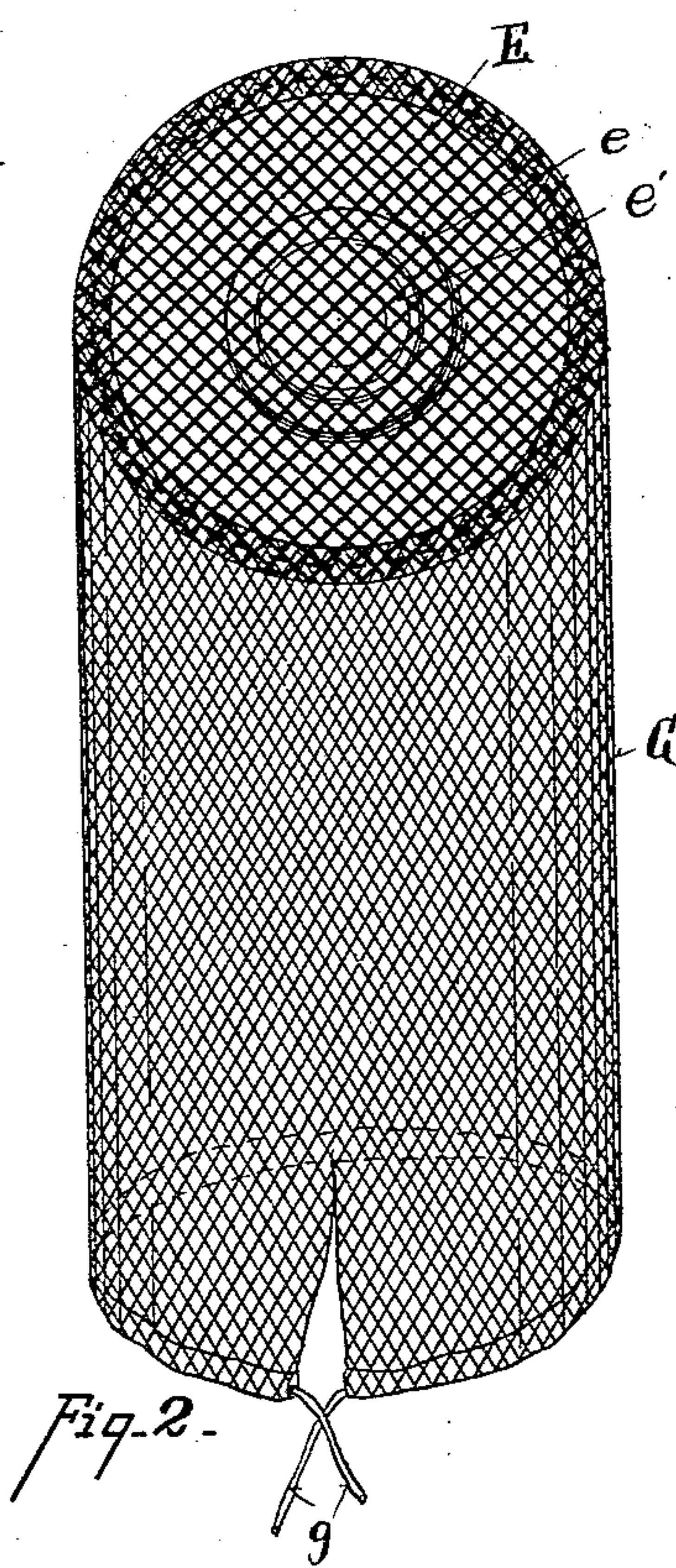
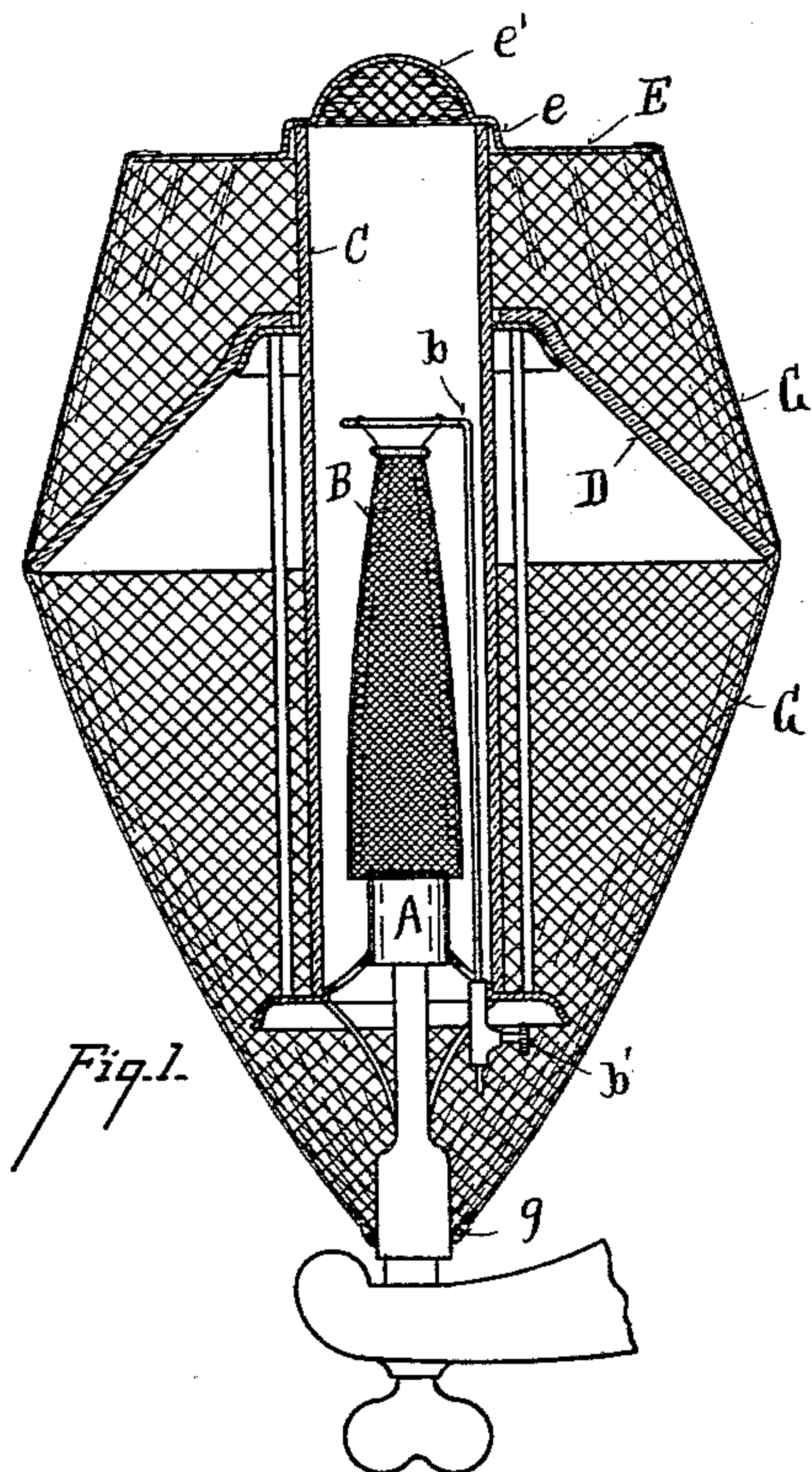


(No Model.)

J. KOCH.
SCREEN FOR GAS BURNERS.

No. 557,833.

Patented Apr. 7, 1896.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH KOCH, OF CINCINNATI, OHIO.

SCREEN FOR GAS-BURNERS.

SPECIFICATION forming part of Letters Patent No. 557,833, dated April 7, 1896.

Application filed September 14, 1895. Serial No. 562,561. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH KOCH, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Screens for Gas-Burners, of which the following is a specification.

My invention relates to improvements in screens for gas illuminating-burners, and is particularly adapted to that class in which a mantle of metallic oxids is suspended in the flame to produce light by its incandescence. Its objects are, first, to provide a screen or protection for the mantle against insects or drafts of air, and, second, to protect the shade-chimney and other parts from flies and other insects during the summer season.

In the accompanying drawings, Figure 1 is a central vertical section through a burner with my device in position thereon. Fig. 2 is a perspective view of the screen detached.

A represents the gas-burner; B, the mantle, consisting of a delicate network of metallic oxids, which becomes incandescent in the gas-flame and thereby produces the light. This mantle is so frail as to be easily broken by a sudden draft of air or by a fly or other insect getting inside the chimney and striking the mantle. The mantle is supported upon a rod *b*, adjustable to the desired height by set-screw *b'*.

C represents a chimney, and D a shade.

E represents a metallic screen seating upon the upper end of the chimney and held in place preferably by an offset *e*, stamped in the screen. The portion of the screen *e'* over the end of the chimney is preferably stamped up into a hemisphere, as shown in Fig. 1, in order to provide a greater surface for the escape of products of combustion from the chimney. To the periphery of the screen E is secured a flexible screen G, formed of any suitable textile fabric, which encircles the burner, shade, and chimney and is gathered and secured by a draw-string *g* beneath the burner. The screen E is extended horizontally a sufficient distance from the chimney to prevent the screen G becoming unduly heated or burning.

It has been customary to use burners of the

character here shown only during the winter months when the doors and windows were closed and there were comparatively few insects, on account of the number of mantles and chimneys broken, as when the mantle becomes broken the chimney is usually broken before the gas can be turned off. It also frequently happens that insects fall into the chimney in attempting to fly over it, thereby breaking the mantle. Insects also get into the chimney during the daytime and either destroy the mantle entirely or break a hole therein, when upon lighting the burner the gas rushes through the hole in the mantle and being deflected upon the chimney breaks it. All this is obviated by the use of the device herein shown. The drafts of air are checked and all insects are prevented from getting into the chimney either from above or below, or from soiling any of the parts.

The burner is lighted by applying a match above the screen E, the meshes of which are made large enough to permit the flame to pass through and down to the mantle. It is therefore unnecessary to disturb the screen after it is once adjusted in position.

I claim—

1. In combination with a gas-burner, a screen consisting of a metallic section provided with means coöperating with the chimney for holding the screen centrally above said chimney and a flexible section secured to and depending from said metallic section, and means for gathering and securing the lower end of said flexible section beneath the burner substantially as specified.

2. In combination with a gas-burner, a screen consisting of a metallic section provided with an offset for holding the same centrally above the chimney, and a flexible section secured to and depending from said metallic section, and means for gathering and securing the lower end of said flexible section beneath the burner, substantially as specified.

In testimony whereof I have hereunto set my hand.

JOSEPH KOCH.

Witnesses:

JOS. CURRUS,
FRED MOHR.