No. 679,616.

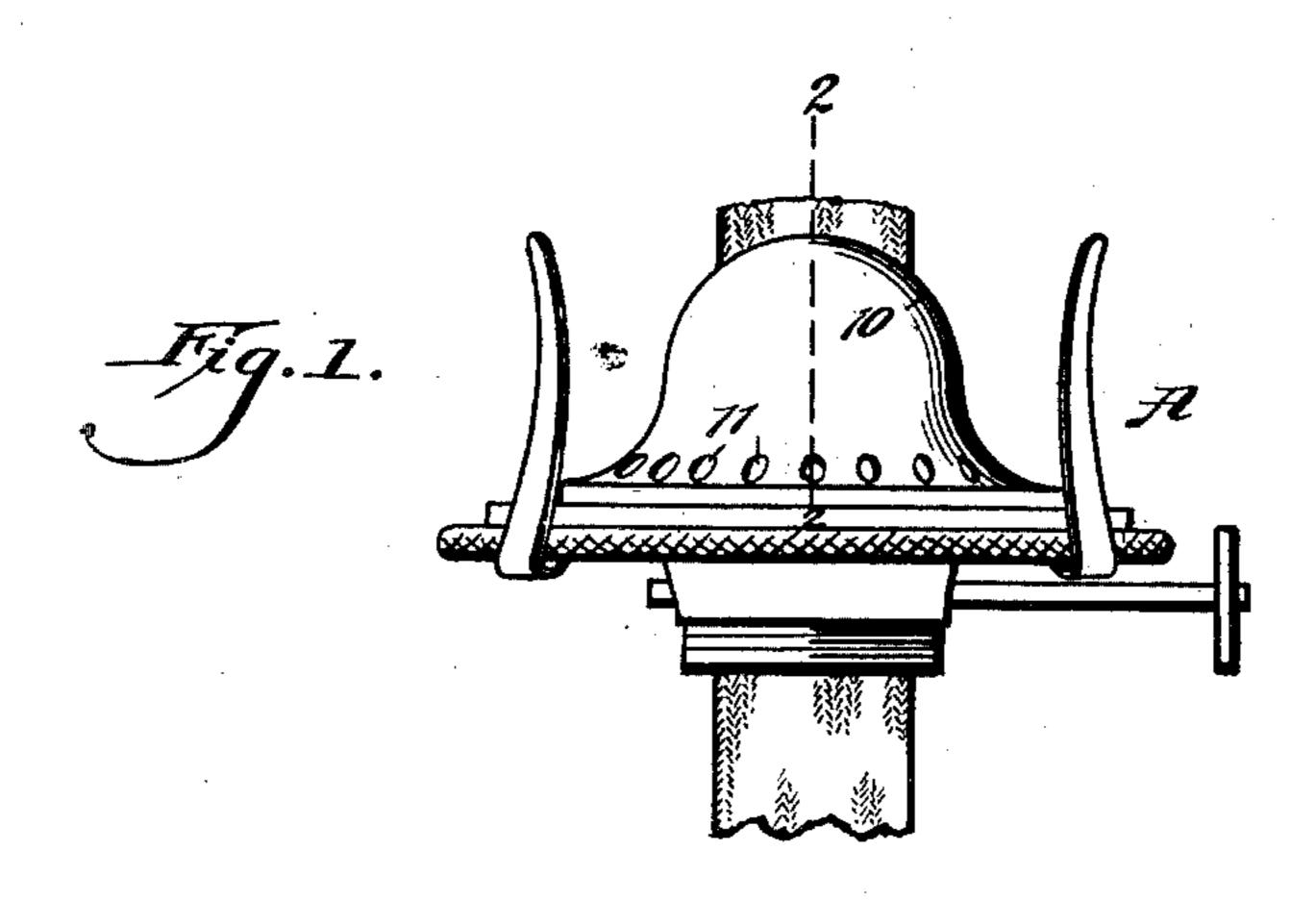
Patented July 30, 1901.

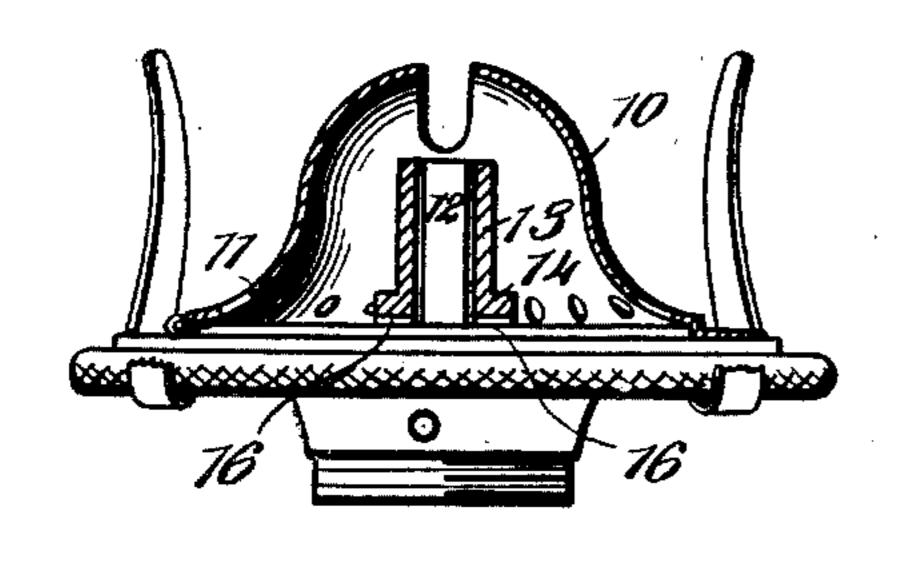
E. L. GOBISCH.

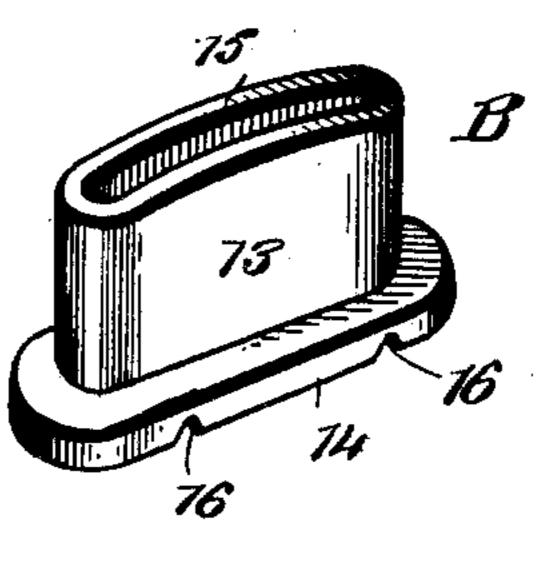
(Application filed Apr. 16, 1901.)

SMOKE PREVENTING ATTACHMENT FOR LAMP BURNERS.

(No Model.)







WITNESSES:

Edward L. Gobisch

## UNITED STATES PATENT OFFICE.

EDWARD L. GOBISCH, OF JERSEY CITY, NEW JERSEY.

## SMOKE-PREVENTING ATTACHMENT FOR LAMP-BURNERS.

SPECIFICATION forming part of Letters Patent No. 679,616, dated July 30, 1901.

Application filed April 16, 1901. Serial No. 56,090. (No model.)

To all whom it may concern:

Be it known that I, EDWARD LINCOLN Go-BISCH, a citizen of the United States, and a resident of Jersey City, in the county of Hud-5 son and State of New Jersey, have invented a new and Improved Smoke-Preventing Attachment for Lamp-Burners, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide 10 an attachment to lamp-burners or the burners of oil-stoves so constructed that the flame will be of full volume and smokeless, particularly when a chimney is employed, and so that the wick may be quickly and evenly cleaned 15 of its charred portions without the use of scissors or like tools.

Another feature of the invention is to so construct the attachment that it will be applicable to any oil-burner and so that it can 20 be economically manufactured and conveniently applied.

A further object of the invention is to provide a means whereby the glass chimney used with an oil-burner will be prevented from be-25 coming cloudy under the influence of the ra-

diation of heat. The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, 30 and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a burner having the improvement applied. Fig. 2 is a section through the upper portion of the burner, the section being taken practically on the line 2 2 of Fig. 1; and Fig. 3 is a detail per-40 spective view of the flue or sleeve which is used in connection with the wick-tube of the burner.

A represents an oil-burner made in accordance with my invention. A cap 10 is located 45 around and extends above the wick-tube 12. This cap is provided with a series of apertures or openings 11, as shown. Any number of such openings may be provided. A sleeve B is loosely slipped down over the 50 wick-tube 12, so that a flue is formed between said sleeve and said wick-tube. This flue is of sufficient size to permit a thin stratum of I the path of the escaping gases of combustion,

heated air to rise through it to the top of the wick-tube, where the air encounters the base of the flame.

The flue or sleeve B consists of a hollow body-section 13 and a base-flange 14. The upper edge of the body 13 is convexed, and the lower or under portions of the top may be on a level with the top of the correspond- 60 ing portions of the wick-tube 12 or may extend above such portions of the wick-tube. By giving the convexed shape to the upper surface 15 of the flue or sleeve B a person is enabled to clean the charred portion of a wick 65 by simply passing a match, a stick, or a like object across the top of the flue or sleeve, or the projecting charred portion of the wick may be wiped off with cloth or paper to advantage.

The base-flange 14 is provided with slots or recesses 16 in its under face, which communicate with the interior of the body. The base-flange 14 is adapted to rest upon the usual perforated bottom section of the burner 75 when the flue or sleeve has been passed over the wick-tube, and the air passing up through the perforations in the bottom of the burner will find its way through the recesses or slots 16 to the interior of the body of the flue and 80 up to the flame, greatly promoting combustion. The air thus passing up through the flue creates a suction and causes the outside atmosphere to be drawn from the space within the chimney through the openings 11 in 85 the cap to the interior of the cap, whereby the air which would otherwise come in contact directly with the sides of the chimney is drawn up to the flame and more or less of the oxygen is consumed and the air in its heated 90 state and in a great measure freed from oxygen only strikes the interior of the chimney and does not render the glass cloudy, as would be the case if the heated air fully charged with oxygen passed up through the chimney 95 in the usual way.

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

1. In a smoke-preventing lamp, a wick-tube 100 and a sleeve surrounding the same concentrically so as to leave an intermediate flue, in combination with a partition located in

and provided with openings which communicate with said flue.

2. In oil-burners, an attachment for the wick-tube thereof, said attachment consisting of a sleeve adapted to be slipped over the wick-tube, said sleeve comprising a chambered body conforming substantially in shape to the shape of the wick-tube of a burner, and a base-flange, the upper edge of the body of the sleeve being convexed and said base-

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flange provided with recesses in its under face leading to the chamber in the body, as described.

In testimony whereof I have signed my name to this specification in the presence of 15 two subscribing witnesses.

EDWARD L. GOBISCH.

Witnesses:

J. FRED. ACKER, JNO. M. RITTER.