No. 662,826. Patented Nov. 27, 1900.

J. SHARPLES.

BURNER FOR OIL LAMPS.

(Application filed May 23, 1900.)

(No Model.) 2 Sheets—Sheet 1.

FIG 1

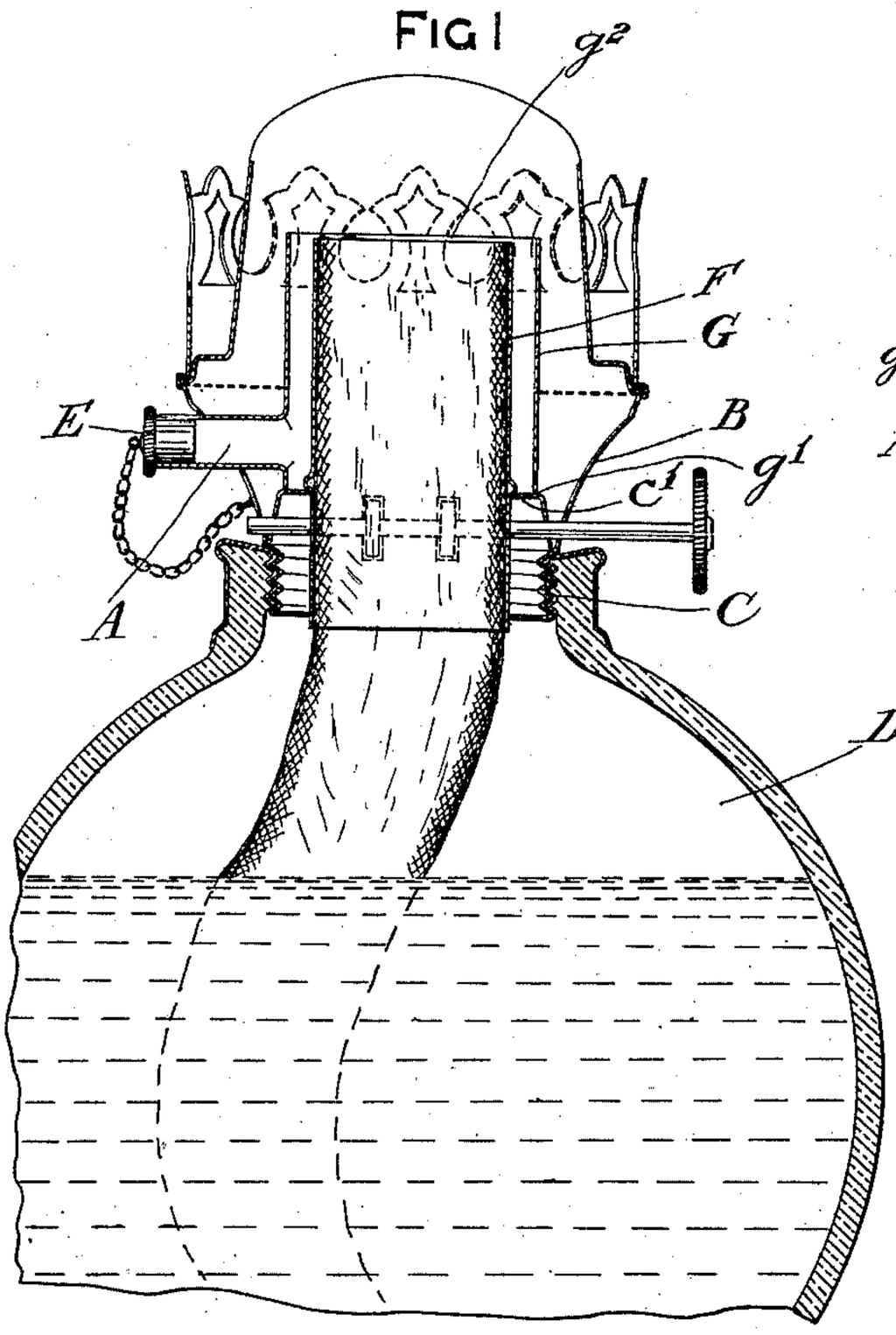


FIG 2

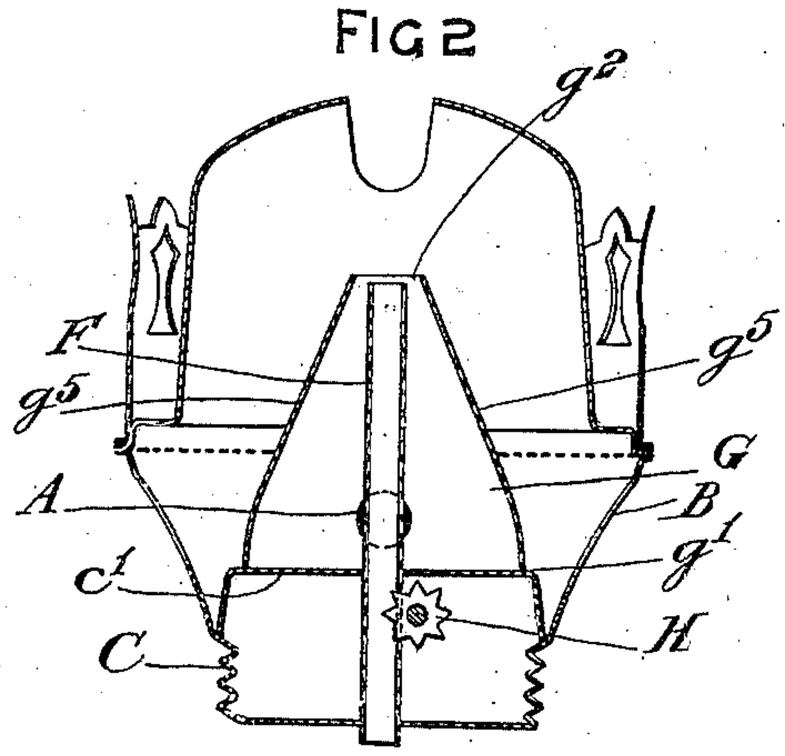
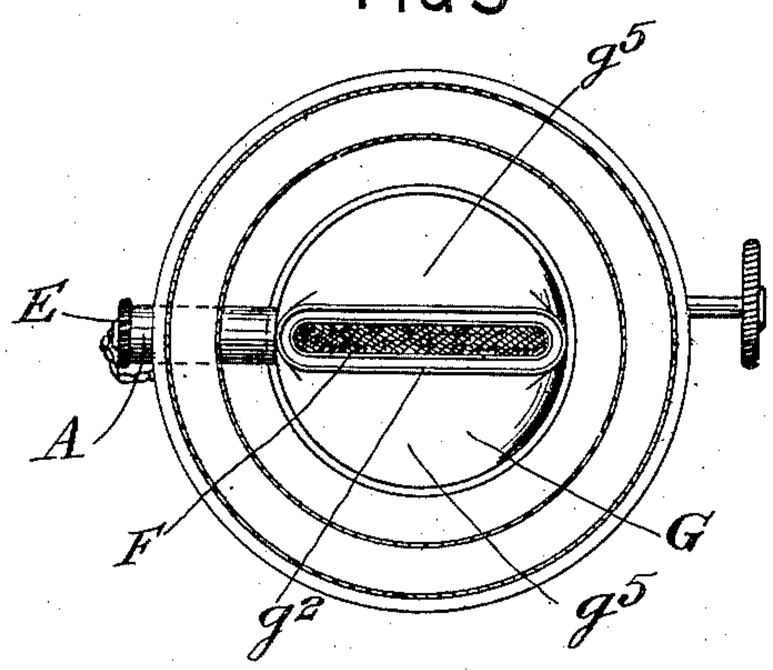


FIG 3



WITNESSES.

Charles Bosworth Kelley

Herbert W. Litchouse.

INVENTOR.

James Sharples

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FIG 4

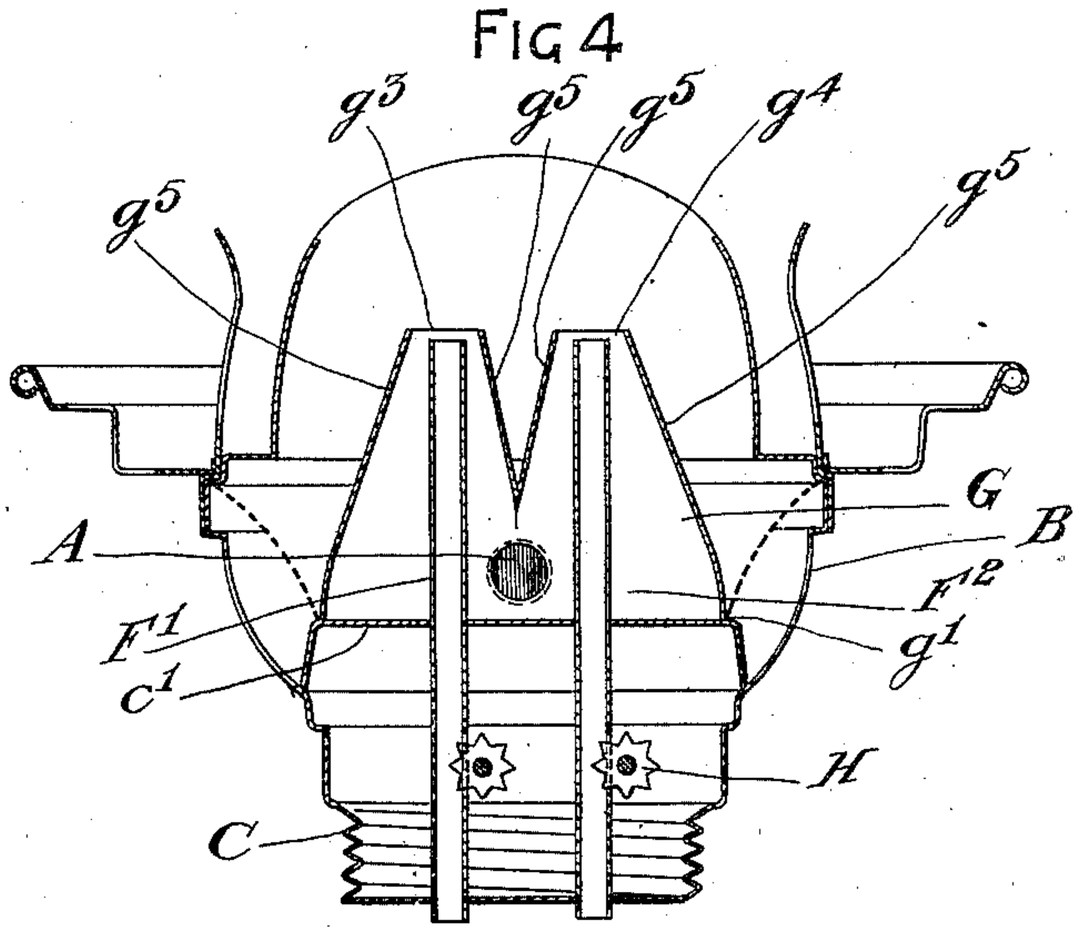
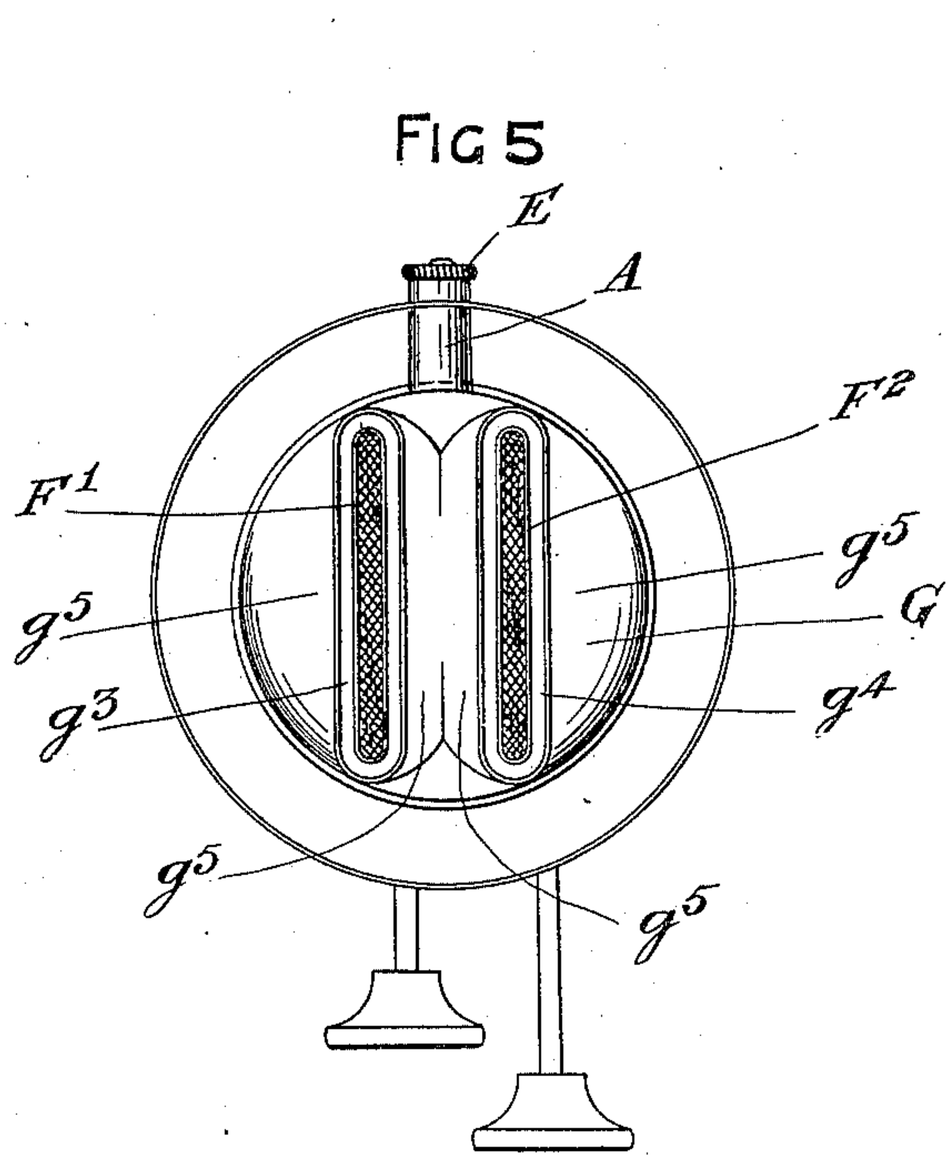


FIG 5



WITNESSES:

Charles Bosworth Ketley

Herbert Whitehouse

INVENTOR:

James Sharples

UNITED STATES PATENT OFFICE.

JAMES SHARPLES, OF BIRMINGHAM, ENGLAND.

BURNER FOR OIL-LAMPS.

SPECIFICATION forming part of Letters Patent No. 662,826, dated November 27, 1900.

Application filed May 23, 1900. Serial No. 17,721. (No model.)

To all whom it may concern:

Be it known that I, JAMES SHARPLES, a subject of Her Majesty the Queen of Great Britain and Ireland, residing at 699 Coventry road, in the city of Birmingham, in the county of Warwick, England, have invented certain new and useful Improvements in and Connected with Burners for Oil-Lamps, of which the following is a specification.

This invention consists of the herein-described improvements in and connected with burners for oil-lamps, so as to facilitate extinguishing the lamp.

My invention is applicable to oil-lamp burners of all kinds, whether they are what is known as "single-wick" burners—that is, fitted with only one wick-tube—or whether they are burners provided with what are known as "duplex" or "circular" or "crescent" or "central-draft," or of other kind of wick-tubes.

I will describe my invention by referring to the accompanying drawings, on which—

Figure 1 is a sectional front elevation of an ordinary flat-flame single-wick lamp with my invention applied thereto. Fig. 2 is a sectional side elevation of the same. Fig. 3 is a sectional plan of the burner and gallery part of the same. Fig. 4 is a sectional elevation of what is known as a "duplex" flat-wick lamp-burner and gallery with my invention applied, and Fig. 5 is a sectional plan of the same.

The same letters of reference indicate the same or corresponding parts in all the figures.

I will first describe the arrangement of my invention illustrated by Figs. 1, 2, and 3.

In carrying out my invention I provide an air-inlet hole or pipe A in the gallery B of the burner immediately above the base C, which screws into the hole in the reservoir D, this air-inlet pipe or hole being closed by a suitable plug or valve E. Within the gallery B and surrounding the wick-tube F, I provide a metallic or other non-combustible funnel G, the lower end g' of which is fixed to and closed by the diaphragm C', below which the wick-spindle H is located. The top g^2 of this funnel is open and is somewhere about level with or slightly above the top of the wick-tube F and is rather larger than the wick-tube, (see Fig. 3,) so as to leave a narrow space all around between the outside of the wick-tube F and the inside of the top g^2 of the funnel G. The funnel G thus forms an air-chamber, the only openings to which are the inlet hole or pipe A, which is connected thereto, and the outlet g^2 at the top around the wick-tube F.

When the lamp is burning and the air-inlet hole or pipe A is closed, the air contained in the air-chamber formed by the funnel G expands through the heat and is therefore at a lower pressure than the external atmosphere.

To extinguish the light, it is only necessary to open the air-inlet hole or pipe A by removing the plug or valve E, so that the inrush of cold air through the pipe A into the chamber in the interior of the funnel G and out through the top against the flame will instantly extinguish the same.

The sides g^5 of the funnel are inclined toward the top, so as the better to direct the inrush of air against the flame.

When my invention is applied to a circular or annular or crescent-shaped burner, the shape of the top of the funnel G is made to correspond therewith, so as to direct the inrush of air against the flame to extinguish the same when the air-plug or air-inlet valve is opened, as above described.

In the case of a duplex burner the top of the funnel G is of course made with two outlets g^2 g^3, (see Fig. 4,) corresponding with the two wick-tubes F' F².

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

1. A burner comprising a wick-tube, an imperforated funnel surrounding the same having its lower end closed about said wick-tube, a wick-spindle located entirely outside of said funnel, a passage leading to the lower part of said funnel said passage being adapted to be closed to the outside atmosphere.

2. A burner comprising a wick-tube, a funnel surrounding the same, a diaphragm closing the lower end of said funnel, a spindle located below said diaphragm, a passage leading from the lower part of the funnel and a removable stopper closing the end of said passage.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JAMES SHARPLES.

Witnesses:

CHARLES BOSWORTH KETLEY,

HERBERT WHITEHOUSE.