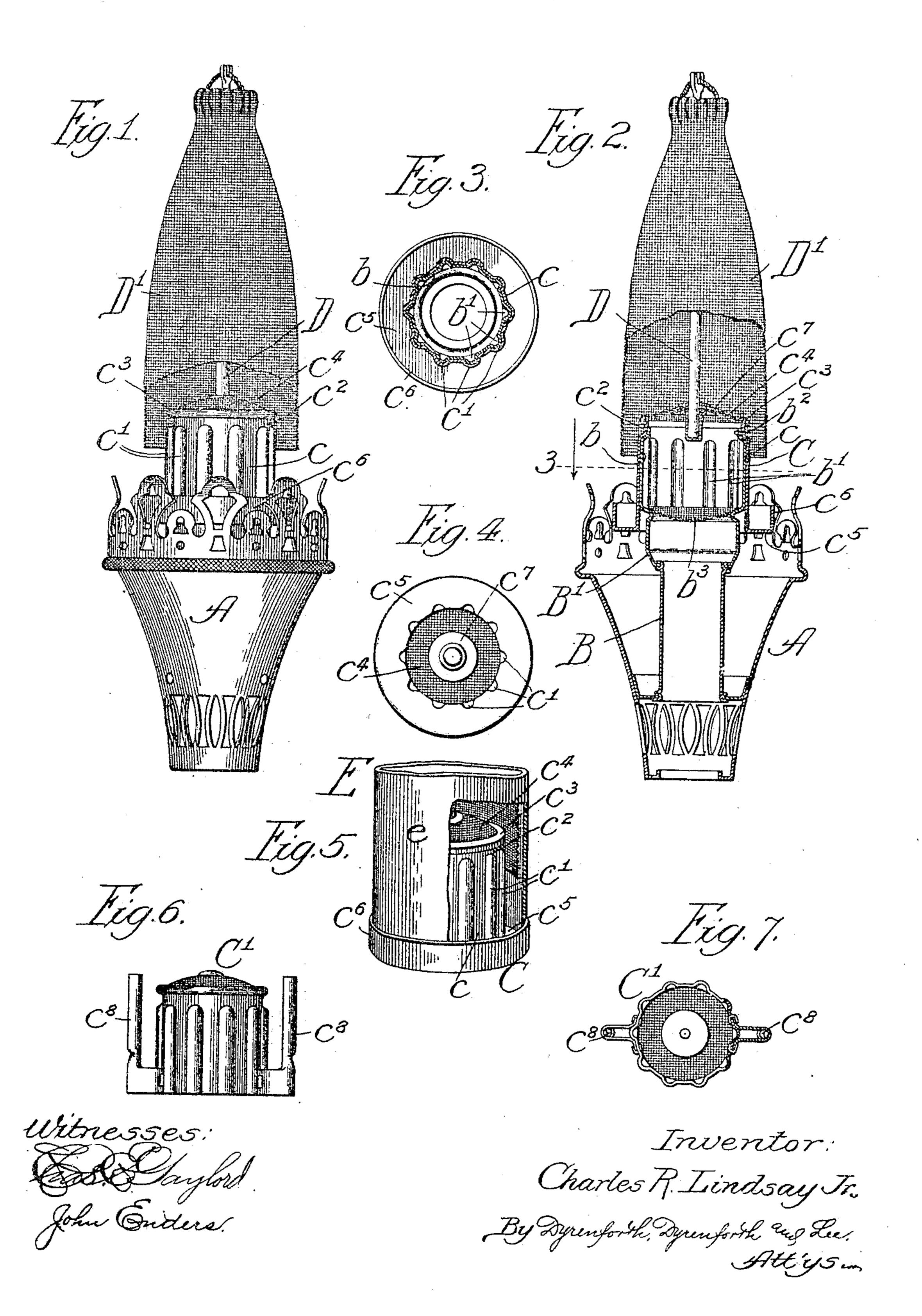
C. R. LINDSAY, JR.

BURNER.

APPLICATION FILED MAY 31, 1905.



UNITED STATES PATENT OFFICE.

CHARLES R. LINDSAY, JR., OF CHICAGO, ILLINOIS.

BURNER.

No. 798,811.

Specification of Letters Patent.

Patented Sept. 5, 1905.

Application filed May 31, 1905. Serial No. 263,016.

To all whom it may concern:

Be it known that I, Charles R. Lindsay, Jr., a citizen of the United States, residing at Chicago, in the county of Cook and State of Illi-5 nois, have invented a new and useful Improvement in Burners, of which the following is a specification.

My invention relates particularly to burners for use in connection with incandescent 10 gas-lights; and my primary object is to provide a burner of improved construction having special provision for insuring improved connection between the gauze cap and burner-tube, for facilitating the shipment of gauze caps and 15 mantles, and for preventing inferior mantles from being supplied to users of the burners.

The invention is illustrated in the accom-

panying drawings, in which—

Figure 1 represents an elevational view of 20 my improved burner equipped with a mantle, which is shown broken; Fig. 2, a vertical sectional view of the same; Fig. 3, a plan section taken as indicated at line 3 of Fig. 2; Fig. 4, a bottom view of the improved gauze cap em-25 ployed; Fig. 5, a broken perspective view showing the manner of using the gauze cap as a portion of a carton for containing a mantle; Fig. 6, an elevational view of a modified form of the gauze cap; and Fig. 7, a bottom plan 30 view, partly in section, of the gauze cap shown in Fig. 6.

Referring to Figs. 1 to 5, inclusive, A represents a chimney or globe support of common construction; B, a central burner-tube 35 equipped with a hollow open-ended head B'; C, my improved gauze cap in its preferred form applied to the head B', and D a mantlestandard supported by the gauze cap C and

supporting the mantle D'.

The head B' has its lower end suitably joined to the upper end of the tube B and is provided with a cylindrical portion b, having vertical corrugations b'. The upper end of the member terminates in a short cylindrical section b^z 45 of reduced diameter and having a smooth ex-

ternal surface.

The gauze cap C comprises a cylindrical portion c, having vertical corrugations c', a short contracted cylindrical section c^2 , above which 50 is formed a bead c^3 , with which is connected the upper gauze c^4 , and an outturned flange c^5 at the lower end of the cylinder c, which is equipped with an upturned flange c^6 . The head B' is equipped internally with a lower gauze b^3 , 55 and the upper gauze c^{\dagger} is equipped with a socket

 c^7 , which receives the lower end of the stand-

In use the gauze cap fits securely upon the head B' with the corrugations c' over the corrugations b' and the cylindrical section c^2 en- 60 circling the cylindrical section b^2 . Mantles of a superior quality are supplied with the gauze caps, and the gauze caps may form portions of the cartons E (shown fragmentary in Fig. 5) for shipping the mantles. Thus e may 65 represent the open lower end of a cardboard tube which has a closed top, the lower end of the tube fitting within the vertical flange c^6 and resting upon the horizontal flange c^5 . It will be observed that special gauze caps are 70 required for use in connection with the head B' of the burner-tube, which will serve to prevent inferior mantles from being sold to the users of the improved burners, inasmuch as the gauze cap is sold with the mantle for con- 75 venience in shipping and to prevent injury to the mantle in applying it to the lamp. At the same time, if desired, the gauze caps may be employed upon burner-tubes of the old form, the cylindrical section c^2 serving to 80 make a close connection with the cylindrical surface of the burner-tube.

In the modification shown in Figs. 6 and 7, C' represents a gauze cap similar in construction to the gauze cap C, except that the flanges 85 c^{5} c^{6} are omitted and lateral sockets c^{8} are provided for receiving the legs of the usual **U**shaped mantle-support. In this case the sockets c^{s} will serve to center the gauze cap with relation to the body of the carton, so that the 90 mantle will be held properly centered in ship-

ments. Changes in minor details of construction : within the spirit of my invention are contemplated. Hence no undue limitation should be 95 understood from the foregoing detailed description.

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

1. The combination of a burner-tube hav- 100 ing a head equipped with vertical corrugations and above said corrugations with a cylindrical section, and a gauze cap having vertical corrugations fitting on said first-named corrugations and a cylindrical section fitting upon 105 said first-named section, for the purpose set forth.

2. The combination of a burner-tube having a head equipped with vertical corrugations, and a gauze cap having vertical corru- 110 gations fitting on said first-named corrugations, for the purpose set forth.

3. A gauze cap comprising a cylindrical member having vertical corrugations and equipped at its upper end with a gauze and at its lower end with an external upturned flange adapted for connection with the body of a carton, for the purpose set forth.

4. In a burner, a burner-tube having a cy-

lindrical head equipped with vertical corrugations adapted to receive the corresponding corrugations of a gauze cap, substantially as and for the purpose set forth.

CHARLES R. LINDSAY, JR.

In presence of—

L. Heislar,

J. H. LANDES.