

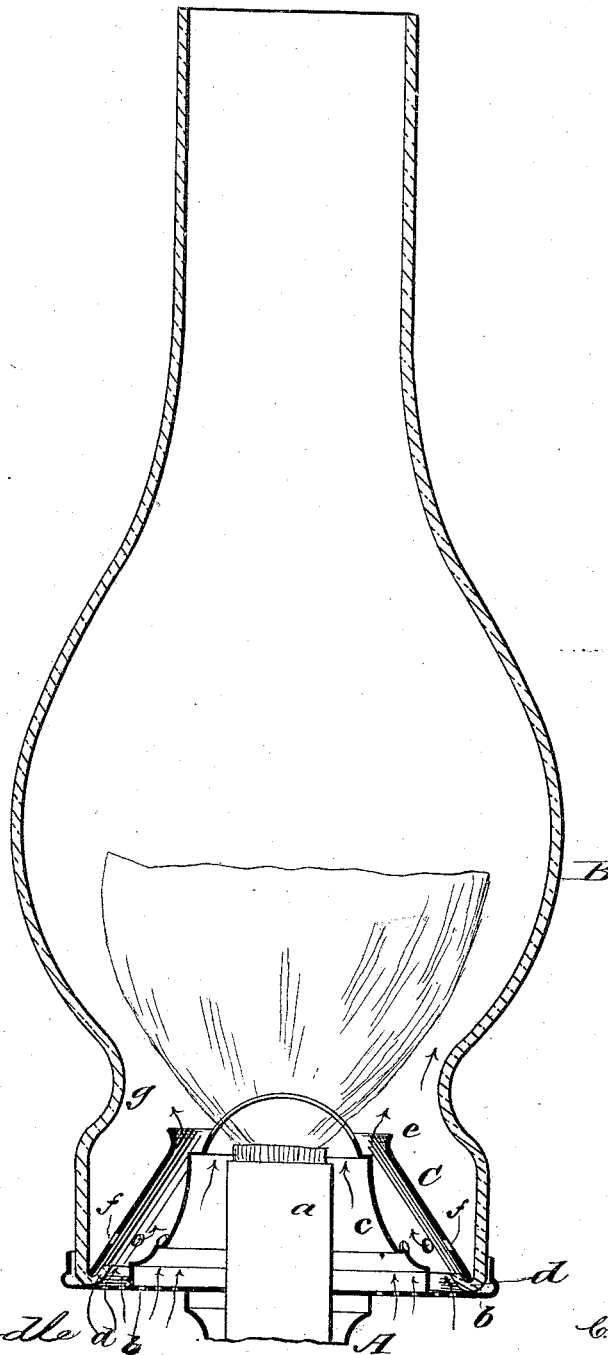
(No Model.)

C. E. TUCKER.

LAMP BURNER.

No. 343,972.

Patented June 15, 1886.



WITNESSES:

*H. Mc Ardle*  
*C. Sedgwick*

INVENTOR:

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BY

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# UNITED STATES PATENT OFFICE.

CHARLES EDWARD TUCKER, OF SALIDA, COLORADO.

## LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 343,972, dated June 15, 1886.

Application filed February 16, 1886. Serial No. 192,115. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES EDWARD TUCKER, of Salida, in the county of Chaffee and State of Colorado, have invented a new and useful Improvement in Lamps, of which the following is a specification, reference being had to the annexed drawing, which is a side sectional elevation.

The object of my invention is to provide for lamps adapted for burning kerosene and similar oils an auxiliary cone for concentrating upon the flame the air drawn into the burner, and a chimney having an internal flange for supporting the auxiliary cone.

My invention consists in the construction and arrangement of parts, as will be hereinafter fully described and claimed.

The burner A is of the usual construction, having the wick-tube *a*, the base-plate *b*, and the cone *c*. The chimney B, which is received upon the base-plate *b*, is provided with an internal upwardly-curved flange or fillet, *d*, in which rests the lower edge of the auxiliary cone C. The auxiliary cone C is made of any suitable material, but preferably of glass. Its form is that of a hollow truncated cone with its upper edge, *e*, flared. In the sides of the cone C, near the base thereof, is formed a series of holes, *f*, for admitting heated air from the chimney to the interior of the cone.

The sides of the chimney B are contracted at a point nearly opposite the cone C, (as shown at *g* in the drawing,) to assist in concentrating upon the flame the air drawn into the burner. Air is admitted under the cone *c*, through holes in the base-plate *b*, and is delivered to the flame in the usual way. Air is also admitted under the cone C, through holes in the base-plate outside of the cone *c*, and the air so admitted is carried above the cone *c* and is concentrated upon the flame; but in its passage through the cone C it draws in heated air from the chimney B through the holes *f*. The air drawn in through the base-plate between the cones *c* and C, becomes heated by contact with the cones and by mixture with the heated air drawn into the cones from the chimney, so that the flame of the lamp is supplied with a concen-

trated jet of heated air, which renders the combustion of the oil more complete, and consequently produces a whiter and more intense light.

I am aware that an Argand gas-burner has been surrounded by a hollow truncated apertured cone formed with an annular flange around its lower outer edge, into which fitted the lower inturned edge of the glass chimney. The truncated cone was provided with a spring-catch operating through a slot against the lower inturned edge of the chimney to lock it in place. And I am also aware that a chimney has been provided with the usual cylindrical neck, around the side of which, near its lower edge, was formed a groove to receive the holding-screws, and I do not claim the same as of my invention. In my construction the lower edge of the chimney is inturned to support the truncated cone without any fastening device, and when the chimney is removed the cone will be removed with it. The upper edge of the said truncated cone has an outward flare, for a purpose hereinbefore set forth, while that before referred to has an inward inclination from about its center to its upper edge, so that there was an inward deflection of air, instead of an outward, and the chimney used with the said prior truncated cone was straight, so that the air, after passing through the apertures in said cone, would have a tendency to rise along the inner sides of the chimney away from the flame, whereas in my construction the chimney is contracted opposite the upper outward-flared end of the cone, to cause a concentration of the air upon the flame. It is of course common to contract chimneys at about this point, and this feature of itself is not claimed.

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

1. The combination, with a lamp-chimney contracted at the upper part of its neck, and having the lower edge of its neck turned inward, of the hollow truncated cone resting on the said inturned edge, and having its sides apertured and its upper edge flared outwardly, substantially as set forth.

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2. The combination, with a lamp having  
the usual flat-wick burner, cone, and chim-  
ney formed with a cylindrical neck contract-  
ed opposite the cone, of a truncated aper-  
5 tured cone between the chimney and lamp-  
cone, apertured in its sides and flared out-  
wardly around its upper edge toward the

contraction in the chimney, substantially as  
set forth.

CHARLES EDWARD TUCKER.

Witnesses:

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WILLIAM J. KNOWLTON.