C. F. ERB.

TUBULAR LANTERN.

APPLICATION FILED MAR. 24, 1909.

962,135. Patented June 21, 1910.

Fig. 1.

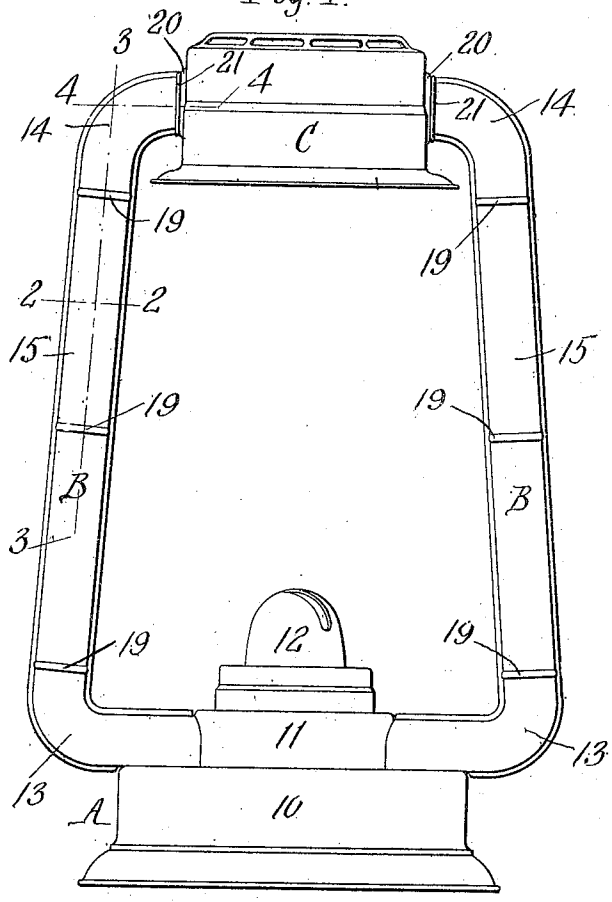


Fig. 2.

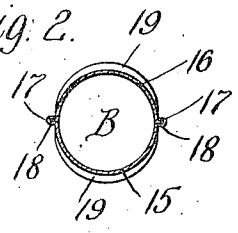


Fig. 3.

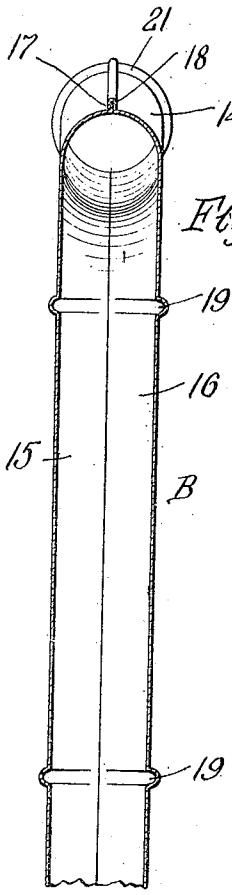
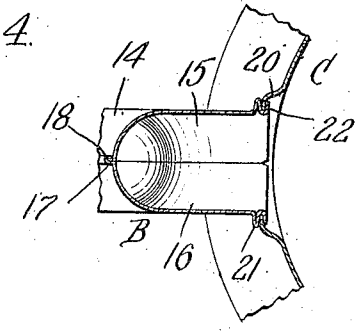


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

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TUBULAR LANTERN.

962,135. Specification of Letters Patent. Patented June 21, 1910.

Application filed March 24, 1909. Serial No. 485,380.

To all whom it may concern:

Be it known that I, CHARLES F. ERB, a citizen of the United States, residing at Rockaway Point, in the county of Queens and State of New York, have invented a new and useful Improvement in Tubular Lanterns, of which the following is a specification.

This invention relates to the frames of tubular lanterns and has particular reference to that class of frames in which each tube is composed of two stamped half-tubes, each of half-round cross section, and both secured together by seams extending along the inner and outer edges of the half-tubes.

The invention has for its object to stiffen the tubes of the tubular frame in a simple, inexpensive and effective manner.

In the accompanying drawings: Figure 1 is an elevation of a tubular lantern embodying this invention. Fig. 2 is a horizontal section in line 2—2, Fig. 1, on an enlarged scale. Fig. 3 is a vertical section in line 3—3, Fig. 1, on an enlarged scale. Fig. 4 is a horizontal section in line 4—4, Fig. 1, on an enlarged scale.

Like reference characters refer to like parts in the several figures.

A represents the base of the lantern comprising the oil pot 10, the air chamber 11 thereon and the burner 12.

B represents the side tubes formed each with a lower elbow portion 13 which connects with the air chamber 11 and with an upper elbow portion 14 which connects with the upper air chamber or band C. Each air tube is composed of two half-tubes 15, 16, half-round in cross section and provided along their inner and outer edges, respectively, with flanges 17, 18, which are united in the form of a seam when the halves have been placed against each other, one of the flanges 17 being so wide that it can be closed around the opposing flange 18 of the other half-tube.

19 represents transverse beads or hollow ribs which are formed on the upright portion of each half-tube at suitable intervals, three such ribs being usually sufficient for tubes of ordinary height. These beads or ribs take up the surplus of metal in shaping the half-tubes from flat blanks between dies and so draw the metal tight in stamping the half-tube and prevent buckling of the metal or the formation of flat, wavy or misshaped spots in the surface of the tube, which would not only mar the appearance of the tube but also impair its strength.

20 represents a flat or plane seat which is formed on the side of the top band or chamber for the reception of the upper end of the side tube, which is secured to this seat by means of a bead 21 closed against the outer side of the seat and the flanged end 22 of the tube which is closed against the inner side of the seat. The latter is arranged in a vertical and transverse plane on the outer side of the cylindrical top band or chamber C and enables the end bead 21 of the tube to seat itself squarely against the top chamber, whereby the connection at this point is simplified and strengthened.

I claim as my invention:

A tubular lantern having tubes composed of stamped half-tubes of sheet metal which extend in a continuous piece from end to end and are provided between their ends at intervals with hollow transverse stiffening beads, said half-tubes being joined on opposite sides by overlapped seams, substantially as set forth.

Witness my hand in the presence of two subscribing witnesses.

CHARLES F. ERB.

Witnesses:
ROBERT A. CURRIE,
HOWARD L. FLETCHER.