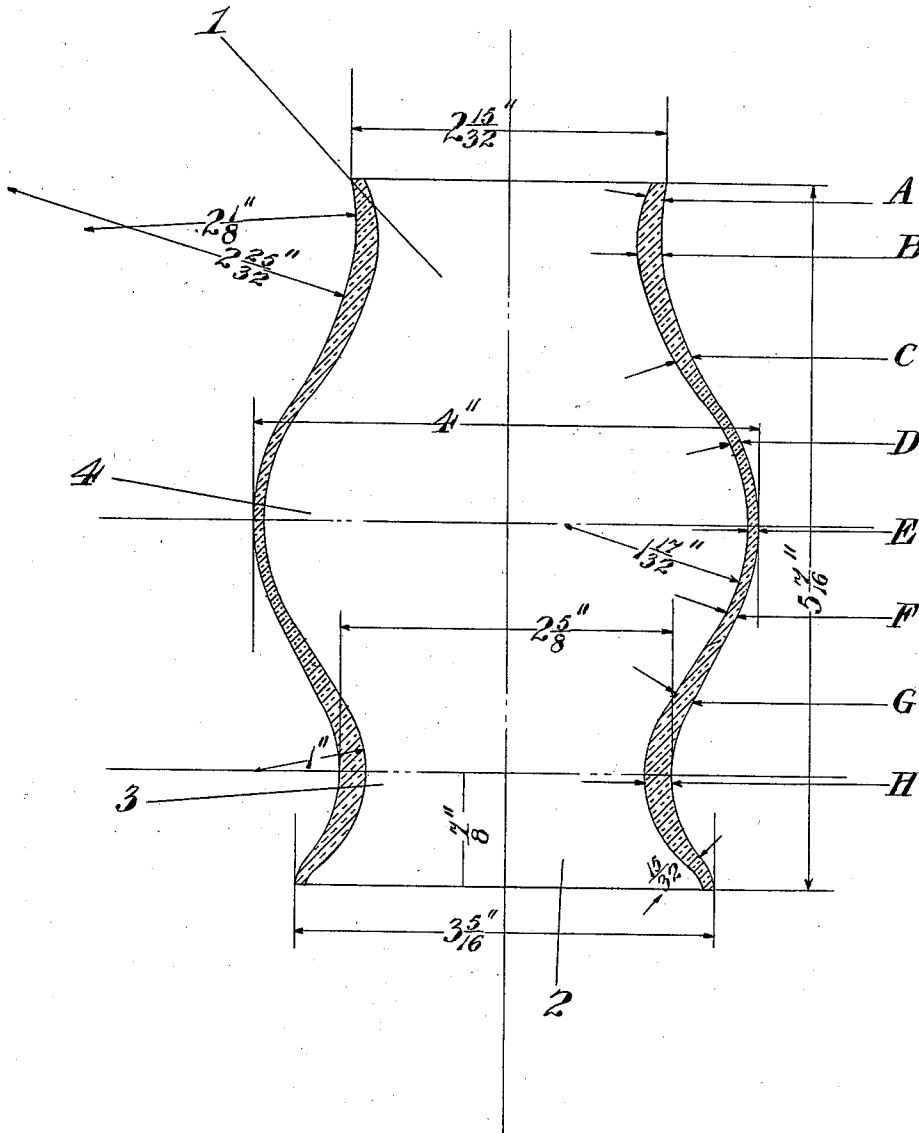


W. CHURCHILL.
 LANTERN GLOBE.
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1,041,740

Patented Oct. 22, 1912.



Witnesses

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LANTERN-GLOBE.

1,041,740.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM CHURCHILL, a citizen of the United States, and a resident of Corning, county of Steuben, and State of New York, have invented certain new and useful Improvements in Lantern-Globes, of which the following is a specification.

My invention has for its object to provide such a construction of lantern globes as will greatly increase the strength thereof against fracture from blows or knocks, and it consists in the peculiar shape given to the globe and the distribution of the material therein, in such a manner that compared with a globe of the present usual construction adapted for the same size railroad lantern as used by trainmen, etc., and for the same burner, my improved globe will not only be considerably lighter but will possess much greater strength, without impairing in any way the essential features of perfect combustion in and protection of the flame.

Referring to the accompanying drawing which is a vertical diametrical section through a globe constructed in accordance with my invention, it is seen to have the usual top and bottom openings 1 and 2.

Immediately above the bottom opening the external wall of the globe is restricted in diameter, forming a constricted zone 3, and from such zone swells outwardly to an enlarged zone 4, from which it gradually slopes in to the top, the diameter of the top and bottom of the globe being such as to fit the lantern with which the globe is to be used. Furthermore as shown and in addition to the external configuration as before described, the internal wall of the globe while following the general surface of the outer wall in axial section is not in parallelism therewith, but departs therefrom in such a manner as to cause a thickening of the wall of the globe commencing at about the enlarged zone and increasing to a maximum at the restricted zone. It will be further noted that there is a thickening of the globe above the enlarged zone and below the top.

In use these globes are mounted between

bottom and top supporting members and are subjected to blows not only from the sides but also to crushing strains from top to bottom. It has been found by tests that the shape of the globe and distribution of the material thereof herein shown results in a maximum resistance to these.

For the purpose of placing those skilled in the art in possession of the best manner known to me of constructing a globe according to my invention, I have incorporated in the drawings measurements of the external contour of globes which I have made and tested. The thickness of the wall of one globe by actual measurement is as follows:—At the point A .14 inches, at the point B .19 inches, at the point C .13 inches, at the point D .09 inches, at the point E .09 inches, at the point F .12 inches, at the point G .19 inches, at the point H .21 inches.

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

1. An integral lantern globe having upper and lower end openings which afford end surfaces by which it is supported, and having a constricted zone located above the lower opening and an enlarged zone located between the constricted zone and the upper opening, the thickness of the walls of the globe being greater at the constricted zone than at the enlarged zone.

2. An integral lantern globe having upper and lower end openings which afford end surfaces by which it is supported, and having a constricted zone located above the lower opening and an enlarged zone located between the constricted zone and the upper opening, the thickness of the walls of the globe at the constricted zone and between the enlarged zone and the top being of greater thickness than other parts of the globe.

In testimony whereof I have signed my name in the presence of two witnesses.

WILLIAM CHURCHILL.

In presence of—

FRED. C. CAMERON,
ED. SFEIFFER.