

C. L. BETTS.
TUBULAR LANTERN.
APPLICATION FILED JAN. 2, 1909.

920,892.

Patented May 4, 1909.

Fig. 1.

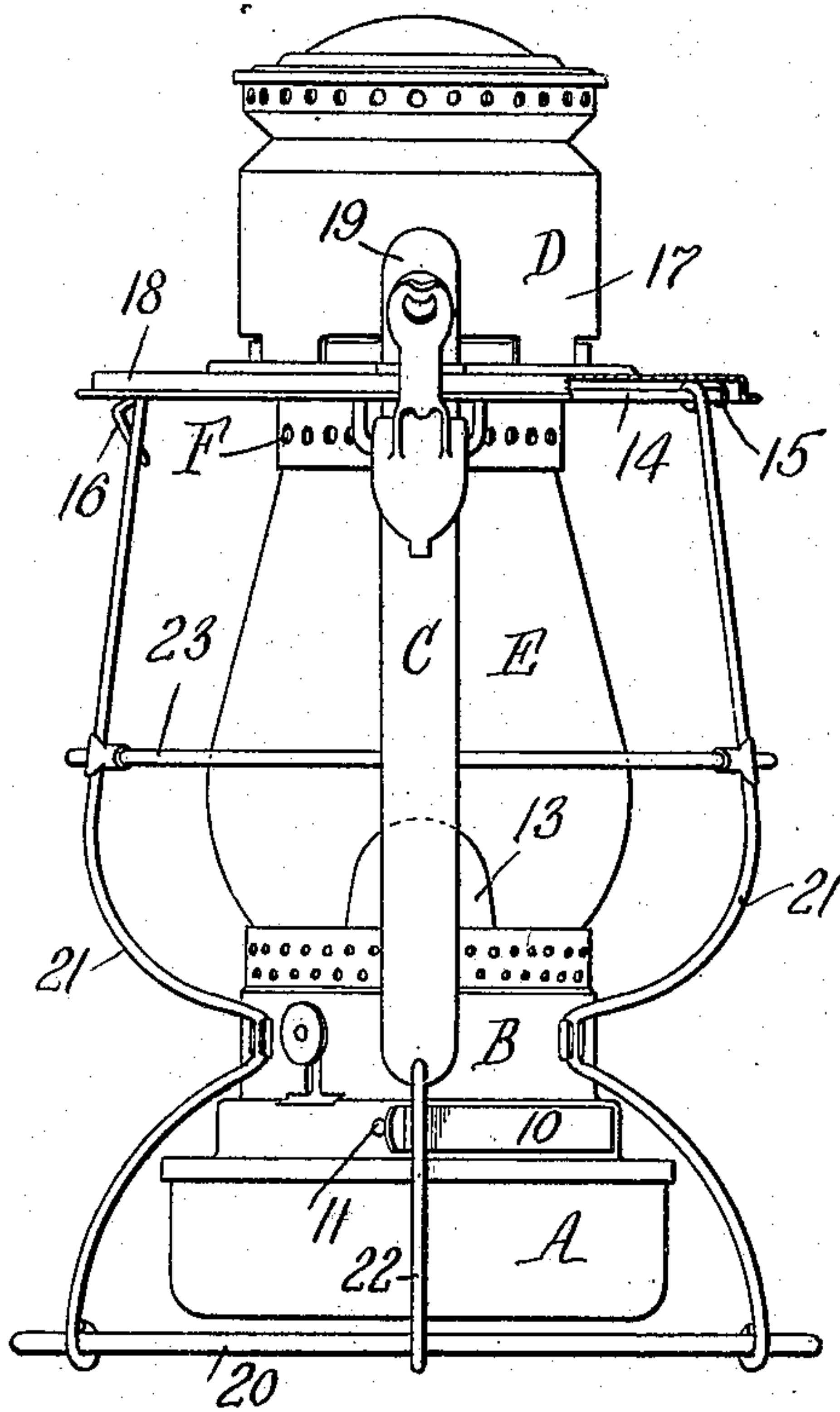


Fig. 2.

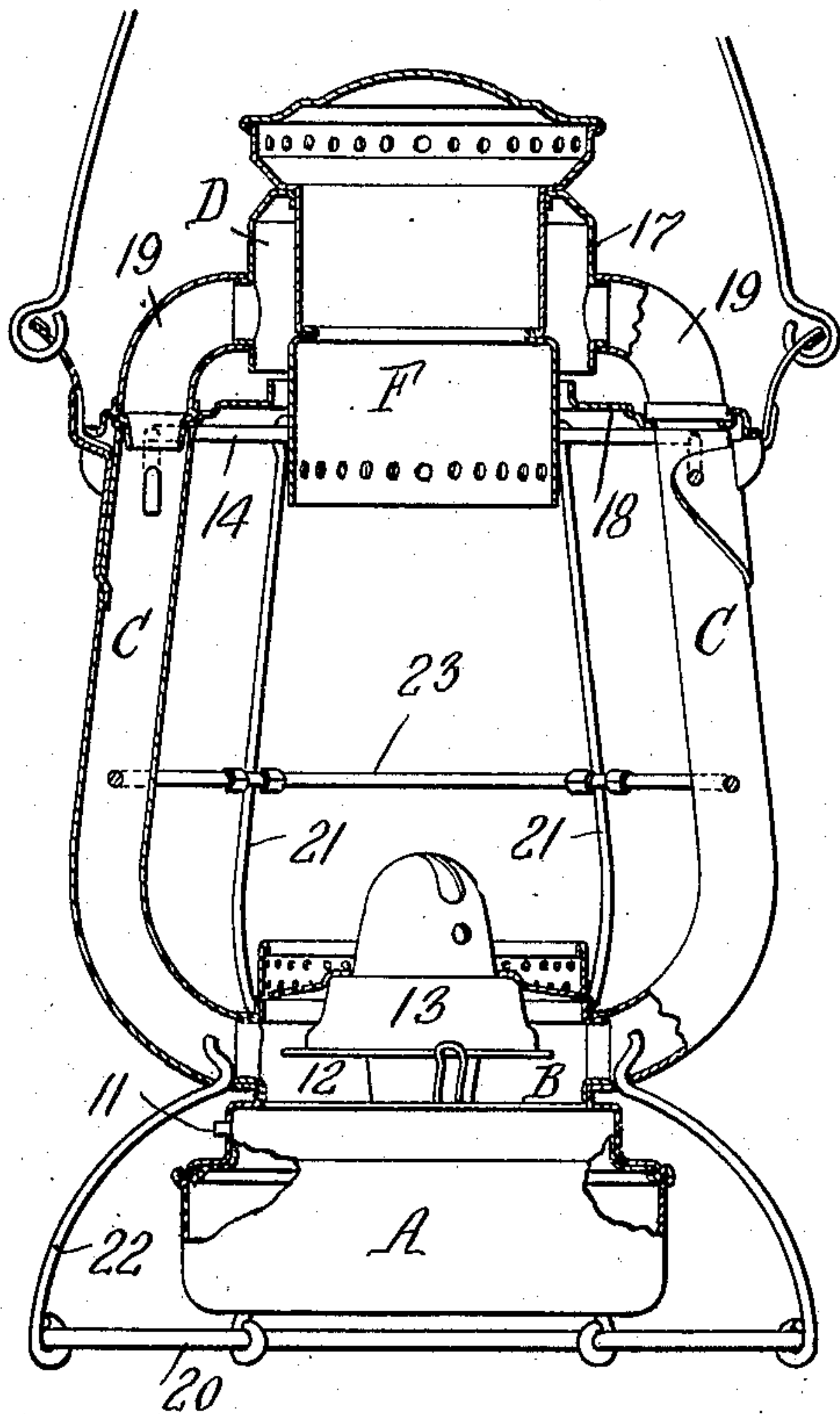


Fig. 3.

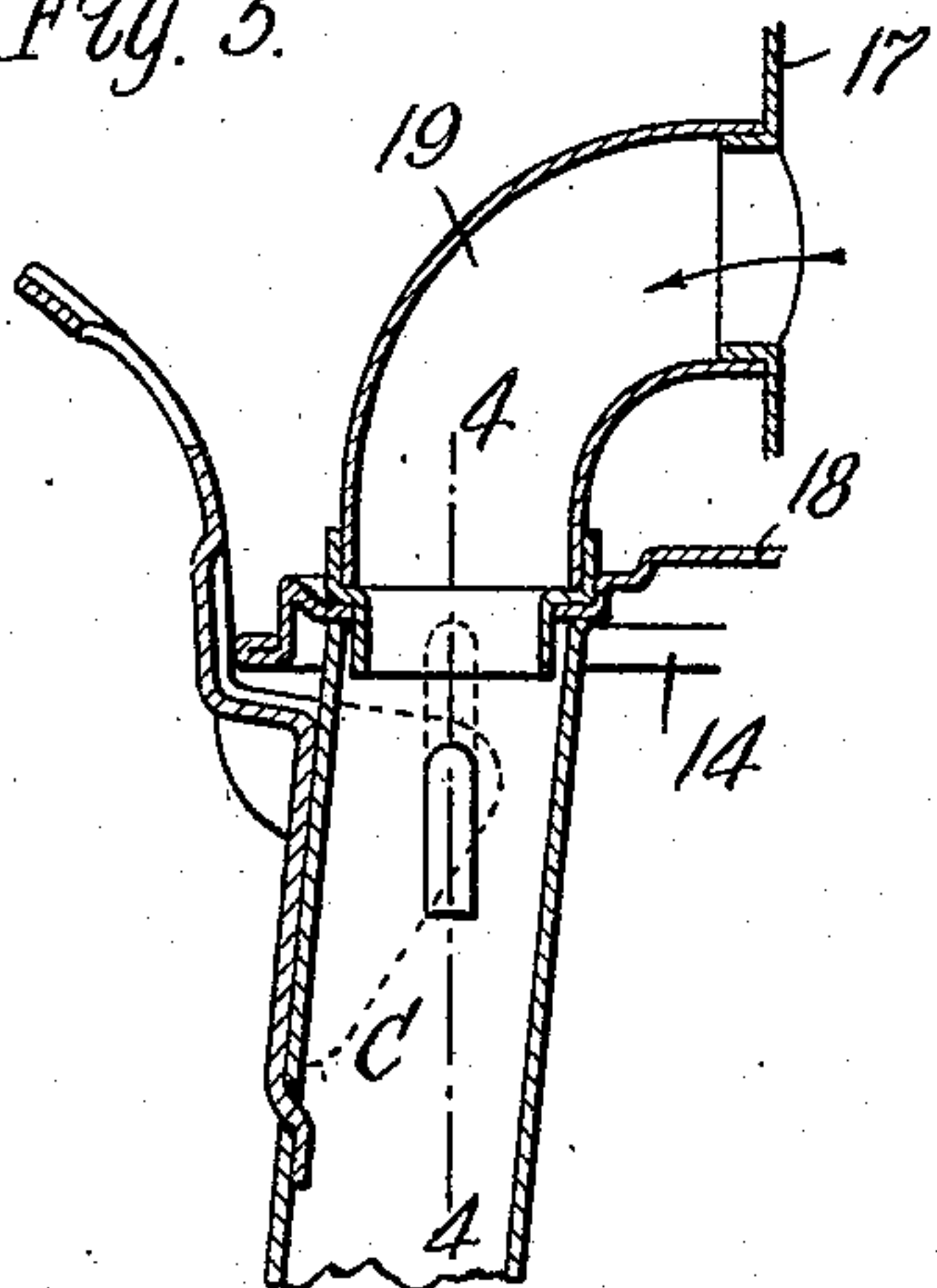


Fig. 4.

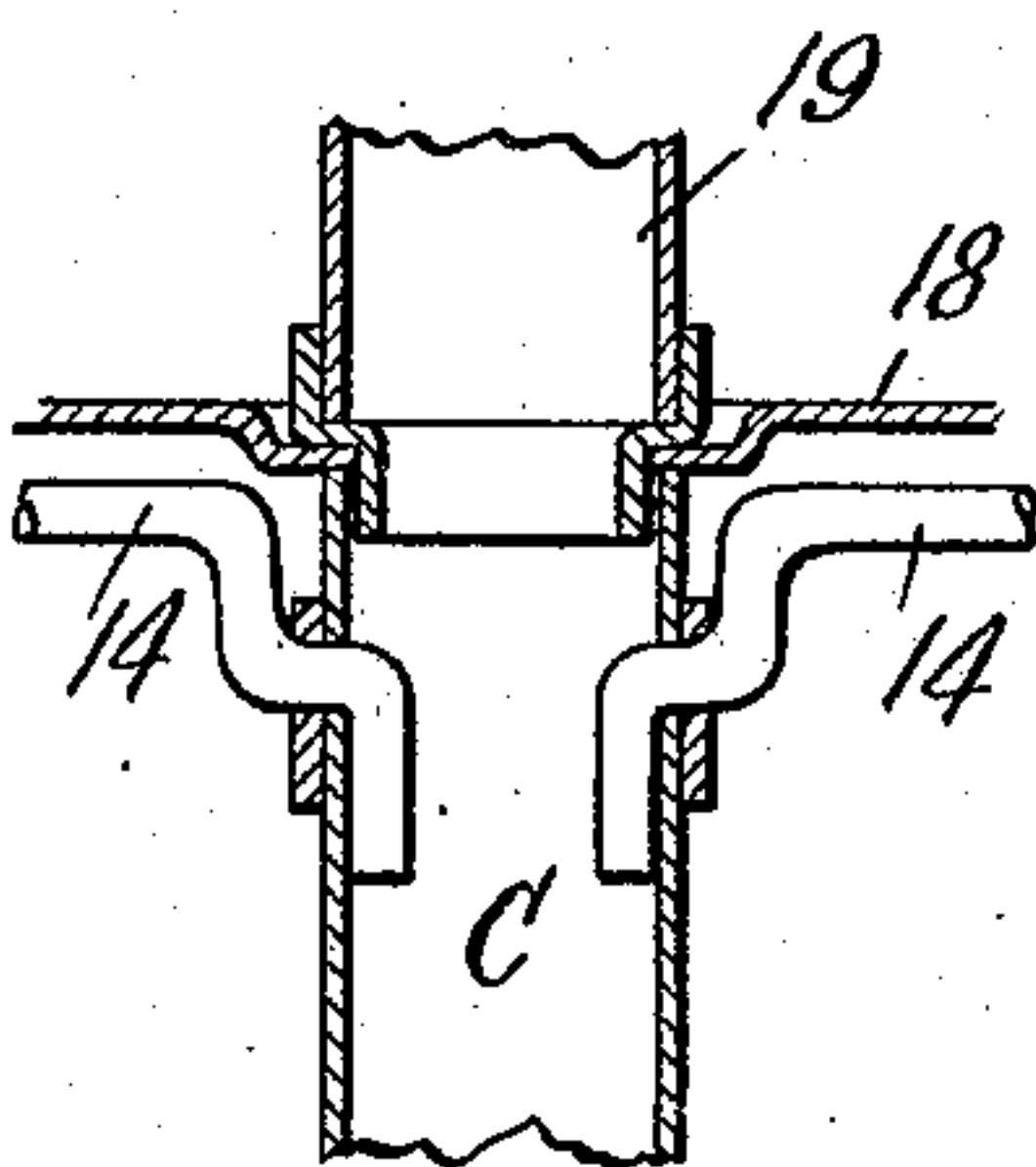
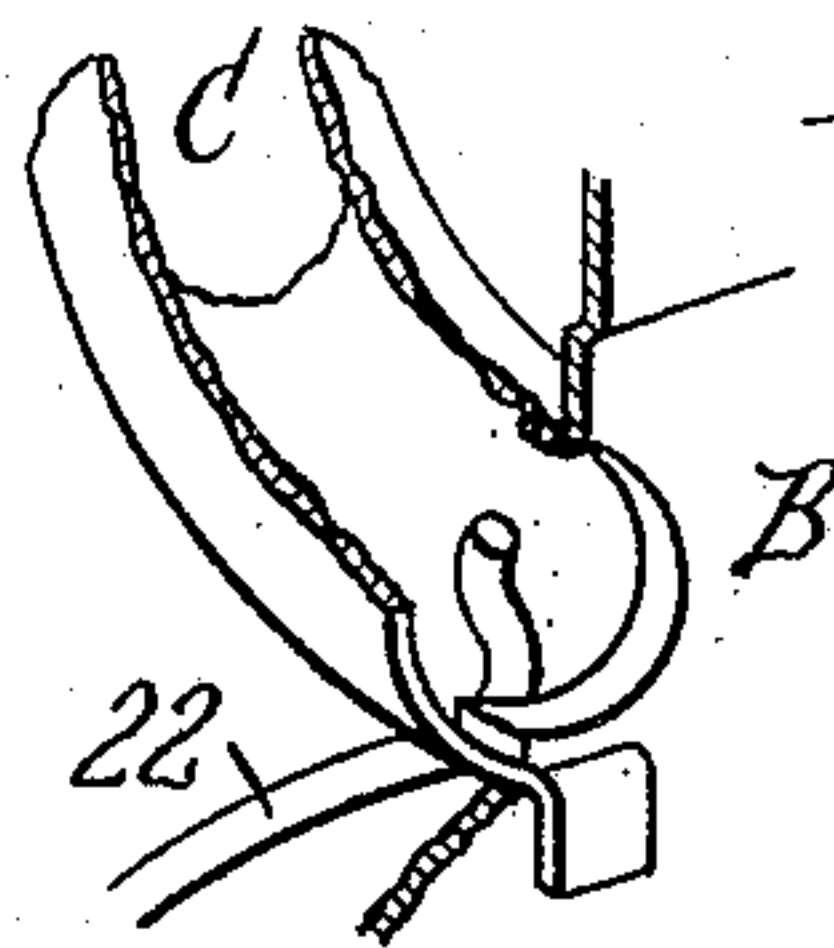


Fig. 5.



Witnesses:

A. F. Diamond.
E. A. Volk.

Inventor:
Charles L. Betts,
By Wilhelm, Parker & Hard,
Attorneys.

UNITED STATES PATENT OFFICE.

CHARLES L. BETTS, OF NEW YORK, N. Y., ASSIGNOR TO R. E. DIETZ COMPANY,
OF NEW YORK, N. Y.

TUBULAR LANTERN.

No. 920,892.

Specification of Letters Patent.

Patented May 4, 1909.

Original application filed November 22, 1906, Serial No. 344,585. Divided and this application filed January 2, 1909.
Serial No. 470,449.

To all whom it may concern:

Be it known that I, CHARLES L. BETTS, a citizen of the United States, residing at New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Tubular Lanterns, of which the following is a specification, this application being a subdivision of my pending application filed November 22, 1906, Serial No. 344,585.

This invention relates to that class of tubular lanterns which are provided with a guard frame of basket form to which the lantern top is hinged for introducing and removing the globe and which are provided with a removable oil pot, as in ordinary railroad lanterns.

The object of this invention is to provide the lantern with an open or skeleton bottom which is strong and rigid and also attractive in appearance.

In the accompanying drawings: Figure 1 is a side elevation of a tubular lantern provided with my improvements. Fig. 2 is a partly sectional elevation at right angles to Fig. 1. Fig. 3 is a fragmentary vertical section, on an enlarged scale, of the upper portion of one of the tubes and connecting parts. Fig. 4 is a vertical transverse section in line 4—4, Fig. 3. Fig. 5 is a sectional perspective view of the lower portion of one of the tubes and connecting parts.

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

A represents the oil pot and B the body hoop or lower ring of the lantern frame into which the oil pot is inserted from below and to which the oil pot is detachably secured by a spring fastening or bayonet catch of such construction that the oil pot is given a partial rotation in the body hoop B for engaging the oil pot with the spring fastening or disengaging it therefrom. The spring fastening shown in the drawings is of well known construction and comprises a spring catch 10 on the body hoop and a stud 11 on the oil pot.

C represents the air tubes which are secured at their lower ends to the body hoop B and open through the same into the chamber 12 within the body hoop from which the burner 13 is supplied with air. These tubes extend upwardly to about the level of the upper guard ring 14. D represents the lan-

tern top which is connected with this guard ring by a hinge 15 at the rear side and a spring catch 16 at the front side of the lantern in a well known manner, so that the globe E can be introduced into the guard from above.

F represents the metallic chimney which is arranged within the top D and bears upon the globe so as to hold the latter on its seat in the body hoop.

The hinged top D comprises a cylindrical wall 17 forming the outer wall of the upper air chamber, a horizontal base flange or plate 18, and elbows 19 which extend from the cylindrical wall outwardly and downwardly through the flange 18 and register with the open upper ends of the tubes when the top is closed down upon the guard.

20 represents the bottom guard ring and 21 represents the upright main guard wires or members which are arranged between the tubes and extend from the top ring 14 to the bottom ring 20 and are secured at the waist of the lantern with their intumed portions to the body hoop.

22, Figs. 1, 2 and 5, represents short supplemental upright guard members or wires which extend from the lower portions of the air tubes down to the bottom ring 20 and are provided at their upper ends with hooks or bent ends which are inserted into the tubes through openings in the under side of the latter and rigidly secured therein by the tinning operation which is employed for finishing the frame.

The rigid lantern frame comprises the body hoop B, the air tubes C, the top guard ring 14, the bottom guard ring 20, the main upright guard members 21 and the auxiliary guard members 22, and also preferably an intermediate guard ring 23 which is secured to the main guard members 21 and the air tubes.

I claim as my invention:

1. In a tubular lantern, the combination of a body hoop, upright air tubes secured with their lower ends to the same, upright main guard members secured to the body hoop between the air tubes and extending upwardly and downwardly from the body hoop, supplemental upright guard members extending downwardly from the lower portions of the tubes, and a horizontal bottom

ring connecting the lower ends of said upright guard members, substantially as set forth.

2. In a tubular lantern, the combination
5 of a body hoop, upright air tubes secured with their lower ends to the same, upright main guard members secured to the body hoop between the air tubes and extending upwardly and downwardly from the hoop,
10 supplemental upright guard members extending downwardly from the lower portions of the tubes, a horizontal bottom ring connecting the lower ends of said upright guard members, and a horizontal top ring connect-
15 ing the upper ends of the main upright guard members and the air tubes, substantially as set forth.

3. In a tubular lantern, the combination of a body hoop, upright air tubes secured

with their lower ends to the same and pro- 20
vided in their lower portions with openings, upright main guard members secured to the body hoop between the air tubes and extend-
ing upwardly and downwardly from the body hoop, supplemental guard members 25
extending downwardly from the lower portions of the tubes and having hooked upper ends which are engaged in said openings formed in the tubes, and a horizontal bot-
tom ring connecting the lower ends of said 30
upright guard members, substantially as set forth.

Witness my hand in the presence of two subscribing witnesses.

CHARLES L. BETTS.

Witnesses:

FRED H. TWOMBLY,
R. A. CURRIE.