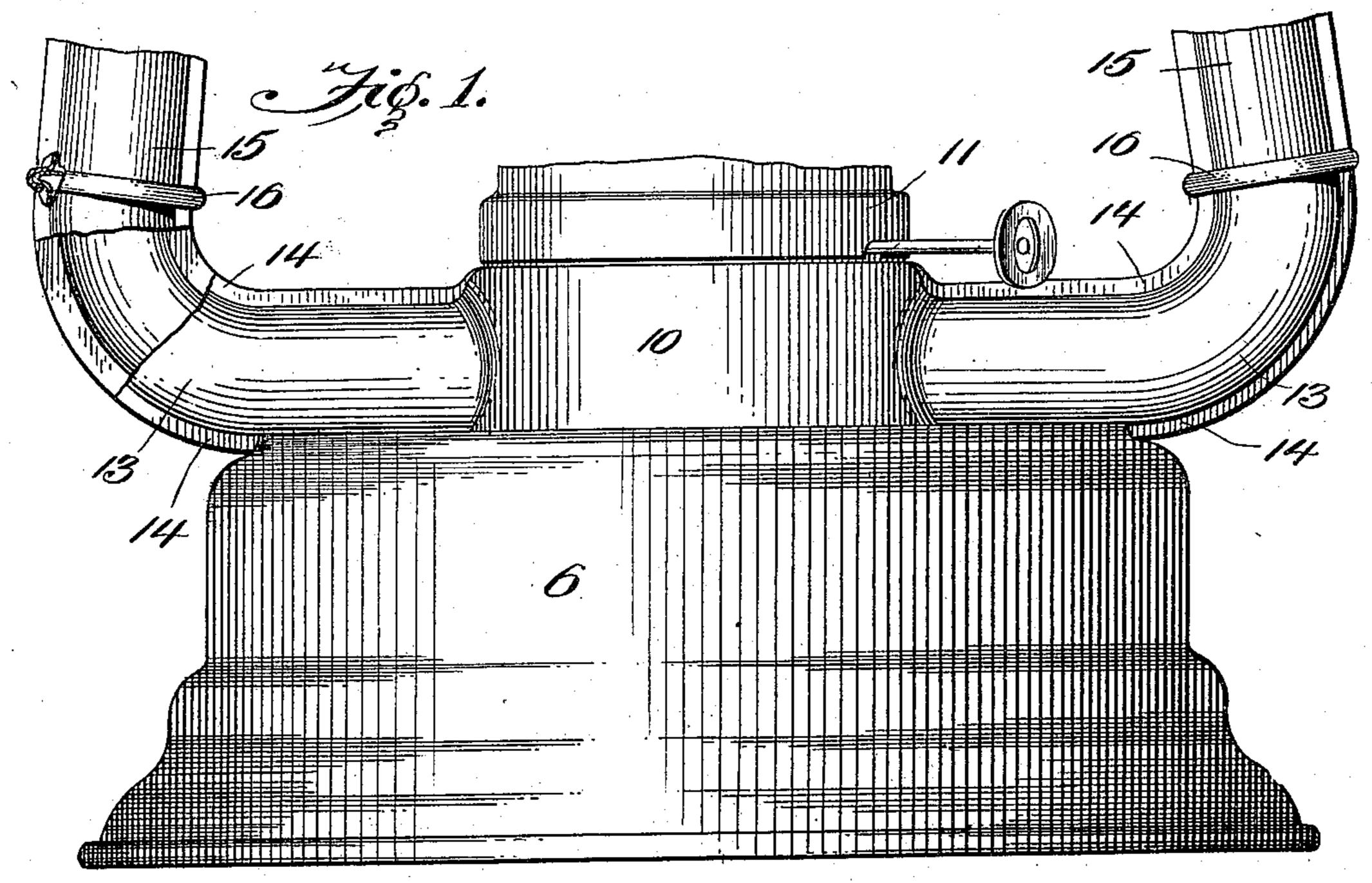
## C. T. WHIPPLE & H. A. MOODY.

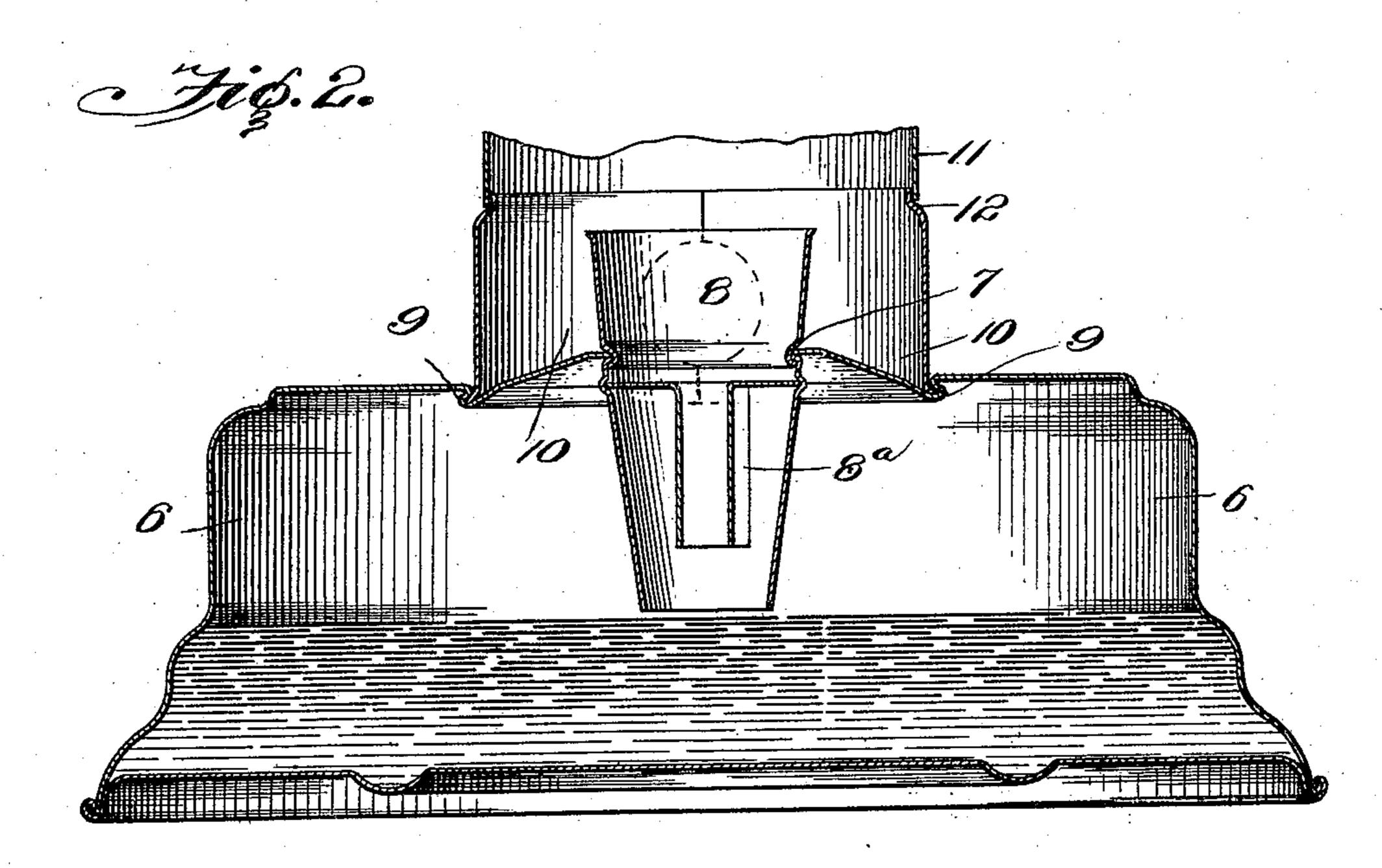
TUBULAR LANTERN.

APPLICATION FILED FEB. 23, 1910.

983,790.

Patented Feb. 7, 1911.





Witnesses Gill Colore. Elayton T. Whipple Herbert H. Moody. by Gus. E. Tew Ottorney

## UNITED STATES PATENT OFFICE.

CLAYTON T. WHIPPLE, OF GLENS FALLS, AND HERBERT A. MOODY, OF SANDY HILL, NEW YORK, ASSIGNORS TO AMERICAN SAFETY LANTERN COMPANY, OF GLENS FALLS, NEW YORK, A CORPORATION OF NEW YORK.

## TUBULAR LANTERN.

983,790. -

Specification of Letters Patent.

Patented Feb. 7, 1911.

Application filed February 23, 1910. Serial No. 545,386.

To all whom it may concern:

Be it known that we, CLAYTON T. WHIPPLE, residing at Glens Falls, in the county of
Warren and State of New York, and HerBERT A. Moody, residing at Sandy Hill, in
the county of Washington and State of New
York, citizens of the United States, have invented certain new and useful Improvements in Tubular Lanterns, of which the
following is a specification.

This invention relates to tubular lanterns and particularly to the tubes and burner collar of said lanterns, the object of the invention being to provide an improved burner collar for attachment to the font, said collar forming an air chamber, and also to provide improved means for connecting the collar to the air tubes, and furthermore an improved method of seaming the collar to the font,

10 without the use of solder.

The invention embodies the formation of the burner collar in two halves integral with the halves of the lower elbows of the air tubes, said elbows being connected to the uptight parts of the air tubes. Heretofore it has been the practice to make the lower elbows integral with the standing part of the tubes and solder the ends of said elbows in holes in the burner collar. This results in considerable waste of metal, in stamping the tubes. By making the lower arms of the tubes integral with the collar this waste is to a large extent avoided, the parts may be more quickly assembled, and the use of solder is unnecessary.

The invention is illustrated in the accom-

panying drawings in which—

Figure 1 is a side elevation of the lower part of a lantern containing the improve-

ment. Fig. 2 is a section thereof.

Referring specifically to the drawings, 6 indicates the font, the top of which has a central opening at 7 at the top of a slightly conical part pressed therein. The edge at this opening fits in a groove in the burner support 8 which extends into the opening and is thus supported. The wick tube 82 is made in a separate piece and depends into the font from the lower end of the burner support, the rim of the wick tube being flanged into the groove mentioned. A circular indentation 9 is made in the top of the font, at the base of said conical portion, forming a groove to receive the lower edge

of the burner collar 10 which forms an air 55 chamber supplied through the air tubes. The edge of the burner collar is set in the groove which is then rolled by pressure, expanding and fastening the edge of the collar in the groove. The burner cap 11 fits at 60 its lower end on a neck 12 at the top of the collar.

The burner collar 10 is made of two halves or pieces of sheet metal each of which is integral with the halves of the lower arms or 65 elbows 13 of the air tubes, the parts being joined together by longitudinal seams at 14, to complete the collar and elbows. The standing or upright parts 15 of the air tubes are similarly made of joined halves, and 70 they are joined to the elbows by a one or more bead and groove joints at 16, which joints may be made without the use of solder. A tight seam at the groove 9 between the lower edge of the burner collar 75 and the top of the font is made by pressing the sides of the groove together upon said edge, which is thus gripped under the overhanging or upper wall of the groove so that a tight seam is formed. The halves of the 80 burner collar and tube elbows are pressed and stretched to proper shape by suitable machines for the purpose, and when assembled the arms of the tube rest on top of the font. This construction avoids the objec- 85 tionable waste incident to stamping the complete tubes and their elbows from the same sheets of metal, and also avoids the necessity for a soldered joint between the tubes and the burner collar and enables the parts to be 90 readily assembled and connected to the font in proper position to receive the burner cap and wick tube.

We claim:—

1. In a tubular lantern, the combination 95 of a font having an opening in the top, and a groove in said top at a distance from said opening, a wick tube and burner support extending through said opening and supported by the edge of the top at said opening, and a 100 burner collar the lower edge of which is fitted into said groove and expanded under an overhanging part thereof.

2. In a tubular lantern, the combination of a font, a burner collar and tube elbows at- 105 tached thereto, said collar and elbows being formed of two side parts united by longitudinal seams in a vertical plane, and air tube

sections joined to the outer ends of said elbows.

3. In a tubular lantern, the combination of a font, and a burner collar and tube elbows connected thereto, said collar and elbows being formed of two parts united by longitudinal seams.

4. In a tubular lantern, the combination of a font, and a burner collar mounted there10 on, said collar being formed of two semi-circular parts, each part having integral therewith projecting halves of the lower elbows of the air tubes, said parts and halves being united to form the complete collar and el15 bows.

5. In a tubular lantern, the combination of a font having an opening in the top, the burner support tube 8 extending through said opening, said tube having a groove

around the same, into which the inner edge 20 of said font top fits, and the wick tube 8a supported at its upper end and depending within said tube 8.

.6. In a tubular lantern, the combination with a burner collar and lower elbows of air 25 tubes extending therefrom, of standing parts of air tubes, said elbows and standing parts having interlocking beads and grooves forming a permanent joint therebetween.

In testimony whereof we, Clayton T. 30 Whipple and Herbert A. Moody, affix our signatures in presence of two witnesses.

CLAYTON T. WHIPPLE. HERBERT A. MOODY.

Witnesses:
Elmer J. West,
Harry L. Russell.