

No. 711,299.

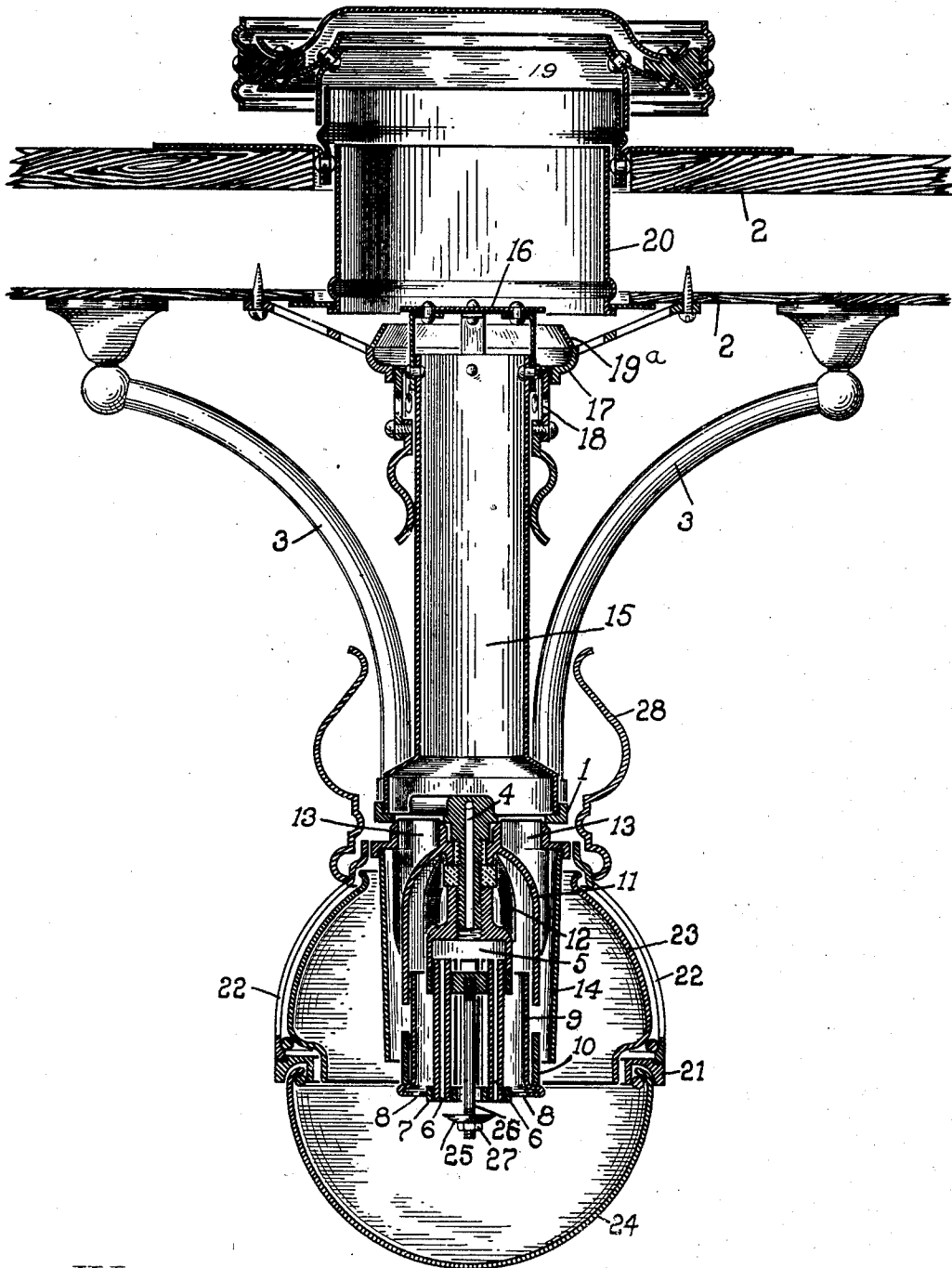
Patented Oct. 14, 1902

R. M. DIXON.

LAMP.

(Application filed July 29, 1901.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

ROBERT M. DIXON, OF EAST ORANGE, NEW JERSEY.

LAMP.

SPECIFICATION forming part of Letters Patent No. 711,299, dated October 14, 1902.

Application filed July 29, 1901. Serial No. 70,031. (No model.)

To all whom it may concern:

Be it known that I, ROBERT M. DIXON, a citizen of the United States, residing at East Orange, Essex county, New Jersey, have invented certain new and useful Improvements in Lamps, of which the following is a specification.

My invention relates to lamps, and has particular reference to that class of lamps known as "car-lamps," although it will be understood that my invention is not limited thereto.

In the accompanying drawing I have shown a lamp embodying my invention, and in order that the invention may be fully illustrated I have shown the said lamp as a deck-car lamp, in which the flame is directed downwardly and outwardly and the products of combustion are conducted out of the car by a suitable flue or draft-tube. The globe portion of the lamp is substantially closed and receives its main supply of air from the top, the gas being delivered downwardly and the flame being suitably spread.

The figure of drawing shows a transverse vertical section through the lamp and its supporting-deck.

In the drawing, 1 indicates a suitable casting, shown in the present instance as suspended from the deck 2 of the car by suitable suspension-arms 3. One of the arms is hollow and conducts the gas to a duct 4, suspended by the casting, through which the gas passes to a chamber 5, supporting suitable burner-tubes 6, whose lower ends are spaced apart by rings 7, having apertures 8 therein and extending upward to form a duct or casing 9, which is preferably surrounded by a suitable reflector 10, which is supported thereby.

A center casting 11 is provided with ducts 12 for the passage of air downward to the flame, and flues or passages 13 for the passage upward of the products of combustion. The center casting and its passages and the burner are surrounded by a suspended chimney or mantle 14, in the form of a casing, which forms the outer wall of the flues or passages 13 and aids in conducting the products of combustion upward.

The flues 13 deliver their products of combustion to an elongated draft-tube, which by reason of its length and the heat of the air-column will produce a powerful upward draft

or suction, so as to produce a very thorough intense combustion, and consequently a very brilliant light. The draft-tube 15 is provided with a suitable cap 16 to prevent the currents of air from blowing down the flue, and likewise at or near its top with a suitable deflector 17, having apertures 18 and an inturned edge 19, which serves to deflect currents of air from the space between the top of the draft-tube and the cap or deflector plate 16. The ventilator 19 is supported by the deck on the outside of the car and is provided with a casing 20, which conducts the products of combustion and the air from the cars upward through the deck to the ventilator, whence they are discharged to the open air.

A combined bezel and support-ring 21 is suspended from the center casting by arms 22, which inclose a dome 23, which is supported by a ring 21. The ring 21 also supports a suitable globe 24. Below the Argand burner is a suitable button or spreader 25, herein shown as adjustable on the rod 26 by the nut 27.

A suitable shield or ornamental crown-piece 28 is provided to cover the junction between the flue 15 and the rest of the lamp.

The globe and dome are transparent or translucent and constitute a substantially closed chamber. The air-supply passes through or around the crown-piece 28 and passes downward through the ducts 12 and thence through the casing 9 through the apertures 8 to the flame, the flame being spread by the spreader 25.

The products of combustion pass upward within the chimney 14 and then through the ducts or chimneys 13, whence they are delivered to the draft-tube 15 and pass there-through upward and out of the lamp. A violent suction is thereby produced and a very brilliant and steady light produced.

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

1. In a lamp the combination of a burner of the inverted Argand type, a center casting provided with passages for directing the downward flow of air, and with passages for directing the upward flow of products of combustion; a casing 9 surrounding the said burner and adapted to conduct air to the top

of the flame, and a casing 14 suspended by
its upper portion, surrounding the last-men-
tioned casing and the center casting and form-
ing one of the walls of the passages through
5 the center casting for directing the upward
flow of products of combustion, and an elon-
gated draft-tube 15 located above the center
casting and the casings specified and receiv-
ing heated products of combustion from the
10 center casting and the casing 14 and thereby
producing a powerful suction or draft.

2. In a lamp the combination of a suspended
burner, an elongated draft-tube adapted to

deliver products of combustion to a venti-
lator or other outlet to the deck, a deflector 15
17 having an inturned edge, and a deflector-
plate 16 located above the said edge.

In testimony whereof I have signed my
name to this specification, in the presence of
two subscribing witnesses, this 29th day of 20
June, 1901.

R. M. DIXON.

Witnesses:

GEO. E. MORSE,
C. A. McCUNE.