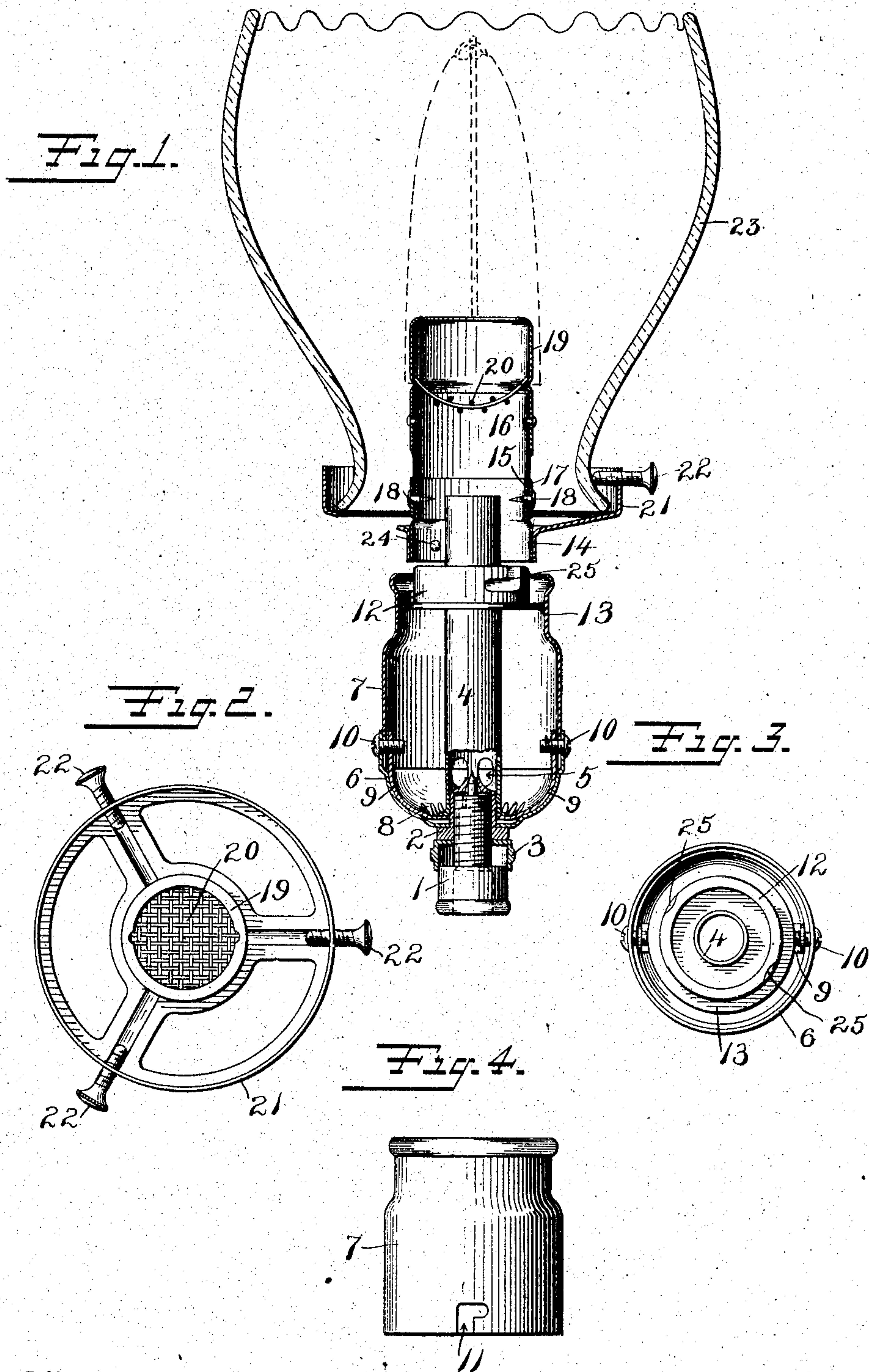


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L. R. HOPTON.
INCANDESCENT LIGHTING FIXTURE.
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INCANDESCENT-LIGHTING FIXTURE.

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To all whom it may concern:

Be it known that I, LEMUEL ROBERT HOPTON, a citizen of the United States, residing at Plainfield, Union county, and State of New Jersey, have invented certain new and useful Improvements in Incandescent-Lighting Fixtures, of which the following is a full, clear, and exact description.

My invention relates to improvements in incandescent-gas-lighting fixtures.

The object of my invention is to provide a simple, economical, and efficient construction which may be artistically designed and arranged in a gas-fixture. I have sought to construct the parts in such a way that they may be readily assembled or disassembled, as occasion may require, and so that the provisions for the admission of air and the regulation of gas may be properly reached. The parts are adapted for the simplest as well as the most elaborate ornamental treatment.

The invention consists in improvements the principles of which are illustrated in the accompanying sheet of drawings.

Figure 1 is a vertical section and elevation of a gas-burner embodying improvements of my invention, the burner-head and globe-holder, however, being just in position for assembling. Fig. 2 is a plan view of the burner-head and globe-support. Fig. 3 is a plan view of the socket and part of the casing. Fig. 4 is a side elevation of the part of the casing not shown in Fig. 3.

1 indicates a tip adapted to screw onto a gas-pipe or fixture-arm and having a screw-threaded post with a gas-passage and a needle or conical valve-seat.

2 is an adjustable member or valve having an opening in the top adapted to coact with the valve-seat for the regulation of the admission of gas.

3 is a set-nut which coacts with the valve portion 2 for locking it in the desired position relatively to the tip 1.

4 is the burner-tube having air-inlets 5 adjacent the gas-valve. The gas and air are mixed within the body of the tube 4 and injected upward to the flame. A casing surrounds a part of the burner-tube and in the

preferred form is composed of the base part 6 and the body part 7. This case has a series of openings 8 near the base for the admission of air to the burner. In the preferred construction a yoke having two arms 9 9 is employed, at the upper ends of which the screws 10 10 are seated. The body of the casing 7, having two slots like 11, forming, with the screws 10 10, bayonet-joints, is adapted to be readily attached to the base of the casing or removed therefrom when desired. At the upper end of the burner-tube is a socket 12, which has a flange 13 just below but fitting closely within the upper end of the casing. This forms a closed chamber around a part of the burner-tube and also forms an annular space inside the top of the casing between the casing and the socket.

14 is a collar forming the base of the burner-head.

15 is an annular member which is securely attached to the collar 14, the two being adapted to slip on over the socket 12 and fit within the annular space at the top of the casing.

16 is a tubular member constructed, preferably, of sheet-mica, which forms an insulating medium to prevent the heat of combustion being transmitted back to the other parts of the burner.

17 is a ring fitted outside the tubular member 16.

18 18 indicate rivets for securing the tubular casing to the annular member 15.

19 is a second tubular member or rim carried by the insulating member 16.

20 is a screen or perforated outlet member carried by the member 19 and forming with it the outlet-cap.

A mantle of suitable construction is supported above the burner in any suitable manner.

21 is a flange which is attached to the socket 14 by a plurality of arms and forms a shade or globe holder or support.

22 22 are clamp-screws.

23 is a globe.

The head of the burner, together with the globe-support, is removable, as shown. The means of connection preferably consists of a

pair of projections, like projection 24, adapted to coact with a pair of depressions, like 25, in the socket 12, affording bayonet-joints. The joint is, however, concealed by the upper edge of the casing 7.

The advantages of this construction in addition to the objects desired, as set forth above, will be apparent to those who are skilled in the art of incandescent-gas lighting.

10 What I claim is—

1. In an incandescent-gas-lighting fixture, the combination of a burner-tube having means for the admission of gas and air, a casing surrounding a portion thereof, a socket 15 carried by said tube of smaller diameter than said casing and leaving an annular space inside thereof and a burner-head having a collar with means of connection with said socket inside said annular space.

20 2. In an incandescent gas-burner, the combination of a burner-tube having means for the admission of gas and air, a large cylindrically-formed casing surrounding and spaced apart from a portion of said tube with a socket 25 at the upper end of said tube having a plurality of indentations forming bayonet-joints within an annular space at the top of said casing and a globe-supporting member having a plurality of indentations adapted to removably coact with said bayonet-joints inside said 30 annular space.

3. In an incandescent gas-burner, the combination of a burner-tube having means for the admission of air and means for the admission and regulation of gas, a cylindrical casing surrounding and spaced apart from a portion of said tube, a socket having bayonet-like recesses, a globe-supporting member having projections adapted to removably coact 40 therewith, an insulating-tube carried by said member, and a burner-cap having a plurality of outlets, said cap being secured to said insulating-tube and spaced apart vertically from the other portions of said globe-supporting 45 member.

4. In an incandescent gas-burner, the combination of a burner-tube having air-inlets near the base, a gas-inlet adjacent to said air-inlets, a substantially cylindrical casing having a base portion having a plurality of openings for the passage of air, said casing forming a substantial air-cushioning chamber, a globe-supporting member detachably supported by said tube, an insulating-tube and an outlet-cap vertically separated thereby from 55 the other parts of said burner and from said chamber.

5. In an incandescent gas-burner, the combination of a burner-tube having means for 60 the admission of gas and air, a casing having a large cylindrical body portion and a base portion having a plurality of openings for the admission of air, said casing forming an air-chamber of substantial size around a portion

of said burner-tube, and a burner-head of 65 cylindrical form surrounding but spaced apart from the remainder of said tube and removably carried thereby.

6. In an incandescent gas-burner, the combination of a burner-tube having means for 70 the admission of gas and air, a casing surrounding a large part of said tube and comprising a convexly-curved base having a series of perforations for the passage of air and a substantially cylindrical body portion removably secured thereto and a detachable 75 globe-supporting member and burner-head.

7. In an incandescent gas-burner, the combination of a burner-tube having means for 80 the admission of gas and air, a cup-shaped member carried by said tube, a substantially cylindrical shell removably secured to said cup-shaped member and spaced apart from said tube and forming a substantial air-chamber, a burner-cap and an insulating-tube supporting said cap and vertically separating it 85 from the other parts of said burner and said air-chamber.

8. An incandescent gas-burner comprising the combination of a burner-tube having 90 means for the admission of gas and air, a casing surrounding a portion of said tube but spaced apart therefrom, a combined burner-head and shade-holder having a depending collar removably carried inside the rim of said casing, 95 said burner-head including a tubular member having an outlet for the combustible mixture and means for thermally insulating the outlet from said casing:

9. In an incandescent-lighting fixture, the 100 combination of a burner-tube having means for the admission of gas and air, a casing surrounding a portion thereof, a socket carried by said tube of smaller diameter than said casing and leaving an annular space inside thereof and a 105 burner-head having a collar with means of connection with said socket inside said annular space, and means for thermal insulation inserted between the outlet of said burner-head and said casing. 110

10. In an incandescent gas-burner, the combination of a burner-tube having air-inlets near the base, a gas-inlet adjacent to said air-inlets, a substantially cylindrical casing having a base portion having a plurality of openings for the passage of air, said casing forming a substantial air-cushioning chamber, a globe-supporting member detachably supported by said tube, and thermal insulating means inserted between the outlet of said 120 burner and said chamber and casing.

11. In an incandescent gas-burner, the combination of a burner-tube having means for the admission of gas and air, a cup-shaped member carried by said tube, a substantially cylindrical shell removably secured to said cup-shaped member and spaced apart from said 125 tube and forming a substantial air-chamber, a

burner-cap and thermal insulating means inserted between said cap and the other parts of said burner and said air-chamber.

12. An incandescent gas-burner comprising
5 the combination of a burner-tube with means for the admission of gas and air, a casing of substantial size carried by said tube, and spaced apart laterally therefrom, a tubular member movably carried adjacent the rim of
10 said casing and forming part of a burner-head,

and provided with an outlet for the combustible mixture, and a globe-supporting member carried by said tubular member and removable therewith.

Signed at New York city, New York, this 15
8th day of September, 1904.

LEMUEL ROBERT HOPTON.

Witnesses:

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