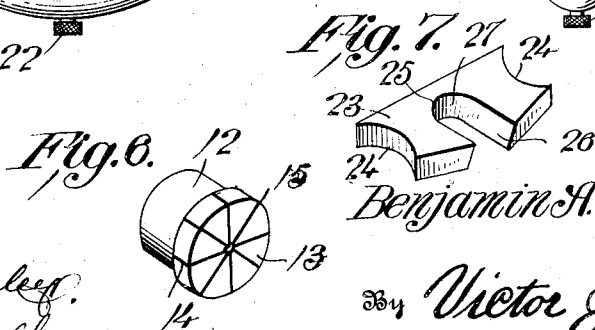
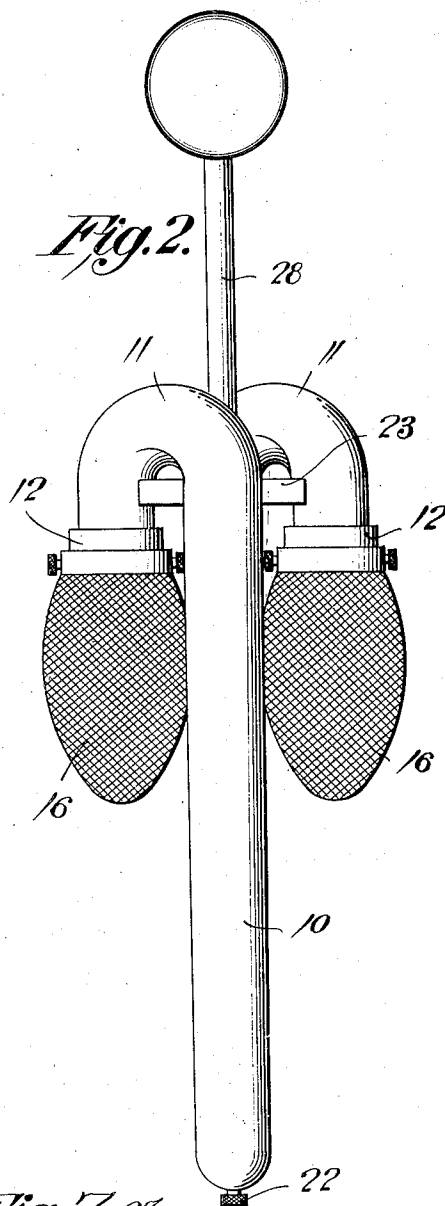
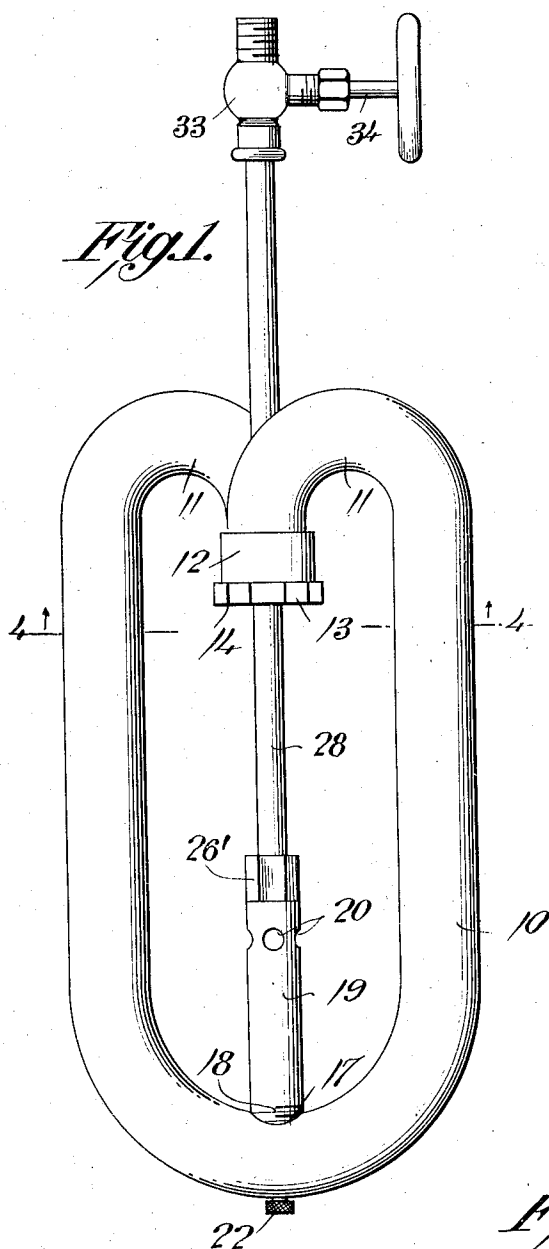


B. A. WILTERMOOD.
LAMP.
APPLICATION FILED JUNE 7, 1912.

1,042,863.

Patented Oct. 29, 1912.

2 SHEETS—SHEET 1.



Witnesses
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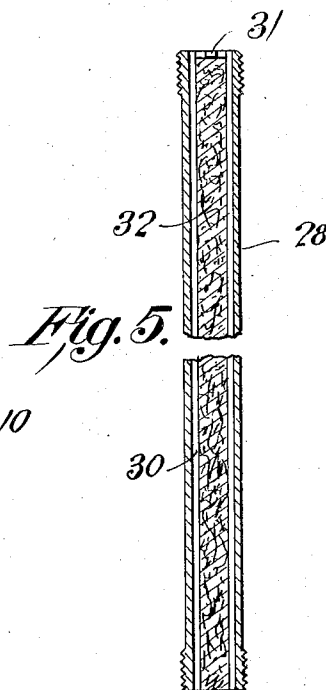
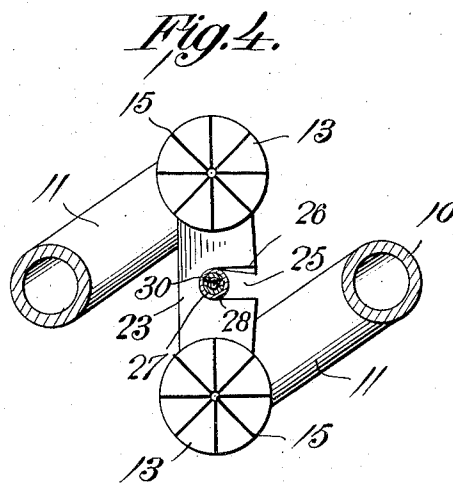
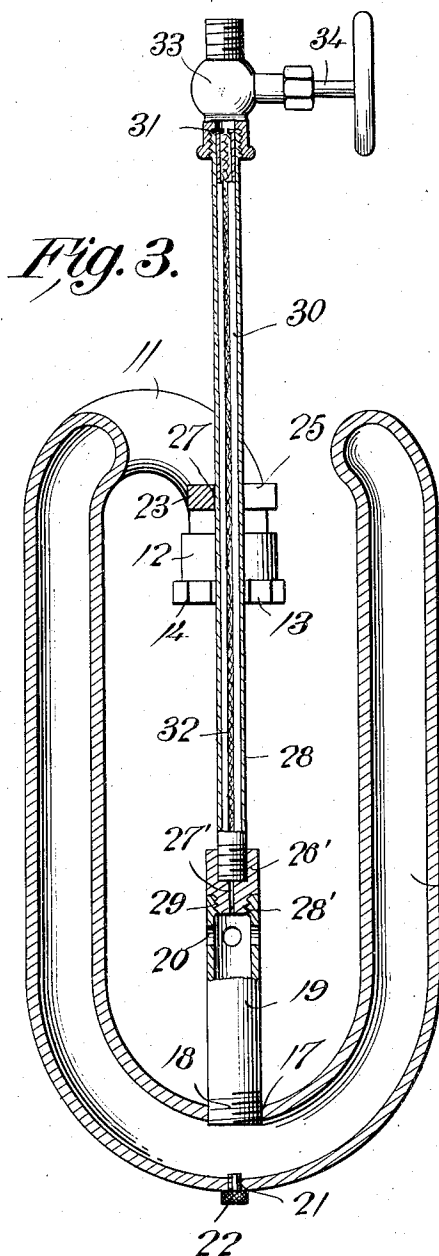
By Victor J. Evans
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2 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

BENJAMIN A. WILTERMOOD, OF NEWPORT, INDIANA.

LAMP.

1,042,863.

Specification of Letters Patent.

Patented Oct. 29, 1912.

Application filed June 7, 1912. Serial No. 702,296.

To all whom it may concern:

Be it known that I, BENJAMIN A. WILTERMOOD, a citizen of the United States, residing at Newport, in the county of Vermilion and State of Indiana, have invented new and useful Improvements in Lamps, of which the following is a specification.

The general object of this invention is the provision of an improved lamp of novel construction in which the fuel used is effectually filtered and vaporized before being mixed with air and fed into the burner tube, said lamp being also provided with a novel form of burner tip for spreading the flame to the mantle, whereby a light of high efficiency will be produced.

In carrying out the objects of the invention generally stated above, it will be understood, of course, that the essential features thereof are susceptible to changes in details and structural arrangements, one preferred and practical embodiment being shown to the accompanying drawing, wherein:—

Figure 1 is a side elevation of the lamp constructed in accordance with the invention, the shade or globe being removed. Fig. 2 is an edge elevation thereof. Fig. 3 is a vertical longitudinal sectional view. Fig. 4 is a transverse section on the line 4—4 of Fig. 1. Fig. 5 is a fragmentary longitudinal sectional view of the vaporizing tube or retort. Fig. 6 is a perspective view of a burner tip used in connection with the invention. Fig. 7 is a similar view of a supporting and deflecting plate used in connection with the invention.

Referring more particularly to the accompanying drawings in which like reference characters designate similar parts, it will be seen that the invention comprises a substantially U-shaped burner tube 10, the free ends of the limbs of which are bent to provide arcuate overhanging portions 11, said portions being bent in opposite directions to the vertical plane of said tube, whereby said portions will be spaced from each other. The extremities of the portions 11 are externally threaded and adapted to receive the internally threaded collars 12 of the hollow burner tips 13 which have their sides and bottoms provided with the radial slots 14 and 15 respectively. Secured to each of the burner tips in any suitable manner is a mantle 16 which is adapted to be lighted by the gas flowing through the slots 14 and 15. The provision of the slots 14 in the sides of

the burner tips provides an efficient means whereby the gas may be spread to the upper part of the mantles 16 thus insuring a perfect illumination.

The inner surface of the lower curved end of the tube 10 is provided with an internally threaded aperture 17 which is adapted to receive the externally threaded end 18 of the mixing chamber 19. Said chamber is in the form of an elongated tube, and extends in parallel relation to the limbs of the tube 10. The chamber 19 is provided adjacent its other end with a plurality of apertures 20 which are adapted to admit air into the chamber for the purpose of mixing with the vaporized gasoline to form a combustible gas. The outer surface of the lower end of the tube 10 is provided with an internally threaded outlet opening 21 which is adapted to be normally closed by means of an externally threaded plug 22, the threads of said opening and plug being broken whereby the latter may be readily inserted and detached from the opening for any purpose desired.

A supporting and deflecting plate 23 has its ends curved as indicated at 24 whereby the said ends may partially embrace the portions 11 of the tube 10 adjacent the burner tips 12, said plate 23 being adapted to extend transversely of the tube in a horizontal plane. One of the longitudinal edges of the supporting plate 23 is provided with a recess 25 having a portion of its wall beveled as indicated at 26, said beveled portion merging into the straight portion 27 thereof.

A vaporizing tube or retort 28 is adapted to be inserted into the recess 25 and the inner end of said pipe is provided with a nozzle 26' having a small opening 27' therein, said nozzle being provided with a partially threaded extension 28' which is adapted to engage the internally threaded end 29 of the mixing chamber 19. When the vaporizing tube or retort is in the position just described, it will be seen that the same is in alinement with the mixing chamber 19 and will be retained in position and in engagement with the supporting plate 23 by reason of the beveled portion 26 of the recess 25. The plate 23 also serves to deflect the heat from the mantles onto the vaporizing tube or retort whereby the gasoline flowing through said tube is vaporized before entering the mixing chamber 19.

Mounted in the vaporizing tube is an elon-

gated split tube 30 having an inwardly extending projection 31 which is adapted to retain a filtering substance 32 such as asbestos in said tube whereby the gasoline flowing through the same will be filtered in an efficient manner so as to produce a gas of a high combustible nature. The tube 30 is slitted whereby the asbestos packing may be readily removed therefrom and carbonization prevented, it being often found in use that the filtering material becomes charred and hardened where the slitted tube is not used thus rendering the filtering device inefficient. The vaporizing tube or retort 28 is provided with a valve casing 33 in which is mounted a valve 34 for the purpose of regulating the flow of gasoline from the supply tank (not shown) into the lamp.

From the foregoing description taken in connection with the accompanying drawings it will be seen that the invention contemplates providing an improved and highly efficient lamp which is simple in construction, durable and effective in operation.

What is claimed is:—

1. A lamp comprising a substantially U-shaped burner tube having its ends bent in opposite directions to the vertical plane of said tube to provide overhanging portions, burner tips carried by the free ends of said tubes, a mixing chamber carried by said tube in parallel relation to the limbs thereof, and a vaporizing tube connected to said mixing chamber.

2. A lamp comprising a substantially U-shaped burner tube having its ends bent in opposite directions to the vertical plane of said tube to provide overhanging portions, burner tips carried by the free ends of said tube, a mixing chamber carried by said tube in parallel relation to the limbs thereof, a vaporizing tube connected to said mixing chamber, and a supporting plate carried by said burner tube adjacent the free ends thereof and adapted to engage said vaporizing tube.

3. A lamp comprising a substantially U-shaped burner tube, burner tips carried by the free ends of said tube, a mixing chamber extending from the lower end of said tube in parallel relation to the limbs thereof, a vaporizing tube connected to said mixing chamber and in alinement therewith, and a supporting plate carried by said burner tube adjacent the free ends thereof and adapted to engage said vaporizing tube, said

plate being provided with a recess having a portion of its wall beveled whereby said vaporizing tube will be retained in engagement therewith when the same is in position.

4. A lamp comprising a substantially U-shaped burner tube, burner tips carried by the free ends of said tube, a mixing chamber carried by said tube, a vaporizing tube connected to said mixing chamber, and a supporting plate carried by said burner tube and adapted to engage said vaporizing tube, said plate being provided with a recess having a portion of its wall beveled for retaining said vaporizing tube in engagement therewith when the latter is in position.

5. A lamp comprising a substantially U-shaped burner tube, burner tips carried by the free ends of said tube, a vertically arranged mixing chamber extending from the lower end of said tube in parallel relation to the limbs thereof, a vaporizing tube connected to said mixing chamber in alinement therewith, a split tube mounted longitudinally in said vaporizing tube, and filtering means mounted in said split tube.

6. A lamp comprising a substantially U-shaped burner tube having its ends bent in opposite directions to the vertical plane thereof to provide overhanging portions, burner tips carried by said tube, a mixing chamber extending from the lower ends of said tube between the limbs thereof and in parallel relation thereto, a vaporizing tube connected to said mixing chamber and in alinement therewith, a supporting plate carried by said burner tube and adapted to engage said vaporizing tube, and means carried by said vaporizing tube for regulating the flow of fuel through the same.

7. A lamp comprising a substantially U-shaped burner tube having its ends bent in opposite directions to the plane thereof to provide overhanging portions, burner tips carried by the free ends of said tube, a mixing chamber extending from the lower end of said tube in parallel relation to the limbs thereof, a vaporizing tube connected to said mixing chamber in alinement therewith, and mantles detachably connected to said burner tips.

In testimony whereof I affix my signature in presence of two witnesses.

BENJAMIN A. WILTERMOOD.

Witnesses:

HOMER B. AIKMAN,
RALPH V. HUGHES.