No. 711,321. Patented Oct. 14, 1902.

T. M. JAMISON.

INCANDESCENT BURNER.

(Application filed Mar. 1, 1902.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

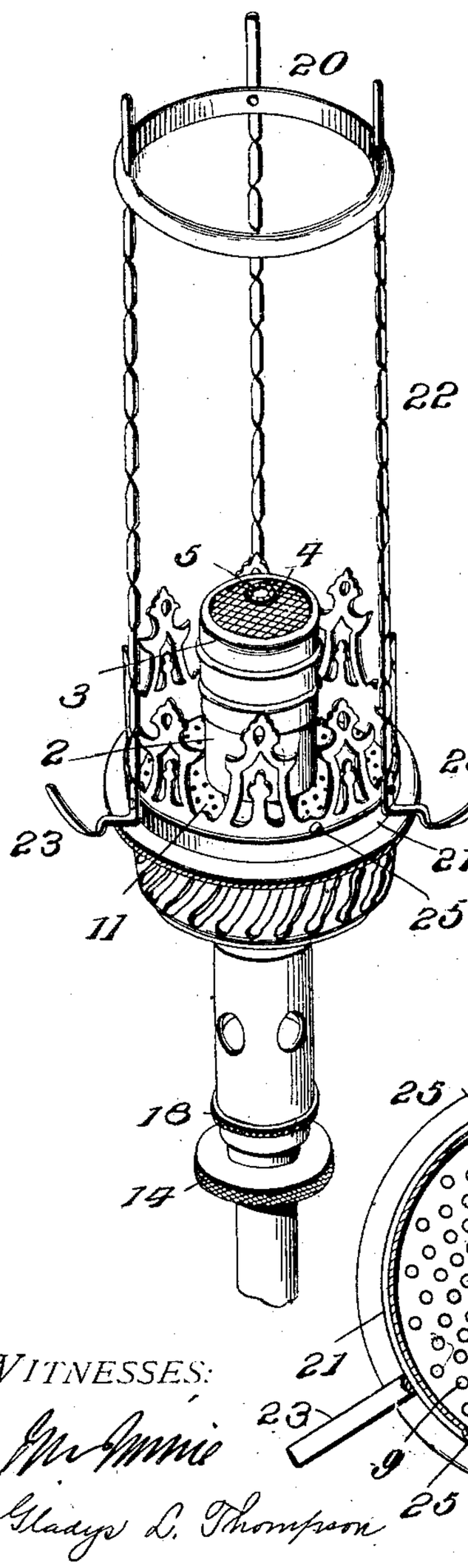

Fig. 2.

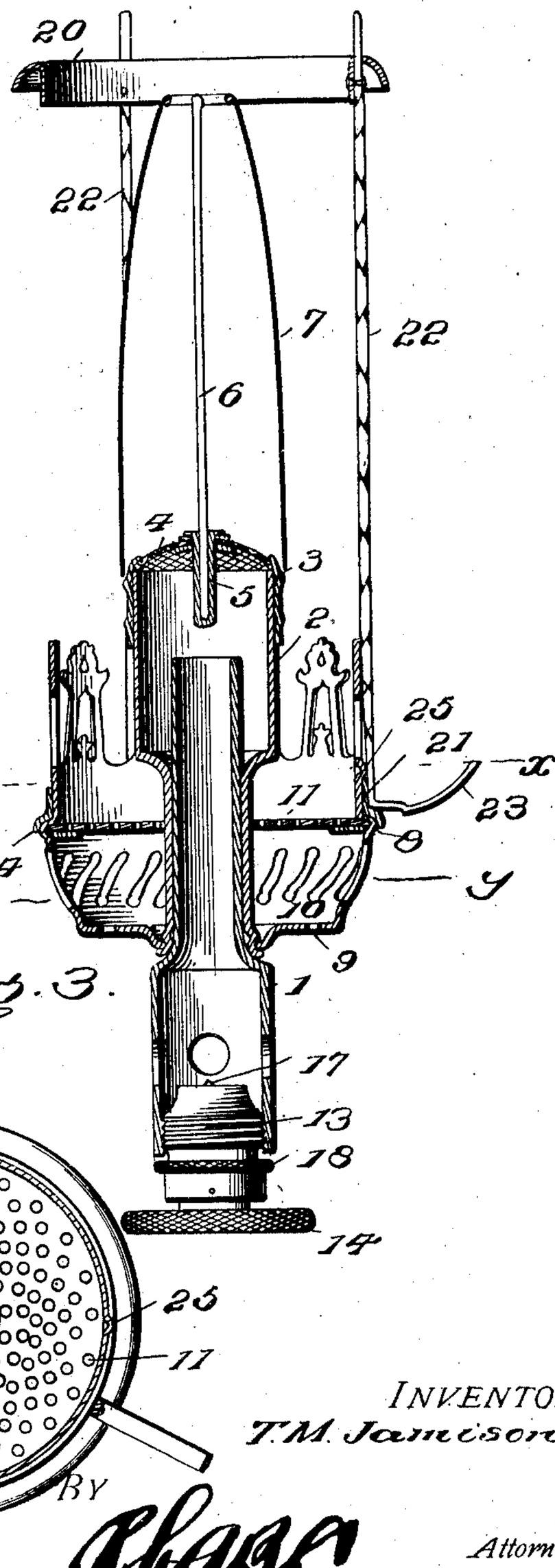

Fig. 3.

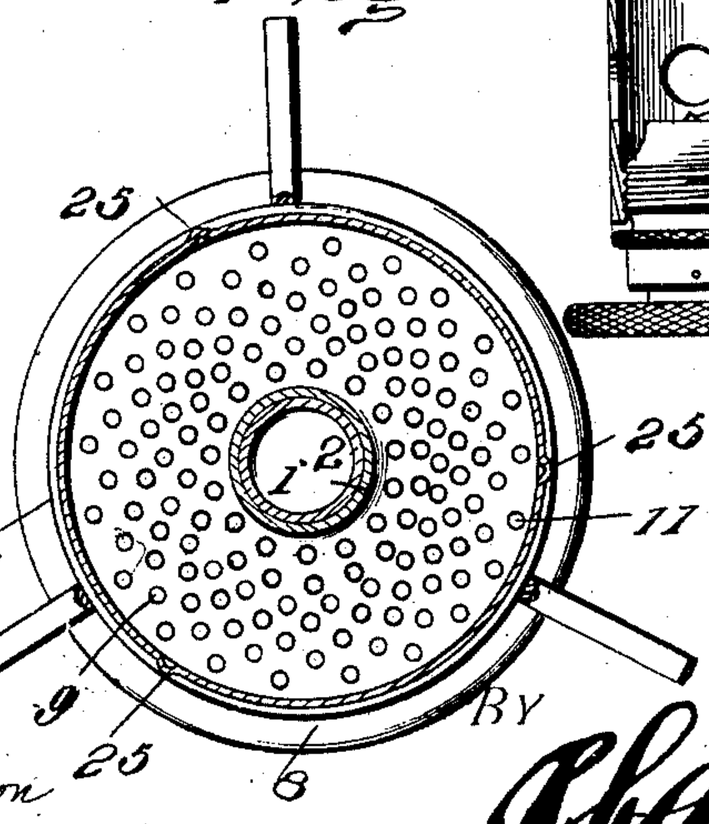

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Fig. 4.

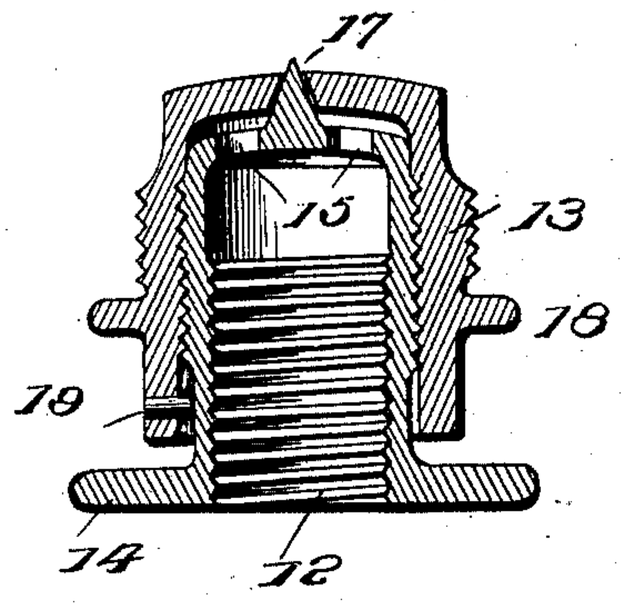


Fig. 5.

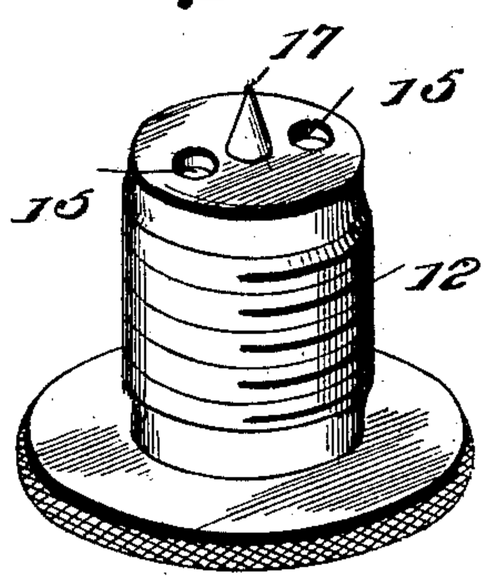


Fig. 6.

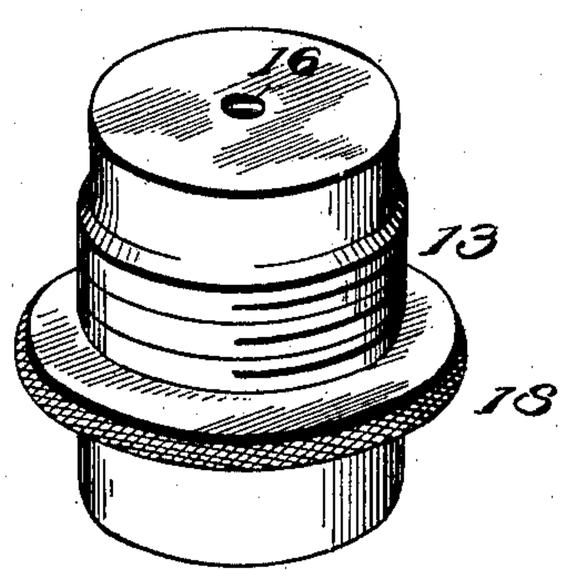


Fig. 7.

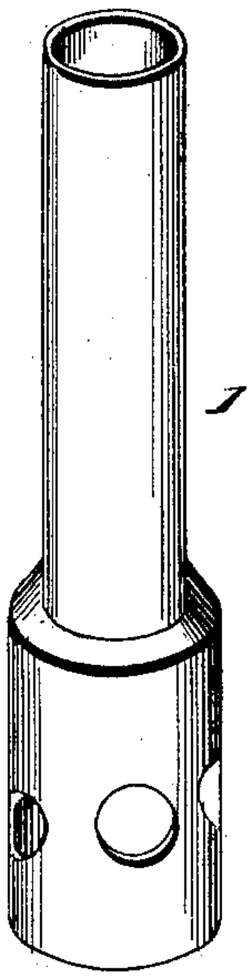
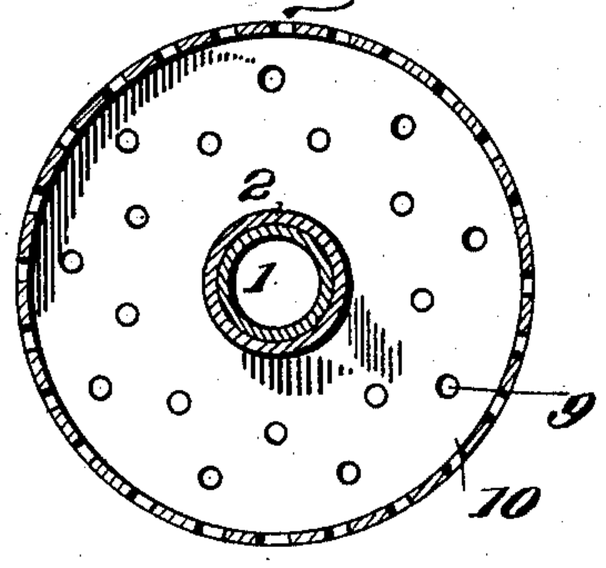


Fig. 8.



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UNITED STATES PATENT OFFICE.

THOMAS M. JAMISON, OF MEMPHIS, TENNESSEE.

INCANDESCENT BURNER.

SPECIFICATION forming part of Letters Patent No. 711,321, dated October 14, 1902.

Application filed March 1, 1902. Serial No. 96,291. (No model.)

To all whom it may concern:

Be it known that I, THOMAS M. JAMISON, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Incandescent Burners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to burners of the incandescent type and aims to equalize the air passing upward around the mantle and between it and the shade or globe, whereby the life of the parts is prolonged, the quality of the light enhanced, and the glow made steady and uniform.

A further purpose of the invention is to prevent disengagement of the burner from the regulating nut or check by means of which the supply of gas is controlled, thereby preventing injury to the mantle, shade, and burner, usually the result of a fall, in the event of separation of the burner when unscrewed too far.

The invention further aims to provide simple and effective means for securing the shade-holder when in place and providing for ready disconnection of said shade-holder from the burner when required for any purpose.

Various other advantages and objects are contemplated and will appear in the course of the subjoined description.

The invention consists, essentially, of the novel features, details of construction, and combinations of parts, which hereinafter will be more particularly set forth, illustrated, and finally claimed.

Referring to the accompanying drawings, forming a part of the specification, Figure 1 is a perspective view of an incandescent burner embodying the invention. Fig. 2 is a vertical central section thereof. Fig. 3 is a plan section on the line X X of Fig. 2. Fig. 4 is a vertical central section of the gas check or regulator. Fig. 5 is a perspective view of the coupling forming the inner member of the gas check or regulator. Fig. 6 is a perspective view of the outer member of the gas check or regulator. Fig. 7 is a perspective view of the mixing-tube. Fig. 8 is a horizontal section on the line Y Y of Fig. 2.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The burner comprises the gas check or regulator, the mixing-tube 1, the telescoping tube 2, having its upper end enlarged to form a chamber above and surrounding the upper end of the mixing-tube 1, a tip 3, fitted to the upper end of the tube 2 and having wire-gauze 4 at its upper end, and a centrally-disposed socket 5, in which is fitted the lower end of the rod 6, supporting the mantle 7, and a gallery 8.

The gallery 8 is of cup shape and is secured to the lower end of the tube 2, and its bottom is provided with a series of openings 9 and the sides of its lower portion with a series of inclined slots 10. The openings or perforations 9 are comparatively small, whereas the slots or openings 10 are of a size to admit a great volume of air. A baffle-plate 11 is located within the gallery above the slots or openings 10, and its middle portion is apertured for the passage therethrough of the tube 2. This baffle-plate is perforated and acts to equalize the volume of air passing upward through the shade or globe and around the mantle 7, whereby the light is made uniform and steady, sudden drafts being wholly prevented, with the result that the mantle and the shade or globe have their period of usefulness prolonged. The upper portion of the gallery is constructed to form a firm support for the shade and holder and is made open, so as not to obstruct the light or cast shadows, as well as to present a finished and ornamental appearance.

The gas check or regulator consists of the parts 12 and 13, the part 12 being both internally and externally screw-threaded and provided at its lower end with a milled or knurled flange 14 to admit of screwing the same onto the threaded extension of a gas-fixture. The part 12 is hollow, and its upper end has outlets 15 for the escape of gas when the burner is lighted. The member 13 is internally and externally threaded and is hollow, and its upper end is provided with an opening 16,

through which the gas passes to the burner and which is adapted to be closed by a needle-valve 17, applied to the upper end of the part 12. A milled or knurled flange 18 forms a part of the member 13 and admits of a firm grip being had thereon when it is required to rotate the member either to regulate the supply of gas to the burner or to open or shut off the supply. The mixing-tube 1 has screw-thread connection with the member 13. Hence the part 13 carries the major part of the burner. To prevent casual displacement of the part 13 from the part 12, a stop is interposed between them, and, as shown, consists of a pin 19, fitted in an opening in the lower portion of the member 13 and extended inward to engage with the lowermost thread of the part 12 and limit the upward movement of the part 13. This occurs when the opening 16 is carried upward from the valve 17 a distance to admit of the predetermined amount of gas passing to the burner.

The shade-holder comprises an upper ring 20, a lower ring 21, and a series of rods 22, connecting the two rings and having their lower ends bent outward, as shown at 23, to form supports for the shade or globe. (Not shown.) This shade-holder is removably fitted to the gallery and is held from downward displacement by an outer shoulder 24, upon which the lower ring 21 rests. Projections 25 are pressed outward from the sides of the gallery, so as to extend over the upper edge of the ring 21 and prevent accidental disengagement of the shade-holder from the burner after the parts have been properly assembled. These projections 25 are pressed inward when forcing the shade-holder home and spring out over the upper edge of the ring 21, so as to retain the holder against accidental displacement.

Having thus described the invention, what is claimed as new is—

1. In an incandescent burner, a gallery having a flat bottom, perforations provided in said bottom, elongated openings or slots in the side of the gallery and adjacent to the bottom thereof, a mixing-tube passing centrally through the gallery having air-inlet openings located below the bottom of the gallery, a perforated baffle-plate disposed intermediate the top and bottom of the gallery immediately above the slotted opening in the side thereof, said plate extending around the mixing-tube and across the space formed between it and the sides of the gallery, substantially as described.

2. In an incandescent burner, gas-regulating means comprising inner and outer members, respectively, interiorly and exteriorly threaded for connection with each other, the inner member carrying a needle-valve for cooperation with an opening in the outer member to regulate the flow of gas, and means for preventing casual disengagement of the inner member from the outer member, substantially as described.

3. In an incandescent burner, gas-regulating means comprising an inner member having a portion exteriorly threaded, an outer member having screw-thread connection with the inner member, a needle-valve provided upon the inner member for coöperation with an opening in the outer member, whereby the flow of gas is regulated, a pin applied to the outer member and adapted to engage with the lowermost thread of the inner member and limit the upward movement of the outer member, substantially as set forth.

4. In an incandescent burner, a gallery having an outer shoulder, and parts pressed out from the sides of the gallery forming projections a distance above the said shoulder, and a shade-holder removably fitted upon the gallery and adapted to be held from casual displacement by means of the said shoulder and outer projections, substantially as set forth.

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

THOMAS M. JAMISON. [L. S.]

Witnesses:
J. H. MORRIS,
F. H. IRBY.