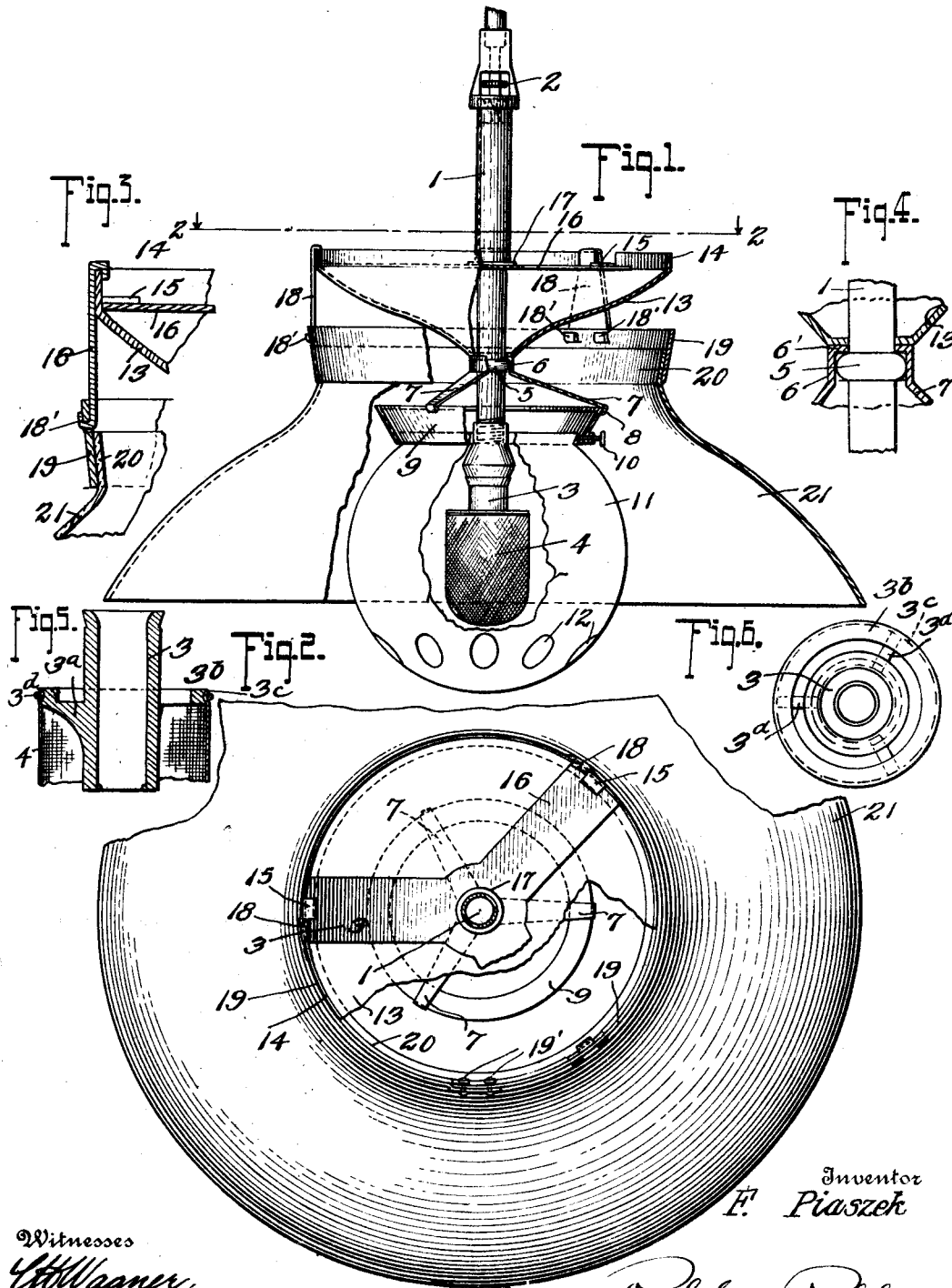


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LAMP STRUCTURE.
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1,064,534.

Patented June 10, 1913.



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LAMP STRUCTURE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FERDINAND PIASZEK, a citizen of the United States, residing at Saginaw, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Lamp Structures, of which the following is a specification.

This invention relates to improvements in lamps, and more particularly to reflector and shade attachments for inverted incandescent lamps.

The object in view is the projection of a maximum number of light rays downwardly from the point of illumination, and with this object in view the invention comprehends the disposition of a shade and a cooperating reflector disposed for supplementing the reflection afforded by the shade without interfering with air circulation.

The invention further includes the disposition of a reflector sustained upon the burner supporting tube and a shade suspended therefrom in appropriate relative position with respect to the light disposed at the terminus of the supporting tube.

The invention also comprises certain other novel constructions, combinations and arrangements of parts, as will be hereinafter specified and claimed.

In the accompanying drawing: Figure 1 is a view partly in elevation and partly in section of a light structure embodying the features of the present invention. Fig. 2 is a transverse section taken on the plane indicated by line 2—2 of Fig. 1 and looking downwardly, parts being broken away. Fig. 3 is an enlarged detail vertical section taken approximately on the line indicated by line 3—3 of Fig. 2. Fig. 4 is an enlarged detail vertical section of a fragment of the parts adjacent the point of supporting engagement with the supporting or supply pipe. Fig. 5 is a longitudinal, vertical, central section through the mantle support, a fragment of the mantle being shown and the parts being shown on an enlarged scale. Fig. 6 is a top plan view of the mantle support.

Referring to the drawing by numerals, 1 indicates a gas supply pipe or tube which also constitutes the supporting tube and

which is supplied with gas through a mixer 2. To the lower end of the pipe 1 is connected the incandescent mantle support 3 provided with a mantle 4. Tube 1 is provided with an annular bead 5 spaced above the connection or support 3. The bead 5 may obviously either be formed integral with the supply pipe 1 or be formed by a separate ring attached to the pipe in any suitable manner.

The mantle support 3, as clearly indicated in Figs. 5 and 6, consists essentially of a tube formed preferably with integral outstanding arms 3^a supporting a surrounding ring 3^b, which ring is formed with an annular groove 3^c into which is secured the upper end of the mantle 4, said mantle being confined in the groove by a retaining ring 3^a which may be a cord, tied or otherwise fastened in position, and if a cord it is formed, of course, of the same material as the mantle. The ring 3^b is preferably formed integral with the arms 3^a.

Surrounding the bead 5 is a ring 6 having an inwardly turned annular flange 6' disposed above and adapted to rest upon the bead 5. Outstanding radially and preferably inclined slightly downwardly from and are supporting arms 7, 7 each terminating at its lower outer end in a hook 8 disposed to underlie the inclined outer surface of an inverted frusto-conical ring 9. The lower edge of the ring 9 is preferably stiffened by being thickened and provided at suitable intervals with set screws 10 adapted to engage the upwardly flared end of a mantle globe 11 inclosing the mantle 4. The globe may be of any ordinary type and is preferably provided with air circulation apertures 12, 12.

Disposed above the ring 6 is a reflector 13 having approximately the shape of an inverted cone with the apex truncated for fitting snugly about the pipe 1 and resting upon the flange 6', whereby the shade 13 is supported. The shade may be formed of any suitable material provided on its inner face with light reflecting material. The outer portion of the inverted conical reflector 13 terminates in an upstanding flange 14 having tabs 15 struck therefrom at various

points about the flange. A spider 16 is arranged with an opening having an annular boss 17 disposed to fit about the pipe 1, with the arms of the spider extending radially from the pipe to the flange 14, there being an arm of the spider for each tab 15, the respective arm of the spider extending beneath the respective tab 15 in position for resting upon the inclined outer portion of the reflector 13. Thus the reflector 13 is comparatively rigidly sustained on the pipe 1 in proper relative position with respect to the burner and globe beneath.

Hooks 18 are spaced about the reflector 13 and are preferably provided in a number equal to the number of tabs 15, with the upper hook portion of each hook 18 engaging the flange 14 adjacent one of the tabs 15, the shank of each hook 18 being pendent from the flange and at its lower end being provided with a pair of spaced hooks 18' adapted to engage suitably disposed apertures in a ring 19. The ring 19 converges downwardly in a ratio proportionate to the upward flare of the upper end portion 20 of a shade 21, the said flared portion 20 being surrounded and clamped by the ring 19. The said ring 19 preferably consists of a strip of metal or other suitable material having its end portions bent and detachably secured together as by bolts or other securing means 19', 19'. The shade 21 is formed of suitable material with preferably an appropriate reflecting inner surface and shaped and dimensioned relative to the size and disposition of the light in the globe 11 for effectively projecting the light rays downwardly, supplemented by the projection of light rays reflected from the under surface of the reflector 13.

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

1. In a light structure, the combination with a support and a light pendent therefrom, of an inverted, substantially conical reflector above the light, a shade spaced below the upper portion of the reflector and disposed for facilitating circulation of air past the light through the space between the reflector and shade, and a globe for the light having air circulating means cooperating with the space between the reflector and shade.

2. In a light structure, the combination, with a support and a light pendent therefrom, of a reflector sustained by said support above the light, said reflector being of substantially inverted conical form, and a shade disposed to substantially surround the light and having its upper portion spaced below and of substantially the diameter of the greatest diameter of the reflector, said shade flaring downwardly from its upper portion.

3. In a light structure, the combination,

with a supporting supply tube and a light pendent therefrom, the said tube being formed with a bead, of a substantially conical reflector disposed in an inverted position above the head and having its apex truncated and surrounding the supply pipe in position for being supported by the bead, a spider engaging the supply pipe and having arms outstanding therefrom to and engaging the outer portions of the reflector, the reflector being formed with an annular upstanding flange and with tabs struck from the flange over the arms of the spider, and a shade pendent from the reflector in position for substantially surrounding the light.

4. In a light structure, the combination, with a supporting supply tube and a light pendent therefrom, the said tube being formed with a bead, of a substantially conical reflector disposed in an inverted position above the bead and having its apex truncated and surrounding the supply pipe in position for being supported by the bead, a spider engaging the supply pipe and having arms outstanding therefrom to and engaging the outer portions of the reflector, the reflector being formed with an annular upstanding flange and means engaging the arms of the spider, spaced hooks having hook portions engaging the flange and shanks pendent therefrom, the lower end portion of each shank being formed with a hook, and a shade support engaged by the hooks at the lower ends of said shanks.

5. In a light structure, the combination, with a supporting supply tube and a light pendent therefrom, the said tube being formed with a bead, of a substantially conical reflector disposed in an inverted position above the bead and having its apex truncated and surrounding the supply pipe in position for being supported by the bead, a spider engaging the supply pipe and having arms outstanding therefrom to and engaging the outer portions of the reflector, the reflector being formed with an annular upstanding flange and means engaging the arms of the spider, spaced hooks having hook portions engaging the flange and shanks pendent therefrom, the lower end portion of each shank being formed with a hook, a shade support engaged by the hooks at the lower ends of said shanks, the shade support comprising a downwardly converging ring, and a shade engaged by the ring and having its upper portion flared within the ring proportionally to the convergence of the ring.

6. In a light structure, the combination, with a supporting and supply tube and a light pendent therefrom, the said tube being formed with an annular bead, of a ring surrounding said bead and having a flange extending below the bead, radial inclined arms extending from the flange and having hook portions at their outer ends, a globe sup-

port sustained by said arms adapted to support a globe in position for inclosing the light, an inverted substantially conical reflector resting upon the flange of said ring, and a shade pendent from the reflector in position for substantially surrounding the globe.

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

FERDINAND PIASZEK.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
