

931,496.

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LAMP.
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Patented Aug. 17, 1909.

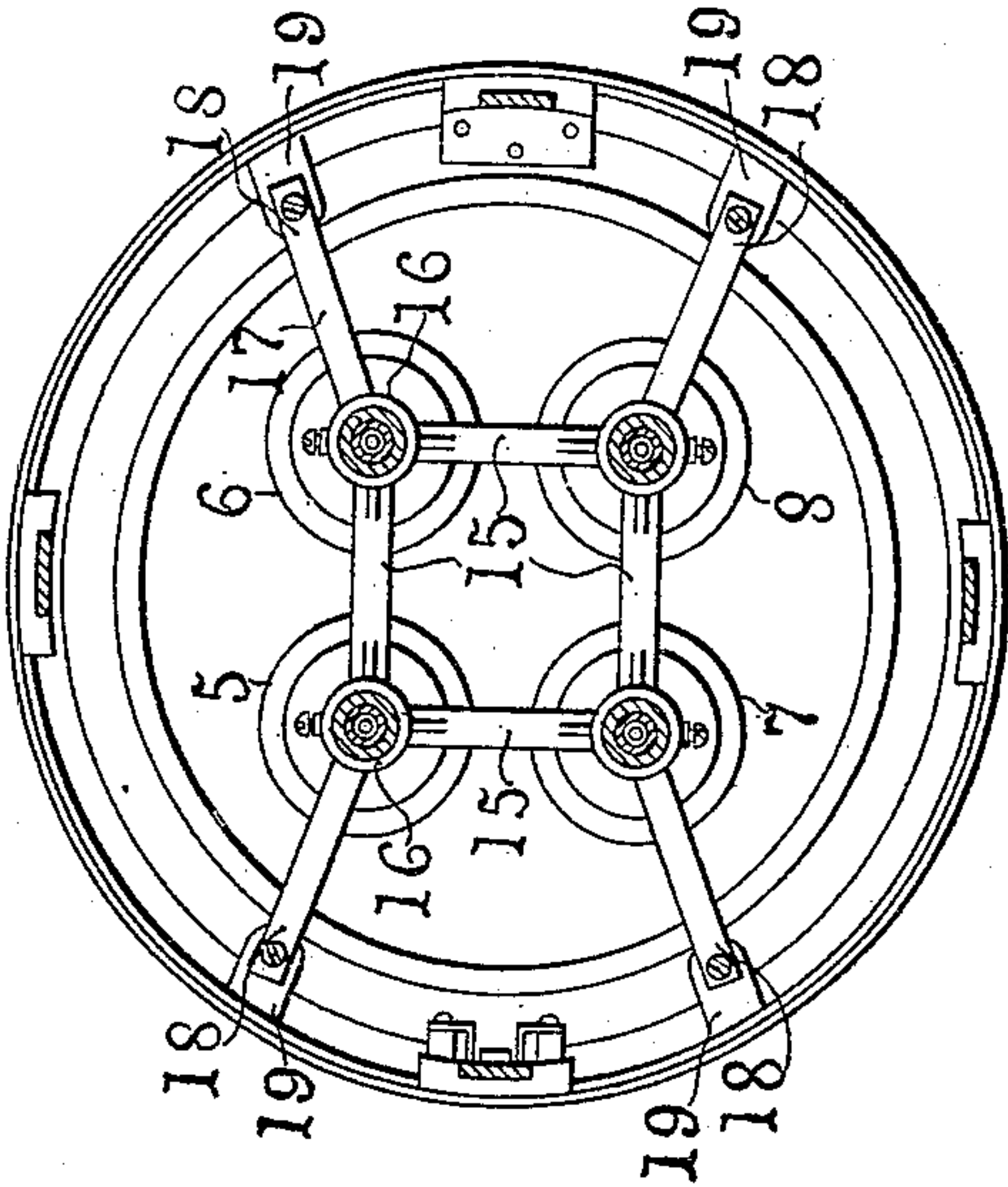


FIG. 2-

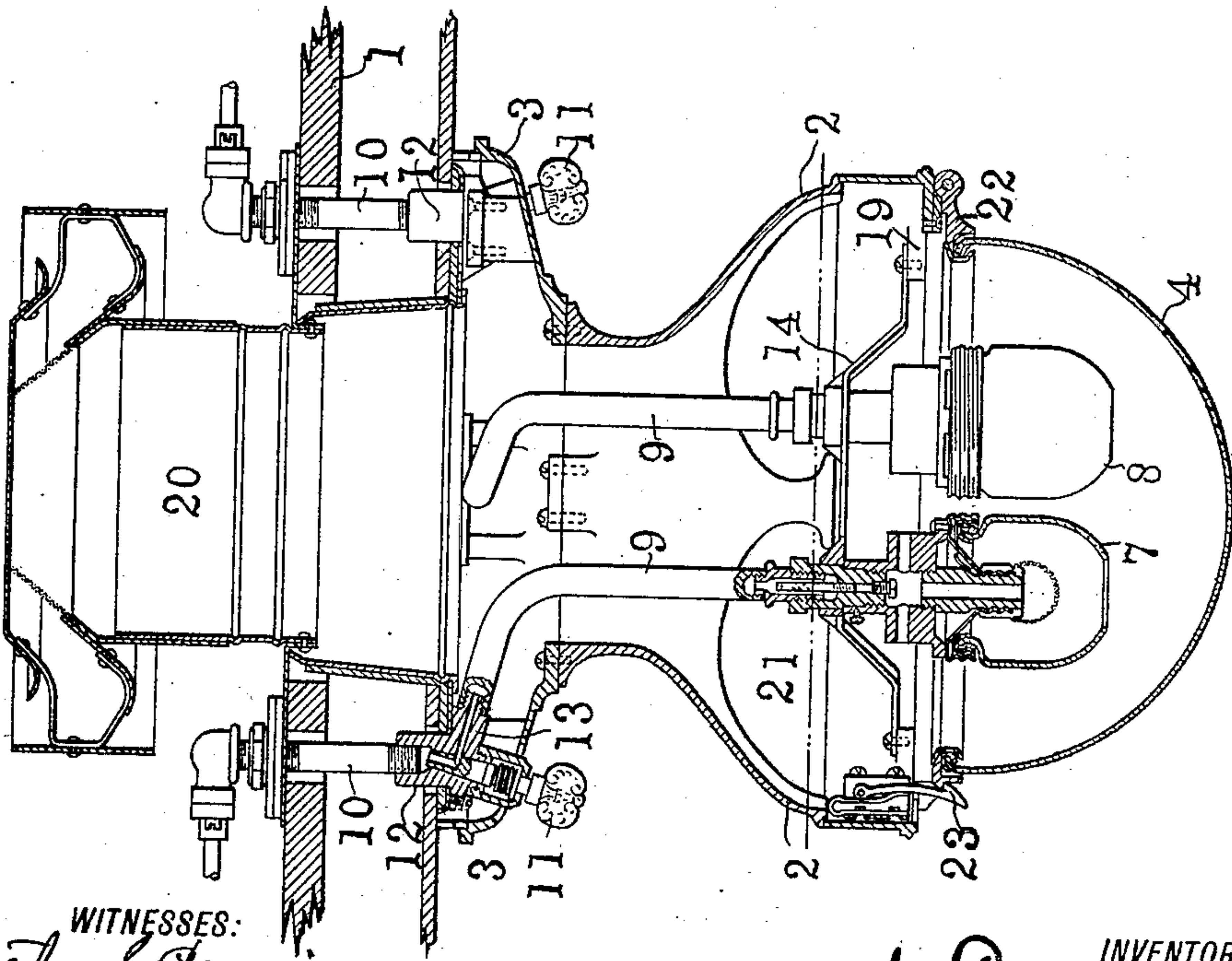


FIG. 1-

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LAMP.

No. 931,496.

Specification of Letters Patent.

Patented Aug. 17, 1909.

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To all whom it may concern:

Be it known that I, LINDSLEY SCHEPMOES, residing at New York, in the county of New York and State of New York, have
5 invented certain new and useful Improvements in Lamps, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

10 This invention relates to illuminating apparatus generally, but, as it more particularly concerns gas lighting apparatus comprising a cluster of separate lamps, it will be conducive to clearness to disclose it in such
15 connection.

One object of this invention is to provide an illuminating apparatus of the class described, which will comprise a plurality of suitably incased lamps which by a simple
20 and inexpensive means are maintained against relative movement.

Another object is to provide a gas lighting apparatus comprising a number of distinct lamps each capable of being regulated in
25 luminosity independently of its companions, together with a globe support and means for so bracing the upper ends of said lamps to the said support that relative movement of the parts will be prevented.

30 Another object is to design an illuminating apparatus peculiarly adapted for the employment of a cluster of individually controlled gas lamps of the inverted mantle type, and in which the cluster will be rigidly
35 held within a casing adapted to effectively dispose of the products of combustion, to insure a steady burning of the lamps, and, if desired, modulate and evenly distribute the light of the cluster.

40 Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements and arrangement of parts which
45 will be exemplified in the construction hereinafter set forth, and the scope of the application of which will be indicated in the following claims.

Referring now to the accompanying drawings, wherein is illustrated one of the various
50 possible embodiments of my invention, Figure 1 is a sectional elevation illustrating an embodiment of certain of the various features constituting this invention and show-

ing the preferred combination and arrangement thereof; Fig. 2 is a horizontal section taken along line 2—2 of Fig. 1 to more fully show certain details of this embodiment.

The accompanying drawings show this invention as employed in connection with the
60 illuminating of railway cars, in which the apparatus as a whole is suspended from the roof 1 of such cars. The casing or support designated by 2 may be provided with a flaring crown-piece 3 which is affixed to such
65 roof in any suitable manner, and at its lower end such casing or support carries a globe 4 which, as shown, is inverted, and being spherical in form serves as a means for not
70 only protecting the inclosed cluster of individually controlled lamps, but also is adapted to evenly diffuse and modulate the light emitted therefrom. To facilitate the occasional displacement of the globe for the purpose of gaining access to the cluster, a swing-
75 ing ring 22 may be hinged to the support, and the globe may be secured directly to such hinged ring. A latch 23 serves to hold closed the ring.

This invention proposes to arrange within
80 the casing and globe a plurality of independent lamps 5, 6, 7 and 8, which may be suspended from the roof in any desirable manner. These lamps will preferably be symmetrically disposed to form an ornamental
85 cluster and in order that the light emitted may be as evenly distributed as possible.

While each of the aforesaid lamps may be supported in various ways, the shown manner of so doing will ordinarily be regarded as
90 preferred and will be found to be essentially simple though exceedingly effective. To this end this invention utilizes the conduits 9, which are primarily for the purpose of conveying the gas which will ultimately be
95 burned in said lamps. Such conduits are vertically disposed and are suspended from their upper ends, which are in communication with supply pipes 10 leading from the source of gas, which may be common to all
100 and may consist of a suitable tank underlying the cars. The lamps are fixed to the lower ends of these conduits so as to receive the gas therefrom and at the same time be carried thereby. The products of combustion
105 will ascend through the upper part of the casing or support which constitutes a chimney, and both for convenience of ar-

rangement and for economy's sake the conduits may extend through such chimney.

Inasmuch as it is desirable to have an individual control for each lamp in order that one or more of said lamps may be used simultaneously, each of the conduits will be provided with a suitable cock 11, which may conveniently be arranged at the upper end of the same, as shown on the drawing. These cocks may each comprise a body portion 12 to which the end of the supply pipe 10 is secured, and a lead 13 may extend laterally and be secured to the upper portion of the associated conduit, which is bent outwardly for this purpose. This arrangement prevents excessive heating of the cocks and at the same time affords a very accessible location for such cocks. The turning or finger grip of each cock will preferably lie exterior of the support or casing, or at least be so disposed as to be readily grasped, either manually or by means of a suitable wrench.

A spider 14 of any suitable form is in engagement with and maintains the lamps against excess vibration, such spider being in turn secured to an adjacent portion of the casing 2. In the specific form shown, such spider is integral and is composed of a number of portions 15 which are interposed between each pair of lamps and are polygonally arranged. Hubs 16 are formed in the spider, and these hubs circumscribe the lower ends of the conduits or the upper ends of the lamps, as the case may be or as the points of attachment may be differently expressed although equivalent in fact, so as to prevent any lateral movement of the latter. Thus while I have, for convenience of description, stated that the spider is in engagement with the conduits adjacent the lamps, it is to be understood that I also contemplate, in an equivalent sense, an engagement with any other suitable part of the lamps. Integrally extending from these hubs are arms 17 which at their outer ends 18 are secured to a part of the casing 2, which may consist of a flange 19 which inturns from the bottom of said casing.

It will be understood, in view of the foregoing explanation, that the products of combustion from the lamps may rise upwardly without meeting any obstruction due to the spider, and may pass through the upper portion of the casing 2, which serves as a chimney, and thence into the ventilator 20, from which such products will ultimately escape. Fresh air for admixture with the gas may be obtained through the perforations 21 in the body portion of the casing, or the mixing may take place externally of the chimney or casing 2, as desired.

It will thus be understood that this invention is one well adapted for attaining the various objects and ends set forth in the foregoing.

The lamps are each capable of being individually regulated or controlled, and one or more of said lamps may be employed at a time, as desired. Moreover, because of the peculiar system of bracing the lamps, it will be noted that they are prevented from rocking or swaying under the motions of a car while in transit, and that the whole arrangement is simple and essentially practicable in nature.

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

1. An illuminating apparatus comprising in combination a casing, a plurality of underlying lamps, and a perforate spider secured to each of said lamps and to said casing respectively.

2. An illuminating apparatus comprising in combination a casing, a plurality of lamps having conduits extending therethrough, and a spider providing a plurality of polygonally arranged members each interposed between a pair of lamps and having a plurality of arms rigidly connecting said members to said casing.

3. An illuminating apparatus comprising in combination a casing, a plurality of lamps having conduits in said casing, and a spider having a corresponding plurality of hubs circumscribing portions of said lamps and having arms connecting said hubs to said casing.

4. An illuminating apparatus comprising in combination a casing, a plurality of symmetrically disposed lamps having conduits in said casing, and a spider providing a hub for each of said lamps, said hubs being integrally connected by portions extending therebetween and having arms integrally extending from said hubs to attachment with said casing to rigidly hold said spider and lamps positioned thereby.

5. An illuminating apparatus comprising in combination a depending casing, an inverted globe suspended from the lower portion of said casing and detachably secured thereto, a plurality of individual lamps inclosed by said globe and said casing, means for individually controlling the flow of gas to each lamp prior to admixture with air, and a spider within said casing in engagement with each of said lamps to maintain them against relative movement, said spider being also secured to said casing.

6. An illuminating apparatus comprising in combination a depending casing, an inverted globe detachably secured to the bottom of said casing, a plurality of symmetrically disposed lamps inclosed by said casing and said globe, and a spider secured to the lower portion of said casing and in engagement with each of said lamps to prevent displacement of the latter.

7. An illuminating apparatus comprising in combination a casing, a plurality of sym-

metrically disposed lamps arranged to underlie said casing, means for individually controlling the flow of gas to each lamp prior to admixture with air, and a spider common to all of said lamps and in engagement therewith to prevent relative displacement thereof, said spider being also secured to said casing.

8. An illuminating apparatus comprising in combination a depending support, a cluster of lamps symmetrically disposed with relation to said support, an integral spider having portions affixed to said support and portions in engagement with each of said lamps whereby the latter will be maintained against relative movement, and means for independently controlling the flow of gas to each of said lamps prior to admixture with air.

9. An illuminating apparatus comprising in combination a depending globe support having a flange adjacent its lower end, an inverted globe detachably secured to the lower end of said support, a cluster of inverted mantle lamps symmetrically disposed within said support and in proximity with said globe, an integral spider having arms affixed to said support, said spider having portions interposed between and in engagement with each of said lamps whereby the latter will be maintained against relative movement, and means for independently controlling the flow of gas to each of said lamps prior to admixture with air.

10. An illuminating apparatus comprising in combination with a depending globe support, a globe detachably carried by said support, a cluster of mantle lamps symmetrically disposed within the lower portion of said support, and in proximity with said globe, a plurality of depending conduits within said support each leading to one of said lamps, an integral spider having portions affixed to said support and having portions interposed between and in engagement with each lamp and adapted to maintain said lamps against relative movement, and means for independently regulating the flow of unmixed gas to each of said lamps.

11. An illuminating apparatus comprising in combination a depending globe support having apertures for the admission of air, an inverted substantially hemispherical globe detachably secured to the lower end of said support, a cluster of inverted mantle lamps symmetrically disposed within the lower portion of said support and in proximity with said globe, a plurality of depending gas conduits within said support each leading to an appropriate lamp, an integral spider having portions affixed to an intermediate portion of said support and having spaced connected portions in engagement with and adapted to maintain said lamps against relative movement, and a cock for each of said conduits for independently regulating the flow of gas

to each of said lamps said spider being adapted to permit the products of combustion to rise in contact with the depending conduits.

12. An illuminating apparatus comprising in combination a depending globe support adapted to serve as a chimney for the discharge of products of combustion, an inverted substantially hemispherical globe detachably secured to the lower end of said support, a cluster of inverted mantle lamps symmetrically disposed within said support and in proximity with said globe, a plurality of depending gas conduits within said support each leading to one of said lamps, a spider having portions affixed to an intermediate portion of said support, said spider having connected portions in engagement with said lamps to maintain the latter against relative movement, and a cock for each of said conduits for independently regulating the flow of gas to each of said lamps.

13. An illuminating apparatus comprising in combination a depending globe support adapted to serve as a chimney for the discharge of products of combustion, an inverted globe detachably secured to said support, a cluster of inverted mantle lamps symmetrically disposed within the lower portion of said support and in proximity with said globe, a plurality of depending gas conduits within said support each conduit leading to and at its lower end carrying an associated lamp, a perforate spider having arms affixed to an intermediate portion of said support, said spider having portions interposed between each pair of lamps and in engagement therewith to maintain the latter against relative movement, and a suitable cock for each of said conduits for independently regulating the flow of gas to each of said lamps, each of said cocks having a turning grip external of said support.

14. An illuminating apparatus comprising in combination a depending globe support having a portion adapted to serve as a chimney for the discharge of products of combustion, an inverted substantially hemispherical globe detachably secured to the lower end of said support, a cluster of inverted mantle lamps symmetrically disposed within the lower portion of said support and in proximity with said globe, a plurality of depending gas conduits within the chimney portion of said support, each conduit at its lower end terminating in a lamp, an integral perforate spider affixed to an intermediate portion of said support, said spider having portions in engagement with parts extending from each of said lamps to maintain the latter against relative movement, and a suitable cock for each of said conduits for independently regulating the flow of gas to each of said lamps, each of said cocks having a turning grip external of said support.

15. An illuminating apparatus comprising

in combination a depending globe support having a portion adapted to serve as a chimney for the discharge of products of combustion and having a ring hinged to its lower end, an inverted substantially hemispherical globe detachably secured to said ring, a cluster of inverted mantle lamps symmetrically disposed within the lower portion of said support and in proximity with said globe, a plurality of depending gas conduits within the chimney portion of said support, each conduit leading to and at its lower end carrying an associated lamp, an integral perforate spider affixed to said support and in engagement with parts extending from each of said lamps to maintain the latter against relative movement, and a suitable cock for each of said conduits for independently regulating the flow of gas to each of said lamps, each of said cocks having a turning grip external of said support.

16. An illuminating apparatus comprising in combination a depending globe support having a portion adapted to serve as a chimney for the discharge of products of combustion and having a ring hinged to its lower end, an inverted substantially hemispherical globe detachably secured to said ring, a cluster of inverted mantle lamps symmetrically disposed within the lower portion of said support and in proximity with said globe, a plurality of depending gas conduits within the chimney portion of said support, each conduit leading to and at its lower end carrying an associated lamp, an integral perforate spider having arms affixed to the flange of said support, said spider having portions interposed between the conduits of each pair of lamps and in engagement with parts extending from each of said lamps to maintain the latter against relative movement, and a suitable cock for each of said conduits for independently regulating the flow of gas to each of said lamps, each of said cocks having a turning grip external of said support.

17. An illuminating apparatus comprising in combination a depending globe support having a portion adapted to serve as a chimney for the discharge of products of combustion and having an intumed flange at its lower end, an inverted substantially hemispherical globe detachably hinged to the lower end of said support, a cluster of in-

verted mantle lamps symmetrically disposed in proximity with said globe within the lower portion of said support and arranged to discharge the products of combustion into the chimney portion of said support, a plurality of depending gas conduits within the chimney portion of said support, each conduit leading to and at its lower end carrying one of said lamps, an integral perforate spider having arms affixed to the flange of said support, said spider having portions interposed between the conduits of each pair of lamps and in engagement with each of said conduits adjacent the upper portions of said lamps to maintain the latter against relative movement, and a suitable cock for each of said conduits for independently regulating the flow of gas to each of said lamps, each of said cocks being located in the upper portion of its conduit and having a finger grip external of said support.

18. An illuminating apparatus comprising in combination a casing, a plurality of lamps therein, a corresponding plurality of conduits each carrying one of said lamps, said conduits leading upwardly and outwardly, and a cock arranged in each gas conduit at a distance from the path of the escaping products of combustion and having a finger grip exterior of said casing.

19. An illuminating apparatus comprising in combination a casing adapted to form a chimney, a plurality of lamps underlying said chimney, a conduit rising from each lamp through said chimney and turning outwardly at its upper end, and a cock arranged in the upper end of each gas conduit and having a finger grip exterior of said casing, whereby said cock will not become heated by the escaping products of combustion.

20. An illuminating apparatus comprising in combination a casing, a plurality of conduits depending through said casing and rigidly connected thereto to prevent relative movement, and a corresponding plurality of lamps each being supported by one of said conduits.

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

LINDSLEY SCHEPMOES.

Witnesses:

E. E. ALLBEE,
R. S. BLAIR.