(No Model.)

N. JENKINS.

BALANCING ATTACHMENT FOR AUTOMATIC LAMP SUSPENDING DEVICES.

No. 374,478. Patented Dec. 6, 1887.

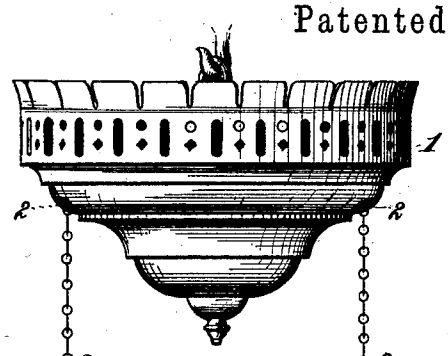
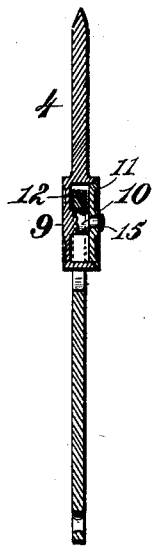


Fig. 1.

Fig. 2.



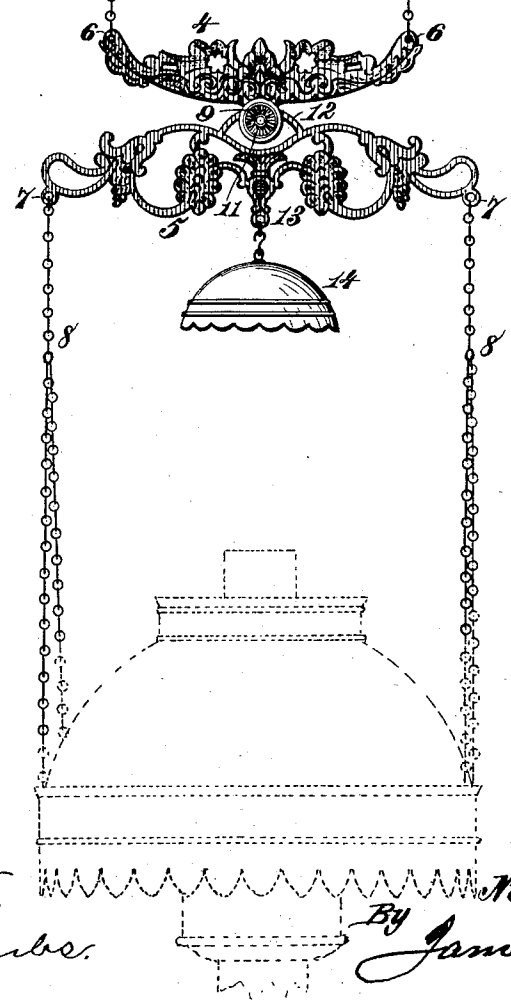
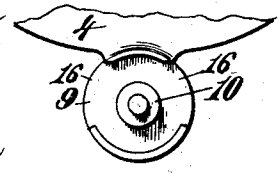


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

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BALANCING ATTACHMENT FOR AUTOMATIC LAMP-SUSPENDING DEVICES.

SPECIFICATION forming part of Letters Patent No. 374,478, dated December 6, 1887.

Application filed June 3, 1886. Serial No. 204,048. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS JENKINS, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented new and useful Improvements in Balancing Attachments for Automatic Lamp-Suspending Devices, of which the following is a specification.

This invention relates to balancing attachments for those devices which are employed to raise and lower lamps in which the balancing attachment comprises two plates, arranged one above the other and the two pivoted together intermediate their ends.

The object of my invention is to provide a novel construction pivotally connecting the plates, whereby they are held against rotating movements with respect to each other, while the upper plate can tilt out of a horizontal plane without tilting the lower plate.

The object of my invention I accomplish in the manner and by the construction of parts hereinafter described, and specifically set forth in the claims, reference being made to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved balancing attachment with the smoke-bell and automatic lamp-suspension devices connected thereto. Fig. 2 is a sectional detail view through the pivotal connection of the balancing attachment, and Fig. 3 a detail view showing the interior of the chambered case.

Referring to the drawings, the numeral 1 designates a supporting-case for inclosing the automatic operating mechanism of the lamp-suspension devices. This casing 1 is attached to the ceiling or other support in any suitable manner, and the automatic mechanism inclosed in said casing may be of any approved construction, and need not be illustrated, as it forms no part of my present invention.

In the lower part of the casing 1 are openings 2, through which pass the suspension-chains 3, the upper ends of which are connected in any suitable manner with the automatic mechanism inclosed in said casing.

The balancing attachment consists of an upper plate, 4, and a lower plate, 5, said bars being of ornamental construction, preferably composed of metal, and arranged horizontally one above the other in the same vertical plane, with a pivotal connection centrally between their ends. The upper balance-plate, 4, is provided at or near each end with an eye, 6, for attachment to the lower ends of the upper chains, 3, and the lower balance-plate, 5, is provided at or near each end with an eye, 7, for attachment of the lower chains, 8, that extend to the lamp or lamp-frame. The lower edge of the upper balance-bar, 4, is formed centrally between its ends with a depending chambered case, 9, containing a laterally-projecting stud or pivot-pin, 10, which engages with a curved loop, 12, formed on the upper central portion of the lower balance-plate, 5, said plates being thus provided with a central pivotal connection that facilitates the balancing and leveling of the suspended lamp. The chambered case 9 is closed by a disk, 11, having a central orifice and placed upon the case, the pivot-pin passing through the central orifice in the disk 11 and riveted down, as at 15, thereby holding said disk in place and confining the curved loop 12 on the pivot-pin 10 within the chambered case. The case 9 is provided with side apertures, 16, Fig. 3, for the passage of the curved loop. This construction provides for a walking-beam motion without permitting one plate to rotate or turn out of a vertical plane with the other plate, as if the lower plate has a tendency to turn or rotate, the wall of the case and the disk prevent such movement. The bottom edge of the lower balance-bar, 5, may be provided with an eye or loop, 13, for suspending a smoke-bell, 14, above the lamp.

This balancing attachment, composed of the centrally-pivoted balance-bars 4 and 5, arranged one above the other and connected with the lamp-suspension chains, as shown, can be used to practical advantage with any automatic lamp-suspension devices in which the lamp is wholly or partly suspended by means of chains, and by its use the vertical adjustment, leveling, and balancing of the lamp will be facilitated, besides assisting the proper working of the automatic operative mechanism.

I do not broadly claim a self-balancing lamp-support for spring suspension devices, consisting of two bars or plates having their adjacent edges pivotally connected together at the cen-

ter of their length, whereby the upper bar or plate may assume an inclined position without changing the horizontal position of the lower bar or plate.

Having thus described my invention, what I claim is—

1. A self-balancing lamp-support for spring suspension devices, consisting of the upper plate having its lower portion provided centrally between its ends with a chambered case, 9, containing a laterally-projecting pivot-pin, 10, a disk, 11, secured to one side of said casing, and the lower plate having centrally between its ends the curved loop 12, passing through the case over the pivot-pin, substantially as described.

2. A self-balancing lamp-support for spring suspension devices, consisting of the upper plate formed integral at its lower edge with the chambered case 9 and pivot-pin 10, the disk 11, arranged at one side of the case and secured to the pivot-pin, and the lower plate formed integral with the curved loop 12, which extends through the case over the pivot-pin, and is confined by the wall of the case and the disk, substantially as described.

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

NICHOLAS JENKINS.

Witnesses:

GEO. H. BENHAM,

THOMAS I. WALKER.