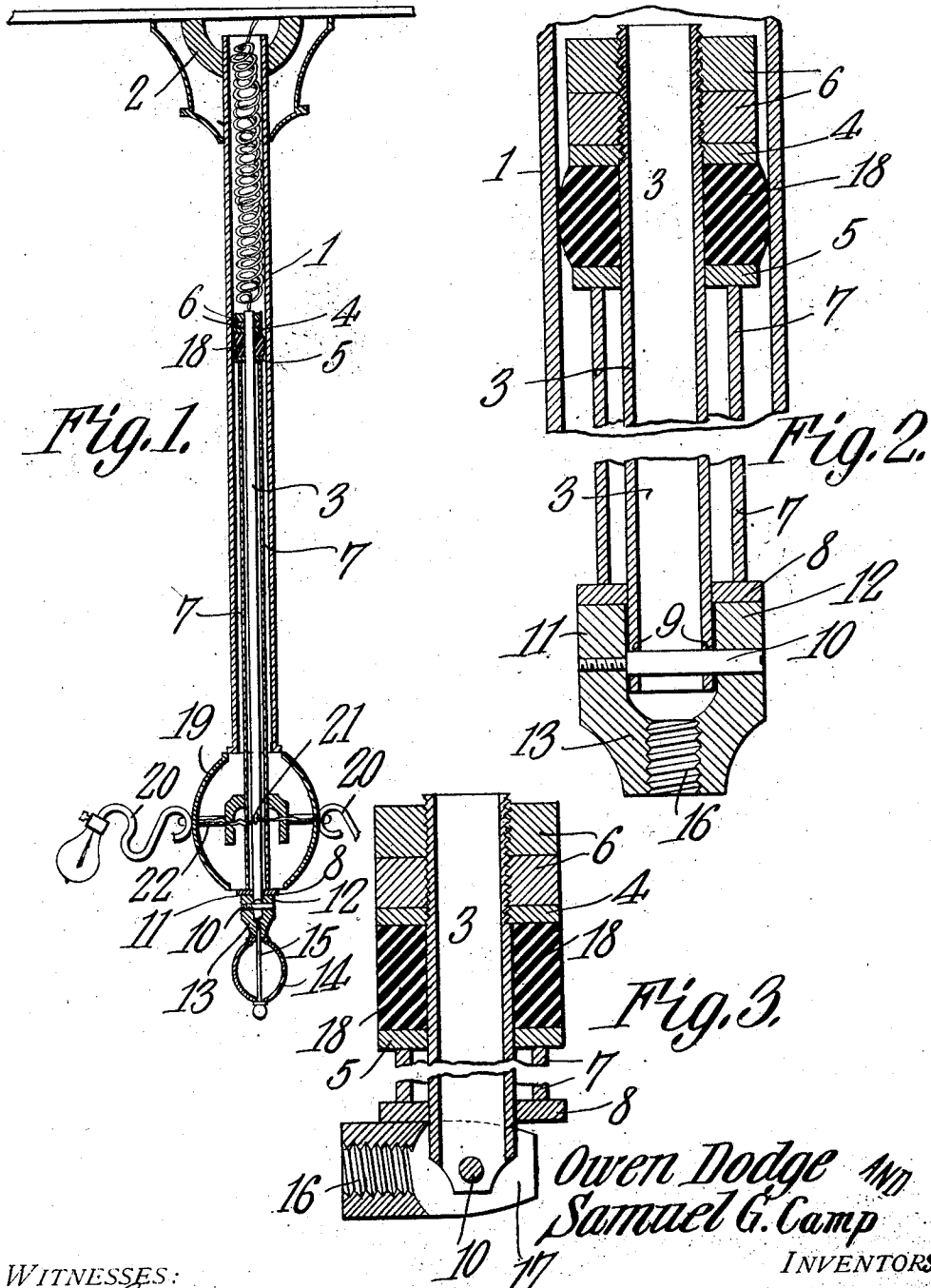


No. 874,836.

PATENTED DEC. 24, 1907.

O. DODGE & S. G. CAMP.
ADJUSTABLE CHANDELIER.
APPLICATION FILED APR. 10, 1907.



WITNESSES:
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UNITED STATES PATENT OFFICE.

OWEN DODGE AND SAMUEL G. CAMP, OF COLORADO SPRINGS, COLORADO.

ADJUSTABLE CHANDELIER.

No. 874,836.

Specification of Letters Patent.

Patented Dec. 24, 1907.

Application filed April 10, 1907. Serial No. 367,387.

To all whom it may concern:

Be it known that we, OWEN DODGE and SAMUEL G. CAMP, citizens of the United States, residing at Colorado Springs, in the county of El Paso and State of Colorado, have invented a new and useful Adjustable Chandelier, of which the following is a specification:

My present invention relates to improvements in fixtures for supporting electric lights and similar appurtenances, and it has for its object to provide an improved chandelier that has a relatively fixed section adapted to be secured to a ceiling or other support, and a vertically adjustable section mounted telescopically therein and carrying the lamps, a conveniently arranged device being employed for holding the lamp section in different adjusted positions and that may be easily reached to operate, provision being also made for the conductors for supplying the current to the lamps, irrespective of the different positions of relative adjustment of the sections.

To these and other ends, the invention comprises the various novel features of construction and combination and arrangement of parts, which will be hereinafter more fully described, and pointed out particularly in the claims appended hereto.

In the accompanying drawings:—Figure 1 represents an axial section through a chandelier constructed in accordance with the present invention. Fig. 2 is a sectional view on an enlarged scale showing the parts in locked position. Fig. 3 is a detail sectional view showing the cam and locking device in unlocked position.

Corresponding parts in the several figures are indicated throughout by similar characters of reference.

The chandelier shown in the present embodiment of the invention comprises a tubular casing 1 having its upper end threaded or otherwise fitted into a tripod or bracket 2 that is firmly secured to the ceiling or other suitable means of support, the casing comprising a relatively stationary section which serves as a guide and a support for the adjustable lamp carrying section, the latter, in the present instance, comprising a tubular standard 3 having a pair of coöperatively arranged washers 4 and 5 fitted loosely thereon, and nuts or abutments 6 arranged on its upper end, nuts being preferably employed that are threaded on its end in order

that their position relatively to the length of the stem may be adjusted.

Surrounding the stem is a relatively adjustable sleeve 7 having one end engaging the lower side of the washer 5 and its lower end engaging the washer 8. The lower end of the stem has a pair of diametrically arranged apertures 9 to receive a pivot screw 10, the latter extending through the arms 11 and 12 of an adjusting member 13, the arms of the latter being provided with cam surfaces adapted to coöperate with the under side of the washer 8 as the adjusting member is turned about the pivot screw as an axis. The adjusting member is located at a relatively low point on the bracket, and it may be provided with a lamp socket, or it may be provided, as shown, with an ornamental bulb 14, a threaded rod 15 passing axially therethrough and having its ends threaded to fit a threaded aperture 16 in the adjusting member, the bulb serving as a handle by means of which the adjusting lever may be turned about its pivot. The high part 17 of the cam is preferably arranged in line with the rod 15 in order that the latter may occupy a vertical position when the sections of the chandelier are in locked relation.

The locking medium is operated by a relative axial movement between the stem and its surrounding sleeve, and it may be composed of an annular elastic sleeve 18 surrounding the stem between the washers 4 and 5, and it is made of rubber or other suitable material that is capable of being compressed in the direction of one dimension and correspondingly expanded in the direction of another dimension, rotation of the adjusting lever to a point where its stem occupies a vertical position causing a relatively longitudinal movement of the stem and sleeve, proximating the washers 4 and 5, and thereby compressing the sleeve in the direction of its axis and correspondingly expanding it in the direction of its diameter, the expansion being sufficient to cause it to engage the inner wall of the casing with sufficient friction to sustain the weight of the relatively adjustable section. In order to compensate for wear and to regulate the locking action of the elastic sleeve, it is preferable to thread the nuts or abutments 6 on the upper end of the stem in order that they may be adjusted axially thereof to vary the compressing action on the elastic sleeve when the adjusting member is turned into locked position.

The lamp attaching devices may be arranged in any suitable manner on the relatively adjustable section, a bracket 19 being secured, in the present instance, to the lower end of the sleeve 7 and serving to support the lamp carrying arms 20, the sleeve and stem being provided at a point adjacent to the bracket with registering apertures 21 through which the conductor cord 22 leading to the lamps passes. The upper ends of the conducting cords extend upwardly through the hollow stem, and they are coiled in the form of a helix above the upper end of the adjustable section. The coiled arrangement of the conductor is capable of a relatively axial elongation and compression, as the adjustable section is moved longitudinally of the casing, so that it is unnecessary to connect and disconnect the conductors whenever the chandelier is adjusted, and the use of sliding contacts and other unreliable devices is avoided.

What is claimed is:—

1. In a chandelier, the combination with a relatively stationary section embodying a tubular casing, of a relatively adjustable section mounted telescopically of the casing and provided with a stem having an abutment fixed on the upper end thereof, a sleeve adjustable longitudinally of the stem, an annular body of expansible material surrounding the stem and having one end engaging the said abutment on the stem and its opposite end engaging the upper end of the sleeve, and a device for adjusting the stem longitudinally of the sleeve to compress the expansible medium longitudinally and expand it transversely.

2. In a chandelier, the combination with a stationary section embodying a tubular casing, of a relatively adjustable section mounted to operate longitudinally thereof and embodying a stem having an abutment at its upper end adjustable longitudinally thereof, and a sleeve surrounding the stem and movable longitudinally thereof, an expansible medium having its ends engaging the said abutment and the upper end of the sleeve respectively and arranged to be compressed longitudinally and expanded transversely when the stem and sleeve are operated relatively, and a cam pivoted on the lower end of the stem and cooperating with the lower end of the sleeve for adjusting the latter and the stem longitudinally.

3. In a chandelier, the combination with a stationary section embodying a tubular casing, of a relatively adjustable section embodying a stem having an abutment at its upper end and adapted to operate longitudinally of the casing, a sleeve surrounding the stem and adjustable longitudinally thereof, an annular expansible body surrounding the stem and interposed between the abutment

thereon and the upper end of the sleeve, and an adjustable member pivotally attached to the lower end of the stem and having arms arranged at opposite sides thereof and provided with cam surfaces adapted to cooperate with the lower end of the sleeve to operate the latter and the stem longitudinally to compress the annular body longitudinally and expand it transversely.

4. In a chandelier, the combination with a stationary section embodying a tubular casing, of an adjustable section adapted to carry lamp attaching devices and embodying a stem having its upper end threaded, and an abutment fitted to operate on said threads, a pair of cooperatively arranged washers loosely fitted on the stem, an annular body of expansible material surrounding the stem between the washers, a sleeve mounted to operate longitudinally of the stem having its upper end engaging one of the washers, and a device connecting the lower ends of the stem and sleeve for adjusting them longitudinally to compress the expansible body axially.

5. In a chandelier, the combination with a supporting section embodying a tubular casing, a relatively adjustable section mounted telescopically within the casing and embodying a sleeve, a hollow stem movable axially therein, lamp attaching devices supported on the stem, an annular body of expansible material having its ends engaging portions of the sleeve and stem, means for adjusting the stem axially relatively to the sleeve to compress the said body axially and expand it transversely into engagement with the casing, and conducting cords having their lower ends movable with the stem and arranged to permit a relative longitudinal movement between the adjustable and supporting sections.

6. In a chandelier, the combination with a stationary section, of an adjustable section mounted in cooperative relation therewith and provided with lamp attaching devices, of a locking device interposed between the sections for retaining them in fixed relation, and a device for operating the locking device embodying a cam pivoted to turn in a vertical plane on the lower end of the adjustable section and arranged to occupy a position in alinement with the axis of the sections when the locking device is in locked position and an ornamental device forming an operating handle for the cam.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

OWEN DODGE.
SAMUEL G. CAMP.

Witnesses:

M. W. PURCELL,
E. R. STARK.