United States Patent [19]

Trassinelli

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[45] **July 24, 1973**

[54] **FLOOR LAMP**

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[52] **U.S. Cl.** ..... **240/81 BS**, 240/10 R, 240/DIG. 3, 339/9

[51] **Int. Cl.** **F21s 1/12**

[58] **Field of Search** ..... 240/81 BS, 81 BC, 240/81 BD, 81 R, DIG. 3, 10 R, 25; 339/9, 21 S, 22 T; 191/22, 29, 32

[56] **References Cited**

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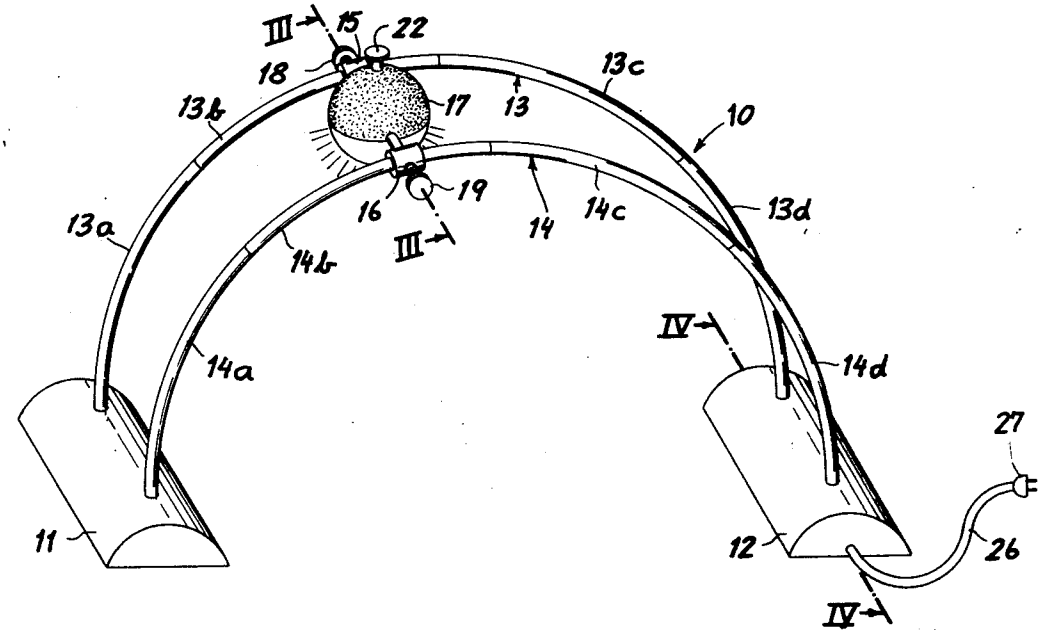
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Assistant Examiner—Edna M. Bero
Attorney—Karl F. Ross

[57] **ABSTRACT**

A glass globe is supported on a pair of metallic sleeves riding two arcuate, parallel metal rods which terminate at two bases, one of these bases containing a step-down transformer by which the two rods may be energized with low-voltage current. A bulb inside the globe has terminals connected to the two sleeves so as to light upon closure of a switch; the globe can be immobilized anywhere along the guidepath represented by the two rods and may be blackened at the top to emit light only downwardly.

9 Claims, 4 Drawing Figures



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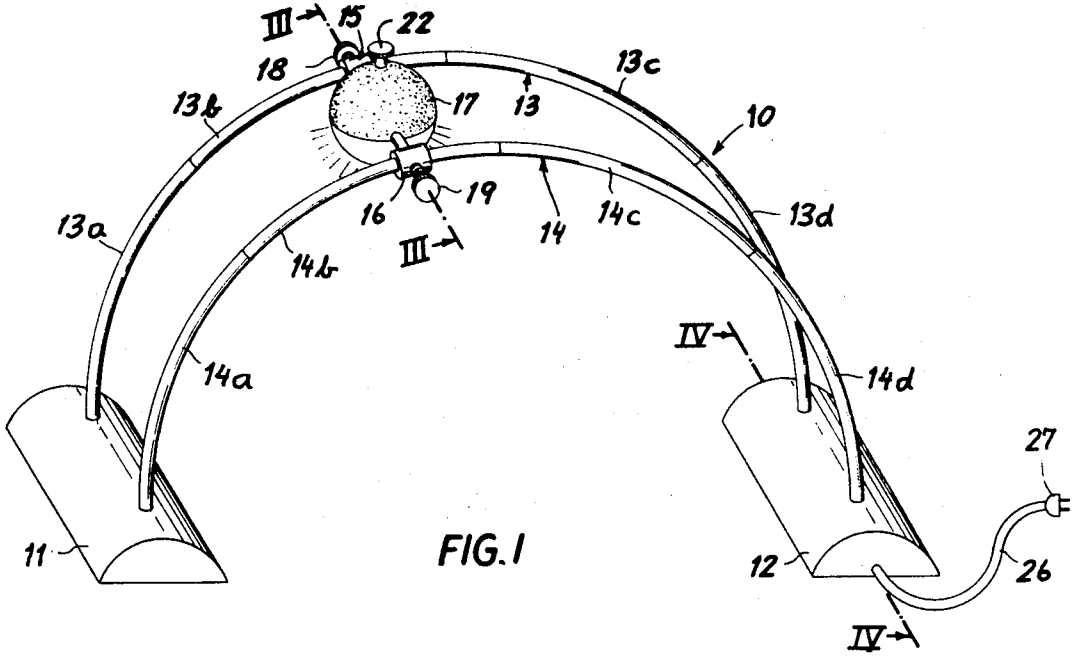


FIG. 1

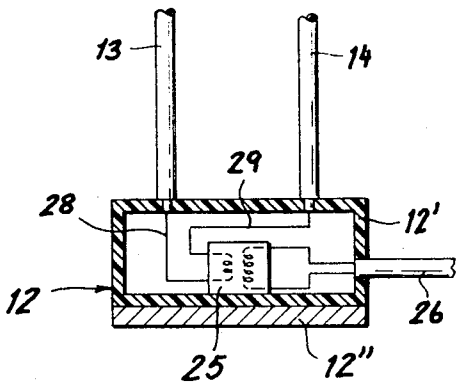


FIG. 4

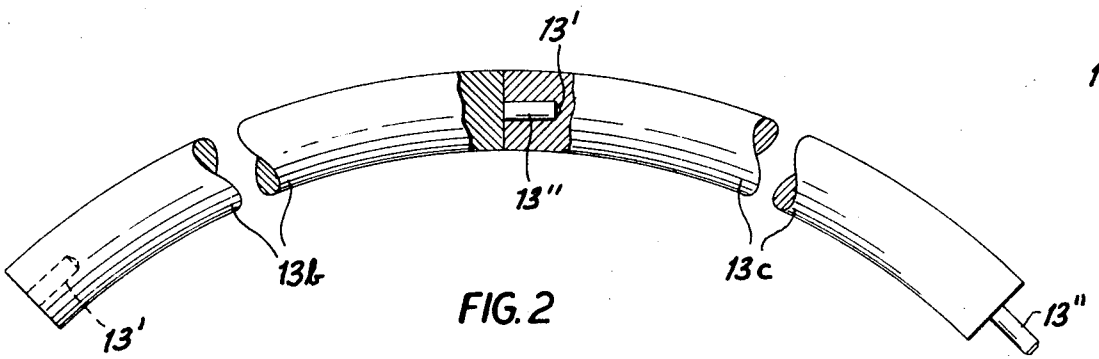


FIG. 2

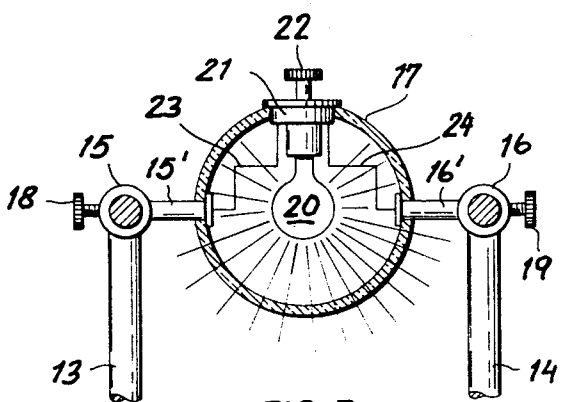


FIG. 3

FLOOR LAMP

My present invention relates to a lighting fixture such as a floor lamp designed to illuminate furniture or other articles from various angles.

The object of this invention is to provide a floor lamp or similar fixture of simple construction which can be adjusted to different levels above the floor, as well as to different angles of illumination, and which can be easily adapted to a variety of situations.

A lighting fixture embodying my invention comprises a pair of spaced-apart bases resting on a foundation such as the floor of a room, which are bridged by two parallel conductors curved in rising arcs above the foundation. A source of electric current, preferably of low voltage (e.g. up to 24 V.) for safety's sake, is connected across these conductors, advantageously in the form of a step-down transformer in one of the bases whose primary can be plugged into a utility outlet of 110 or 220 V. A pair of sliders mechanically and conductively engage the conductors for displacement along their arcs, the sliders supporting a lamp body which is disposed between the conductors and is electrically connected to the current source through these conductors and the sliders.

Such an arrangement allows the lamp body to be slid into any position along the arcuate guidepath defined by the conductors; this guidepath may be easily modified if each of these conductors consists of detachably interfitted, preferably rod-shaped segments and/or is sufficiently flexible to allow the spacing of the bases to be varied.

According to a more specific feature of my invention, the lamp body comprises a transparent envelope (of glass or synthetic resin) provided in its interior with one or more bulbs which may be fixedly or adjustably mounted therein. I prefer to make the envelope spherical, not only for the sake of appearance but also for easier balancing on an axis defined by a pair of gudgeons integral with the two sliders whereby the light rays from the bulb or bulbs may be emitted in different directions from a selected location.

The above and other features of my invention will now be described in detail with reference to the accompanying drawing in which:

FIG. 1 is a perspective view of a floor lamp embodying the invention;

FIG. 2 is an elevational view (partly in section) of a pair of interfitted metal rods forming part of the structure of FIG. 1;

FIG. 3 is a cross-sectional detail view taken on the line III — III of FIG. 1 but drawn to a larger scale; and

FIG. 4 is another cross-sectional detail view, also drawn to a larger scale, taken on the line IV — IV of FIG. 1.

The floor lamp **10** illustrated in FIG. 1 comprises a pair of spaced-apart bases **11, 12** of sufficient weight to give stability to the structure. The two bases are bridged by a pair of arcuate spans **13, 14** of good electrical conductivity, e.g. of copper, each divided into several sections **13***a*, **13***b*, **13***c*, **13***d* and **14***a*, **14***b*, **14***c*, **14***d*. As particularly illustrated for two of these sections (**13***b*, **13***c*) in FIG. **2**, they are detachably interconnected with the aid of mating male and female terminations, i.e. bores **13'** at one end and pins **13''** at the other end, which engage each other with a tight fit so as to form a continuous structure. Given a certain flexibility

of these rods, the shape of the spans **13** and **14** may be altered by the moving of some of the sections or inserting additional ones with or without relocation of the bases **11, 12.**

The two spans **13** and **14** slidably support respective sleeves **15** and **16,** also of highly conductive metal such as copper, which together carry a glass globe **17** by means of extensions **15', 16'** lying on a common diameter of the globe; these extensions form gudgeons around which the globe can be swung into different positions, being held by friction or by nonillustrated fastening means in a selected attitude with reference to the sleeve axis. The sleeves **15** and **16,** in turn, can be immobilized by screws **18, 19** anywhere along the arcuate guidepath defined by the spans **13** and **14.**

A bulb **20** (FIG. 3) inside globe **17** is seated in a socket **21** provided with an on-off switch **22;** the terminals of the socket are connected via wires **23, 24** within the globe to gudgeons **15'** and **16',** respectively, for energization of bulb **20** (in the closed position of switch **22**) from a low-voltage source disposed in base **12.** As illustrated in FIG. **4,** this source comprises a step-down transformer **25** with a primary winding connectable through a cable **26** and a plug **27** (FIG. **1**) to a wall socket; wires **28, 29** extend from the secondary winding of transformer **25** to conductors **13** and **14,** respectively. Although these two conductors and the internal wiring have been shown insulated from ground by a dielectric housing **12'** forming part of base **12,** it will be understood that one of these conductors could also be grounded.

Aside from the leads **23, 24** inside globe **17** and **28, 29** in base **12,** no wires are used anywhere on the structure **10.** In particular, this structure is not encumbered by any exposed wiring which could interfere with the movement of the lamp body **17, 20** along its guidepath or impede the disassembly and reassembly of the rod segments **13***a*, **13***b*, **14***a*, **14***b*.

As further illustrated in FIG. **1,** the upper hemisphere of globe **17** may be blackened or otherwise rendered opaque to concentrate the emitted light on the region beneath the spans.

If the floor lamp **10** is designed to reach across a coffee table, for example, a convenient length for each segment **13***a* etc. is from one to two meters.

As further illustrated in FIG. **4,** the base **12,** as well as the base **11,** has a bottom plate **12''** of cast iron or other heavy material (e.g. marble) designed to stabilize the structure.

Supplemental fasteners, not shown, may be provided along the spans **13, 14** to hold their segments together. Thus, the guide sleeves **15, 16** need not be continuously cylindrical but may be formed with longitudinal slots to clear webs or studs on the ends of the rod segments carrying these fasteners.

I claim:

1. A lighting fixture comprising;

a pair of spaced-apart bases resting on a foundation;

two curved parallel conductors bridging said bases in arcs rising above said foundation;

a source of electric current connected across said conductors;

a pair of sliders engaging said conductors for displacement along said arcs, said sliders forming conductive extensions of said conductors; and

a lamp body supported by said sliders between said conductors, said lamp body being electrically con-

nected to said source through said sliders and said conductors.

2. A fixture as defined in claim 1 wherein said source comprises a step-down transformer in one of said bases.

3. A fixture as defined in claim 1 wherein said lamp body comprises a transparent envelope and a bulb in said envelope.

4. A fixture as defined in claim 3 wherein said envelope is provided with an opaque upper surface.

5. A fixture as defined in claim 3 wherein said envelope is spherical.

6. A fixture as defined in claim 5 wherein said sliders form a pair of gudgeons on a common diameter of the sphere.

7. A fixture as defined in claim 1 wherein said conductors are composed of detachable interfitted segments.

8. A fixture as defined in claim 7 wherein said segments are rod-shaped.

9. A fixture as defined in claim 1 wherein said sliders are provided with fastening means for immobilizing said lamp body in any selected position along said arcs.

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