

[54] **IMPROVEMENTS APPLIED IN THE MANUFACTURE OF LAMPS**

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[51] Int. Cl. .... **F21s 1/02**

[58] Field of Search..... 240/73 BJ, 73 R;  
285/276

[56] **References Cited**

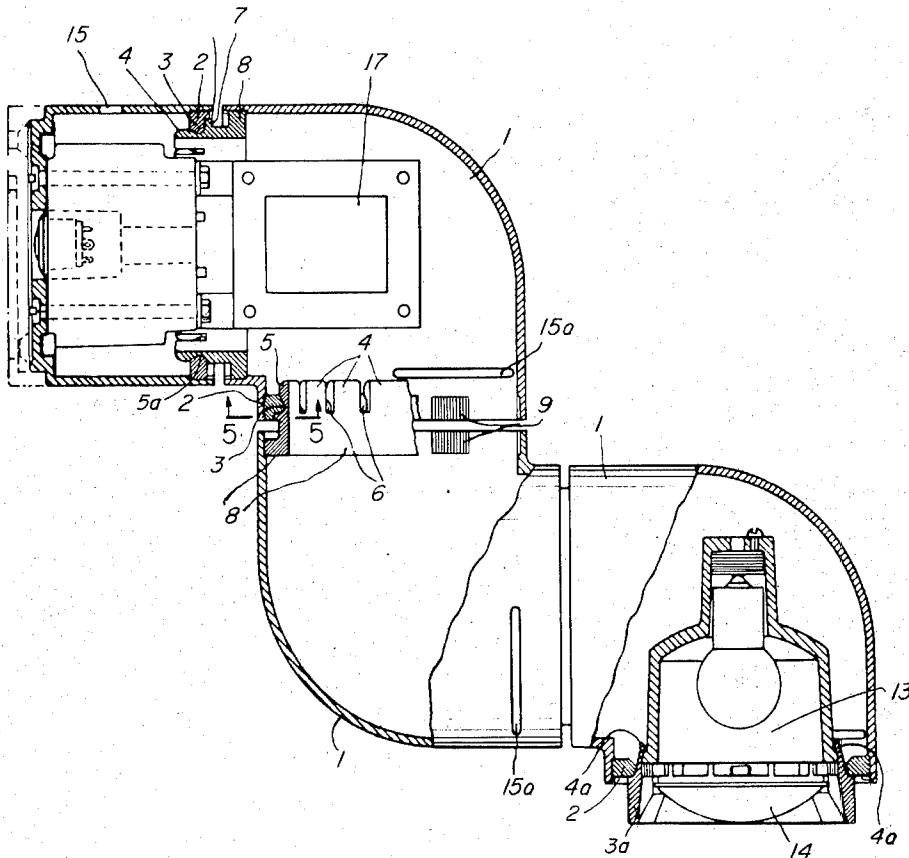
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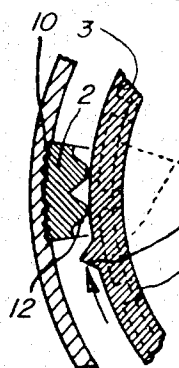
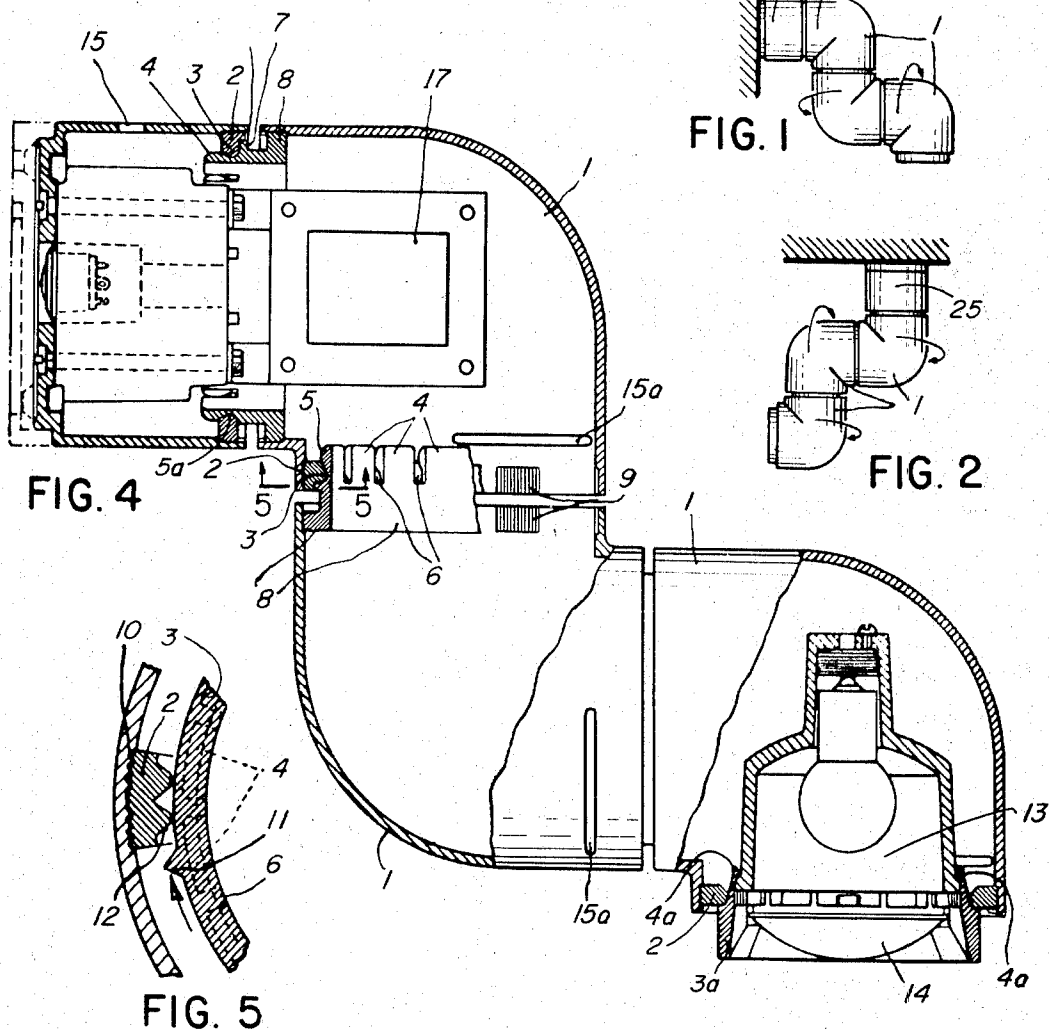
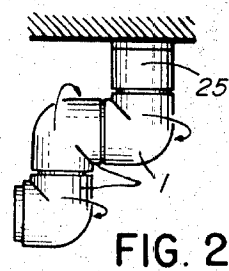
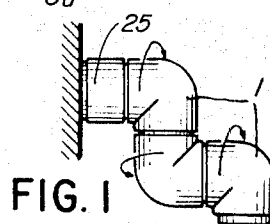
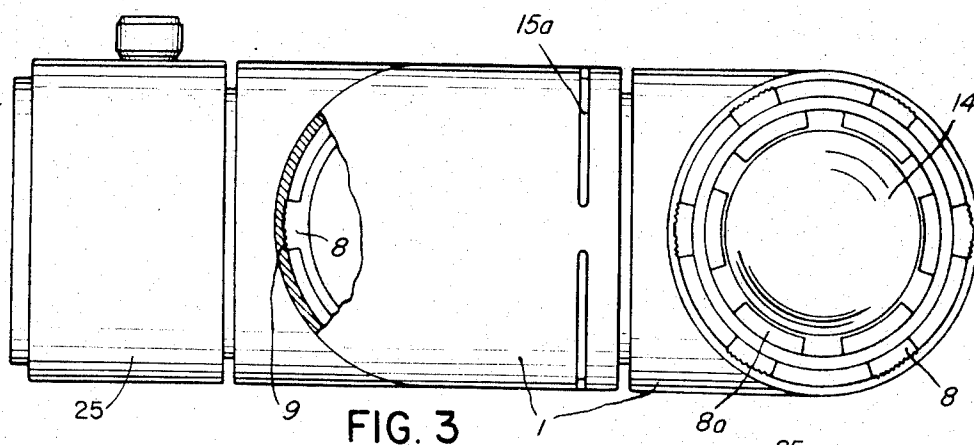
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[57] **ABSTRACT**

The base and three elbowed sections of the lamp are rotatably and detachably secured together by a ring fixed inside the open end of one section and seated in an annular groove in the outer peripheral wall of a resilient crown fixed inside the adjacent open end of the next section. A luminous device with focusing lens is secured in like manner in the outer end of the last elbowed section and air vents are provided in the various sections for the circulation of air through the sections and over the transformer mounted in the base.

**7 Claims, 5 Drawing Figures**





## IMPROVEMENTS APPLIED IN THE MANUFACTURE OF LAMPS

The present invention refers to improvements applied to the manufacture of lamps, which consist in that the lamp is made up by different sections, which can be 5 elbowed, and joined in a revolving manner by one of their openings, which allows that each one of the sections of the body of the lamp may acquire a desired position, independent from the positions of the adjacent sections, and which sections contain a lens with advance and return motion, so that the focus of the light may be scattered or made sharp with intermediate variations, and also contain the necessary transformer so as to be able to alter the voltage.

For the purpose of correct interpretation, the following case of practical realization is described as a non limitative example of the invention, with a page of drawings adjoined in which:

FIGS. 1 and 2, are elevational views of the lamp according to the improvements, and illustrate its application on a table or on a wall.

FIG. 3, is a front elevation of same lamp partially sectioned, in a larger scale.

FIG. 4, is a sectioned side elevation of the lamp shown in FIG. 3; and

FIG. 5, is an enlarged detailed section according to line V—V of FIG. 4.

The lamp of this invention is made up by several elbowed pieces or sections 1 which are rotatably joined to the adjacent sections so as to allow one section to rotate on the other. The rotatable joint between adjacent sections comprises a ring 2 and a crown 3, which are placed respectively on the inside of one of the ends of the cylinder shaped sections of the lamp, and in the inside of the end part of the other adjacent cylindrical section to be coupled, the crown 3 having in one of its edges a series of resilient press fingers 4, which are arranged in a perpendicular and annular manner, said press fingers 4 having on their back part a convex ridge 5 which, when all the press fingers are in place, form a ring-like groove 5a that is disposed inwardly of the convex ridge and interrupted by separations 6 between each press finger.

Two adjacent cylindrical sections 1 are rotatably joined by facing the points of the press fingers 4 of one section towards the ring 2 of the other section and, by means of pressure, forcing the press finger 4 into the ring 2 and seating the ring 2 inside the groove 5a. Radial extending abutment means 7 on the crown 3, being more prominent than the press fingers 4 acts as a stop piece for the ring 2. When a simple separating traction is exerted on any of the two joined sections 1, and indeed the separation is achieved when the antagonistic action of the press fingers 4 is surpassed.

The rings 2 and the crowns 3 are provided with radial tailpieces 8, 8a on the outer edge of same, which are lodged in corresponding radial grooves 9 of the interior part of the edge of the opening in which they must remain, for which purpose the back part of these radial tail pieces are also grooved, in such a manner that their grooves link in with or are seated in the projections of the grooves 9. When a greater fastening of the radial tailpieces 8, 8a to the grooves 9 of the interior walls of the openings of the sections 1 is desired, then, there also is a joining adhesive 10.

To limit the rotation of one section 1 in relation to the other, and in order that it does not reach 360°, the

run limiting stop pieces 11 and 12 are provided on the crown 3 and ring 2 respectively.

When the crown 3 of press fingers 4, apart from coupling with the ring 2 of the faced piece in a rotatory manner, must support the overhanging internal luminous device 13 and the movable lens 14, with advance and return movements, then the press fingers are of different lengths in relation to each other, so that those that protrude most 4a act as support and fastening means for the cantilever elements 13 and 14.

On both the crown 3a which supports the lens 14 and the wall of the different sections 1 of the lamp, there are openings 15 and 15a for the renewal of air in the interior of the structure of same; there also is openings 15 for the circulation of air in the base 25 of mentioned lamp, which contains a suitable transformer 17.

Having thoroughly described the nature of the invention, such changes and modifications as would occur to one skilled in the art are considered to be within the purview of this invention as fall within the scope of the appended claims.

I claim:

1. Improvements in the manufacture of lamps, characterized by a lamp made up by several cylinder shaped sections, including a base section and elbowed sections, which are rotatably joined by coupling means to the adjacent section, said coupling means comprising a ring and a crown, which are fixed respectively on the inside of one of the ends of one of the cylinder shaped sections of the lamp, and on the inside of the opening of the other cylindrical section which is adjacent and is joined with the first; the crown, in its free edge being provided with several press fingers, arranged in an annular and perpendicular manner, said press fingers having a concave groove on their outer surface, which in a conjoint manner form an annular groove interrupted by the separation which exists between each press finger, the inner peripheral edge of said ring being rotatably seated in said annular groove, the top edge of the press fingers being more prominent than the concave groove thereby forming a stop piece for the ring, whereby when a light separating traction is exerted on any of adjacent joined sections, separation will be achieved when the antagonistic action of the press fingers is surpassed.

2. Improvements in the manufacture of lamps, according to claim 1, in which the ring and the crown are provided with spaced radial tailpieces on the outer edge thereof set in corresponding grooved areas on the inside part of the edge of the opening in which they are fixed, the back part of said radial tailpieces also being grooved and seated in the notches that are between the projections of the grooves of the inside walls of the openings.

3. Improvements in the manufacture of lamps, according to claim 2, in which the radial tail-pieces and the grooves on the interior walls of the openings of the sections are secured together by a joining adhesive.

4. Improvements in the manufacture of lamps, according to claim 1, in which cooperating stop means on the ring and on the crown limit the rotation of a section in relation to an adjacent section, so that it does not reach 360°.

5. Improvements in the manufacture of lamps, according to claim 1, in which when the crown of press fingers also supports an overhanging internal luminous device and a movable lens, the press fingers being of

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different lengths in relation to each other, so that those that protrude most act as support and fastening means for the luminous device and lens.

6. Improvements in the manufacture of lamps, according to claim 5, in which in the crown which supports the lens and in the walls of the different sections of the lamp structure, and in the base of the lamp there

are openings for the circulation and renewal of air in the interior of the lamp.

7. Improvements in the manufacture of lamps according to claim 6, in which a transformer is mounted in the base of the lamp and extends into the interior of the adjacent cylinder shaped section.

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