May 20, 1930. H. E. SLADE 1,759,422

LAMP SOCKET CASING

Filed June 17, 1929

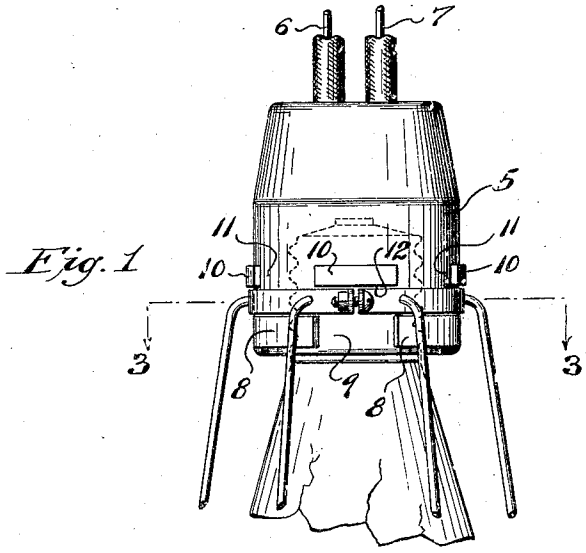



Fig. 1

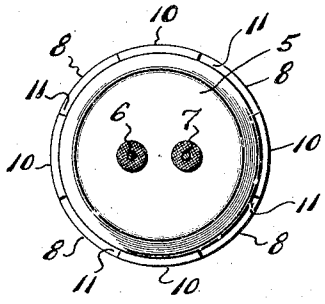



Fig. 2

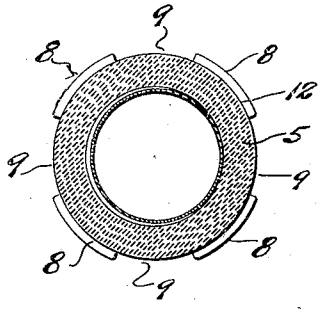



Fig. 3

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# UNITED STATES PATENT OFFICE

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## LAMP-SOCKET CASING

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This invention relates to an improved form and construction of one-piece molded lamp socket casing; and this invention has for its principal object to provide a one-piece molded lamp socket casing having novel means to form thereon a guard or shade holder groove.

Molded lamp socket casings as heretofore manufactured have been furnished with guard or shade holder grooves formed by spaced continuous annular ribs extending around the exterior surface of the casing body. In some types, the casings have been molded in two parts or halves and then assembled and joined together by mechanical fastening means, and in other types, a one-piece casing has been molded by means of a split mold. In the former type the production expense is relatively high since it involves both assembling costs and the cost of the necessary mechanical fastening devices; and furthermore, owing to the two-piece form, the same do not provide a casing of neat and attractive appearance. In the latter type, the molding can only be accomplished by a split mold, and consequently the mold cost is comparatively high while the production per hour is lessened, all of which increases the cost of production; and furthermore, owing to the split cavity of the mold, disfiguring fins or marks are left on the exposed surfaces of the finished casing which detract from its appearance.

It is the principal object of this invention to provide a novel socket casing which may be molded in one piece so as to provide the desired annular seating groove for the attachment of guards or shade holders, without necessity of employing a split mold; and to this end the socket casing is designed to provide spaced annular rows of separated rib projections, with the projections of one row staggered relative to those of the other row, and whereby the projections of one row will be opposed to the intervening gaps between the projections of the other row. By reason of such novel construction and arrangement of elements, the casing may be readily and quickly molded in a piston type mold, wherein the box of the mold and co-operating piston are provided with finger-like members adapted to pass each other or dove-tail when brought together in mold cavity forming relation; the finger-like members thus serving to form the gaps or spaces between the desired rib projections of the finished casing.

The finished socket casing, thus furnished with the annular rows of staggered rib projections, will possess an annular seat intermediate the rows of projections for the reception of the clamp-band of a guard or shade holder; and the projections will adequately serve to prevent lateral displacement of the clamp-band when mounted in said groove.

It will thus be obvious that not only will the cost of production of the casings be reduced to a minimum, but also that the finished casing will possess an attractive and distinctive appearance.

An illustrative embodiment of the invention is shown in the accompanying drawings, in which:—

Figure 1 is a side elevation of the novel socket casing made according to and embodying the principles of this invention, the same showing the clamp-band of a guard in attached relation thereto; Figure 2 is a top end view of the novel socket casing; and Figure 3 is a transverse section of the same, taken on line 3—3 in Figure 1, but with the guard removed.

Similar characters of reference are employed in the above described views to indicate corresponding parts.

Referring to said drawings, the reference character 5 indicates the body of the socket casing which is adapted to contain within its lower open end the threaded shell contact and center contact, as commonly provided in such structures in the manner familiar to those skilled in the art, and to which are electrically connected the circuit wires 6 and 7 which enter and are molded into or otherwise related to the upper end of the socket casing.

Integrally formed in connection with the lower end portion of the socket casing body 5, so as to project from the external surface thereof, is a lower annular row of rib projec-

tions or segments 8, separated one from another by intervening gaps 9. Also integrally formed with the casing body 5, so as to project from the external surface thereof, is an upper annular row of rib projections or segments 10, separated one from another by intervening gaps 11. Said annular rows of rib projections or segments are spaced vertically apart to provide an annular seat 12 the sides of which are defined by said rib projections or segments. The essential relative disposition of the rib-projections or segments of the annular rows thereof is such that the projections or segments of one row are vertically aligned or opposed to the gaps of the other row. For example, as shown in the accompanying drawings, the rib-projections or segments 8 of the lower row are opposed to the gaps 11 of the upper row, and similarly the rib-projections or segments 10 of the upper row are opposed to the gaps 9 of the lower row. Such disposition readily permits the use of dove-tailing or interpassing fingers respectively in the box and piston portions of a piston type mold, whereby the desired formation is obtained by a single molding operation in an efficient, rapid and economical manner.

It will be understood that the number of rib projections or segments per row is subject to considerable variation, and may be more or less than the number thereof shown in the accompanying drawings, so long as the essential staggered relation of those of one row relative to those of the other is maintained. It will also be obvious that the rows of rib projections or segments may be spaced any desired distance apart in order to provide an annular receiving channel or groove of desired width; and, furthermore, that the spaced rows of rib projections or segments may be located at any desired point intermediate the upper and lower ends of the socket casing body.

In the use of the novel socket casing of this invention, when it is desired to apply a guard or shade holder thereto, the clamp-band of the latter device (as shown in Figure 1) is engaged in the annular seat 12, and, when tightened up, is held against displacement in one direction by the rib projections or segments 8 and in the other direction by the rib projections or segments 10, which respectively abut opposite sides thereof.

It will be understood that the socket body embodying the novel features of this invention may be made of any desired kind of plastic or other material capable of being formed by a molding method.

As many changes could be made in the socket casing structure herein described and shown in the accompanying drawings without departing from the scope of the invention as defined in the appended claims, it is intended that all matter contained in the description or shown in the drawings shall be interpreted as illustrative and not in a limiting sense.

I claim:—

1. In a one-piece socket casing, means to provide an external annular shade holder or guard seat, comprising spaced annular rows of rib projections integral with the casing body, the rib projections in each row being separated by intervening gaps, and said rib projections of one row being in aligned opposition to the gaps in the other row.

2. In a one-piece socket casing, means to provide an external annular shade holder or guard seat, comprising a plurality of exteriorly projecting segments integral with said body and disposed in vertically spaced staggered relation one to another.

3. In a socket casing, a plurality of external annularly spaced projections integral with the casing, said projections being arranged in parallel rows around the casing body, with the projections of one row opposing the spaces between the projections of the other row, and said rows of projections respectively defining the upper and lower limits of a guard or shade holder groove.

In testimony, that I claim the invention set forth above I have hereunto set my hand this 14th day of June, 1929.

HAROLD E. SLADE.