A. C. HOUGH.

SHADE FIXTURE.

APPLICATION FILED JULY 19, 1917.

1,252,113.

Patented Jan. 1, 1918.

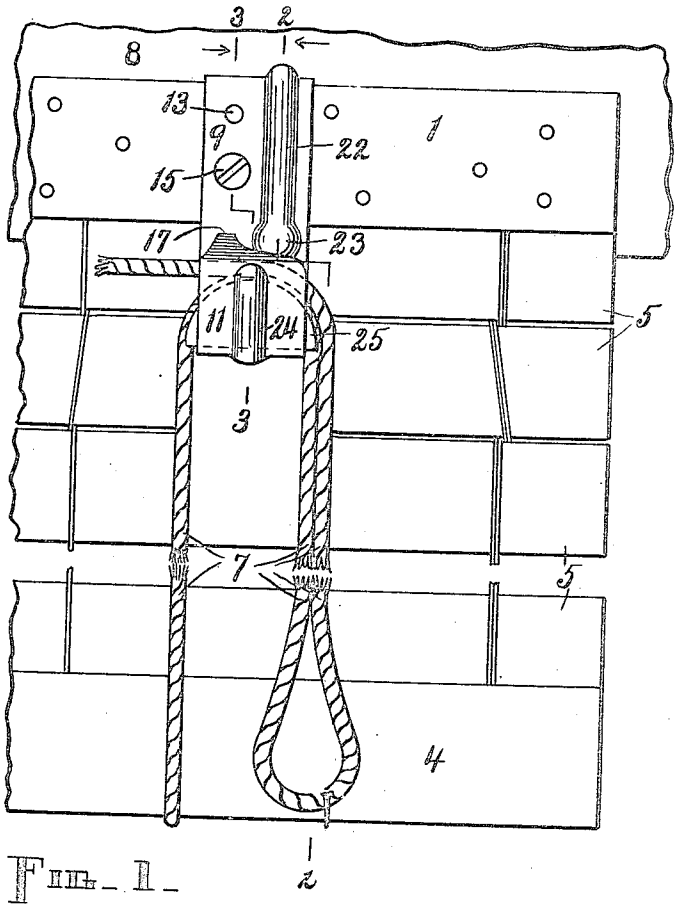


Fig. 1.

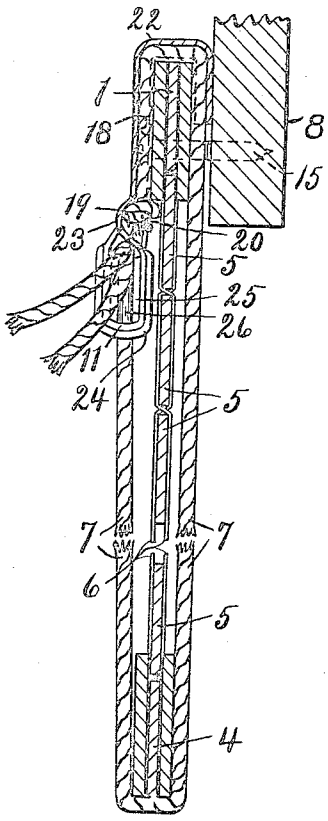


Fig. 2.

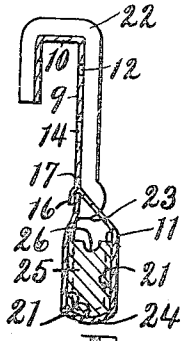


Fig. 3.

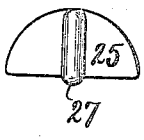


Fig. 4.

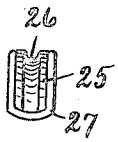


Fig. 5.

WITNESS:

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SHADE-FIXTURE.

1,252,113. Specification of Letters Patent. Patented Jan. 1, 1918.

Application filed July 19, 1917. Serial No. 181,535.

To all whom it may concern:

Be it known that I, AZEL C. HOUGH, a citizen of the United States of America, residing at Janesville, in the county of Rock and State of Wisconsin, have invented a new and useful Shade-Fixture, of which the following is a specification.

My invention relates to cord-supporting devices designed to be attached to that type of flexible shades which are capable of being rolled up and unrolled through the medium of cords, and resides in a supporting member attachable to a shade and provided with a separate, segmentally-grooved, anti-friction member over or through which the roll-up cord operates, and having a knot-receiving part for the fixed end of said cord, all as hereinafter set forth.

This invention is in the nature of an improvement of the shade fixtures covered by United States Letters Patents Nos. 1,182,373 and 1,187,458.

It has been found to be impracticable to stamp out in one piece, at a reasonable cost, a fixture of this kind, in the best mechanical form, with a hook or other kind of cord-runner or supporting device for the roll-up cord of such shape that said cord can run freely and properly therein or therethrough because of the dimensions required to reduce the friction of the cord to the minimum, and the large waste of material incident thereto. One object of my invention, therefore, is to provide a fixture in which the cord friction is reduced to the minimum, and at the same time a large saving is effected in the amount of stock required for the main and stamped portion of the fixture.

Another object is to afford both ample space for the anchor knot of the cord, and efficient holding means therefor.

The anti-friction cord member or cord-runner with which my fixture is provided is termed a "glide," and the same is preferably made of glazed porcelain, or glass, which two materials are more nearly frictionless than other commercial materials in common use, although I may employ some other material such as steel or other metal.

No pulley is required, of course, in this fixture. A pulley in such a device is highly objectionable for reasons fully stated in said Patent No. 1,182,373.

Other objects and advantages will appear in the course of the following description.

I attain the objects and secure the advantages of my invention by the means illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of fragmentary portions of the top and bottom parts of a porch shade, and of an attached fixture which embodies a practical form of my invention; Fig. 2, a vertical section through said shade parts and said fixture, taken on lines 2—2, looking in the direction of the associated arrow, in Fig. 1; Fig. 3, a vertical section through said fixture, on lines 3—3, looking in the direction of the associated arrow, Fig. 1; Fig. 4 a side elevation of the glide, and, Fig. 5, an end elevation of said glide.

Similar reference characters refer to similar parts throughout the several views.

Those portions of the shade appearing in connection herewith comprise top and bottom moldings 1 and 4, respectively, intermediate slats 5, and warp strands 6. The right-hand top and bottom portions only of the shade are shown with a single fixture mounted thereon, but it will be understood that usually the complete shade requires two fixtures, or a second fixture similar to the first. A roll-up cord 7 is provided for the shade. This cord in practice usually extends from the top of the shade, adjacent to the edges thereof, down behind and under the bottom of the shade, when the latter is extended full length, and up to the top in front, having a horizontal reach at the top in front, and a loop of sufficient proportions adjacent to said right-hand edge, the arrangement being similar to the disclosure in said Patent No. 1,182,373. The construction and operation of these elements are old and well known, and need no extended explanation; furthermore the details of construction may vary in different makes of shades.

At 8 is represented a portion of a porch or building supporting member or support

for the shade and to which the latter may be fastened in the manner presently to be explained.

Passing now to the fixture, it will be seen that the same comprises a front portion or body 9 having behind, at the top, a hook 10, and in front, at the bottom, a stirrup, loop, eye, or holder 11. The body 9 has a small opening 12 therein, for a nail 13 with which the fixture is secured in place on the shade molding 1, and a larger opening 14 therein, for a screw 15 with which said fixture and molding are attached to the support B. The hook 10 is shaped and proportioned to fit over the top of the molding 1 and support the body 9 on the front of said molding. The eye or holder 11, at the base of the body 9, may be formed by turning up the bottom part of said body and leaving a space between the main and upturned portions. In the present case, a tongue 16 is made at the free end of the aforesaid upturned portion, and such tongue is thrust through an opening 17 in the body 9 and bent downwardly behind said body, as clearly shown in Fig. 3. In this manner a strong and substantial carrier is produced. A cord-receiving groove 18 is formed inside of the body 9 and the hook 10, such groove starting from a point approximately in front of the under edge of the molding 1, when the fixture is in place, and extending upwardly, rearwardly, and downwardly to the bottom of the back side of said hook. At the base of the groove 18 in front is an enlargement or recess 19 which opens into said groove. This recess is designed to receive a knot 20 at the upper end of the roll-up cord 7, and to afford with the bottom front edge of the molding 1 a secure anchorage for said knot and cord. The cord 7 extends from the knot 20 upwardly, rearwardly, and downwardly, through the groove 18 and between the sides of said groove and the molding 1. A central transverse groove 21 may be formed inside of the holder 11, such groove having vertical end portions in the front and back sides of said holder, and a horizontal intermediate portion in the bottom of said holder, substantially as shown, and being for the purpose explained hereinafter.

The parts of the fixture thus far described can be formed out of a single piece of sheet-metal, with the aid of suitable punches and dies, and such parts, (with the exception of the recess 19 and the holder 11 with its groove 21), together with the fastening means therefor, are similar to the fixture and fastening means covered by said Letters Patent No. 1,182,373. When the said parts are punched out of sheet-metal, as here represented, an exterior rib 22 and protuberance 23 are provided for the groove 18 and recess 19, respectively, and an exterior rib 24 for the groove 21.

The eye or holder 11 is designed to receive therein a block 25 having a groove 26 for the cord 7. This grooved block constitutes the glide to which reference has been made, and the same should be of a size and shape which will enable it to fit within the holder 11, and have a segmental or semi-circular upper edge in which the groove 26 is located, or in any event such groove should be segmental or semi-circular in its major direction, and adapted in cross-section to receive the cord 7 and permit the latter to run freely therein. The ends of the glide 25 should project more or less beyond the adjacent edges or ends of the holder 11, so as to enable the cord 7, which passes in the groove 26 over said glide, to clear such edges or ends. Being of practically frictionless material and of a size and shape best adapted to accommodate the cord 7, as is the case, the glide 25 constitutes a cord-runner that does not appreciably resist or wear said cord as the latter runs in or slides through the groove 26, and at the same time said glide is free from the objections to a pulley.

It is necessary, of course, that the glide 25 be held securely in place in the holder 11, and as one means for this purpose I have provided said holder with the interior groove 21 and said glide with an exterior rib 27 to fit within such groove, said rib being on the sides and bottom of said holder, in the transverse central plane thereof. By this rabbeting the parts together, I utilize simple and common connecting or joining means to obtain the necessary security and preclude the possibility of displacement of the glide.

The knot 20, at the upper end of the cord 7, is so held by the edges of the recess 19 and the adjacent edge of the molding 1 that it resists any pull on said cord tending to draw said knot upward, and the latter is also concealed within said recess. After passing from behind under the molding 4 and upwardly, the cord 7 passes through the holder 11, bearing and sliding in the groove 26 in the glide 25. The movement of the cord over the glide is very free, almost without friction, in fact, as previously pointed out.

This fixture might be made up without one or the other of the new elements, or, in other words, the recess 19 might be employed in a fixture having an ordinary cord-runner or a pulley for the roll-up cord, and the glide 25 can be used without being associated with said recess. As a matter of fact, my glide feature is applicable to other forms of supports therefor besides that herein shown and described. Furthermore, the support for my cord glide might be made attachable to the support 8 instead of to the molding 1, that is to say, said glide might be supported by suitable means from said support 8. It is clear, therefore, that various modifications and changes in the construc-

tion and arrangement, and in the shape and size as well, of some or all of the parts of this device may be made without departure from the nature of my invention as defined by the appended claims.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. As an improved article of manufacture, a shade fixture comprising a member attachable to a shade, and being hollowed inside to form a knot-receiving recess and a cord-receiving groove.

2. As an improved article of manufacture, a shade fixture comprising a hook-provided member adapted to engage the top portion of a shade and extend down in front of said portion, and provided with a cord-runner, said member having in its downwardly-extending part a hollow portion which forms a knot-receiving recess, and also having a cord-receiving groove, the latter extending from said recess upwardly, rearwardly, and downwardly.

3. The combination, with a flexible shade having a projection adjacent to the top thereof, and a knotted cord, of a fixture comprising a member attachable to the top part of said shade, and having therein a knot-receiving recess contiguous to said shade projection, and also having a cord-receiving groove leading from said recess, the arrangement of parts being such that the knot on such cord is held by said projection and the recessed portion of said shade member.

4. As an improved article of manufacture, a shade fixture comprising a member attachable to a shade, and having a part bent to form a holder and into interlocking engagement with said member, the latter being slotted to permit of such engagement, and an independent anti-friction non-rotary glide in and attached to said holder, for a roll-up cord.

5. The combination, in a shade fixture, with a member consisting of a body attachable to a shade, and a holder at the bottom of said body, said holder having intermediate vertical and horizontal engaging parts, of an independent anti-friction non-rotary cord glide receivable in said holder and provided with intermediate vertical and horizontal engaging parts to interlock with said first-named engaging parts.

AZEL C. HOUGH.

Witnesses:
VERNA FLANERY,
HAZEL T. WEIRICK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."