May 1, 1928. 1,667,741

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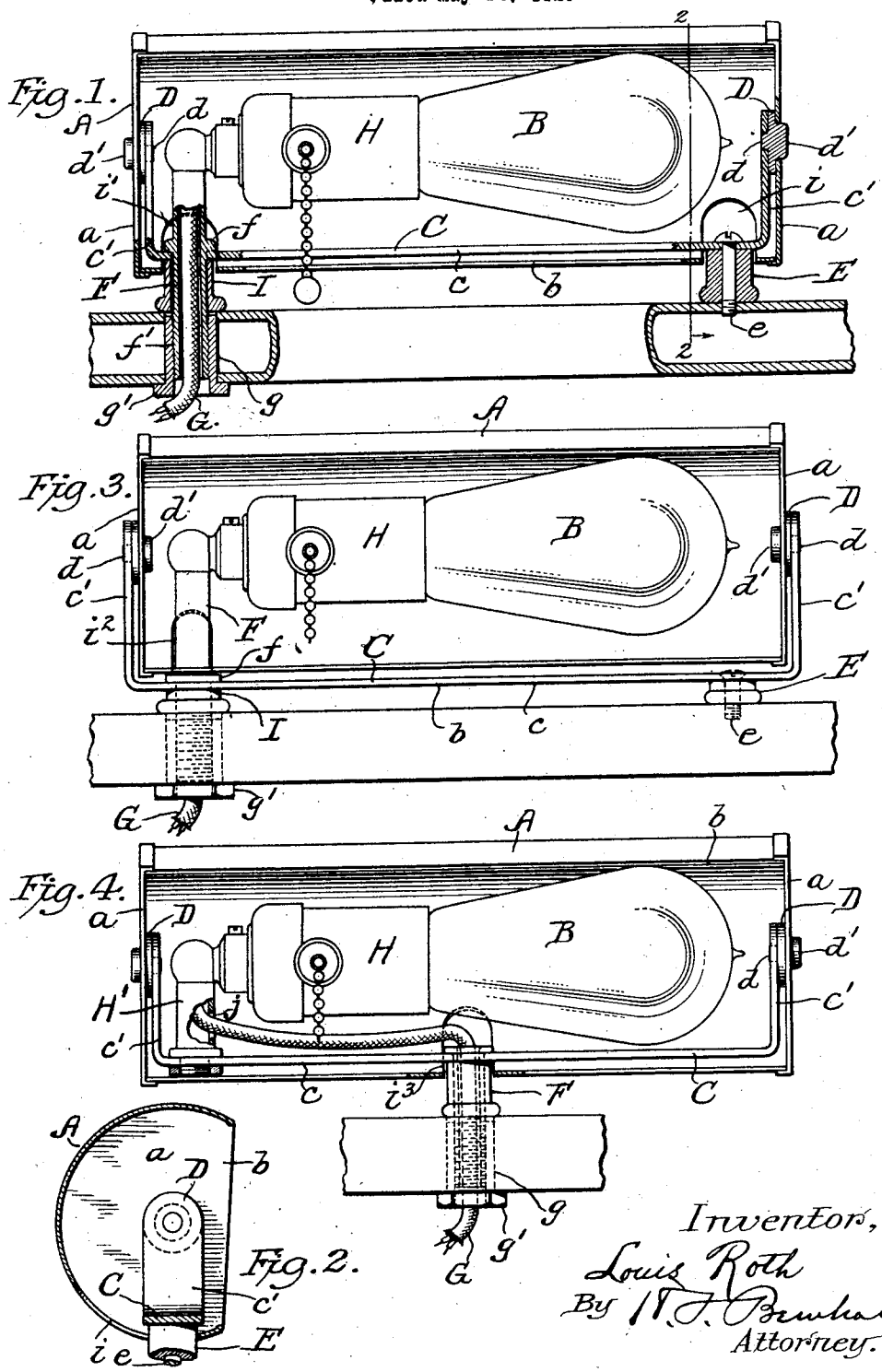
LIGHT FIXTURE FOR BEDSTEADS AND OTHER ARTICLES

Filed May 14, 1926



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Patented May 1, 1928. 1,667,741

UNITED STATES PATENT OFFICE.

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LIGHT FIXTURE FOR BEDSTEADS AND OTHER ARTICLES.

Application filed May 14, 1926. Serial No. 109,023.

My invention is a fixture for bedsteads and other objects, designed to afford illuminating means for the convenience of a reader while resting at ease. Although the fixture is useful, more particularly, in connection with a bedstead to meet the requirements for illumination of a reader while lying in bed, still it is apparent that the fixture may be used in connection with other articles of furniture, and, further, that it may be used in other relations.

In a fixture of the character under consideration, it is desirable that provision be made for concentrating the light rays and for directing such rays upon a book or other object, and it is desirable, also, that provision be made for moving the reflector to suit the convenience of the reader or user.

With these ends in view, my invention is a fixture wherein a reflector may be adjusted as and when required, said reflector being supported by simple means and said reflector being shiftable to various positions without resorting to the use of devices requiring manual adjustment for retaining the reflector in position.

Broadly stated, my invention is embodied in a reflector-supporting member engageable frictionally with parts of the reflector for retaining the latter in either of a plurality of operative positions.

Other functions and advantages of the invention will appear from the following description taken in connection with the drawings, wherein—

Figure 1 is a view partly in side elevation and partly in longitudinal section of a bed light fixture embodying the invention.

Figure 2 is a cross section on the line 2—2 of Figure 1.

Figures 3 and 4 are longitudinal sectional elevations of other embodiments of the invention in bed light fixtures.

A is a hood constituting a reflector mounted to encase, at least partially, a source of light afforded by an incandescent lamp B. The reflector is a casing substantially arcuate in cross section, see Figure 2, said casing being closed at the ends by heads, *a*, and open on one side by the provision of a wide aperture or slot *b*. The reflector is rotatable on a longitudinal axis afforded by journals entering the heads, *a*, whereby the reflector is mounted in a manner to permit it to be rocked or turned for changing the opening *b* directing the rays of light in a desired direction. Preferably, the hood is composed of metal, and the inner surfaces of the hood, including the heads *a*, are coated with a suitable light reflecting medium, the coating being of any desired material or substance.

For rotatably supporting the hood, I employ a stirrup or yoke, C, the same being shown as comprising a straight longitudinal member, *c*, and a plurality of arms, *c'*, extending at an angle to member *c*, at the opposite ends thereof. The hood, A, and yoke or stirrup, C, may be arranged in various ways, as e. g. the yoke may be positioned within the hood as in Figures 1, 2 and 4; or said yoke may be arranged exteriorly relatively to the hood, as in Figure 3; but whatever the relative arrangement may be, the hood is rotatably supported by, and frictionally engaged with, said yoke. The frictional engagement is obtained by the spring or elasticity inherent in the arms, *c'*, of the yoke, and such frictional relation and pivotal connection is useful in obtaining the rotatable movement of the hood, and in retaining said hood in the different positions to which said hood may be moved or shifted. In the particular example of frictional and pivotal relation of hood to yoke shown, I employ disks, D, having trunnions, *d*, *d'*, each disk being interposed between one arm, *c'*, of the yoke and one head, *a*, of the hood, whereas the trunnions *d*, *d'*, are fitted loosely in apertures provided in the yoke arms *c'* and the hood heads *a*, respectively. The elasticity of the yoke arms *c'* presses the disks D into frictional contact with the closed ends or heads *a* of the hood, whereas the trunnions *d*, *d'*, afford the axis on which the hood may be turned as required. Obviously, the attendant is required to apply some pressure to the hood for turning it to overcome the frictional contact due to the elasticity of the arms *c'* in pressing the disks D against the hood heads *a*; but when the hood shall have been shifted, and the pressure is removed, then the yoke coacts with the friction disks in holding said hood in the position to which it will have been shifted. This operation takes place without requiring the attendant to manipulate set screws or other devices ordinarily used in locking the parts in place, and the friction disks D and their trunnions turn with the hood to avoid defacing or marring the coated surfaces of the hood ends.

The yoke or stirrup functions as the primary support for the rotatable hood, but for fixedly attaching the yoke or stirrup on the bedstead or other article, I may employ various forms of attaching devices, examples of which are depicted in the drawings.

In one form, shown in Figures 1 and 3, the yoke is fixedly attached at two points, but in Figure 4 a single attaching means is used centrally of the yoke. The two part attaching means for Figures 1 and 3 embodies a short post, E, with a screw, *e*, engageable near one end of the yoke and fixedly attached to the article, and it embodies, also, a longer post, F, with provision for the accommodation of the electric cable, G, and a lamp socket, H. The longer post, F, is hollow and provided with a collar, *f*, and is threaded at *f'*, for the reception of a sleeve nut, *g*, flanged at *g'*. Cooperating with the tubular post F is a spacing sleeve or collar, I, fitted loosely on the tubular post, with one end contacting the stirrup, C, and the other end engageable with the bedstead, see Figure 1, whereby the operation of tightening the sleeve nut *g* on the threaded post *f'* draws the collars *f*, *g'*, and the ends of the spacing sleeve or collar I into engagement tightly with the bedstead and the yoke C for fixedly holding said yoke C and the lamp fixture as a whole in firm connection with the bedstead or other article to which the fixture is applied. The posts E, F, pass from the outside of the hood to the interiorly positioned yoke or stirrup C within the hood, and to allow for the turning or rotating movement of the hood relatively to the yoke, I provide slots *i*, *i'*, in the curved part of the hood, said slots being at or near the ends of said hood and accommodating the posts E, F, so that said posts act to support the yoke C fixedly in place, whereas the slots *i*, *i'*, allow for the pivotal movement of the hood with respect to the posts E, F.

With the yoke C arranged exteriorly to the hood, it is necessary to provide a single slot, as i^2, in the hood for the accommodation of the longer tubular post F. It will be noted that in Figure 2 a short post E and screw *e* are used near one end for the outside yoke, whereas the longer tubular post F passes through the slot i^2, and through the yoke C, in order that it may afford the support for the lamp socket H.

Again, the yoke or stirrup may be supported centrally and at a single point, as in Figure 3, but in this form of construction, the hood is slotted centrally and at a single place, as at i^3, to accommodate the fixture post F and the parts associated therewith, whereby the slot i^3 in the hood allows said hood to turn on the axis afforded by the trunnions *d*, *d'*, such turning of the hood by reason of its slot i^3 taking place relatively to the tubular fixture post F. In this form, the lamp socket H should be attached fixedly to the yoke or stirrup, and for this purpose I provide a short member H' which carries the lamp socket H and is attached in a desirable manner to the yoke C, suitable provision being made as by a slot, *j*, for leading the cable, G, from post, F, to member H', and thence to the usual terminals of the lamp socket H.

It is apparent that the lamp socket H may be of any desired kind, such as the pull chain socket shown, and that various details of the form and constructions shown may be changed by a skilled constructor within the limits of my invention.

Having thus fully described the invention what I claim as new and desire to secure by Letters Patent is:

1. In a light fixture, a slotted hood provided with end members and with a light opening, a spring yoke or stirrup including arms which extend across the end members of said hood, means for supporting said yoke, said slotted hood and the yoke-supporting means being relatively positioned for the hood to turn relatively to the supporting means for determined distances, and means for pivotally supporting the hood on said arms of the spring yoke.

2. In a light fixture, a slotted hood provided with end members and with a light opening extending lengthwise of the hood, a spring yoke or stirrup the arms of which are positioned crosswise of said end members, means for pivotally connecting the end members of the hood and the arms of the yoke or stirrup whereby the hood is free to turn on an axis afforded by said pivotal connecting means, which axis is longitudinally of the hood, and supporting means for said yoke or stirrup, said slotted hood and the yoke-supporting means being relatively positioned for the hood to turn on said longitudinal axis and relatively to the supporting means without interference by said yoke-supporting means.

3. In a fixture of the class described, a hood, a spring yoke or stirrup, and frictional devices having pivotal relation to the stirrup for applying yielding pressure from the yoke to the hood, said frictional devices being rotatable with the hood.

4. In a fixture of the class described, a hood, a spring yoke or stirrup, and friction disks having trunnions, whereby the hood is pivotally mounted and yielding pressure from the yoke or stirrup is applied to said hood.

5. In a fixture of the class described, a hood provided with slotted means adapting said hood for rotative movement, a spring yoke or stirrup with frictional connection to said hood, and a post for supporting the stirrup fixedly while affording means for

the slotted hood to turn relatively to said post.

6. In a fixture of the class described, a slotted hood, a post extending through a slot of said hood, a spring yoke in fixed relation to said post, and frictional means affording a pivotal connection of the hood to said yoke.

7. In a fixture of the class described, a slotted hood provided with a light [illegible] a fixed post occupying such relation to the slotted hood that said hood may be rotated relatively to the post, a spring yoke carried by said post, and frictional means affording a pivotal connection of the hood to said spring yoke.

In testimony whereof I have hereto signed my name this 11 day of May, 1926.

LOUIS ROTH.