March 24, 1931. M. GUETT 1,797,983

ELECTRIC LAMP FIXTURE

Filed June 24, 1927

Fig. 1

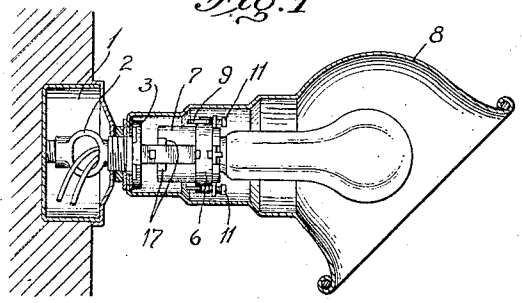


Fig. 2

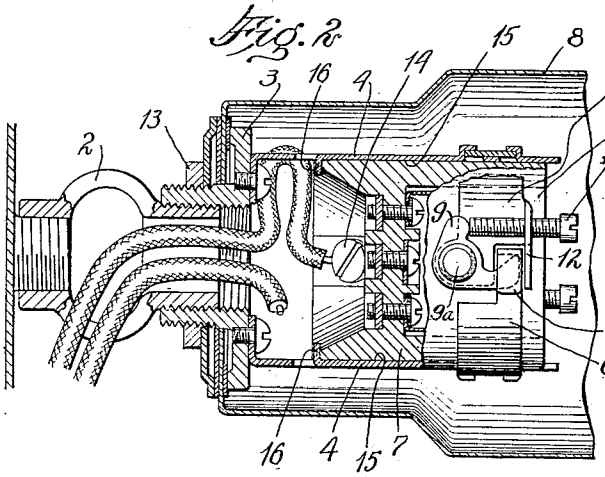


Fig. 3

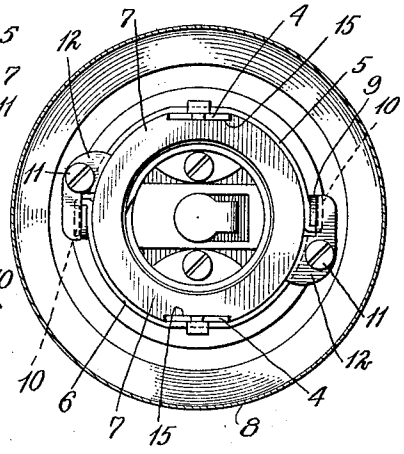


Fig. 4

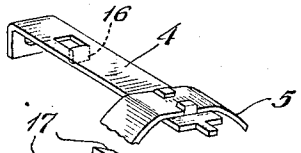


Fig. 5

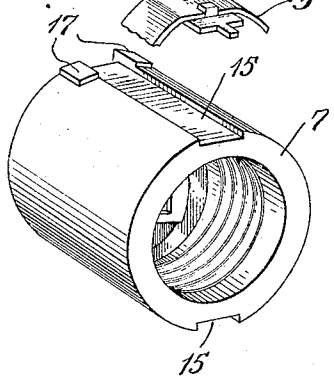
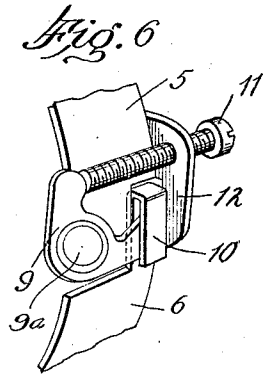


Fig. 6



Maurice Guett INVENTOR

BY

Jeffrey Kilbourn & Eggleston

ATTORNEY

Patented Mar. 24, 1931 1,797,983

UNITED STATES PATENT OFFICE

MONROE GUETT, OF HARTFORD, CONNECTICUT, ASSIGNOR TO THE HART & HEGEMAN MANUFACTURING COMPANY, OF HARTFORD, CONNECTICUT, A CORPORATION OF CONNECTICUT

ELECTRIC-LAMP FIXTURE

Application filed June 24, 1927. Serial No. 201,097.

The invention's object is to improve the convenience of wiring and security of mounting of lamp sockets, particularly those to be located inside of husks or the bases of reflectors and the like, where the making of the electric connections is difficult on account of the restricted space; and a special and additional object of the invention is to provide easy adjustability in such mountings so that the lamp, or other translating device, can be properly located in relation to other parts.

The invention consists in the general organization and in the details, and in the combination of details, as expressed in the accompanying claims, and all of which are exemplified, though without limitation, by the fixture shown in the accompanying drawings, wherein Fig. 1 is a longitudinal section of the fixture employed with a form of reflector. Fig. 2, a vertical axial section partly in elevation; Fig. 3 a cross section and end view of bracket structure and Figs. 4, 5 and 6 details.

An ordinary outlet wall box 1 is shown in Fig. 1, provided with the usual hickey 2, which in the present case represents the support for the new fixture, but it will be understood that its manner of support is subject to infinite variation, according to the situation in which the fixture is to be used. The fixture includes a main bracket, comprising a head 3 and a pair of opposite fingers 4 secured to the head by screws or in any other suitable way; they could be integral. The head 3 is provided with attachment means in the form of a hollow threaded boss, by which it is screwed on to the end of the hickey 2 or other supporting member. The two fingers 4 carry and are joined by a contractile ring, which may be formed of two half rings or sections, marked 5 and 6 respectively, one being riveted or clinched to each finger as shown in Fig. 4, and the meeting ends of the two sections being connected to each other by a power-applying mechanism by means of which the ring may be contracted on or toward the lamp socket 7 which occupies the space within it.

The construction of the contracting mechanism is subject to variation, but is so designed, in all cases, as to be operable from the outer end of the fixture, that is to say by means of a screw-driver inserted through the open end of the closure 8 which, as above stated, may be any enclosure, either an ornamental husk or a reflector as illustrated in the case in hand. In the present case, the contracting mechanism comprises a bell crank 9 pivoted on a stud 9a in one end of each ring section with one of its arms extending parallel with the axis of the socket and the other transverse. The parallel arm is engaged by a hook 10 on the proximate end of the mating ring section, while the transverse arm is engaged by an operating screw 11 threaded in an outturned lug on the other section. The nicked heads of the screws face outwardly, and setting them inwards draws the ring sections together. The hook 10 of one section is guarded against slipping off of the bell crank by the extended portion of the screw lug 12, as shown in Fig. 6, and cannot be removed therefrom except by backing off its screw an appropriate distance. It is preferred to form the contractile ring in two sections, as described, and with bell-cranks and hooks at both their meeting ends, but it is within the invention to use any appropriate means for contracting the ring or otherwise clamping the bracket structure upon the socket, provided the operating member faces outwardly for convenient access by a screw driver.

The outer enclosure or reflector 8 is secured on the hollow boss of the head plate 3 by means of a clamp nut 13, and can be put in place prior to the attachment of the bracket to its support. As shown in the drawing, this enclosure completely surrounds the bracket and socket and need be of no greater diameter than will suffice to accommodate such moderate projections as are represented by the bell crank 9 and screw lug 12.

The circuit wires are pulled through the hickey and the tubular boss of the bracket structure into the interior of the latter, in the usual way, for connection to the socket terminals.

The socket 7 is of insulating material and

internally provided at its outer end with the usual contacts for receiving a standard lamp base as will be understood. At its inner end, it is provided with binding screws such as 14 for connecting the contacts with the circuiting wires. Preferably, the whole inner face of the socket is deeply recessed so that the binding screws 14 are thus protected by the surrounding insulating rim of the socket and the bare ends of the wires protruding from under the screw-heads are kept out of contact with any other part. Externally, the socket is provided with two opposite, longitudinal and flat-bottomed channels 15 or other equivalent surfaces, to receive and slide on the fingers 4. Its inward movement on these fingers is limited by two inturned tabs 16 on one or both of the fingers and its outward movement by one or more projections or lugs 17, cast or formed on the socket body. These are adapted to abut the contractile ring, but by expanding the ring sufficiently the lugs will pass under it, thus permitting the socket to be removed and inserted without completely separating the ring sections.

By contracting the ring, the two fingers 4 are clamped toward or against the flat bottoms of the channels 15 and obtain a holding or clamp surface on the socket which is approximately equal in length to the length of the latter, thereby making the connection specially secure and without exerting excessive pressure. It is not necessary that the ring itself shall clamp on, or even engage the socket, since its function, in the case in hand, is primarily to operate the fingers as clamp members, but it is nevertheless desirable that the ring also shall directly clamp the socket to give added security. Within the general scope of the invention, the ring might constitute the sole clamp member and would be sufficient for this purpose, if its width or dimension longitudinally of the socket should be sufficient to provide the desired stability for the latter, because the theory of this invention looks toward the clamping of the socket by the bracket over a long surface on the latter, substantially co-extensive with its length. By organizing the fingers as flat and slightly flexible clamp-members, snugly fitting the shallow channels 15, this object is accomplished in a simple and inexpensive manner, but other forms of engagement between bracket and socket could obviously be substituted with equal effect.

It will be apparent that when the wires have been pulled into the bracket, they can be connected to the socket while the latter is outside the enclosing husk, or sufficiently removed from the interior thereof to permit the work to be done conveniently. The wires may be then pushed back or crumpled into the space in the rear of the bracket and more or less into the rear recess of the socket as the latter is introduced into the bracket. On tightening the operating screws, the socket is permanently mounted but can be set in or out as desired within the limit of its clamp-length, thus to bring a lamp filament exactly at the focus of the reflector or in some other desired position. Even in its outermost position, the surface of the clamp-engagement between socket and bracket has considerable longitudinal extent and though the clamp length may not be as long as when the socket is placed further inward, it is still adequate, by reason of the close fitting of the fingers in the channels 15 and by the help of the ring, to hold the socket against displacement from any ordinary cause.

Having described the invention, the following is claimed:

1. In a light fixture the combination of a husk or like enclosure, a socket and a clamping bracket therein, a socket clamp on said bracket including a socket engaging member, a bell crank for operating the same and an operating screw for said bell crank disposed longitudinally of the socket with its head faced outwardly.

2. In a light fixture having a husk or like enclosure, a bracket for supporting a socket therein comprising opposite fingers longitudinally engageable with the socket, a contractile ring carried by said fingers and surrounding the socket and means adjustable to draw the ring and also the fingers into clamping engagement with said socket.

3. In a lighting fixture, the combination of a support, a husk or like enclosure thereon, a socket, a socket supporting clamp bracket mounted on the support within the enclosure and comprising opposite fingers engaging longitudinal channels in the exterior of the socket, a contractile ring adjustable to force the fingers into said channels and tightening means for said ring located between the socket and the wall of the enclosure operable from the open end of the latter when the socket is in place.

4. In a lighting fixture, the combination of a support, a husk or like enclosure thereon, a socket, and a socket supporting clamp bracket mounted on the support within said enclosure, said bracket comprising fingers and the socket slidably mounted on and in engagement therewith, means provided on said fingers for limiting the sliding movement of the socket thereon, and clamp tightening means located between the socket and the enclosure wall operable from the open end of the enclosure when the socket is in place.

5. In a lighting fixture, the combination of a support, a husk or like enclosure thereon, a bracket within the enclosure, a socket mounted on the bracket for sliding adjustment relatively thereto and a contractile ring for clamping the socket with respect to the bracket having an adjustment screw disposed longitudinally of the socket between

the latter and the wall of the enclosure with its head faced outwardly toward and accessible from the open end of the husk or enclosure.

6. In a lighting fixture of the kind described, the combination of a support, a socket supporting bracket thereon, a socket slidably supported on the bracket, stop means on said bracket for limiting sliding movement of the socket thereon in one direction, stop means on the socket for limiting its sliding movement on the bracket in the other direction, clamping means for securing said socket relatively to the bracket in predetermined position intermediate the limits established by said stop means, a husk or like enclosure on said support enclosing said support, socket and bracket and an adjustment screw for said clamping means operable from the open end of the enclosure when the socket is in place.

7. A lighting fixture comprising a husk or like enclosure, a socket-supporting bracket mounted therein in fixed relation to the enclosure, a lamp socket organized for adjustment on the bracket to accommodate different lamps to the enclosure, clamping means associated with said bracket and socket operative in one position to clamp the latter against movement relatively to the bracket and in another position to release the socket to permit its said adjustment on the bracket, and an operating screw disposed longitudinally of the socket with its head faced outwardly and accessible from the open end of the enclosure, said screw arranged to actuate said clamping means.

In testimony whereof, I have signed this specification.

MONROE GUETT.

CERTIFICATE OF CORRECTION.

Patent No. 1,797,983. Granted March 24, 1931, to

MONROE GUETT.

It is hereby certified that the name of the assignee in the above numbered patent was erroneously described and specified as "The Hart & Hegeman Manufacturing Company", whereas said name should have been described and specified as The Arrow-Hart & Hegeman Electric Company, as shown by the records of assignments in this office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 21st day of April, A. D. 1931.

(Seal)

M. J. Moore,
Acting Commissioner of Patents.