March 22, 1949. P. J. LEPORE 2,465,326

ASSEMBLY CLAMP FOR LAMP HOLDERS

Filed March 29, 1946

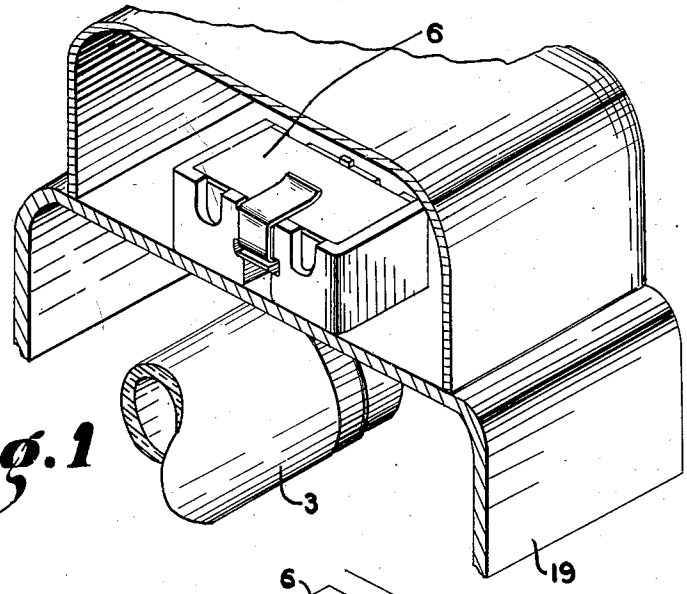
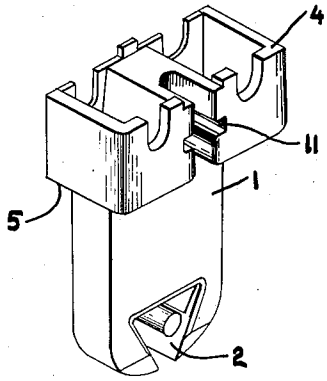


Fig. 1



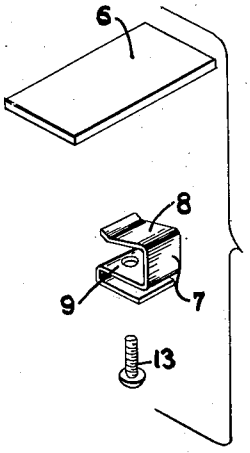


Fig. 2

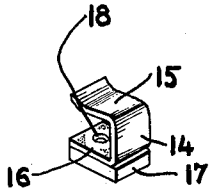


Fig. 3

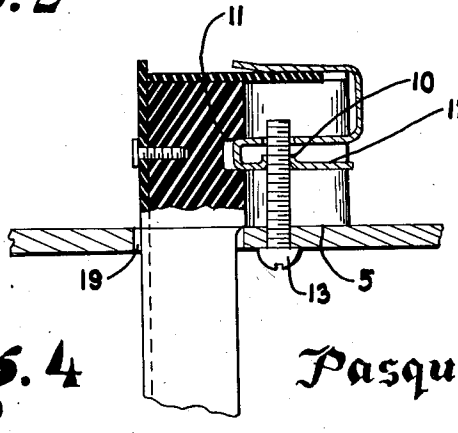


Fig. 4

INVENTOR

Pasquale J. Lepore

BY Lawrence Brems

ATTORNEY

Patented Mar. 22, 1949 2,465,326

UNITED STATES PATENT OFFICE

2,465,326

ASSEMBLY CLAMP FOR LAMP HOLDERS

Pasquale J. Lepore, Somerville, Mass., assignor to Sylvania Electric Products Inc., Salem, Mass., a corporation of Massachusetts

Application March 29, 1946, Serial No. 658,118

3 Claims. (Cl. 240—51.11)

1

This invention relates to a device for assembling and securing component parts of a lighting fixture and particularly to lamp holders therefor and the manner in which they are secured to the fixture.

An object of the invention is to provide a rigid and efficient means for attaching a lamp holder to a fixture.

A further object of the invention is to provide a simplified means for assembling and installing a lamp holder in a fixture.

A further object of the invention is to provide a single device having a multiple function acting to secure the holder to the fixture and to secure a bottom closure thereto.

A further object of the invention is to provide a device which greatly facilitates the procedure for assembling and installing a lamp holder in a fixture.

The invention consists principally of a unitary member in the form of a clamping unit or clip used in combination with a conventional lamp holder. The clamping member is generally C-shaped having upper and lower substantially parallel extensions one of which projects over the bottom of the base portion of a lamp holder and the other extends into the material of the base. Thus the clamp or clip embraces and is anchored to a portion of the base of the holder.

The lower extension acts to secure an insulating closure plate upon the bottom of the holder while the upper extension is provided with a threaded aperture to receive a screw for attaching the holder to a fixture.

To provide a better understanding of the invention a particular embodiment thereof will be described and illustrated in the accompanying drawings in which:

Fig. 1 is a perspective view in section showing the manner in which the invention is applied to a fixture for electric discharge lamps.

Fig. 2 is an exploded perspective view showing the component parts of the device.

Fig. 3 illustrates a modified form of the clamping element of the invention.

Fig. 4 is a partial cross sectional view of the assembled device.

The invention is illustrated herein as applied to a simple conventional type of lighting fixture for fluorescent lamps but may be applied to any fixture in which discharge lamp holders are used.

In the commercial production of fixtures of the type herein considered the rapid and accurate assembling of their component parts presents many problems not the least of which

2

is the holding of the parts in correct position while screws or other fasteners are introduced and made fast. The type of lamp holder to which the invention is applied consists of a body portion 1 in the outer end of which is formed a recess 2 within which is received the contact pins of the lamp 3. The holder is also provided with an enlarged base portion 4 which is hollow to receive conductors not shown having means for connection to a source of energy. The base 4 is larger than the body 1 to present a flat upper face 5 which serves as the attaching face for securing the socket to its fixture.

After the wiring operations have been completed the open end of the base 4 must be closed. To close and insulate the holder base a plate 6 of fibre or other suitable material is secured thereto. Prior to the present invention it has been common practice to provide a long screw or bolt passing through the holder supporting member, through the base of the holder and through the plate 6 and the whole assembly held together with a nut upon the end of the bolt. Obviously all of these members must be properly positioned and suitable apertures therein aligned while the bolt is placed in position and its nut tightened. To efficiently assemble the fixture in the above manner the services of a highly skilled operator and an excessive period of time is required.

Applicant's invention provides a clamp or clip member 7 having a generally C-shaped conformation with upper and lower horizontally projecting portions 8 and 9. The portion 9 of the clip is provided with a threaded aperture 10 and extends into a laterally disposed recess 11 in the base 4. The portion 8 of clip 7 extends along the bottom of the base 4 and acts to hold the plate 6 in position upon the bottom of the base 4.

Desirably the portion 9 may desirably have a reversely bent portion 12 which is spaced a short distance from and is disposed substantially parallel to the main section of the projection 9. Desirably but not necessarily the clip is made of sheet spring metal and the two sections of the extension are spaced apart sufficiently to be firmly frictionally held in the recess 11. While it is desirable that both sections of the extension 9 be provided with registering apertures only one section need be threaded such as the aperture 10. Desirably the aperture 10 is of the extruded type to provide additional engagement with the screw 13.

In Fig. 3 a modified form of clip 14 is shown. This clip 14 has a generally C-shaped conforma-

tion similar to the clip 7 and is provided with a resilient portion 15 adapted to extend over the plate 6 while its portion 16 has secured thereto a relatively heavy section 17 of metal. The section 17 may be secured in position in any suitable manner as by spot welding. A threaded aperture 18 is provided in the heavy section 17 and the section 16 in which the screw 13 is received.

To assemble the holder to the fixture after its electrical connections are made the clip 7 is forced upon the base of the holder with its portion 9 within the recess 11 and its bottom portion 8 overlying and securing the plate 6 in position. The holder and all of its component parts are thus held in their proper relative positions permitting the socket to be handled rapidly and without particular attention to displacement of the parts. The holder may then be moved into proper position on the fixture with its body portion projecting through an aperture in the reflector 19 or other part of the fixture. The screw 13 is then fed through an aperture in the reflector 19 and then through the aperture in the base of the socket and into the threaded aperture 10 in the clip 7. The section 9 of the clip acts as a nut and when the screw is tightened down upon the reflector the whole assembly is held rigidly together.

It will be noted that one relatively short screw is used to secure all of the parts together.

The practice of the invention greatly reduces the total time consumed in assembling the fixture and insures maximum accuracy of structure and permanence of the finished product.

What I claim is:

1. In combination a support, a tubular discharge lamp holder having a lamp receiving portion and an open ended hollow base, a flat insulating closure for the base, a generally C-shaped clip having one of its clamping arms extending over and holding said closure in place, the second clamping arm embracing at least a portion of said base and having a threaded aperture therein and a screw received in said aperture engaging said support and acting to clamp the holder thereto.

2. In combination, a support, a tubular discharge lamp holder having a lamp receiving portion and an open ended hollow base, a flat insulating closure for the base, said base presenting a flat attaching face opposite to its bottom face, a recess in said base between its attaching and bottom face, a generally C-shaped clip having one of its clamping arms extending over and holding said closure in position and its other clamping arm extending into said recess, a screw extending through said support and having threaded engagement with the last named arm of said clip, said screw acting to secure the holder in position with its attaching face engaging said support.

3. A combination having the elements defined in claim 2 and in which the said clip is made of strip metal its last named clamping arm having a portion bent back upon itself to form a double layer.

PASQUALE J. LEPORE.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
2,115,600	Weston	Apr. 26, 1938
2,264,141	Nemeroff	Nov. 25, 1941
2,277,468	Welch	Mar. 24, 1942
2,324,683	Despard	July 20, 1943
2,328,757	Tinnerman	Sept. 7, 1943
2,399,958	Tinnerman	May 7, 1946
2,403,240	Sawin	July 2, 1946