Jan. 23, 1962 W. M. WALDBAUER 3,018,081

MOUNTING FOR LUMINAIRES

Filed March 27, 1958

Fig. 1.

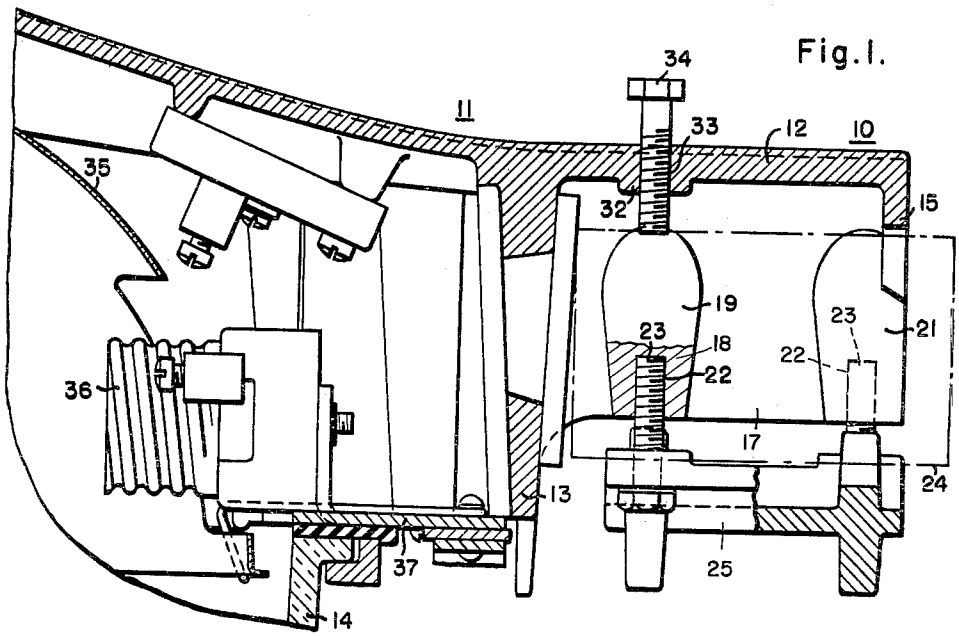


Fig. 2.

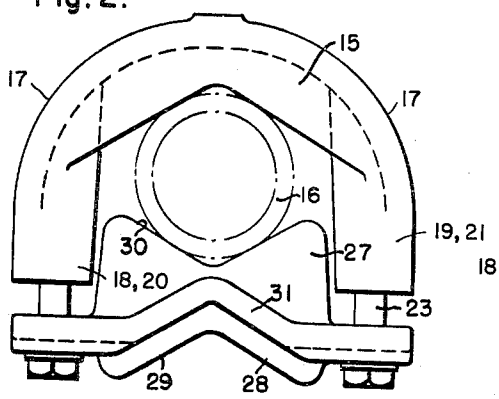
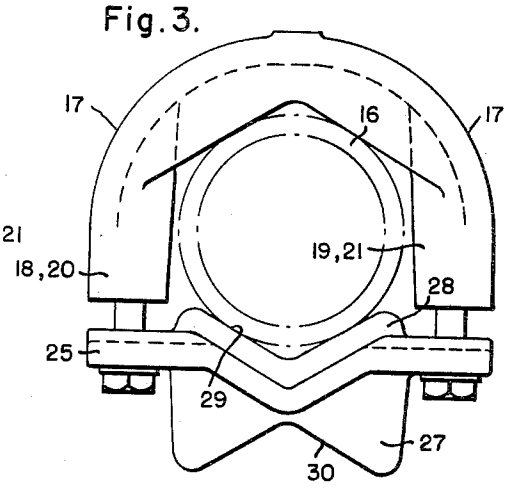


Fig. 3.



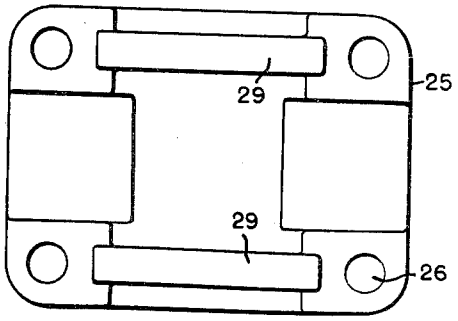


Fig. 4.

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MOUNTING FOR LUMINAIRES

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The invention relates generally to slipfitters for mounting luminaires and more particularly to a slipfitter for mounting luminaires on brackets of different sizes.

The object of the invention is to provide a slipfitter for luminaires that can be mounted on brackets of different sizes by the reversal of a part.

It is also an object of the invention to provide in conjunction with a slipfitter, equipped with a reversible member to adapt it for mounting on brackets of different sizes, means cooperative for adjusting the slipfitter relative to the bracket to properly align the luminaire.

Other objects of the invention will in part be obvious and will in part appear hereinafter.

The invention, accordingly, comprises the features of construction, combination of elements, and arrangement of parts, which will be exemplified in the construction hereinafter set forth and the scope of application of which will be indicated in the claims.

For a fuller understanding of the nature and objects of the invention, reference should be had to the following detailed description taken in connection with the accompanying drawing, in which:

FIGURE 1 is a view in section showing details of the slipfitter structure and its application to a luminaire housing;

FIG. 2 is a view in end elevation of the slipfitter showing the clamping plate arranged to engage a bracket of one size;

FIG. 3 is a view in end elevation showing the slipfitter with its clamping members arranged to engage a bracket of larger size than the bracket illustrated in FIG. 2; and

FIG. 4 is a top plan view of the clamping plate provided in the slipfitter.

Referring now to the drawing, the slipfitter shown generally at **10** is cast integral with the housing of a luminaire, the base portion of which is shown generally at **11**. While in this particular modification the supporting member or hood **12** of the slipfitter is cast integral with the housing of the luminaire, it is not necessary that these members be made in one piece. It would be satisfactory to bolt hood **12** to the housing or attach it rigidly in any other manner.

The slipfitter which will be described in detail hereinafter, actually comprises that portion of the structure illustrated in FIG. 1 which extends to the rear of the base member **13** which depends from the shell of the housing and cooperates in supporting the refractor **14** to completely enclose the light that will be housed by the luminaire. The luminaire housing may include a reflector **35** secured to the housing and socket **36** for a light source, mounted on a plate **37** also secured to the housing.

The supporting member or hood **12** is provided with depending side walls **17** spaced far enough apart to enable the fitting of them over a bracket **16**. At the pole end of the hood **12** there is another depending wall or web **15** which extends between the walls **17**. This depending end wall or clamping member **15**, as best shown in FIGS. 2 and 3, has a substantially V-shaped lower edge which, as will be described hereinafter, constitutes one of the members of a clamp for gripping the bracket **16**. Since the slipfitter is intended for use on brackets **16** of different sizes, the walls **17** will be so spaced that they will fit over the largest bracket **16** for which the slipfitter is intended.

In this particular embodiment of the invention, since the hood of the slipfitter may be cast, four bosses **18** to **21**

inclusive may be cast integral with the walls **17** and at the corners of the hood **12**. (Boss **18**, shown in FIG. 1, is partially sectioned and broken away.) While in this instance the bosses **18** to **21** inclusive are made integral to the hood, it will readily be appreciated that they may be separate units and applied in any other well-known manner such as by bolting or riveting.

The depending bosses **18** to **21** are provided for supporting a clamping member to be described hereinafter. Therefore, each of the bosses **18** to **21** has a tapped opening **22** provided therein for receiving screwbolts **23**. The tapped openings **22** will extend far enough into the bosses to assure that the screwbolts **23** make a good connection. Reference to FIG. 3 shows that the bosses **18** to **21** also will limit the lateral movement of the slipfitter on the bracket **16**.

The brackets **16** most commonly provided for mounting luminaires are usually lengths of pipe fastened in a street-lighting pole, not shown. However, it is to be understood that other types of brackets may be employed provided about 6" of the street end is rounded to adapt it to fit the slipfitter. It is considered sufficient to state that the right hand end of the pipe sections **16** as viewed in FIG. 1 and which is designated by the legend **24** is the pole end. These pipe sections are generally lengths of pipe 1¼ inches and 2 inches in diameter. The size will be determined by the load the bracket will be required to carry.

In order to clamp the slipfitter shown generally at **10** to the brackets **16**, a plate **25** is provided. This plate **25** is best shown in FIG. 4 and in size is substantially the same as the area defined by the depending walls **17** and the bosses **18** to **21** inclusive. The plate **25** will be provided with four openings **26** located at the corners and so disposed that they will align with the openings **22** provided in the bosses **18** to **21** inclusive. The openings **26** will be made the size required to receive the screwbolts **23** provided for attaching it to the bosses **18** to **21** inclusive.

A convenient method for making the plate **25** is by casting. It is usual to make luminaire housings and the slipfitters of aluminum which may be readily cast to provide all the required members with great accuracy. However, the present invention does not require that the members be made from aluminum castings. The whole structure might be machined or made in small parts and then assembled to meet the requirements of the particular structure. No matter how the housing and plate **25** are made, the members already described and to be described hereinafter will have to be provided. Jaw members **27** and **28** are provided at opposite ends extending on opposite sides of the plate **25** and may be cast integral with it. As best shown in FIGS. 2 and 3, the jaw members **27** and **28** have specially shaped edges or faces.

Referring now to FIGS. 2 and 3, it will be observed that the brackets **16** are of different sizes. The brackets **16** shown in FIG. 2 is smaller in diameter than the bracket illustrated in FIG. 3. The edges or faces **29** and **30** of the jaw members **27** and **28** shown in FIGS. 2 and 3 are substantially V-shaped simulating the lower edges of the wall or web **15**. The slope of the sections of the face **30** will be somewhat different from the slope of the sections of the face **29** in order to adapt them for engaging pipes of different sizes. The face **30** of the jaw member **27** will be designed or sloped to grip the smaller bracket **16** while the face **29** of the jaw member **28** will be shaped to engage a larger pipe or bracket **16**.

Therefore, in mounting this slipfitter shown generally at **10** on a bracket **16**, it can be adapted to two different sizes of bracket **16** by reversing the plate **25**. It will be noted that the central portion of plate **25** is bowed upwardly as shown on FIG. 2 or downwardly as shown on FIG. 3. This bowed section **31** is substantially V-shaped and facilitates the making of the jaw members **27** and **28**

of the right size and shape to engage brackets **16** of different sizes. It also provides that the bolting flange **25** will be in substantially the same vertical location to the hood **10**. Thus, the length of screwbolts **23** need not be varied.

Referring now to FIG. 2, it will be noted that the part of the jaw member **27** extending on the same side of the plate **25** as the V-shaped middle section **31** is much higher relative to the plate than the opposite sections of the jaw members **28**. These high sections of the jaw members extend between the depending walls **17** of the hood member **12**, and therefore, must be made of a size to enable their fitting into the hood.

In order to provide for properly aligning the luminaire on the bracket **16**, a boss **32** is provided on the supporting members **12**. A threaded opening **33** extends through the support member **12** and the boss **32**. An adjustable screwbolt **34** extends through the threaded opening **33**.

In mounting the slipfitter on a bracket **16**, when the support member or hood **12** is in position, the plate **25** will be applied to the bottom by means of the screwbolts **23**. If the bracket **16** is a pipe length 1¼ inches in diameter, then the V-shaped jaw section **31** will be disposed with the apex upwardly presenting the jaw faces **30** designed for engaging the pipe of smaller diameter as shown in FIG. 2. If the bracket **16** is two inches in diameter, then the plate **25** will be reversed as shown in FIG. 3.

The screwbolts **23** at the pole end of the slipfitter will be tightened first to grip the bracket **16**. Then the adjusting screwbolt **34** will be manipulated or adjusted to align the housing with the bracket to give the luminaire the proper inclination to the surface to be illuminated. Then the screwbolts **23** at the opposite end of the plate will be tightened. If the luminaire does not have the exact alignment desired, the screwbolts **23** and **34** will be adjusted until the luminaire is set at the proper angle to the surface to be illuminated. When this has been effected, all of the screwbolts **23** will be tightened firmly setting the slipfitter on the bracket **16**.

In some instances, it may be desirable to have the faces **29** and **30** and the depending face of the jaw member **15** gnarled to improve the gripping characteristics of the slipfitter. However, this is not essential.

Since certain changes may be made in the above construction, and different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

I claim as my invention:

1. In a luminaire housing, a slipfitter at one side for mounting said housing on a bracket, said slipfitter including a hood having spaced depending walls disposed to carry the housing, a clamping member extending between the depending walls of the hood, bosses formed integrally with the depending walls and having threaded openings extending upwardly from their lower ends, a clamping plate having openings therethrough aligning with the openings in the bosses, a plurality of spaced jaws carried by the clamping plate and extending to opposite sides, the spaced jaws on the opposite sides of the clamping plate being adapted to engage brackets of different sizes, screw bolts fitting through the openings in the clamping plate and engaged in the threaded openings provided in the bosses for drawing the desired jaws on the clamping plate into cooperative relationship with the clamping member provided on the hood for setting the luminaire housing in position on the bracket.

2. In a luminaire housing, a slipfitter for mounting said housing on a bracket, said slipfitter including a hood having a top portion and spaced depending side walls, a depending end wall on said hood which is of an inverted V-shape so as to form a clamping member, a pair of spaced bosses formed integrally with each depending side wall and having threaded openings extending upwardly from their lower ends, and adjustable means disposed in said hood, a clamping plate having openings therethrough in registration with the openings in said bosses, a pair of cooperating spaced jaws carried by said plate on one side thereof having dimensions so as to be able to engage brackets of one size, a pair of cooperating spaced jaws carried by said plate on the opposite side thereof having dimensions so as to be able to engage brackets of another size, screw bolts fitting through the openings in said clamping plate and engaged in the threaded openings provided in the bosses for drawing either one of the pairs of jaws on the clamping plate into cooperative relationship with the jaw provided on the hood and for cooperating with said adjustable means for setting the luminaire housing in different predetermined positions to dispose it at the proper angle to the surface to be illuminated.

References Cited in the file of this patent

UNITED STATES PATENTS

999,998	Hine	Aug. 8, 1911
2,337,824	Kraut	Dec. 28, 1943
2,733,034	Tormo	Jan. 31, 1956
2,778,929	Loehr	Jan. 22, 1957
2,848,182	Wildberg	Aug. 19, 1958

FOREIGN PATENTS

678,959	France	Jan. 2, 1930