

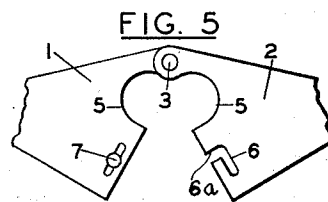
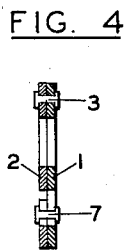
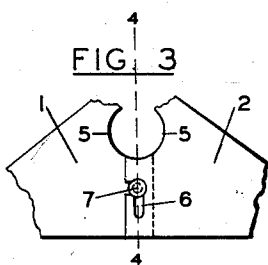
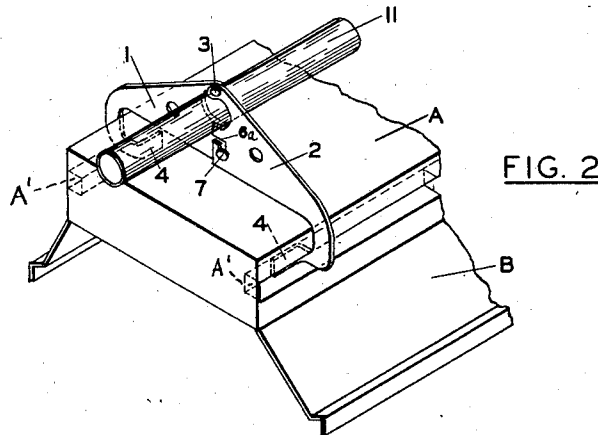
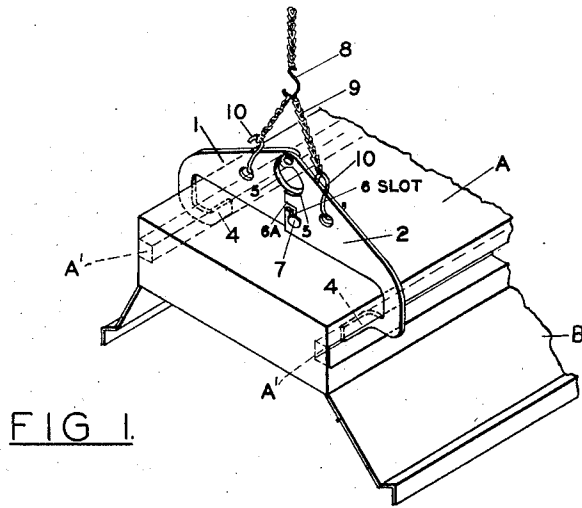
June 3, 1947.

F. W. WATKINS

2,421,447

HANGER FOR LIGHTING FIXTURES

Filed Feb. 8, 1945



Inventor

F. W. Watkins

By Robert Robb

Attorneys

UNITED STATES PATENT OFFICE

2,421,447

HANGER FOR LIGHTING FIXTURES

Frank W. Watkins, Cleveland, Ohio

Application February 8, 1945, Serial No. 576,885

8 Claims. (Cl. 248-343)

1

This invention pertains to the art of lighting fixtures, and comprises primarily a novel form of hanger unit designed for suspending fixtures of the fluorescent lamp type.

A primary object of my invention has been to produce a simple and cheap construction of hanger unit but one which is adapted to be readily interengaged with the usual housing of a fluorescent light, or disengaged therefrom, when necessary.

A further object of my invention has been to so design my hanger unit that it comprises complementary members pivotally connected at the inner ends thereof and equipped with fixture supporting arms at the outer ends thereof, there being provided certain novel locking means intermediate the inner end portions of the hanger members for holding the latter rigidly in fixture supporting position, but adapted for readily permitting the movement of the hanger members relatively to each other incident to the engaging of the hanger unit with the lighting fixture, or the disengagement of the said parts.

For a full understanding of my invention reference may be had to the accompanying drawings, in which:

Figure 1 is a fragmentary perspective view of a lighting fixture of the fluorescent type, the same shown as being supported by means of a hanger unit embodying my invention, said hanger unit suspended by means of chain supports.

Figure 2 is a view similar to Figure 1, showing the adaptability of my hanger unit to being supported by means of the conduit often provided for containing the electric wires that supply current to the lamp of the lighting fixture, such a conduit being shown in its supported engaged relation to the hanger unit.

Figure 3 is a fragmentary view showing more clearly the locking feature of my hanger unit, the same illustrated as when rigidly holding the hanger members in interlocked position for supporting the lighting fixture.

Figure 4 is a sectional view of the hanger unit, taken about on the line 4-4 of Figure 3.

Figure 5 is a view similar to Figure 3, but showing the hanger members slightly separated as when they are unlocked to permit upward movement of their outer ends for disengagement from the housing of the lighting fixture, or for engagement therewith.

Specifically describing my invention, and referring particularly to the drawings, my hanger unit comprises primarily two complementary hanger members 1 and 2. These members are

2

stamped from flat sheet metal which are disposed vertically flatwise and are pivoted together by means of a pivot member 3 at their uppermost inner portion. At the outer end, each of the hanger members 1 and 2 curves downwardly and is formed with a lateral arm 4 at the lower inner portion of the downward extension thereof.

The arms 4 of the hanger members 1 and 2 are designed to engage in grooves in the opposite sides of the housing A of the light fixture. The housing A supports the fluorescent light or lamp tubes in a conventional manner, and to the underside of the housing A is attached the reflector B, which also may be of generally conventional form.

As a means for substantially rigidly connecting the hanger members 1 and 2 together in their position of engagement with the housing A, I provide, in the hanger member 2, at its inner lower end portion, an L-shaped slot 6, and mounted in a slot formed in the inner lower portion of the hanger member 1 is a lock member or pin 7. The lock member 7 is adapted to move upwardly and downwardly in the slot of the member 1 and is likewise adapted to pass through the entrance portion 6a of the slot 6 and drop into the vertical portion of said slot 6 for locking the members 1 and 2 together in the position shown in Figures 1 and 2.

The hanger unit or device which I have generally described above is intended to suspend the lighting fixture with which it is used, in two different ways which are illustrated in Figures 1 and 2.

In Figure 1 the hanger unit comprising primarily the members 1 and 2 is intended to be supported by means of a chain or chains designated 8. In actual practice, dependent upon the length of the light unit, one or more of these chains will be employed, and they are attached to the hanger unit by means of an auxiliary chain 9 and suitable hooks 10, as seen in Figure 1.

According to the construction of Figure 2, the suspending means for the light fixture will comprise the conduit 11 from which may lead off the wires for supplying the electric current to the fluorescent lamps that are suspended below the housing A and between the sides of the reflector B. In other words, according to the construction of the suspending means in Figure 2, the conduit 11 provides the support for the lighting fixture.

In order to enable the hanger unit to cooperate with the conduit 11, the hanger members 1 and 2 are formed at their innermost ends with recesses 5 as seen best in Figure 3, and the conduit 11 will

be embraced between the opposite recesses 5, one of which, of semi-circular general form, is provided in each of the members 1 and 2.

The operation of engaging the hanger unit of my invention with the housing A of the lighting fixture will now be described. The hanger members 1 and 2 are separated at their middle portions by relative upward pivotal movement of the outer ends thereof, after the lock pin or member 7 has been raised to the upper end or entrance portion 6a of the L-shaped slot 6. In such position the lock pin permits the said separation movement by upward pivotal action of the members 1 and 2, so that the supporting arm 4 may be separated sufficiently to permit the hanger unit to move downwardly toward the top portion of the housing A, and the arms 4 to be inter-engaged with the grooved portions A' at opposite sides of the housing A. Thereupon, this action having been completed, the locking member is permitted to drop down into the vertical portion of the slot 6 and will effectively lock the members 1 and 2 in their position of engagement of the arms 4 with the opposite grooved portions of the housing A. Since the movement of the lock member is gravitative, it normally lies at the lower portion of the vertical section of the slot 6, and therefore there is no likelihood of the disengagement of the locking portions of the two members 1 and 2 after the arms 4 have once been emplaced in the groove A' of the housing A, thus effecting complete interlocking of the arms 4 with the housing A.

My hanger unit is made substantially entirely of metal stampings of relatively simple construction, and provides a very rigid and complete supporting unit for a lighting fixture of the type in conjunction with which it is used.

Should it be desired to remove the lighting fixture, it may be readily detached from the hanger unit or units that support it, and the operation will be to push upwardly on the lock member 7 and pull the arms 4 out of the grooves A' of the fixture housing A. The above will enable the disengagement of the hanger unit from the lighting fixture in a self-evident manner, with the locking member disposed as in Figure 3.

In the formation of the members 1 and 2 of the hanger unit, the inner portions thereof will be wider than the outer portions, this being desirable in order to provide for the formation of the slot in the inner portions of the members 1 and 2 and the mounting of the lock feature comprising the locking member or pin 7.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is:

1. In a hanger unit for lighting fixtures, or the like, in combination, complementary hanger members, each comprising a vertical sheet metal-like body, pivotally connected together at their upper inner ends and each member provided with a fixture supporting arm adjacent to its outer end, and means at the lower inner ends of the hanger members for lockingly connecting the same to maintain their outer arms in supporting engagement with a lighting fixture.

2. A hanger unit as set forth in claim 1, in which the locking means comprises a movable locking pin adapted to interlockingly connect

the innermost portions of the hanger members together.

3. A hanger unit as set forth in claim 1, combined with suspending means for the hanger unit engaged with each of the hanger members thereof, comprising a wire conduit, the hanger members having complementary portions interlocking with said conduit.

4. A hanger unit as set forth in claim 1, combined with suspending means for the hanger unit engaged with each of the hanger members thereof, comprising a wire conduit, the hanger members having portions interlocking with the said conduit, the hanger members being formed at their inner adjacent ends with recesses adapted to receive the said conduit for establishing the interlocking of the latter with the hanger unit.

5. A hanger unit of the class described, comprising complementary members disposed in substantial alignment, a pivotal connection between the upper inner portions of said hanger members permitting the outer portions of said members to swing upwardly, each hanger member being formed at its outer end with a downwardly and inwardly extending arm for engaging a lighting fixture, and a locking member slidably carried by one of the hanger members adjacent to its inner end and movable into interlocking engagement with the other of said hanger members at the inner end of the latter whereby to hold the hanger members in fixed relation with their outer arms engaged with a lighting fixture.

6. A hanger unit as claimed in claim 5, wherein the locking member carried by one of the hanger members is mounted for vertical movement in a slot formed in the latter, and wherein the other hanger member is formed with an L-slot for permitting interengagement of the locking member carried by the complementary hanger member for holding the two hanger members of the unit in fixed relation as stated.

7. In a hanger unit for lighting fixtures, or the like, in combination, complementary hanger members pivotally connected together at their upper inner ends and each member provided with a fixture supporting arm adjacent to its outer end, and means at the lower inner ends of the hanger members for lockingly connecting the same to maintain their outer arms in supporting engagement with a lighting fixture, the adjacent inner ends of the said hanger members having complementary recessed portions to receive and support a horizontal wire conduit.

8. A unit as claimed in claim 1, wherein the flat metal of the outer arm of each hanger member is extended inwardly and bent laterally to form the fixture supporting portion of the member.

FRANK W. WATKINS.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
148,612	Hudspeth	Mar. 17, 1874
2,297,869	Biller	Oct. 6, 1942
2,347,113	King	Apr. 18, 1944