Aug. 3, 1948. M. H. KRUGER 2,446,425

FLUORESCENT LIGHTING FIXTURE

Filed Sept. 14, 1945

2 Sheets-Sheet 1

Fig. 1.

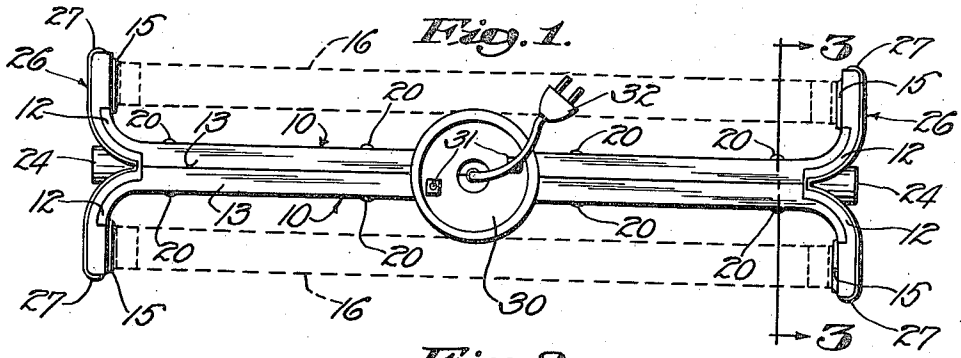


Fig. 2.

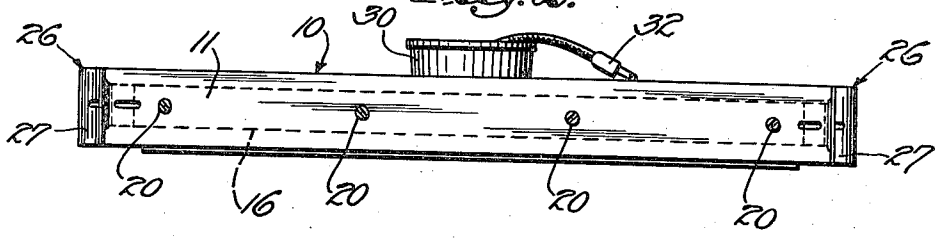


Fig. 3.

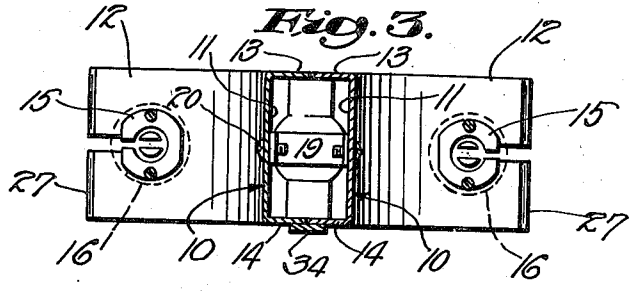
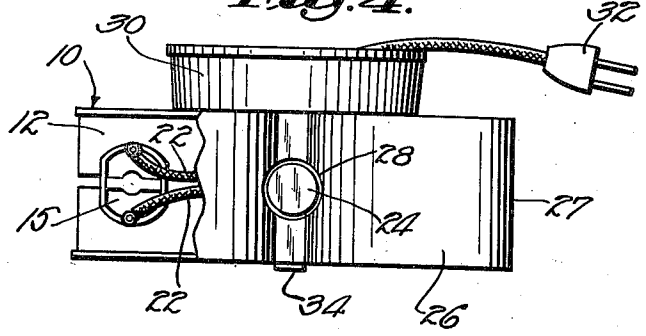


Fig. 4.



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FLUORESCENT LIGHTING FIXTURE

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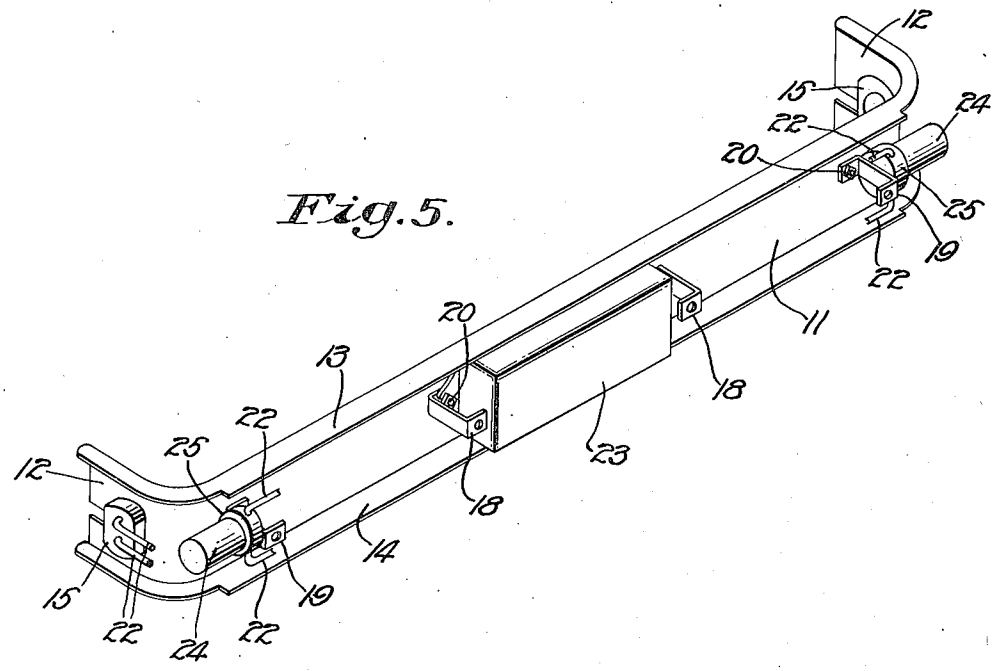


Fig. 5.

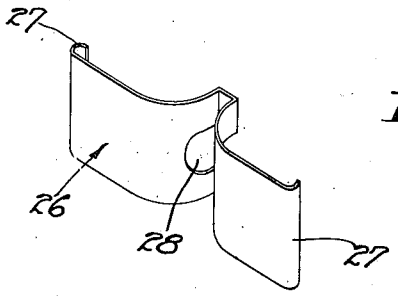


Fig. 6.

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UNITED STATES PATENT OFFICE

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FLUORESCENT LIGHTING FIXTURE

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Application September 14, 1945, Serial No. 616,328

6 Claims. (Cl. 240—51.11)

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This invention relates to a fluorescent lighting fixture of greatly simplified construction, which will be simple and easy to make, and yet be efficient and wholly satisfactory in operation and maintenance.

Lighting fixtures of this nature, designed to hold fluorescent lighting tubes, are generally complicated and massive in structure and relatively expensive to manufacture. The present device eliminates many of the parts and elements usually found in such structures, such as the reflectors, and provides a structure of pleasing appearance, consisting of two main parts of identical construction, and which are attached together, and which provide the necessary housing for the wires, ballast, and starters, as well as support for the fluorescent tubes. The ceiling to which the fixture is attached acts as the reflector in this construction, and parts which ordinarily collect dust are reduced to a minimum, thus providing ease of maintenance.

Before explaining in detail the present invention it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also it is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation, and it is not intended to limit the invention claimed herein beyond the requirements of the prior art.

Other objects and advantages of the invention will appear in the following specification, in connection with the accompanying drawings, in which

Fig. 1 is a plan view of my structure;

Fig. 2 is a side elevation;

Fig. 3 is a section on lines 3—3 of Fig. 1;

Fig. 4 is an end elevation with a portion broken away to expose the interior;

Fig. 5 is a perspective view of one of the principal parts, showing the interior arrangement, and

Fig. 6 is a perspective view of the end closure cap.

As shown in the drawings, the fixture comprises two main parts, consisting of two U-shaped members 10 of similar or identical construction, made preferably of sheet metal and having a side 11, and two forwardly curved ends 12, and two rearwardly turned flanges 13 and 14 extending along the entire top and bottom edges respectively of the members 10, forming a channel-shaped section. Sockets 15 (Fig. 3) are provided in the two ends 12 to detachably receive two fluorescent lamps 16 in tubular form, shown in dotted lines in Fig. 1. The two members 10 are assembled secured together in opposed relation, or back to back, as shown in Fig. 1, by means of two middle connecting brackets 18, and two end brackets 19 with screws 20 therein (Fig. 5). The sides 11 and flanges 13 and 14 of members 10, when thus secured, provide a housing for containing the usual wires 22, ballast 23 (transformer), starters 24 and sockets 25 therefor (Fig. 5). As wires 22, ballast 23, starters 24, and sockets 25 are conventional operating parts in such fixtures, their construction and circuits are not shown in detail. The two middle connecting brackets 18 also serve to secure the ballast 23 to the fixture, and the two end brackets 19 likewise secure the sockets 25 for the starters 24 to the fixture. Closure caps 26, preferably of sheet metal, having curved ends 27 and a central aperture 28 for the starters 24 enclose the otherwise open outside ends of the fixture, and are preferably secured thereto by snapping ends 27 thereof over ends 12 of members 10, the resiliency of the sheet metal construction permitting this to be done. The fixture is attached to the ceiling by means of central hanger 30, in any suitable manner, the hanger in turn being secured to the top flanges 13 of members 10 in any suitable manner as by nuts and bolts 31 (Fig. 1), and connection to an electrical outlet is made by means of plug 32 or by usual lead wires. A panel member 34 serves to close the joint between the two bottom flanges 14 of members 10, and is secured thereto in any suitable manner, as by several small T-shaped tongues (not shown) inserted in the joint.

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It will thus be seen that the fixture comprises a minimum of parts, and is simple and easy to construct, install and maintain, and is wholly efficient and satisfactory in operation. The fact that the two members 10 are of identical construction, and can be made from the same dies, also reduces the cost of constructing the unit.

I claim:

1. A fluorescent lighting fixture comprising two substantially identical U-shaped members, the forwardly extending ends thereof having sockets therein for holding fluorescent tubes, rearwardly turned top and bottom flanges on said members, the two members with their flanges, when arranged back to back in opposed relation, forming a housing for containing operating parts of the fixture, and means for holding the members in opposed relation.

2. A fluorescent lighting fixture comprising two substantially identical U-shaped members, the forwardly extending ends thereof having sockets therein for holding fluorescent tubes, rearwardly turned top and bottom flanges on said members, the two members with their flanges, when arranged back to back in opposed relation, forming a housing for containing operating parts of the fixture, means for holding said members together in opposed relation and a cap enclosing the oppositely extending ends of said members.

3. A fluorescent lighting fixture comprising two substantially identical members, channel-shaped in cross-section, having forwardly extending curved ends, sockets provided in said ends for holding fluorescent tubes, means for holding said members together in opposed relation, operating parts for said fixture being housed in the channel formed between said members, and a cap enclosing the oppositely extending end portions of said members.

4. A fluorescent lighting fixture comprising two substantially identical members, channel-shaped in cross-section, having forwardly extending curved ends, sockets provided in said ends for holding fluorescent tubes, means for holding said members together in opposed relation, operating parts for said fixture being housed in the channel formed between said members, a cap enclosing the oppositely extending end portions of said members, and means for attaching said fixture to a wall or ceiling.

5. A fluorescent lighting fixture comprising two substantially identical members having forwardly extending curved ends, sockets provided on the inner side of said ends for holding fluorescent tubes, rearwardly turned top and bottom flanges on said members forming a channel-shaped section between said flanges, means for holding said members together in opposed relation with said curved ends extending in opposite directions, the space between said members and their flanges when so arranged, forming a housing for containing operating parts of the fixture.

6. A fluorescent lighting fixture comprising two substantially identical members having forwardly extending curved ends, sockets provided on the inner side of said ends for holding fluorescent tubes, rearwardly turned top and bottom flanges on said members forming a channel-shaped section between said flanges, means for holding said members together in opposed relation with said curved ends extending in opposite directions, the space between said members and their flanges when so arranged, forming a housing for containing operating parts of the fixture, and a cap enclosing the oppositely extending ends of said members.

MICHAEL H. KRUGER.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
2,293,116	Claspy	Aug. 18, 1942
2,314,038	Elting	Mar. 16, 1943
2,367,472	Schockett	Jan. 16, 1945
2,399,531	Young	Apr. 30, 1946