

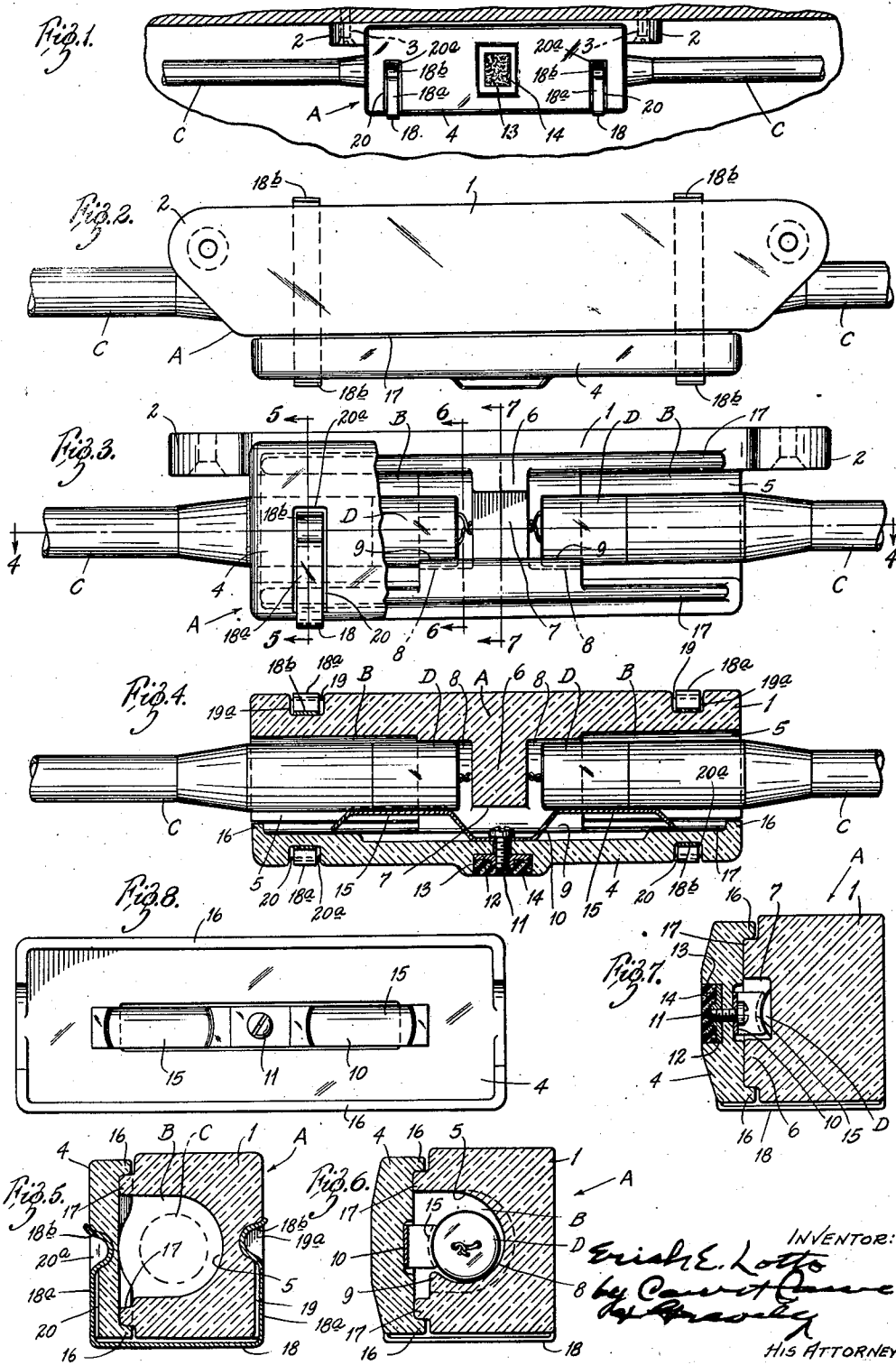
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ELECTRIC LAMP FIXTURE

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ELECTRIC LAMP FIXTURE

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My invention relates to fixtures for supporting and electrically connecting adjacent ends of longitudinally aligned tubular lamps. The principal objects of the present invention are to devise a simple and inexpensive fixture having lamp sockets in its opposite ends and a quick detachable cover that will permit easy insertion and removal of the lamps from the sockets laterally thereof and to provide for electrically connecting and disconnecting said lamps in the attached and detached positions, respectively, of said cover. The invention consists in the double socket lamp fixture and in the parts and combinations and arrangements of parts hereinafter described and claimed.

In the accompanying drawing, which forms part of this specification and wherein like symbols refer to like parts wherever they occur,

Fig. 1 is a front elevational view of a lamp fixture embodying my invention,

Fig. 2 is a top plan view of said fixture,

Fig. 3 is a front side view of said fixture, with a portion of the cover thereof shown broken away,

Fig. 4 is a central horizontal longitudinal section on the line 4—4 in Fig. 3,

Figs. 5, 6 and 7 are vertical cross-sectional views on the lines 5—5, 6—6, and 7—7, respectively, in Fig. 3; and

Fig. 8 is an interior side view of the cover.

In the accompanying drawing, my invention is shown embodied in a fixture for supporting and electrically connecting adjacent ends of longitudinally aligned tubular lamps, particularly fluorescent lamps for showcase lighting. Said fixture is in the form of an elongated block A of porcelain or other electrical insulating material having longitudinally aligned sockets B that lead inwardly from its opposite ends and are adapted to receive adjacent ends of two fluorescent lamps C that are provided with the usual metal end caps or electrodes D.

The porcelain block A is longitudinally divided into two sections; that is, it comprises a main body portion or section 1, having lugs 2 that project from the ends thereof in the plane of the top thereof and are apertured to receive suitable fasteners 3, and a removable cover or section 4, which cooperates with longitudinally aligned grooves 5 in the front or cover opposing face of said body to form the lamp sockets B, whereby removal of said cover permits independent side-wise insertion and removal of the lamps C from said sockets. The grooves 5 are separated by a cross wall or partition 6 located in the main body

portion 1 midway of the ends thereof, the outer or cover opposing edges of said partition having a rectangular notch 7 therein.

The grooves 5 open through the front cover receiving face of the body member 1 and have flat sides and concave backs or bottoms; and the inner end portions of said grooves are made slightly narrower and more shallow than the remaining portion thereof to provide arcuate seats 8 for the electrodes D at the ends of the lamps C and a clearance space between the lamps and said remaining portions of said grooves. Said grooves are also made deep enough to provide clearance spaces between the lamp and the cover. As shown in Figs. 3 and 6, the rounded or arcuate seat portions 8 of the grooves 5 are curved upwardly upon their open sides far enough to provide shoulders 9 that are adapted to retain the electrode ends D of the lamps C in their respective seats when the cover 4 is removed. However, sufficient space is left between the upper edges of the shoulders 9 and the overhanging walls of the grooves 5 to permit insertion and removal of the lamp ends therethrough.

Mounted on the inner face of the cover 4 for attachment to and detachment from the main body portion 1 as a unit is a metal contact member or conductor 10 that extends longitudinally of said cover and is rigidly secured thereto midway of its length by means of a cap screw 11 that extends inwardly through registering holes provided therefor in said contact member and said cover and is threaded into a rectangular metal anchor plate 12 that seats in a rectangular recess 13 provided therefor in the outer face of the cover. The rectangular screw receiving plate 12 is held in place in the similarly shaped recess 13 preferably by means of a suitable plastic electrically insulating material 14 that fills said recess and completely covers said plate. The end portions of the contact plate 12 are offset upwardly on opposite sides of the securing screw 11 therefor to provide oppositely extending spring contact portions or arms 15 that are adapted to resiliently engage and electrically connect electrodes D of the two aligned lamps C. As shown in the drawing, the spring contact portion 15 of the contact plate 12 is curved transversely to snugly seat against the cylindrical surfaces of the lamp ends.

As shown in the drawing, the inner face of the cover 4 is provided with edge flanges 16 that overlap longitudinal outstanding ribs 17 formed on the body member 1 along the longitudinal

edges of the grooves 5, thus preventing relative longitudinal and crosswise movement of said cover and body member. The cover 4 is firmly but detachably secured to the body member 1 by means of two channel-shaped spring clips 18 that straddle said cover and body member adjacent to the ends thereof. In attached position, the web portion of each of these spring retaining clips extends transversely of the fixture across the bottom thereof and the two branches or flanges 18a are disposed with one in a vertical groove 19 in the exterior face of the back face of the body member 1 and the other in a similar groove 20 in the front face of the cover 4. The flanges of each of these channel-shaped spring clips terminate at their free upper ends in inwardly bowed or curved portions 18b adapted to seat in depressions 19a and 20a provided therefor in the upper ends of the grooves 19 and 20, respectively. By this arrangement, the cover 4 may be quickly and easily secured to the body member 1 of the fixture, by forcing the spring clips 18 upwardly over the assembled body member and cover until the rounded ends 18b of the flanges of said clips snap into the pockets in the upper ends of the grooves.

The hereinbefore described lamp fixture has several important advantages. It is simple and easy to manufacture and can be readily mounted in a comparatively small space. The spring clips permit the cover to be quickly and easily attached to and detached from the body member, while the spring contact member serves to electrically connect the adjacent ends of the two lamps whenever the cover is applied. When the cover is removed, the contact member is also removed therewith, thus breaking the circuit between the two lamp ends and enabling the fixture to be inspected and the lamps to be removed and replaced without danger of shock. When the cover is removed, the lamp ends are still retained in the grooves by the shoulder portions of the seats for the electrodes until the lamps are lifted clear of said shoulders. The seats at the inner ends of the grooves serve to support the remaining portions of the lamps therein clear of the remaining portions of said grooves and thus provide ventilating clearance spaces between the major portions of the grooves and lamp ends.

Obviously, numerous changes may be made without departing from the invention. Therefore, I do not wish to be limited to the precise construction shown.

What I claim is:

1. A fixture for supporting and electrically connecting adjacent horizontally disposed longitudinally alined ends of electric lamps, said fixture comprising a body portion having horizontally disposed longitudinally alined grooves in the front face thereof that open through opposite ends thereof and are adapted to receive sideways said ends of said lamps and sustain them on the lower side walls of said grooves, a member for covering said grooves to form therewith sockets that lead inwardly from opposite ends of said fixture, means for removably securing said member to said front face of said body portion, whereby removal of said member uncovers said grooves throughout their entire length thereby permitting sideways removal of said ends of said lamps from said grooves, and a single contact member secured to the groove covering face of said member and having free end portions adapted in the attached position of said member

to resiliently engage and electrically connect said ends of said lamps.

2. A fixture for supporting and electrically connecting adjacent horizontally disposed longitudinally alined ends of electric lamps, said fixture comprising a body portion having longitudinally alined grooves horizontally disposed in the front face thereof opening through opposite ends thereof, a member for covering said grooves to form therewith sockets that lead inwardly from opposite ends of said fixture and are adapted to support said ends of said lamps, means for removably securing said member to said front face of said body portion, whereby removal of said member uncovers said grooves throughout their entire length, thereby permitting sideways insertion and removal of said ends of said lamps from said sockets, and a single contact member secured to the groove covering face of said member and having free end portions adapted in the attached position of said member to resiliently engage and electrically connect said ends of said lamps, the lower lamp supporting side walls of said grooves being shaped to prevent accidental displacement of said ends of said lamps from said grooves when said member is detached from said body portion.

3. A lamp tube fixture comprising a body portion having spaced rounded longitudinally alined grooves therein adapted to receive sideways the ends of adjacent lamp tubes, each of said grooves extending to an end of said body portion, the inner ends of said grooves being spaced by a partition in the central portion of said body portion, rounded shoulders in said grooves adjacent to said partition, a cover member for covering said grooves to form sockets, said cover member having a spring member mounted on the central portion thereof, said spring member having arms extending into said grooves and being adapted to contact the ends of adjacent lamp tubes in said alined grooves and said spring member being adapted to conduct electrical current from the end of the lamp tube in one of said grooves to the end of the lamp tube in the other, and means for securing said cover member to said body portion.

4. A lamp tube fixture comprising a body member having spaced longitudinally alined rounded grooves therein adapted to receive sideways the ends of adjacent lamp tubes, the inner ends of said grooves being spaced by a partition in the central portion of said body member, the outer portion of said partition having a notch therein, said grooves adjacent to said shoulder having rounded shoulders adapted to form a seat for said ends of said lamp tubes, a cover member for covering said grooves to form sockets, said cover member having a spring electrical current conducting member mounted in the central portion thereof opposite said notch in said partition, said spring member having inwardly extending spring arms adapted to contact the ends of said lamp tubes in said grooves, and means for securing said cover to said body portion.

5. A lamp tube fixture comprising a porcelain body portion having spaced longitudinally alined rounded grooves therein adapted to receive sideways the ends of adjacent alined lamp tubes, the inner ends of said grooves being spaced by a partition in the central portion of said body member, the outer portion of said partition having a notch therein, the bottom of said grooves adjacent to said shoulder having rounded shoulders adapted to form a seat for the ends of

said tubes, a porcelain cover member for said grooves having a spring electrical current conducting member mounted in the central portion thereof opposite said notch in said partition, said spring member having inwardly extending concave arms adapted to contact the ends of said

tubes in said grooves, and said spring member adapted to conduct electricity from the end of one lamp tube to the end of the adjacent tube, and means for securing said cover to said body member.

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