

Feb. 12, 1924.

1,483,252

W. SYMMES

DETACHABLE ELECTRIC FIXTURE

Filed Nov. 8, 1921

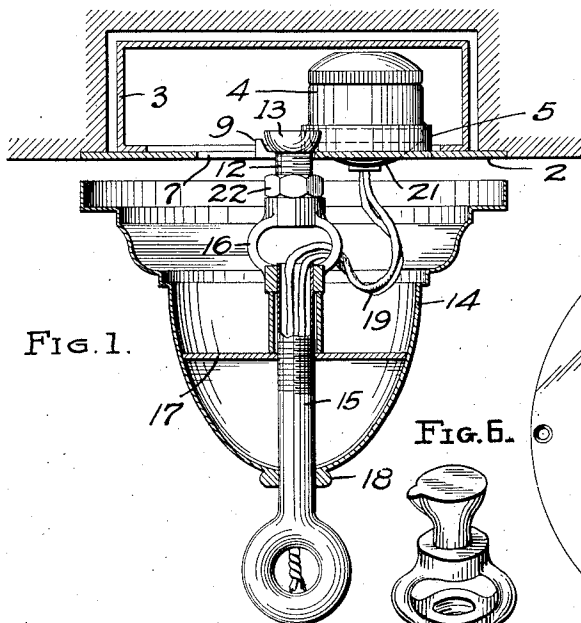


FIG. 1.

FIG. 5.



FIG. 2.

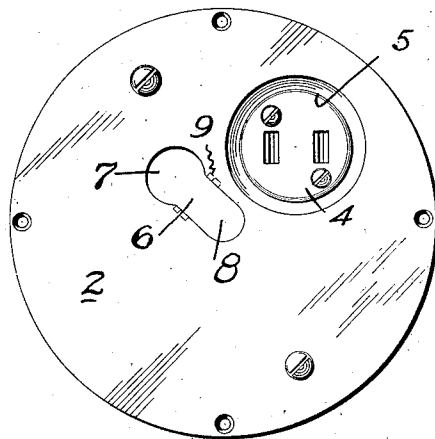


FIG. 4.

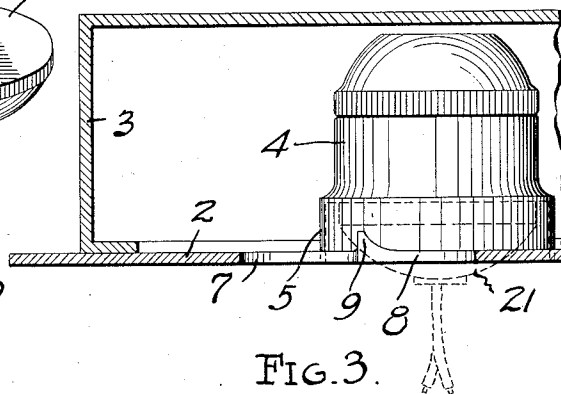
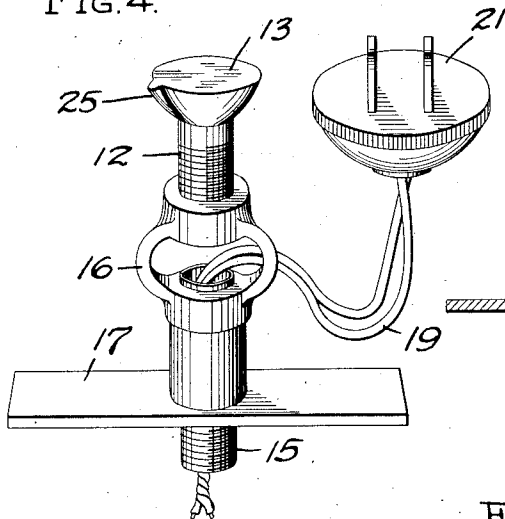
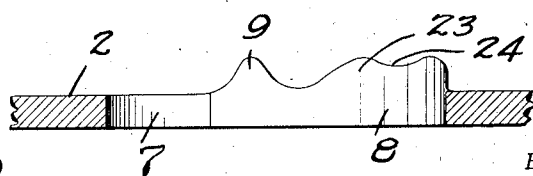


FIG. 3.

FIG. 5.



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WHITMAN SYMMES, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO THOMAS DAY COMPANY, OF SAN FRANCISCO, CALIFORNIA, A CORPORATION OF CALIFORNIA.

DETACHABLE ELECTRIC FIXTURE.

Application filed November 8, 1921. Serial No. 513,661.

To all whom it may concern:

Be it known that I, WHITMAN SYMMES, a citizen of the United States, and a resident of the city and county of San Francisco, State of California, have invented a certain new and useful Detachable Electric Fixture, of which the following is a specification.

The invention relates to removable electric lighting fixtures and particularly to hanging fixtures suspended from the ceiling, generally termed electroliers.

An object of the invention is to provide a removable electrolier, which is readily attached to and detached from its supporting fixture and which is securely held in position when attached.

Another object of the invention is to provide a removable electrolier which may be attached to and detached from its supporting fixture, without the use of tools.

The invention possesses other advantageous features, some of which, with the foregoing, will be set forth at length in the following description, where I shall outline in full, that form of the invention which I have selected for illustration in the drawings accompanying and forming part of the present specification. In said drawings I have shown one specific embodiment of my generic invention, but it is to be understood that I do not limit myself to such form, since the invention, as set forth in the claims, may be embodied in a plurality of forms.

Referring to said drawings:

Fig. 1 is a vertical section through the fixture attachment, showing the fixture in engagement with the ceiling support.

Fig. 2 is an underneath view of the ceiling plate.

Fig. 3 is a cross section through the ceiling plate.

Fig. 4 is a perspective view of one form of attachment.

Fig. 5 is a vertical section taken through the slot in the ceiling plate, showing a modified arrangement.

Fig. 6 is an elevation of a modified form of connecting hickey.

The present invention relates to removable or detachable hanging electric fixtures of all types and relates particularly to means for detachably supporting the fixtures, so that they may be attached or removed without the use of tools. The fixture is supported independently of the electrical

connections, so that no strain is placed on the connections. The attaching means comprises broadly a ceiling plate, having a seat therein to receive a stem or connection on the fixture and having an electric outlet fitting and means on the fixture engageable with said seat and an electric plug fitting. The ceiling plate 2, which is formed of metal, is set flush with the ceiling and is provided on its rear face with a suitable casing or junction box 3, in which the electric outlet fitting 4 is disposed. The plate is provided with a countersunk socket or recess 5, at the base of which the face of the fitting 4 is exposed, and the plug fitting carried by the fixture seats in the socket or recess when the fixture is hung. The plate is provided with an elongated aperture or slot 6, which may be similar in shape to a key hole. The slot has an enlarged entering portion 7, and a narrower engaging or locking portion 8. The supporting element on the fixture is entered into the slot at the enlarged portion and moved laterally over the locking portion. Disposed on the upper surface of the plate at the edges of the slot, between the entering and locking portions, are one or more teeth or projections 9, which prevent the accidental movement of the supporting element from the locking portion to the entering portion. The supporting element is placed centrally of the fixture and the locking portion of the slot is located centrally of the ceiling plate, so that the fixture is hung centrally of the ceiling plate.

The fixture to be hung is provided at its upper end with a stem 12 having a knob 13 on its end, the knob being preferably spherical or hemispherical. The knob is smaller in diameter than the entering portion of the slot, so that it may be readily inserted and is larger in diameter than the locking portion of the slot, so that when positioned above the locking portion, the knob rests against the sides of the slot and supports the fixture. The knob is preferably formed integral with the stem, so that it may not become accidentally detached therefrom and is preferably provided with a spherical under surface so that it has no projecting shoulders to catch on the edge of the enlarged portion of the slot when the fixture is being detached, thus rendering removal very simple. The stem is secured to the canopy 14, or other equivalent part of the fixture, in any suitable man-

ner, so that it is held rigid with respect to the canopy. In the present instance, the stem is formed in two parts 12 and 15, connected together by the double hollow nut 16 which bears against a cross-bar 17 in the canopy. The canopy is held by the collar 18 engaging the lower stem part 15 which is provided at its lower end with an eye or hook on which the lighting fixture is suspended. The lower stem part 15 is hollow to form a conduit for the current carrying wires 19, which emerge into the canopy through the hollow nut. The stem is made in two parts to thus provide a conduit for the wires, but if another form of stem is used, or if it is provided with side openings for the wires, it is evident that the stem may be formed of a single piece, as shown in Fig. 6. After the stem parts are screwed into the hollow nut, the threads are jammed, or set screws are placed to prevent accidental unscrewing of the parts.

The wires 19 are provided on their ends with a plug 21 adapted to be inserted in the socket or recess in the ceiling plate, the wires being sufficiently long and flexible, so that in hanging the fixture, the electric connection may be readily made before the mechanical supporting connection is made. The stem and knob extend sufficiently above the upper edge of the canopy 14 to permit the fixture to be hung without bringing the edge of the canopy into contact with the ceiling. To prevent this contact and the resultant marring of the ceiling, I provide a stop nut 22 on the stem 12, to limit the upward movement of the stem into the slot. When the stop projections 9 are provided, it is necessary to move the stem into the slot sufficiently to permit the knob to pass over the projections. This necessitates spacing the upper edge of the canopy 14 below the knob a sufficient distance to permit the knob to pass the projections, so that after passing and seating in the locking portion of the slot, the upper edge of the canopy is spaced slightly from the ceiling. The slight spacing is not objectionable and is hardly noticeable, but the fixture may be constructed to avoid it, when desired. This may be accomplished by lengthening the slot and providing an upstanding ear 23 on each side thereof, beyond the projections 9. Each ear is provided on its upper surface with a depression 24 in which the knob seats and the base of the depression is raised sufficiently to bring the upper edge of the canopy close to the ceiling. Should the knob become disengaged from the ears 23, its lateral movement toward the entering portion of the slot is stopped by the projections 9.

To prevent the hung fixture from freely rotating, the knob 13 is provided with a lateral projection 25, which may be posi-

tioned to contact with a projection 9 or with the side wall of the socket 5.

To hang the fixture all that is necessary is to seat the electric plug fitting, insert the knob through the entering portion of the slot and move the fixture laterally to position the knob over the narrower portion of the slot. To detach the fixture, it is raised slightly to lift the knob over the projections, moved laterally and lowered to move the knob through the enlarged portion of the slot.

I claim:

1. The combination in a removable electric lighting fixture of a ceiling plate having a slot and a recess therein, an electric outlet fitting disposed at the bottom of said recess, an electric lighting fixture, a headed stem on said fixture adapted to engage in said slot and an electric plug fitting attached to the fixture and adapted to seat in said recess and engage in said outlet fitting.

2. The combination in a detachable electric fixture, of a ceiling plate, said plate having a slot therein and a countersunk socket containing an outlet receptacle, flexible insulated wires having at their upper ends an electrical plug and connected at their lower ends to the current carrying circuit of said lighting fixture, a stem connected at its lower end to said lighting fixture and projecting above the same and having at its upper portion an enlarged head, the said head being formed to enter said slot and lock therein and the electrical plug connected with the lighting fixture corresponding with the electrical receptacle in the socket of the ceiling plate.

3. The combination in a detachable electric fixture, of a ceiling plate, a slot and an opening therein, an electrical receptacle connected to said plate above said opening, a canopy connected to said fixture, flexible insulated wires connected to the current carrying circuit of said fixture and leading up through said canopy and attached to a plug, a stem with an enlarged head attached to said fixture and centrally disposed within said canopy and extending above it, the stem and head corresponding with the slot in the ceiling plate and formed to lock therewith, said plug corresponding with said receptacle, the fixture, the canopy and the plug being spaced to allow the free movement of the said fixture during the locking movement.

4. The combination in a detachable electric fixture, of a ceiling plate having a countersunk socket therein, an electrical receptacle seated in the socket, a slot in said ceiling plate provided with a larger entering portion and a narrower locking portion, an upward projection adjacent to the narrower portion of said slot, flexible insu-

lated wires connected to the current carrying circuit of said fixture and to an electrical plug, a stem having an enlarged head connected to the upper end of said fixture and extending above it, said stem and head being adapted to be inserted into said slot at its larger entering portion and moved laterally over said projection and into the narrower portion of said slot, and said plug being seated in the socket with its lower end above the fixture. 10

In testimony whereof, I have hereunto set my hand.

WHITMAN SYMMES.