

Dec. 17, 1940.

F. A. KUNTZ

2,225,057

LIGHT FIXTURE FOR TELEPHONE BOOTHS

Filed March 31, 1939

2 Sheets-Sheet 1

FIG. 1

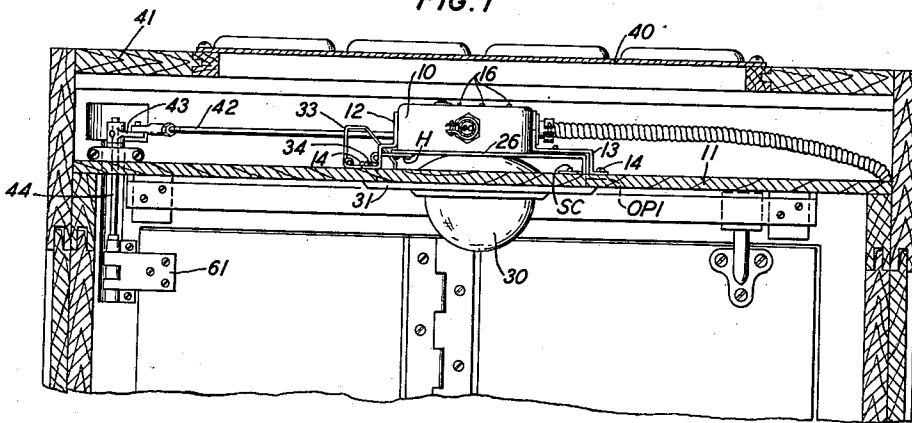


FIG. 2

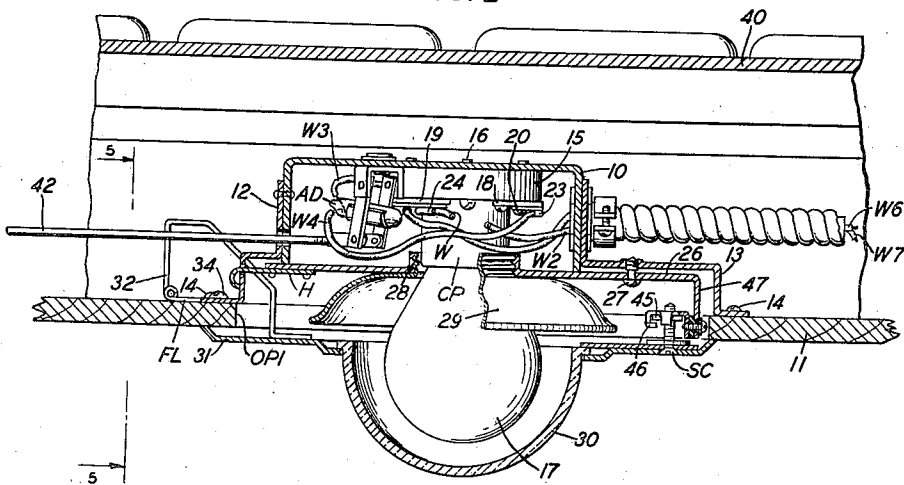
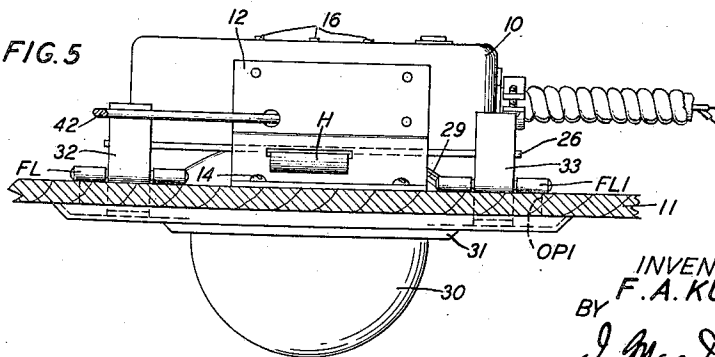


FIG. 5



INVENTOR
F. A. KUNTZ
BY
J. MacDonald
ATTORNEY

Dec. 17, 1940.

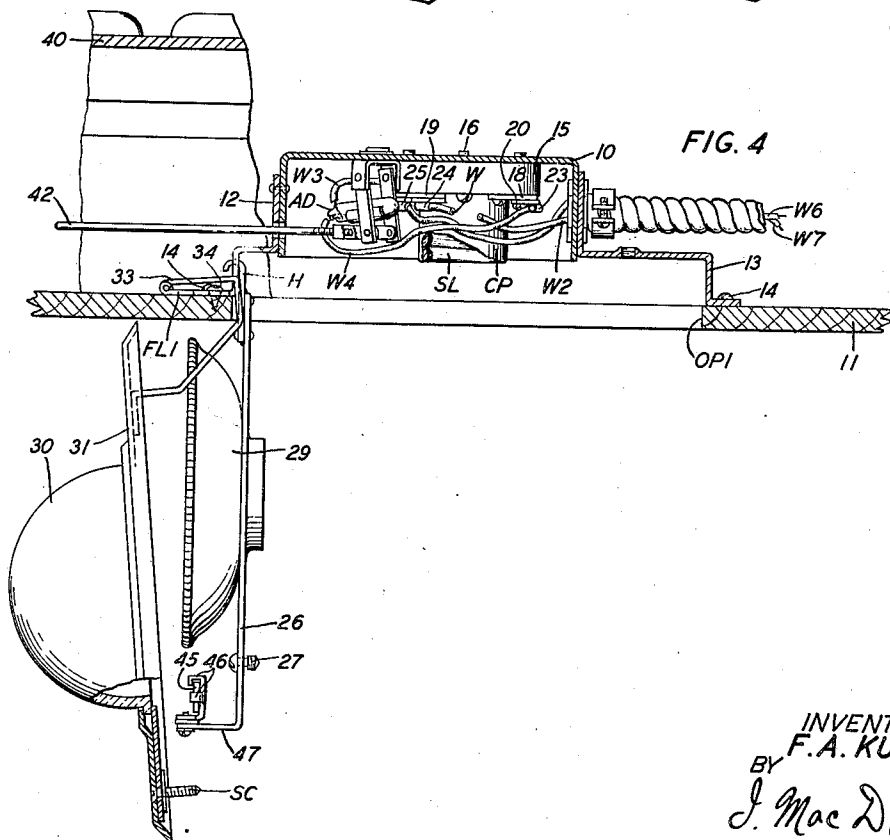
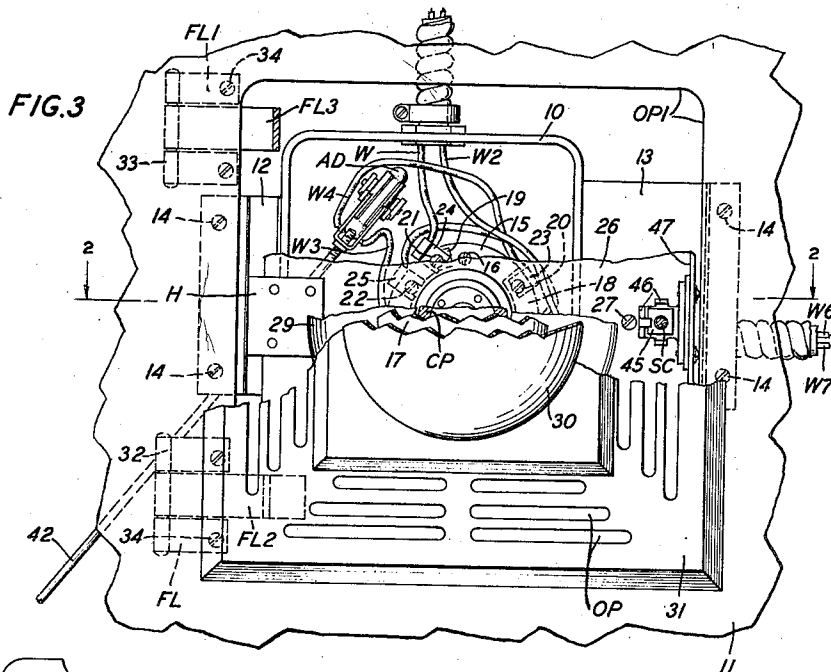
F. A. KUNTZ

2,225,057

LIGHT FIXTURE FOR TELEPHONE BOOTHS

Filed March 31, 1939

2 Sheets-Sheet 2



INVENTOR
F. A. KUNTZ
BY
J. Mac Donald
ATTORNEY

UNITED STATES PATENT OFFICE

2,225,057

LIGHT FIXTURE FOR TELEPHONE BOOTHS

Frank A. Kuntz, Woodhaven, N. Y., assignor to
Bell Telephone Laboratories, Incorporated,
New York, N. Y., a corporation of New York

Application March 31, 1939, Serial No. 265,154

3 Claims. (Cl. 240—2)

This invention relates to light fixtures and more specifically to a type of light fixture used, for example, in telephone booths and the like.

Light fixtures of the type heretofore used in telephone booths have been found to necessitate the removal of the roof section of the booth for effecting the necessary wire connections between the electric fan, the lamp and a connector block placed in a compartment formed by the ceiling and the roof section of the booth or whenever it was necessary to effect the adjustment of a door operated switch used for controlling the operation of the fan and the energization of the lamp used for the lighting of the interior of the booth.

The removal of the roof section of the booth and the adjustment of the switch as well as the establishment of the different wire connections to the connector block was rendered difficult due to the limited space between the roof of the booth and the ceiling of the premises in which telephone booths are sometimes located and in some cases due to the booths being built into the store fixtures.

In accordance with this invention a novel light fixture construction is provided which permits the adjustment of the door-controlled switch and the different wire connections to the connector block from the interior of the booth upon the simple pivotal movement of the fixture plate and that of a cover of a casing enclosing the switch and the connector block. In the light fixture construction of the invention the connector block is provided with means for receiving a socket for the lamp while a pair of brackets support the casing in spaced relation to the ceiling of the booth. Means is provided for hinging the cover of the casing on one of the brackets while the other bracket is provided with means cooperating with means carried by the casing cover for securing such a cover in the closed position with means carried by the fixture plate and cooperating with means carried by the cover of the casing for securing the fixture plate to the underside of the ceiling of the booth. A pair of hinges for the fixture plate having one of their flaps secured to the top side of the ceiling of the booth permit the pivotal movement of this plate past its pivotal center so as to give free access to the lamp while the pivotal movement of the cover of the casing gives in turn free access to the switch and the wire connector block from the interior of the booth.

Other novel features of the invention and advantages will appear from the following descrip-

tion and by the claims appended thereto, reference being had to the accompanying drawings in which:

Fig. 1 is an assembly view showing the light fixture mounted on the ceiling of a telephone booth, the telephone booth being shown in section;

Fig. 2 is an enlarged side view shown in the section taken on the line 2—2 of Fig. 3;

Fig. 3 is a view of the under side of the fixture, showing a number of operating parts with portions broken away;

Fig. 4 is a side view shown with the casing in section, the fixture plate and the cover of the casing being shown in their open position and the lamp removed from its socket; and

Fig. 5 is a side view looking in the direction indicated by the arrow 5—5 of Fig. 2.

According to the light fixture of the invention, a casing 10 is supported in an inverted position on the top side of the telephone booth ceiling, by a pair of brackets 12 and 13, these brackets being held securely to such ceiling by a plurality of screws 14.

A connector block 15 made of porcelain or other convenient insulating material is secured into the casing 10 by a plurality of screws 16 shown in Figs. 1, 2 and 4. This connector block is formed with a downward extending cylindrical portion CP into which is mounted a socket SL provided for receiving a lamp 17 and on the connector block 15 is securely mounted a plurality of conducting segments such as 18 and 19 shown in Figs. 2, 3 and 4 in turn provided with screws 20, 21 and 22 for securing the wire terminals such as 23, 24 and 25 of lead-in wires W and W2 and the connecting wires W3 and W4, the latter connecting with the electrodes of a mercury switching device AD provided for controlling the energization of the lamp 17 and that of the motor of an electric fan (not shown) in a manner which will be hereinafter described in detail.

A cover 26 for the casing 10 is provided with a hook-shaped extending member H engaging a slot in bracket 12 as shown in Figs. 2 and 5 to serve as pivots for this cover while a screw 27 is provided for holding the cover 26 in the closed position against the peripheral edge of casing 10, the screw 27 engaging a similarly screw-threaded hole in the bracket 13. The cover 26 is provided with a centrally disposed opening 28 which is preferably screw-threaded as shown in Fig. 2 for receiving a similar screw-threaded portion of a reflector member 29 serving for directing the light emitted by lamp 17 into the interior of the

telephone booth through an inverted dome-shaped translucent shade 30 carried by the fixture plate 31 as shown in Figs. 2, 3 and 5. On plate 31 are mounted two hinges 32 and 33, the flaps FL and FLI of which are secured to the ceiling of the booth as by a plurality of screws 34 while the flaps which are attached to the plate 31 are so formed as to make possible the movement of the plate 31 past its pivotal point so as not to interfere with the pivotal movement of cover 26 to a point giving free access to the interior of the casing for effecting the different wire connections and the adjustment of the switch AD. The plate 31 is provided with a screw SC which when this plate is moved in the closed position as shown in Figs. 1, 2, 3 and 5 registers with a nut 45 carried by a spider-shaped member 46 for threadedly engaging the nut 45 provided for securing the plate 31 against the under side of ceiling 11, the spider-shaped member being in turn mounted on the downwardly extending lug 47 formed integrally with the cover 26.

The plate 31 is provided with openings OP shown in Fig. 3 cooperating with the opening OP1 in the ceiling of the booth and with a louver-plate 40 secured to the roof 41 of the booth as shown in Fig. 1 to form a path for the escape of vitiated air.

The mercury switch AD is shown in Figs. 2, 3 and 4 of the lamp 17 and that of the fan is operatively connected to one end of a rod 42, while the other end of this rod, as shown in Fig. 1, is pivotally mounted on the end of a crank arm 43 keyed to a spindle 44 serving as a hinge pin for the topmost disposed hinge 61 of the door of the booth, the movement of the door from the open to the closed position shown in Fig. 1 being effective to pivot the mercury switch from the position shown in Fig. 2 to the position shown in Fig. 4 for establishing connections between the switch electrodes connecting with wires W3 and W4 for energizing the lamp and the motor of the fan which may be connected to similarly disposed ends of wires W6 and W7, the opposite ends of these wires being secured to the conducting segments 18 and 19 of the connector block.

According to the light fixture construction of the invention, the removal of the screw SC from nut 45 permits the pivotal movement of plate 31 from the closed position shown in Figs. 1, 2 and 5 to the position shown in Fig. 4 so as to permit access to the lamp 17 and to the screw 27, while the removal of screw 27 from the bracket 13 in turn permits the pivotal movement of cover 26 from the position shown in Fig. 2 to the position shown in Fig. 4, thus giving access to the switch AD and to the wire terminals of the connector block from the interior of the booth.

It is to be understood that minor changes may be made without departing from the spirit of the invention.

What is claimed is:

1. A light fixture for use in a telephone booth having a ceiling provided with an opening, said

fixture comprising a casing, a plurality of brackets for securing said casing to said ceiling centrally to the opening, a connector block and a switch mounted in said casing, said switch having an actuating member protruding through an opening in said casing for operative connection with the door of the booth, a lamp socket formed with said connector block in position concentric thereof, means carried by said connector block for effecting electrical connections to said switch and from said switch to said lamp socket, a fixture plate hinged to the ceiling of the booth and a cover for said casing hinged on one of said brackets, the hinge of said plate being so shaped as to permit the movement of the latter in position for permitting ready access to said lamp and said cover and the movement of said cover giving ready access to said connector block from the interior of the booth.

2. A light fixture for use in a telephone booth having a ceiling provided with an opening, said fixture comprising a casing, a pair of brackets for mounting said casing on said ceiling centrally to the opening, a switching device and a connector block mounted in said casing, said switching device having an operable element connected to the door of the booth, a cover for said casing pivoted on one of said brackets and movable in position to give access to said connector block and said switching device from the interior of the booth, means carried by the other of said brackets for securing said cover in its closed position on said casing, a fixture plate pivoted on the ceiling of the booth and means carried by said plate cooperating with means carried by said cover for securing said plate against the under side surface of said ceiling for closing the opening thereof.

3. In a light fixture for use in a telephone booth having a ceiling provided with an opening, said fixture comprising a casing, a plurality of brackets for securing said casing to said ceiling, a switching device mounted in said casing and operated by the movement of the door of the booth for controlling the operation of the lamp of said light fixture, a connector block mounted in said casing, said connector block having a socket for receiving the lamp of the lighting fixture, a cover for said casing pivoted on one of said brackets, said cover having an opening registering with said lamp socket, the screw threaded electrode of said lamp passing through the opening in said cover in engagement with said socket, a light reflector carried by said cover and a fixture plate hinged to the ceiling of the booth, said hinge being so shaped as to permit the fixture plate to move from a position against the under side of said ceiling to a position offset from its pivot and at right angles from its closed position for permitting access to said lamp and said cover, said cover being movable from its closed position in position for permitting access to said connector block and said switching device from the interior of the booth.

FRANK A. KUNTZ.