Jan. 29, 1929. **1,700,344**

E. C. WHITE

ELECTRIC LIGHTING FIXTURE

Filed Feb. 19, 1925

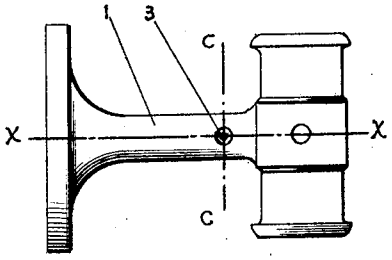


FIG 1

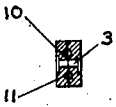


FIG 2

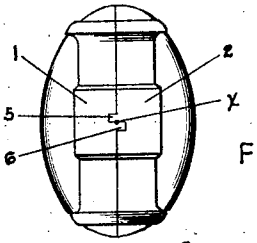


FIG 3

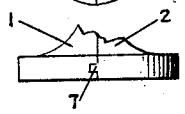


FIG 4

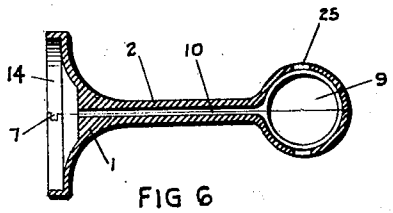


FIG 6

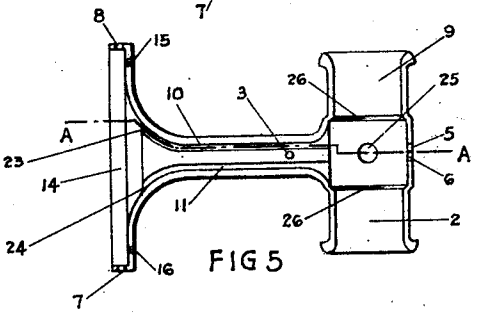


FIG 5

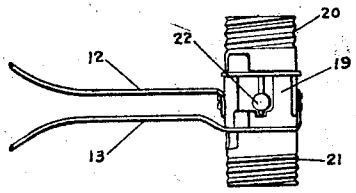


FIG 7

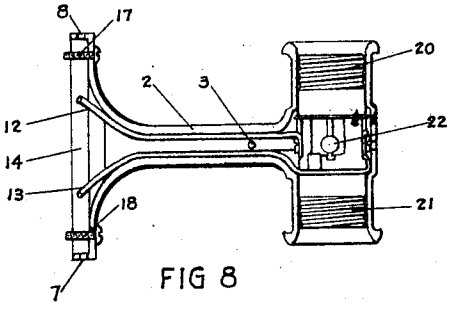


FIG 8

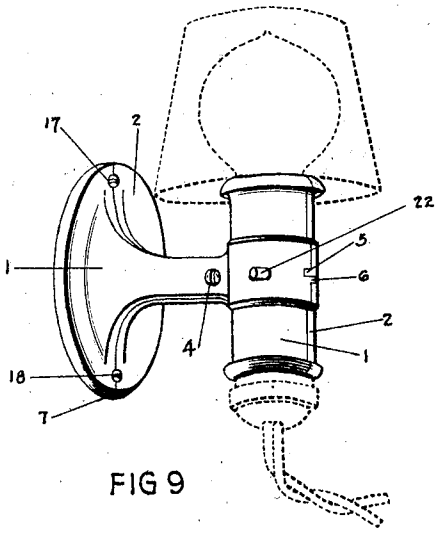


FIG 9

INVENTOR

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Patented Jan. 29, 1929. 1,700,344

UNITED STATES PATENT OFFICE.

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ELECTRIC-LIGHTING FIXTURE.

Application filed February 19, 1925. Serial No. 10,182.

My invention relates to the methods of constructing all types of electric lighting fixtures including wall brackets, ceiling fixtures, chandeliers, table lamps, floor lamps, adjustable fixtures and all appliances or parts thereof which contain or include a lamp socket.

The objects of my invention are to construct lighting fixtures from a minimum number of moulded or cast parts; to facilitate the wiring of fixtures by making it possible to assemble the necessary wires and wiring devices and fit same into the outer parts without the necessity for providing cored or hollowed parts or the expense of drawing in wires or attaching wiring devices in the usual manner; to eliminate all possibility of twisting wires and causing short circuits within fixtures by placing all wires and wiring devices in readily available open spaces and then assembling the parts to provide any desired enclosure and finish; and to provide such complete enclosure by the assembly of two parts made from the same mould. A further object of my invention is to construct such moulded parts of insulating material so as to eliminate all unnecessary insulated parts of the wires and wiring devices contained therein. A further object is to facilitate the construction of said moulded parts from material which may not require to be plated, painted, colored, lacquered or otherwise surface-treated in order to present the desired appearance, so that the finish may be more permanent. A further object of my invention is to provide a lighting fixture of compact design provided with a socket which may be used for an electric lamp, another socket which may be used for an attachment plug, switch control of one of said sockets independent of the other when desired, a single pair of conductors for both sockets, and parts moulded to receive the wires and wiring devices and to support all parts in the desired relation when assembled.

In the accompanying drawings, Fig. 1 is a side view of an electric bracket; Fig. 2 is a cross-section thereof on the line C—C; Fig. 3 is a front view thereof; Fig. 4 is a bottom view of the wall plate portion thereof; Fig. 5 is an inside view of one of the moulded halves of the outer casing; Fig. 6 is a horizontal section of the complete bracket without wire or wiring devices on the line A—A in Fig. 5; Fig. 7 is a view of the sockets and wire connected together; Fig. 8 is a view of the sockets and wire assembled into the moulded half casing illustrated in Fig. 5; Fig. 9 is a perspective view of the completed bracket showing one of the ways in which it may be used.

In carrying out my invention according to the illustrated embodiment thereof, I provide two moulded or case parts 1 and 2 which are exactly alike and only distinguished from each other by their respective assembled positions. In other words, if part 1 is revolved 180 degrees about the horizontal axis represented by point "X" in the front view and line X—X in the side view, it would occupy the position of part 2. Therefore, as the two parts are made from the same mould, a description of one of these parts is to be taken as applying to both, and in this embodiment it is assumed that the parts are to be moulded of insulating material. A hole 3 is provided for a screw 4, on the end of which a nut is screwed to draw the two halves of the bracket together. The diameter of the screw 4 fits the hole 3 closely so that the two halves of the bracket cannot move with respect to each other except rotatably about the center of the screw 4. Such rotation is rendered impossible by the provision of the projection 5 and the corresponding recess 6 in the front edge of the part 2. The said projection and recess are of course symmetrically and oppositely disposed around the axis X—X so that when the two parts are joined together the projection of one fits into the recess of the other. The back edge of the part 2 is likewise provided with a projection 7 and a corresponding recess 8 similarly disposed around the axis X—X. Looking therefore at Fig. 5, it will be seen that when two parts are assembled they interlock at three points, namely: 7, 8 and 5—6 to prevent relative rotation of the parts around the center 3.

The part 2 is provided with an approximately cylindrical space 9 to accommodate the twin socket illustrated in Fig. 7 and a hole 25 to receive one of the push buttons of said socket. Bearing surfaces 26 are provided to retain the slightly enlarged center body of the twin socket in fixed adjustment vertically, and the diameter of the upper and lower spaces is such as to fit the outside of the screw shells 20 and 21. Part 2 is also provided with wire grooves 10 and 11 to receive the conductors or wires 12 and 13, and also a space 14 to accommodate the joints between these wires and the supply wires when the bracket is installed. Recesses 15 and 16 are

provided so that when the parts are assembled, these provide holes for the supporting screws 17 and 18 which are provided for attaching the bracket to an outlet.

The twin socket 19 is provided with two oppositely disposed socket screw shells 20 and 21 which are connected together electrically and connected to wire 13. The center contact of the lower socket is in permanent contact with wire 12 which also supplies the center contact of the upper socket through the push switch 22. It will therefore be understood that when the socket is connected to an electric line, the lower socket will always be "on" and the upper socket may be turned on and off by means of the switch.

The arrangement of parts is such that the wires 12 and 13 may be bare wires as they are effectively supported and separated in the insulated material and may be connected to the socket as shown without any risk of contact between parts of opposite polarity and the rear ends of these bare wires project from the insulation at points 23 and 24 which are widely separated so that ample room is provided for connecting these wires to the supply wires of the outlet.

In actually assembling the parts, one of the great economies of my invention becomes evident. The wires 12 and 13 are connected to the binding screws of the socket 19 in the most convenient manner. The socket and wires are then laid into the spaces 9, 10 and 11 of part 2, the push button on the socket being inserted through hole 25. Part 1 is then laid over these assembled parts and screw 4 inserted through hole 3, a nut applied to the end of the screw and tightened. This completes the assembly of the bracket ready for delivery to the point where it is to be installed. It is to be observed here that the projections and recesses 5, 6, 7 and 8 may be dispensed with as the socket 19 fits the space 9 in such a manner as to prevent relative rotation of the parts 1 and 2 about the center 3 when the parts are drawn together. Also the use of insulating material for the parts 1 and 2 may be dispensed with and these parts cast in metal, in which case the socket 19 would be encased in the commonly-known covering of paraffined paper before being assembled into the parts 1 and 2, and the wires 12 and 13 would be the ordinary insulated wires used in wiring fixtures, the grooves 10 and 11 being then made correspondingly larger or combined into one groove to accommodate insulated wires. In fact, the general proportions of the entire bracket and particularly of the internal spaces 9, 10 and 11 would be somewhat increased by the use of a conducting material for parts 1 and 2, but many other advantages of my invention would be obviously retained.

The general purpose of this type of bracket will be understood from the sketch shown in Fig. 9 in which the bracket is shown as it would be installed in place with a lamp and shade used on the upper socket controlled by the push-button switch 22 and an attachment plug connected to the lower socket for the purpose of supplying current to some other appliance irrespective of whether the lamp in the upper socket is turned on or off.

It must be particularly understood that my invention is not limited to this type of bracket but includes the construction of other forms of lighting fixtures from moulded or cast parts in the manner described even though the two halves of any completed part are not made from the same mould and are not even symmetrical (as might be the case, for example, where only one lamp socket was provided in a wall bracket) so long as the construction and assembly of parts include what I claim as new, which is:

1. In an electric lighting fixture, a pair of opposed matching members of moulded material to form a longitudinally vertically divided fixture comprising when assembled, a hollow base, a hollow lamp socket housing, and a single interconnecting arm having separate laterally spaced passages extending between the interiors of said base and housing to receive and segregate twin lamp socket service wires; a lamp socket device in said housing having oppositely pointing lamp receptacles, said lamp receptacles having common service wires connected therewith and extending respectively back through said respective arm passages into said hollow base; said housing having internal shoulders to engage and retain said lamp socket device against longitudinal displacement; and a single fastening means extending transversely through said arm intermediate its passages to retain said fixture members assembled.

2. In an electric lighting fixture as defined in claim 1 in which the meeting edges of its matching members are provided with cooperative tongues and recesses adapted by their interengagement to retain said members against rotative displacement in relation one to the other, said tongues and recesses lying flush with the external surface planes of said members.

3. An electric lighting fixture comprising two lamp sockets aligned on the same axis and pointing in opposite directions; a two-part hollow fixture of insulating material divided in the plane of the vertical axis of said lamp sockets and adapted in part to embrace the latter; said fixture including when assembled, a base, a lamp socket housing and a single arm between said base and housing, said arm having laterally spaced passages to communicate with the interior of said housing whereby service wires may extend through said arm into connection with said lamp-sockets; a single fastening means extending laterally through said arm to bind

the fixture parts together; and cooperative tongues and recesses respectively formed at and in the plane of the meeting edge portions of said fixture parts and adapted by their interengagement to retain said parts against rotative displacement one from the other about the axis of said fastening means.

4. An electric lighting fixture comprising two lamp sockets aligned on the same axis and pointing in opposite directions, a two-part hollow fixture of insulating material divided in the plane of the vertical axis of said lamp sockets and adapted in part to embrace the latter; said fixture including, when assembled, a base, a lamp socket housing and a single arm between said base and housing; said arm having laterally spaced passages to communicate with the interior of said housing whereby service wires may extend through said arm into said housing interior; a common means to connect one service wire to the shell contacts of both lamp sockets, means to connect the other service wire to a center contact of one lamp socket, a switch means operative to make and break connection between the center contacts of said lamp sockets; said housing portions of said fixture having openings through which external parts of said switch means may project; a single fastening means extending laterally through said arm to bind the fixture parts together; and cooperative tongues and recesses respectively formed at and in the plane of the meeting edge portions of said fixture parts and adapted by their interengagement to retain said parts against rotative displacement one from the other about the axis of said fastening means.

Signed at New York, N. Y., on this 17th day of February 1925.

ERNEST CANTELO WHITE.