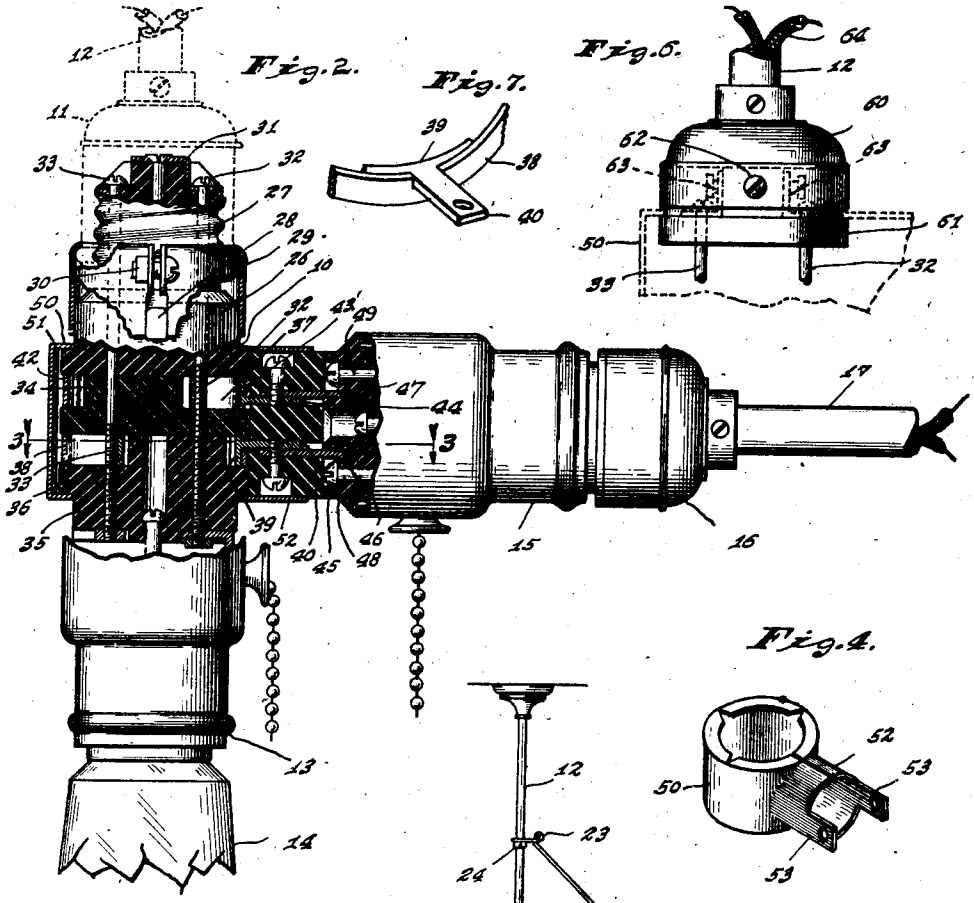
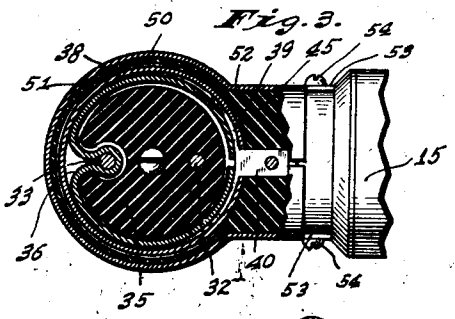
Dec. 15, 1925. 1,566,220

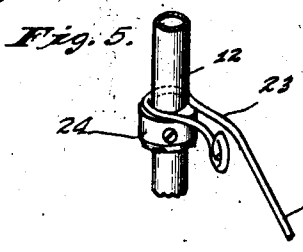
G. LILLY

SWIVEL LAMP FIXTURE

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UNITED STATES PATENT OFFICE.

GUSTAVUS LILLY, OF INDIANAPOLIS, INDIANA.

SWIVEL LAMP FIXTURE.

Application filed October 30, 1922. Serial No. 597,796.

To all whom it may concern:

Be it known that I, GUSTAVUS LILLY, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Swivel Lamp Fixture, of which the following is a specification.

The regular electric-light fixtures provided in rooms are often found to be inadequate, and even to produce shadows where light is needed, and additional and movable light-sources are often desired; and yet the ordinary portable lamp with its need for space and its troublesome and always-in-the-way cord is not satisfactory.

It is the object of my invention to provide a simple and economically constructed light fixture by which an additional and movable source of light may be obtained without the aforesaid disadvantages; which may be used in connection with already existing permanent outlet fixtures without interfering with the light-sources already provided; and which permits the extra light-source to be moved about a supporting axis without any bending of conductors and with its support wholly overhead. More specifically, it is my object to provide a light fixture for use at the lower end of an overhead support, which fixture provides a lateral extension movable about the axis of a stationary part of the fixture and having lamp-supplying conductors connected by sliding contacts to the conductors of such stationary part; and to provide, if desired, a light-source at such main part, so then there may be lights both at such main part and on the swingable lateral extension.

The accompanying drawing illustrates my invention: Fig. 1 is a side elevation of the device; Fig. 2 is a fragmental enlarged side elevation, in partial section, of the central swiveling fixture; Fig. 3 is a fragmental section on the line 3—3 of Fig. 2; Fig. 4 is a perspective view of the cover shell surrounding the swiveling fixture; Fig. 5 shows the support for the inner end of a brace which carries the load of the extension arm and light; Fig. 6 is a fragmental elevation of an alternative structure taking the place of the standard light socket on the end of an overhead support; and Fig. 7 is a fragmental perspective view of the lower contact ring and shoe.

My swiveling fixture 10, in its form shown in Figs. 1 and 2, may be screwed into a usual lamp socket 11 provided on the lower end of the depending pipe or other overhead support 12. On the lower end of this swiveling fixture is preferablv provided a standard lamp socket 13 into which may be screwed a light bulb 14. Projecting laterally from the swiveling fixture is a standard socket 15 into which screws a plug 16 on the inner end of the laterally extending conduit 17, which is preferably a rigid tubular arm. It is this lateral arm 17 which may be swung around the main axis of the swiveling fixture. The outer end of this lateral conduit may have any standard outlet fixture, such as a lamp socket 18 which may receive an electric light bulb 19. The arm 17 is preferably provided at an intermediate point with a brace 21 attached to the arm 17 by means of a collar 22. The upper end of the brace 21 is provided with a hook 23 partially surrounding the conduit 12 and supported thereon by the collar 24. A chain 25 may be provided near the end of the arm 17 to aid in swinging it. The sockets 13 and 15 shown contain the ordinary pull-switches, although this is not an essential feature of my invention.

The swiveling fixture 10 is supported in the socket 11 by a plug 26 of insulating material having on one end the usual threaded metal tube 27 and the usual central contact 31 similar to those of the ordinary extension plug. Near its lower end this plug has an enlargement (shown in Fig. 2) provided with a lug 28, which engages a slot in a split collar 29 clamped to the outer shell of the socket 11 by a bolt 30 to prevent turning of the plug 26 in such socket.

Two long bolts 32 and 33 having their upper ends in electrical contact with the center contact piece 31 and the threaded metal tube 27 respectively extend longitudinally through the plug 26, through circular insulating blocks 34 and 35, and into the

socket 13. These bolts 32 and 33 not only clamp the blocks 34 and 35 between the plug 26 and the socket 13, but also serve the purpose of conducting the current to two curved brushes 36 and 37 and to the lamp socket 13. The upper surface of the block 35 is provided with an annular recess around its periphery, the hole through which the bolt 33 runs is enlarged in such upper surface to a depth equal to that of the peripheral recess, and the wall between this enlarged hole and the peripheral recess is cut away as shown in Fig. 3. The curved brush 36 lies in the recess in the top surface of the block 35, and is so bent that its middle portion enters the enlarged hole and surrounds and engages the bolt 32, as is shown in Fig. 3. The upper surface of the block 34 is provided with a recess and enlarged hole similar to those of the block 35 and spaced 180° therefrom so that the enlarged hole surrounds the bolt 32. The second brush 37 is exactly like the brush 36, and its bent-in middle part is in contact with the bolt 32 and its ends extend around the block 34 in its recess.

A ring of metal 38 slidingly surrounds the lower brush 36, which bears outward resiliently against it to form a sliding contact A shoe 39 lies between the brush 36 and ring 38 and is provided with a shank 40 extending outward through a notch in the ring 38. A similar ring 42 and shoe 43 form contact with the upper brush 37. The shanks 40 and 44 of the shoes 39 and 43 extend into longitudinal holes in a circular block of insulating material 45, in which they are clamped to two metallic strips 46 and 47 respectively. The two metallic strips 46 and 47 are bent at right angles at their outer end to form ears through which run bolts 48 and 49 of the standard lamp socket 15.

A split metallic cover shell 50, preferably lined with a strip of insulating material 51 to separate it from the rings 38 and 42, surrounds the blocks 34 and 35, and has a main cylindrical portion provided at each end with an internally projecting flange, one of which overlies an annular flange on the lower end of the plug 26 and the other of which overlies a similar flange on the block 35. The shell also has a laterally projecting portion 52 which surrounds the block 45 and is provided on its outer end with two diametrically opposite ears 53 through which pass screws 54 by which it is attached to said block 45. The shall 50 turns on the blocks 34 and 35 as the arm 17 is swung.

The alternative structure shown in Fig. 6 permits the elimination of the socket 11, plug 26, and the collar 29. A metallic cap 60, very similar to that of an ordinary light socket, is fitted to the end of the depending pipe or conduit 12. Within the cap 60 is fixed a shoulder plug of insulating material 61 by means of two screws 62 located on opposite sides of the cap 60. That portion of the plug 61 which projects into the cap 60 is provided with suitable metal contact pieces 63 which serve to form electrical connection between supply wires 64 and the bolts 32 and 33. The plug 61 is so located relative to the cap 60 that an annular groove is formed between the lower edge of the cap and the shoulder on the plug. The annular flange on the upper end of the shell 50 fits in this groove between the cap 60 and the plug shoulder. The remainder of the swivel fixture below the plug 61 is the same as that below the plug 26 in the form of my invention shown in Figs. 1 and 2, and already described, so that the two forms are the same save for their specific mountings on the supporting pipe 12.

I claim as my invention:

1. An electric-light fixture, comprising a member having a plurality of laterally spaced longitudinally extending electrical conductors therein, a plurality of longitudinally spaced outwardly spring-pressed contacts each of which is in contact with one of said longitudinal extending conductors but insulated from the other conductors and contacts, a second member rotatable on said first member, and a plurality of contacts which are carried by said second member and each of which slides on and is spring-pressed upon by one of the contacts of said first member as the second member is rotated.

2. An electric-light fixture, comprising a member having a plurality of laterally spaced longitudinally extending electrical conductors therein, a plurality of longitudinally spaced contacts each of which is in contact with one of said longitudinal extending conductors but insulated from the other conductors and contacts, said longitudinally extending conductors being connected at one end to a lamp socket and adapted at the other end to be connected to a source of current, a second member rotatable on said first member without rotating said lamp socket, and a plurality of contacts which are carried by said second member and each of which slides on one of the contacts of said first member as the second member is rotated to take off current in shunt to said lamp socket in any direction.

3. An electric-light fixture, comprising a member having a plurality of laterally spaced longitudinally extending electrical conductors therein, a plurality of longitudinally spaced contacts each of which is in contact with one of said longitudinal extending conductors but insulated from the other conductors and contacts, said longitudinally extending conductors being connected at one end to a lamp socket, a second member rotatable on said first member without rotat-

ing said lamp socket, and a plurality of contacts which are carried by said second member and each of which slides on one of the contacts of said first member as the second member is rotated to take off current in shunt to said lamp socket in any direction.

4. An electric-light fixture, comprising a member having a plurality of laterally spaced longitudinally extending electrical conductors therein, a plurality of longitudinally spaced contacts each of which is in contact with one of said longitudinal extending conductors at an intermediate point therealong but insulated from the other conductors and contacts, said longitudinal conductors being adapted to be connected to a source of current supply, a second member rotatable on said first member and relatively to said longitudinal conductors, and a plurality of contacts carried by said second member each of which slides on one of the contacts of said first member as the second member is rotated.

5. A swivel lamp fixture, comprising a stationary member, an arm rotatable on said stationary member on a longitudinal axis thereof, conductors carried on said arm, supply conductors in said stationary part, and sliding contact means to effect electrical connection between the conductors carried on said arm and intermediate portions of said supply conductors, said supply conductors being provided with connection points on both sides of the intermediate portions at which they co-operate with said sliding contact means.

6. A swivel lamp fixture, comprising a stationary member, electrical conductors extending therethrough, an arm rotatable on said stationary member on a longitudinal axis thereof, wires carried on said arm, and sliding contact means to effect electrical connection between said electrical conductors and the wires carried on said arm at points between the ends of said stationary member, said electrical conductors being provided with connection points on both sides of the intermediate points at which they co-operate with said sliding contact means.

7. A swivel lamp fixture, comprising a stationary member, electrical conductors therein, a current-outlet fitting stationarily mounted on said stationary member and electrically connected to said electrical conductors, an arm rotatable on said stationary member on a longitudinal axis thereof, wires carried on said arm, and sliding contact means to effect electrical connection between said electrical conductors and the wires carried on said arm in shunt to said current-outlet fitting.

8. A swivel lamp fixture, comprising a stationary member, electrical conductors stationary therein and accessible at both ends of said stationary member, an arm rotatable on said stationary member on a longitudinal axis thereof, a current-outlet fitting mounted on said arm and connected to wires carried on said arm, and sliding contact means to effect shunt electrical connection between said electrical conductors and the wires carried on said arm.

9. A swivel lamp fixture, comprising a stationary member, electrical supply conductors therein, a current-outlet fitting stationarily mounted on said stationary member and electrically connected to said electrical conductors, an arm rotatable on said stationary member on a longitudinal axis thereof, a current-outlet fitting mounted on said arm and connected to wires carried on said arm, and sliding contact means to effect shunt electrical connection between said electrical conductors and the wires carried on said arm.

10. A swivel electric-light fixture, comprising two members the second of which is rotatably mounted on the first at an intermediate point along said first member, said first member being provided with a screw current-outlet fitting at each end, and the second member being provided at the side with a screw current-outlet fitting.

11. A swivel electric-light fixture, comprising two members the second of which is rotatably mounted on the first at an intermediate point along said first member, said first member being provided with a current-outlet fitting at each end, and the second member being provided at the side with a current-outlet fitting.

12. An electric-light fixture, comprising a supporting member provided at one end with a current-outlet fitting, and with supply conductors leading into its other end, and a member rotatably mounted on said supporting member and carrying conductors having sliding-contact connection with said supply conductors in shunt to said current-outlet fitting on said supporting member.

13. An electric-light fixture, comprising a supporting member provided at one end with a current-outlet fitting, and with supply conductors leading into its other end, and a member rotatably mounted on said supporting member and carrying conductors having sliding-contact connection with said supply conductors in shunt to said current-outlet fitting on said supporting member, and a current-outlet fitting mounted on said rotatably mounted member and connected to the conductors carried by said rotatably mounted member.

14. An electric-light fixture, comprising a supporting member provided at one end with a current-outlet fitting, and with supply conductors leading into its other end, and a member rotatably mounted on said supporting member and carrying conduc-

tors having sliding-contact connection with said supply conductors in shunt to said current-outlet fitting on said supporting member, and a lateral extension arm extending from said rotatably mounted member and provided at its end with a current-outlet fitting which is connected to the conductors carried by said rotatably mounted member.

In witness whereof, I have hereunto set my hand at Indianapolis, Indiana, this 27th day of October, A. D. one thousand nine hundred and twenty two.

GUSTAVUS LILLY.