A. J. TIZLEY.

ELECTRIC SWITCH.

APPLICATION FILED APR. 14, 1915.

1,162,665. Patented Nov. 30, 1915.

Fig. 1.

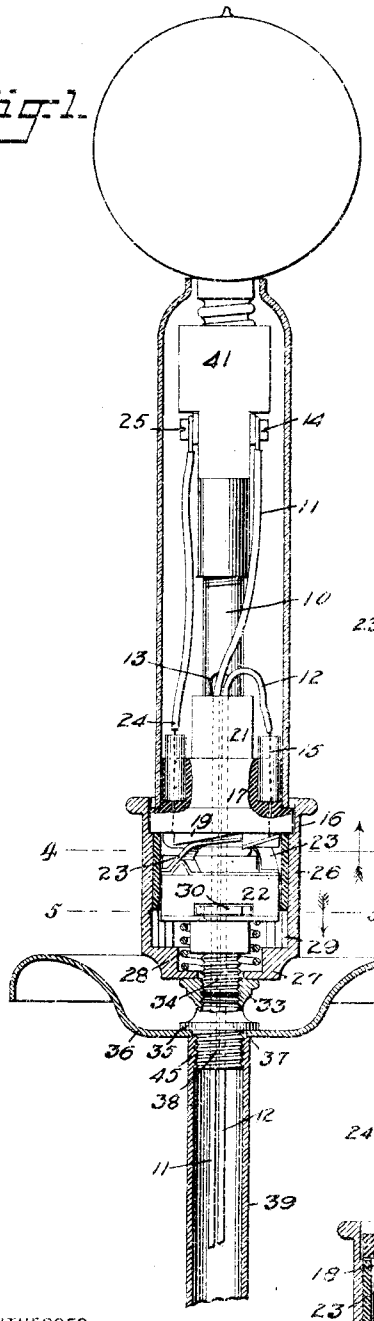


Fig. 4.

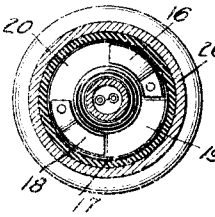


Fig. 5.

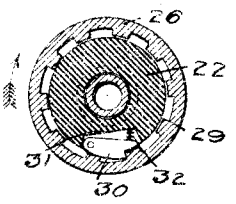


Fig. 6.

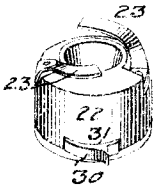
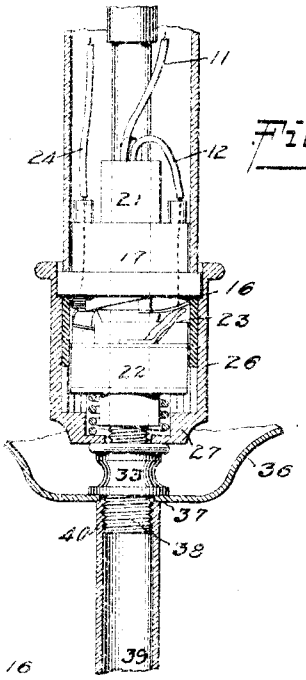


Fig. 2.



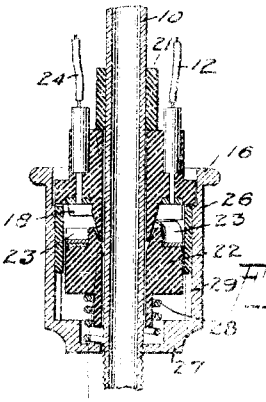


Fig. 3.

WITNESSES

William A. Goebel.

E. C. Marshall

INVENTOR

Arthur J. Tizley

BY Munn & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

ARTHUR JAMES TIZLEY, OF NEW YORK, N. Y., ASSIGNOR TO EDWARD F. CALDWELL & CO., INC., OF NEW YORK, N. Y.

ELECTRIC SWITCH.

1,162,665. Specification of Letters Patent. Patented Nov. 30, 1915.

Application filed April 14, 1915. Serial No. 21,265.

To all whom it may concern:

Be it known that I, ARTHUR J. TIZLEY, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Electric Switch, of which the following is a full, clear, and exact description.

My invention has for its object to provide an electric switch particularly well adapted for use on candelabra in which a switch member is mounted to rotate on a central tube through which the wires lead one of the wires being connected with the switch member for making and breaking the circuit.

Another object of the invention is to dispose the switch member in a collar with which it is connected by a ratchet so that while the switch will be operated by rotating the collar in one direction the collar may be rotated in the opposite direction relatively to the switch member.

Additional objects of the invention will appear in the following specification in which the preferred form of my invention is disclosed.

In the drawings similar reference characters refer to similar parts in all the views in which—

Figure 1 is a sectional elevation showing my invention; Fig. 2 is another elevation partially in section showing other features of the invention; Fig. 3 is a sectional fragmentary view showing the switch members; Fig. 4 is a sectional view on the line 4—4 of Fig. 1; Fig. 5 is a sectional view on the line 5—5 of Fig. 1; and Fig. 6 is a perspective view showing the rotary switch member.

By referring to the drawings it will be seen that a tube 10 is provided, wires 11 and 12 being disposed in the said tube 10 and coming out of the said tube 10 through the opening 13. The wire 11 is then connected with the binding post 14, the wire 12 extending through the plug 15 and being connected with the spring contact member 16 mounted on the insulating switch member 17, the insulating material with which the member 17 is constructed insulating the contact member 16 from the contact point 18. The switch member 17 is constructed in the order of a ratchet with the contact points 18 and 18 forming two teeth of the ratchet and the other two teeth being formed at 19 and 20. The switch member 17 is prevented from moving up the tube 10 by the collar 21 which is disposed around the tube 10 and is secured thereto. Mounted on the tube 10 for coöperating with the said member 17 there is a rotary switch member 22 which has two resilient extending contact arms 23 which are connected together electrically so that when the contact arms 23 engage the contact points 16 and 18, a circuit will be completed from the wire 12 to the contact point 16 to one of the contact arms 23 to the other contact arms 23, thence to the contact point 18 with which the wire 24 is connected, thence to the wire 24 leading to a binding post 25 which is a companion to the binding post 14, the said binding post 14 and 25 being connected with the lamp.

Disposed around the rotary switch member 22 there is a collar 26 having a head 27 with which an end of the spring 28 engages, this spring also engaging the rotary switch member 22 for holding the rotary switch member 22 with its contact arms 23 yieldingly in engagement with the contact points 16 and 18 or with the switch member 17 at its ratchet teeth 19 and 20. The collar 26 has inner teeth 29 as best illustrated in Fig. 5 of the drawings, with which a ratchet 30 engages, this ratchet 30 being provided in a recess 31 in the rotary switch member 22 and being held yieldingly extended by a spring 32. With this construction, the rotary switch member 22 may be rotated by the collar 26, when the said collar 26 rotates in one direction it being possible for the collar to be rotated in the opposite direction and relatively to the rotary switch member 22. This construction makes it possible to reverse the movement of the collar 26 without damaging the switch.

The collar 28 is held in place on the tube 10 by a nut 33 which meshes with a thread 34 on the tube 10, this nut 33 having a flange 35 against which a cup 36 may be disposed, the cup 36 having an opening 37 through which a hollow stem, having an outer thread 38, is disposed, a tube 39 having an inner thread 40 meshing with the thread 38 for pressing the cup 36 against the flange 35. The binding post 14 and 25 are connected with the lamp socket 41 in the customary manner.

Having thus described my invention I

claim as new and desire to secure by Letters Patent:

1. In an electric switch, a central tube, a switch member mounted on the tube and having two contact points insulated from each other, two wires in the central tube, one of the wires leading to a contact point, a wire leading from the other contact point for coöperating with the other of the first two wires, a rotary switch mounted on the central tube for connecting the contact points, there being a recess in the side of the rotary switch, a pawl in the recess, a spring for pressing the pawl yieldingly away from the recess and a collar disposed around the rotary switch member and having inner teeth for engagement by the pawl.

2. In an electric switch, a central tube, a switch member secured around the tube and provided with two contact points, the switch member having an outer annular seat, a second switch rotatably mounted on the central tube for coöperating with the first switch member, a collar disposed around the second switch member and having means for operating the latter, the collar being disposed beyond the annular seat to embrace an artificial candle tube seated in the seat, and means for yieldingly pressing the second switch member against the first switch member.

In testimony whereof I have signed my name to this specification in the presence of the two subscribing witnesses.

ARTHUR JAMES TIZLEY.

Witnesses:

L. LIVINGSTON,

E. T. CALDWELL.