W. F. ANKLAM.
ELECTRICAL FITTING.
APPLICATION FILED SEPT. 8, 1914.

1,161,582. Patented Nov. 23, 1915

Fig. 2.

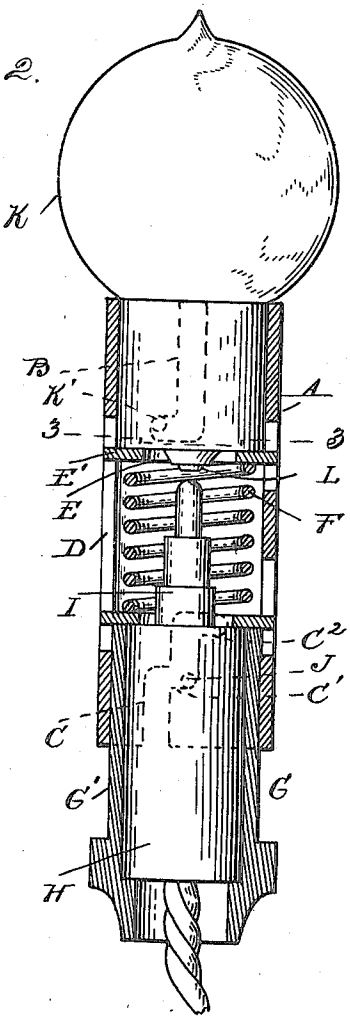


Fig. 1.

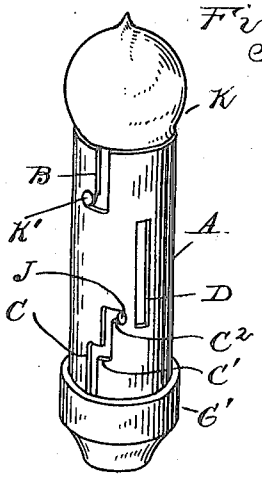
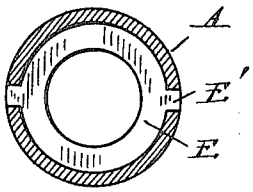


Fig. 3.



WITNESSES:
H. K. Ford
James P. Barry

INVENTOR
William F. Anklam

BY
Whittemore Hulbert & Whittemore
ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM F. ANKLAM, OF DETROIT, MICHIGAN, ASSIGNOR TO C. M. HALL LAMP COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

ELECTRICAL FITTING.

1,161,582. Specification of Letters Patent. Patented Nov. 23, 1915.

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To all whom it may concern:

Be it known that I, WILLIAM F. ANKLAM, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Electrical Fittings, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to electrical fittings and more particularly to a socket fitting adapted for the reception of a lamp and connector plug for use in vehicle lamps and similar structures.

In the drawings, Figure 1 is a perspective view; Fig. 2 is a longitudinal section; and Fig. 3 is a cross-section on the line 3—3 of Fig. 2.

In the construction of vehicle lamps it is desirable and is required by the laws of certain States to locate the switch for turning on and off the light directly in the lamp. Thus if the lamp is burned out or otherwise inoperative it is called to the attention of the operator when the attempt is made to turn it on. With the present invention I have provided a simple construction of socket for the lamp and connector plug which permits the latter to be used as a switch, the detail construction being as follows: A is a metallic, cylindrical sleeve which is provided at opposite ends with bayonet joint slots B and C, also with the longitudinal slots D on opposite sides of the central portion thereof.

E are annular spring abutments for fitting within the cylinder A and having projecting lugs E′ for engaging the longitudinal slots D.

F is a spring arranged between the abutments E and normally holding the same at the opposite ends of the slots D.

G is the connector plug which is provided with an outer metallic casing G′ containing an insulator plug H carrying a yieldable contact member I. The casing G′ is provided with lugs or pins J for engaging the bayonet slots C and these slots are formed with two laterally-extending locking shoulders C′ and C² for engaging the pins J and holding the plug in different positions of longitudinal adjustment. The lamp K is also provided as usual with the pins K′ for engaging the bayonet joint slots B.

The proportion of the parts just described is such that when the lamp is inserted in one end of the cylindrical socket A it will press against the abutment E, forcing the latter inward against the tension of the spring F before the lamp may be turned to lock upon the shoulder of the bayonet slot. In the same manner the insertion of the plug G will bear upon the opposite spring abutment E, forcing it in the opposite direction against the tension of the spring F. Therefore the pins J may be engaged with either of the locking shoulders C′ or C². When the pins J are in engagement with the shoulder C′ the contact I will be separated from the cooperating contact L of the lamp, but when the pin J is in engagement with the shoulder C² the contact I will be pressed against the contact L, thereby completing the circuit. In both positions the plug G will be held from accidental displacement by the tension of the spring F and this same spring forms also the tensioning means for holding the lamp from disengagement. Thus with this simple construction both lamp and connector are secured, and the connector may be used as a switch for turning on or off the lamp.

What I claim as my invention is:—

1. An electrical fitting, comprising a cylindrical casing adapted for receiving a lamp and a connector plug respectively in opposite ends thereof, and formed to establish two different spaced relations between said lamp and plug, of a spring housed within the central portion of said casing, and abutments at opposite ends of said spring held thereby in constant yieldable contact with said lamp and plug respectively, and means independent of said abutments for establishing electrical connection between the lamp and plug in one of their spaced relations.

2. An electrical fitting, comprising a cylindrical casing adapted for the reception of a lamp and a connector plug in the opposite ends thereof, a spring housed within the central portion of said casing, sliding abutments at opposite ends of said spring, means for locking the lamp in said casing against the tension of said spring, means for locking said plug in two positions of longitudinal adjustment and each under the tension of said spring, and an electrical contact adapted to be held in connection with the

lamp contact in one position of said plug and out of connection therewith in the other position.

3. An electrical fitting, comprising a cylindrical casing adapted for the reception of a lamp and a connector plug in opposite ends thereof, a spring housed in the intermediate portion of said casing, spring abutments at opposite ends of said spring engaging said casing to form stops, a connector plug insertible in one end of said fitting, comprising an outer metallic sleeve, an insulator plug therein, and a yieldable electrical contact member engaging said insulator, said casing being provided with bayonet joint slots at opposite ends thereof for respectively locking said lamp and said plug, and the slots for said plug being provided with two shoulders, one for holding said electrical contact out of connection with said lamp and the other for holding said contact in connection with said lamp.

4. An electrical fitting, comprising a cylindrical casing adapted for receiving a lamp and a connector plug respectively in opposite ends thereof, a spring housed within the center portion of the casing, and abutments at opposite ends of said spring, held thereby in yieldable contact with said lamp and plug and formed with portions slidably engaging the casing.

5. An electrical fitting, comprising a cylindrical casing, a spring housed within the central portion of the same, sliding abutments for the opposite ends of the spring, having their displacement limited through engagement with the casing, a lamp insertible in one end of the casing, interlocking with the casing and contacting with the abutment in said end, a plug insertible in the other end of the casing, having two positions of interlocking engagement with the casing and contiguous in both of said positions with the other abutment, electrical terminals respectively carried by the lamp and plug, and means for locking the plug in its two positions, said terminals being in contact in one of the positions of the plug and spaced in the other.

6. An electrical fitting, comprising a cylindrical casing adapted for receiving a lamp and a connector plug respectively in its opposite ends, a spring housed within the center portion of the casing, and annular abutments at opposite ends of said spring, held thereby in yieldable engagement with the lamp and plug.

7. An electrical fitting, comprising a cylindrical open-ended casing, and a lamp and connector plug respectively retained in the ends of the casing, the plug having a portion establishing direct electrical connection with the lamp in a certain position of said plug.

8. An electrical fitting, comprising a cylindrical casing adapted for receiving a lamp and a connector plug respectively in its opposite ends, a spring housed within the center portion of said casing, annular abutments at opposite ends of said spring, held thereby in yieldable engagement with the lamp and plug, the plug having a portion projecting through the adjacent abutment for establishing electrical connection with the lamp.

9. An electrical fitting, comprising a cylindrical casing adapted for receiving a lamp and a connector plug respectively in its opposite ends, a spring housed within the center portion of said casing, annular abutments held by said spring in yieldable contact with the lamp and plug, and means for establishing an electrical connection between the lamp and plug through the apertures of the abutments.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM F. ANKLAM.

Witnesses:
HERBERT APFELBAUM,
C. E. ALLEN.