W. F. ANKLAM.

ELECTRICAL SOCKET FITTING.

APPLICATION FILED APR. 18, 1917.

1,264,255. Patented Apr. 30, 1918.

Fig. 1.

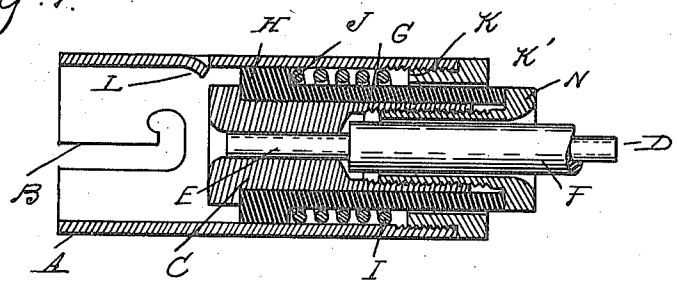


Fig. 2.

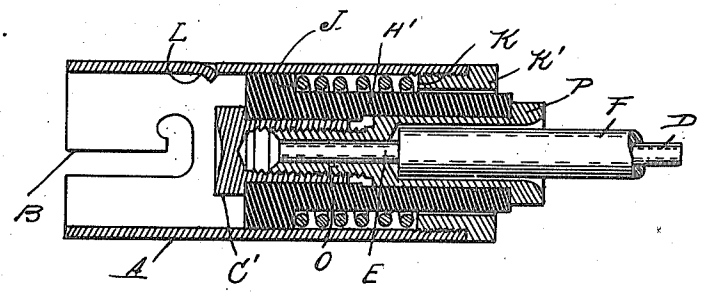
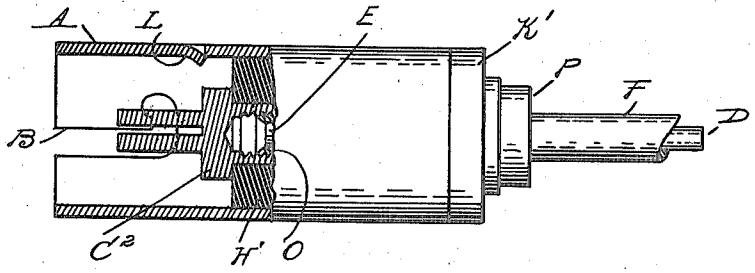


Fig. 3.



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 SOCKET-FITTING.

1,264,255. Specification of Letters Patent. Patented Apr. 30, 1918.

Application filed April 18, 1917. Serial No. 163,084.

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 Socket-Fittings, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to electrical socket fittings such as are used for connecting the incandescent lamps of a vehicle lighting system, and the invention comprises certain novel features of construction as hereinafter set forth.

In the drawings:

Figure 1 is a central longitudinal section through the fitting;

Fig. 2 is a similar view showing a modified construction; and

Fig. 3 is a similar view of another modification.

In the present state of the art, socket fittings for small incandescent lamps are usually provided with a resilient, yieldable central contact, which serves the double function of an electrical connection and a clamp for holding the lamp from disengagement. To provide for the yielding of the contact it is usual to form a sliding connection between the same and the member to which the terminal wires are attached. This is objectionable because of the low voltage, and the resistance introduced by the sliding contact frequently produces a flickering or dimming of the light. It is the object of the present construction to maintain a rigid and good electrical connection between the terminal wire and the central contact, and at the same time to provide for the resilient yielding of the latter.

As shown in Fig. 1, A is the outer metallic socket member, which is provided with the usual bayonet slot B for engaging a locking pin on the lamp bulb, and C is the central contact member. Instead of providing a sliding connection between this contact and the terminal wire D, a rigid connection is formed by centrally boring the contact and soldering the bared portion of the wire E therein. The contact member is also counterbored to receive a portion F of the insulation so as to form a firm mechanical as well as a good electrical connection. G is an insulator-sleeve surrounding the contact C and having a portion H which slidably fits within the socket member A. In rear of this portion H the sleeve is reduced in diameter to form an annular recess between the same and the socket member, in which is located a spring I, one end thereof abutting against the shoulder J on the sleeve and the opposite end engaging a counter-shoulder K on the socket, preferably formed by a threaded bushing K'. L is a stop for limiting the forward movement of the bushing, preferably formed by a struck-in portion of the tube A, and N is a clamping means for attaching the contact C to the sleeve G, preferably in the form of a threaded bushing engaging the counterbore in said contact member and surrounding the insulated portion F of the terminal wire.

With the modified construction shown in Fig. 2, the terminal wire is attached to a member O which is bored and counterbored to receive the bared and insulated portion of said wire. This member O has a head portion P at the rear end thereof forming a shoulder for engaging one end of the bushing H', while the opposite end is threaded for engagement with a correspondingly-threaded bushing member C' having a shoulder for engaging the sleeve and forming the central contact. With both constructions the terminal wire is rigidly attached to the contact member and moves with the latter when adjusted to engage the lamp. By reason of this rigid connection the electrical circuit is not disturbed and the mechanical wearing of the parts can in no way affect it.

The construction shown in Fig. 3 is similar to that shown in Fig. 2 with the exception that the contact member C^2 is formed with a split plug portion for engaging the socket contact of a connector plug or other electrical fitting.

What I claim as my invention is:

1. The combination with a socket member, of a central contact member bored and counterbored and having a shouldered head at the opposite end from said counterbore, an insulator sleeve surrounding said contact member and bearing against the shouldered head, said sleeve having a portion slidably fitting said socket member and a portion of reduced diameter, a bushing having a threaded engagement with the counterbored portion of said contact member and provided with a shoulder for engaging the op-

posite end of said sleeve, a spring surrounding the reduced portion of said sleeve, a stop on said socket member for limiting the movement of said sleeve in one direction, and an abutment for the spring opposed to said stop.

2. The combination with an insulated terminal wire having a bared end portion, of a member bored to receive the bared portion of said wire and counterbored to receive a portion of the insulation thereof, said member having a shouldered head at the end opposite the counterbore, an insulator-sleeve surrounding said member, and a bushing having a threaded engagement with the counterbore within said sleeve and a shoulder for engaging the opposite end of said sleeve and clamping the same.

3. The combination with an insulated terminal wire having a bared end portion, of a member bored to receive the bared portion of said wire and counterbored to receive a portion of the insulation thereof, an insulator sleeve surrounding said member, and a bushing having a threaded engagement with the counterbore within said sleeve and coacting with said bored member to clamp said sleeve.

4. The combination with a bored and counterbored contact member, of a terminal wire engaging the bore of said member, an insulator sleeve surrounding said member, a bushing having a threaded engagement with the counterbored portion of said contact member and coacting with said member to clamp said sleeve.

In testimony whereof I affix my signature.

WILLIAM F. ANKLAM.