C. A. W. KEIM.

CONNECTOR FOR ELECTRIC CONDUCTORS.

APPLICATION FILED MAR. 20, 1918.

1,291,545. Patented Jan. 14, 1919.

Fig. 1

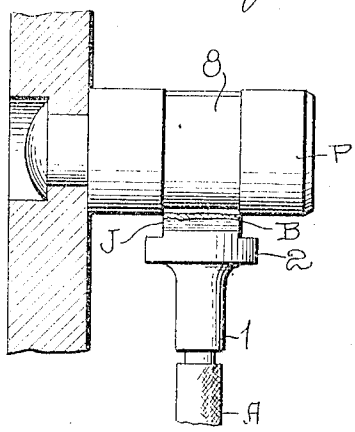


Fig. 2

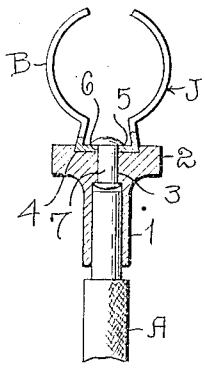
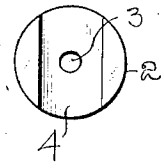


Fig 3



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CONNECTOR FOR ELECTRIC CONDUCTORS.

1,291,545. Specification of Letters Patent. Patented Jan. 14, 1919.

Application filed March 20, 1915. Serial No. 223,584.

To all whom it may concern:

Be it known that I, CHESTER A. W. KEIM, a citizen of the United States, residing at West Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Connectors for Electric Conductors, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in connectors for electric conductors and it is an object of the invention to provide a novel and improved connector of this general type wherein the conductor is provided with a terminal consisting of spring jaws adapted to be engaged with an annular groove provided in a binding or other terminal.

It is also an object of the invention to provide a novel and improved device of this general character wherein the terminal for the conductor comprises a sleeve or socket member in which a terminal of the conductor is secured and wherein said sleeve or socket is provided with a head having anchored thereto the intermediate portion of a pair of integrally connected spring jaws.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved connectors for electric conductors whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view partly in elevation and partly in section illustrating a connector for electric conductors constructed in accordance with an embodiment of my invention;

Fig. 2 is a fragmentary view partly in section and partly in elevation illustrating a conductor terminal as herein employed; and

Fig. 3 is a view in top plan of the outer face of the annular enlargement or head of the sleeve or socket included in the conductor terminal.

As herein disclosed my improved connector includes a conductor terminal consisting of a sleeve or socket 1 preferably formed of cold rolled steel and which has its outer end closed and with said closed end portion defined by the annular enlargement or head 2 preferably circular in form. The terminal portion of an electrical conductor A is insertible within the sleeve or socket 1 through the open end thereof and preferably held within said socket or sleeve 1 by solder. The closed end or head 2 of the sleeve or socket 1 is provided therethrough with the opening 3 at substantially the axial center of the bore of the sleeve or socket 1 and the outer face of the enlargement or head 2 is provided thereacross with a radially disposed groove or channel 4 in which snugly fits the intermediate connecting portion 5 of the spring jaws J. The connecting portion 5 is provided with an opening 6 which registers with the opening 4 and through said opening 4 is disposed a holding rivet 7 of copper or brass and which serves to hold the jaws J firmly in proper position in a manner to assure the desired electrical connection.

The jaws J as herein embodied are formed by outwardly bowing or curving the opposite end portions of a band B of spring steel and which jaws normally occupy substantially parallel planes approximately perpendicular to the intermediate portion 5. It is also preferred that the jaws J be hardened and tempered.

P denotes a binding post or other terminal provided intermediate its length with an annular groove 8 which snugly receives the jaws J, when the same are engaged with the post P. Normally the free ends of the jaws J are separated a distance less than the diameter of the post P at the grooved portion thereof so that when the jaws are engaged with the post an electrical connection is assured.

From the foregoing description, it is thought to be obvious that a connector for an electric conductor constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the

precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:

A terminal for an electrical conductor comprising a sleeve in which an end portion of the conductor is adapted to be secured, the outer end of the sleeve being closed, said sleeve and closed end being integral and formed of electrical conductive material, the outer face of the closed end of the sleeve being provided with a transverse groove extending entirely thereacross, a pair of resilient jaws having their inner extremities connected, the connected portion seating within the groove, and a holding member disposed through the connecting portion and the closed end of the sleeve at a point alining with the bore of the sleeve, the end portion of the conductor being secured within the sleeve independently of the holding member.

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

CHESTER A. W. KEIM.

Witnesses:
CHAS. H. COLLVER, Jr.,
HAZEL A. VOLKER.