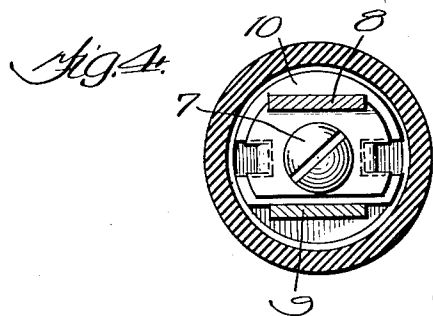
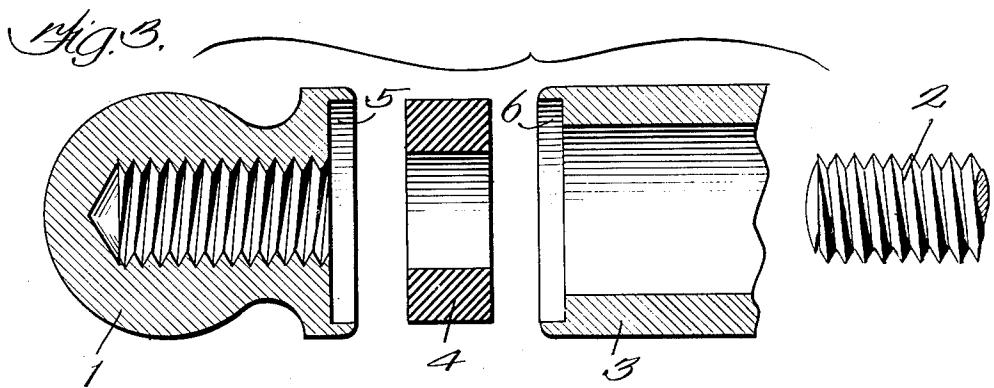
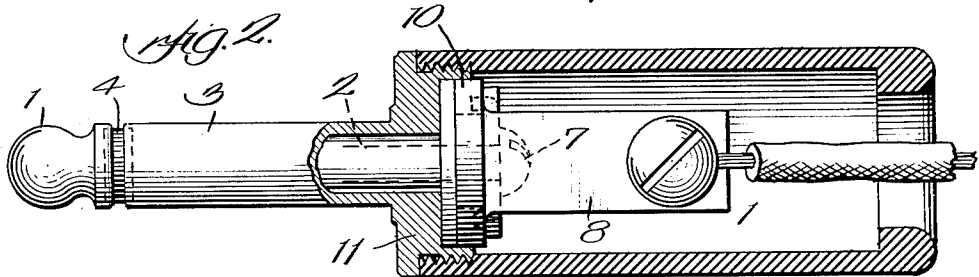
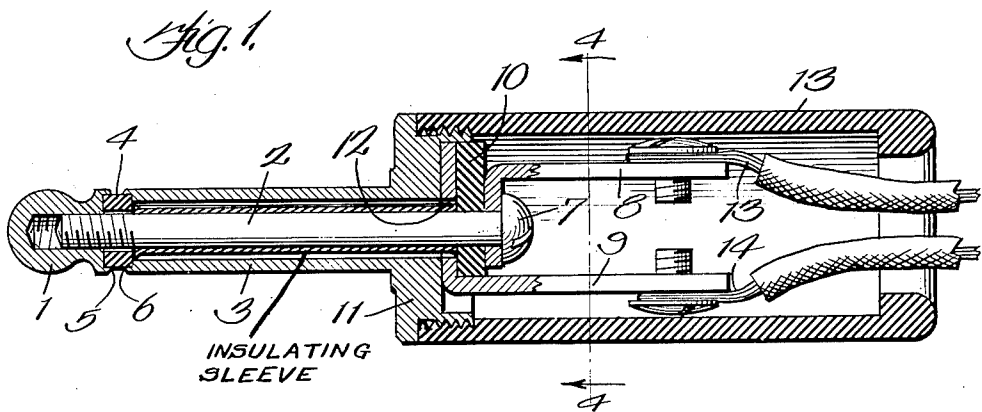


Feb. 16, 1926.

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E. E. YAXLEY
CONNECTING PLUG
Filed May 26, 1924



Inventor:
Ernest E. Yaxley
By *L. L. Cragg* atty.

UNITED STATES PATENT OFFICE.

ERNEST E. YAXLEY, OF CHICAGO, ILLINOIS.

CONNECTING PLUG.

Application filed May 26, 1924. Serial No. 716,007.

To all whom it may concern:

Be it known that I, ERNEST E. YAXLEY, a citizen of the United States, residing at Chicago, in the county of Cook and the State of Illinois, have invented a certain new and useful Improvement in Connecting Plugs, of which the following is a full, clear, concise, and exact description.

My invention relates to connecting plugs employing tip and sleeve contacts adapted for engagement with the contacting springs of spring jacks. The invention resides in an improved construction and assembly of the component parts of such a plug.

The plug of my invention has the tip and sleeve contacts thereof aligned as usual, and are spaced apart lengthwise of the sleeve contact to electrically separate both contacts of the plug. A spacer of insulation is interposed between the adjacent ends of the sleeve and tip contacts, this spacer being received in a cup shaped recess that is formed in at least one of these contacts and in preferably each of the contacts of their adjacent ends. The tip contact is desirably furnished with a shank which passes through the sleeve contact and through the spacer, this shank being threaded whereby it may be employed to clamp the tip, sleeve and spacer in firm assembly.

The invention will be more fully explained in connection with the accompanying drawing in which Fig. 1 is a longitudinal section showing the preferred embodiment of the invention; Fig. 2 is a view partially in elevation and partially in longitudinal section, taken in a direction at right angles to the direction in which Fig. 1 is taken; Fig. 3 is a view showing parts of the plug in separated relation, some in section and one in elevation, a portion of the sleeve contact and tip shank being broken away and the parts being shown on a greatly increased scale; and Fig. 4 is a sectional view on line 4—4 of Fig. 1. The metallic tip contact 1 of the plug is provided with a shank 2 which is preferably screwed into the tip. The metallic sleeve contact 3 of the plug surrounds the tip shank 2 and is spaced apart therefrom so as not to have direct electrical connection therewith. The aligned contacts 1 and 3 are spaced apart and are separated by a ring

shaped spacer 4 of insulation. This spacer is received within the cup shaped recesses 5 and 6 which are respectively formed in the adjacent ends of the contacts 1 and 3. The shank 2 is furnished with a slotted head 7 whereby it may be turned or held by a screw driver to bring the elements 1, 3 and 4 into firm assembly. The ring shaped spacer 4 engages the rims of the recesses 5 and 6 so as to supplement the shank 2 in maintaining the contacts 1 and 3 in proper alignment. The annular space between the rims of the recesses 5 and 6 is sufficiently deep and wide to prevent metallic particles from being held therein to short-circuit the plug contacts. The tip shank also serves to electrically and mechanically assemble the terminal plates 8 and 9 with the tip and sleeve contacts 1 and 2. As illustrated, the head 7 of the shank clamps the angular end of the terminal plate 8 against the insulating spacer 10, which, in turn, presses the angular end of the plate 9 against the heel portion 11 of the sleeve 3. The plate 9 is formed with an opening 12 where the shank passes through, this opening being sufficiently large to prevent the shank from having direct connection with this plate. The plug handle 13, of insulation, is screwed upon the heel portion 11 of the sleeve 3 and is hollow to enclose the terminal plates 8 and 9 and the conductor ends 13, 14 that are attached to these plates.

Changes may be made without departing from the invention.

Having thus described my invention, I claim:—

A connecting plug including a tip contact; a sleeve contact aligned with the tip contact, said contacts being spaced apart longitudinally of the sleeve and having opposing cup shaped recesses formed in their adjacent ends; and a spacer of insulation in the form of a ring disposed in said recesses and surrounded by and engaging the rims about the same, said tip contact having a shank passing through the sleeve contact and the spacer and serving to bind said contacts and the spacer in assembly.

In witness whereof, I hereunto subscribe my name.

ERNEST E. YAXLEY.