P. F. WILLIAMS.

POTHEAD.

APPLICATION FILED JAN. 26, 1911.

1,109,726. Patented Sept. 8, 1914

Fig. 1

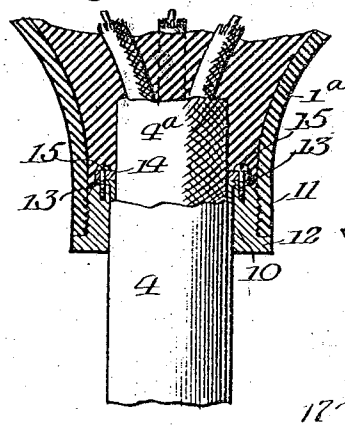


Fig. 3.

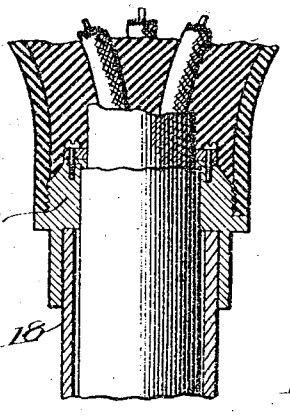
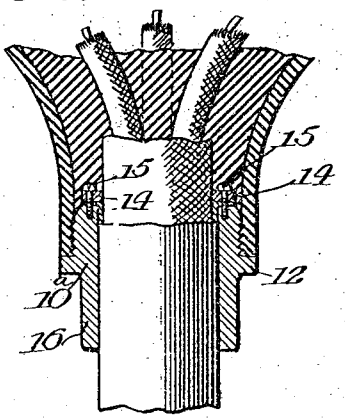


Fig. 2.



Witnesses
O. W. Wurmiel
A. Lyda Jones

Inventor
Paul F. Williams
by A. Miller Belfield
Atty.

UNITED STATES PATENT OFFICE.

PAUL F. WILLIAMS, OF CHICAGO, ILLINOIS, ASSIGNOR TO G. & W. ELECTRIC SPECIALTY CO., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

POTHEAD.

1,109,726. Specification of Letters Patent. Patented Sept. 8, 1914.

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To all whom it may concern:

Be it known that I, PAUL F. WILLIAMS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Potheads, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to cable terminal devices, and especially to a form of device which I have called a pot head. These devices ordinarily consist of a casing made usually of insulating material, and provided with structural features which will permit the cable end to be led into the device, and the strands or conductors to be separated out and connected with line wires or other conductors.

The object of the present invention is to provide a simple, practical and effective device of this kind, and also to provide improved means for mechanically connecting the device to the cable end, which means may be called an end piece. In the present application I show several arrangements by which this can be done, each embodying the general feature of a member such as a plug or collar, adapted to close the space or opening between the cable sheath, and the walls of the pot head orifice, or mouth, through which the cable is led, together with instrumentalities for insuring a perfectly tight joint at such point.

In the accompanying drawings Figure 1 is a view in vertical section of a terminal device or pot head embodying my invention; Figs. 2 and 3 are views similar to Fig. 1, showing modified forms of the device.

In Fig. 1 I have shown a construction involving a collar or plug 10, having a threaded portion 11, adapted to make threaded engagement with the lower edge of the mouth 1^a of the bottom of the pot head. This collar is also preferably provided with a flange 12 to engage the lower edge of said mouth 1^a. In this arrangement also I show the upper edge of the lead sheath of the cable 4 bent outwardly to form a flange 13, and this flange meets and abuts against the top edge of the collar 10. I also show a supplemental collar or ring 14, arranged upon the cable portion 4^a laid bare by the removal of the lead covering. Screws 15 are desirably passed through the ring 14 into the flange 13 to form a tight and secure joint between the various parts.

In the practical use of this device the bowl 1^a and collar 10 may be placed over the cable, the end of the cable sheath clamped to the collar 10 by the ring 14 as shown, and then the interior of the bowl filled with insulating compound in accordance with the practice in such matters. It will be seen that my method of clamping the end of the cable sheath provides a most efficient water tight joint, as well as one which is readily installed and cheaply manufactured.

In Fig. 2 I show an arrangement substantially like that of Fig. 4, except that the collar 10^a of Fig. 2 has a downwardly projecting extension 16, extending down the cable sheath for convenience of application and for forming a more extended grip of the collar upon the cable sheath.

The arrangement shown in Fig. 3 is similar to that of Fig. 2, except that it has a plug member 17 similar to the member 16 of Fig. 2, but having an enlarged socket at its lower end adapted to fit over and receive a pipe 18 inclosing the cable. It will be seen that in this arrangement as in the others the sloping shoulders of the plug member filling the cable inlet allow the compound to work down well to the bottom of the device, and so form an efficient seal, and also to work in underneath the flange formed on the cable sheath.

It will be understood that changes and modifications can be made within the scope of the appended claims without departing from the spirit of the invention.

What I claim is:

1. A cable pothead comprising in combination, a casing provided with an inlet aperture, a perforated plug for closing said aperture projecting when in normal position within said casing, the outer edge of said plug within the casing being cut away to provide a space for insulating compound between the plug and the casing.

2. A cable pothead comprising in combination, a casing having an inlet aperture, a perforated plug for closing said aperture engaging the inside of the pothead, a cable sheath entering the pothead through the perforation in said plug and flared out in contact with the inner face of said plug, a ring for clamping the end of said sheath

against the inner face of said plug, said ring being of less diameter than the interior of said pothead and said plug being cut away at a point immediately beyond the outer edge of said ring forming a space for compound extending between the casing on one side and the ring and end of the cable sheath on the other side to a point below the end of the cable sheath whereby the joints on both sides of said sheath may be sealed with compound.

3. A cable pothead having in combination, a casing, a collar through which the cable is led having screw threaded connection with the inside of the mouth of the casing, and means independent of the casing for securing said collar to the cable.

4. A device of the class specified, having a collar 10^a, provided with a screw threaded connection with the mouth of the device, into which the cable is led, said collar 10^a having a flange 12 to engage the lower edge of the device, a ring 14 within the mouth of the device, in combination with a cable having its metal sheath bent outwardly to form a flange, which is interposed between the collar 10^a and ring 14, and screws 15 to secure the ring 14 and collar 10^a together.

5. The combination of a casing having an aperture, a perforate plug for closing said aperture having a socket, a cable having a metallic sheath passing through said plug, and a pipe surrounding the sheath of said cable and engaging said socket.

6. A device of the class specified, having an inlet closing member provided with sloping shoulders to form a cavity between the closing member and the wall of the device.

7. The combination of a casing having an inlet aperture, an inlet closing member carried by said casing, a cable provided with a metallic sheath passing into said casing through said member, and a pipe surrounding said sheath, said member having means for inclosing the end of said pipe.

8. A device of the class specified, comprising in combination a casing having a cable inlet, a perforate plug fitted into the cable inlet, a ring arranged above the perforate plug and screws arranged to pass through said ring and also through the cable sheath when the latter is interposed between the ring and plug.

9. A cable pothead comprising in combination, a casing having a substantially tubular lower end forming a cylindrical inlet aperture of substantial length, and a perforated plug of cylindrical form fitted closely into said inlet aperture, the outside upper edge of said plug being beveled or cut away to provide a space for sealing compound between the plug and casing.

10. A device of the class described having a cable inlet closing member, provided with an inlet aperture through which the sheath of the cable is led, said member being provided also with an exterior depending flange having an interior diameter greater than said inlet aperture whereby said flange is adapted to inclose a pipe surrounding the cable sheath.

In witness whereof, I hereunto subscribe my name this 18th day of January A. D., 1911.

PAUL F. WILLIAMS.

Witnesses:
A. LYDA JONES,
HAZEL JONES.