

June 10, 1930.

G. P. EDMONDS

1,762,510

POTHEAD

Filed July 10, 1925

Fig. 1

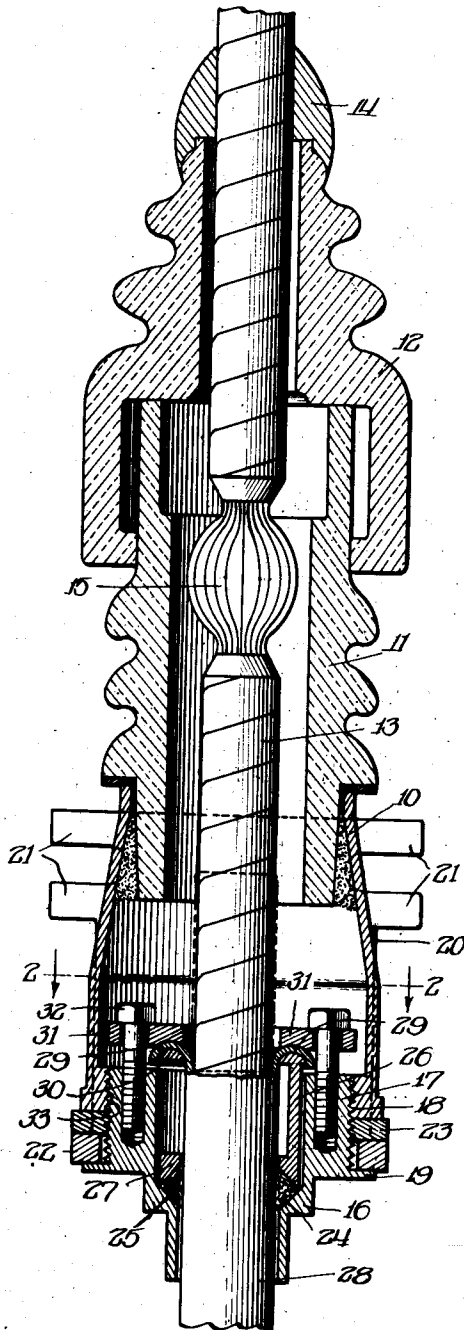


Fig. 2

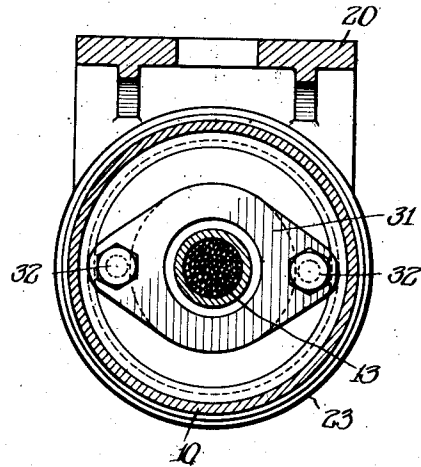
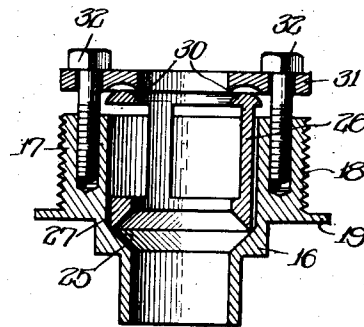


Fig. 3



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UNITED STATES PATENT OFFICE

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POTHEAD

Application filed July 10, 1925. Serial No. 42,674.

This invention relates to a pothead.

One object of the invention is to provide a simple, reliable and durable pothead for electric cables in which the cable is secured and supported in an improved manner.

Another object is to provide a pothead having improved means whereby the cable is supported and whereby irregularities of the packing around the cable is compensated for in securing the cable in position.

Another object is to provide an improved pothead in which the parts are assembled in an improved manner.

Another object is to provide a pothead and method of assembling the parts thereof adapted to meet all of the commercial requirements.

These and other objects are accomplished by means of the arrangement shown on the accompanying sheet of drawings, in which—

Figure 1 is a vertical longitudinal sectional view of a pothead embodying my invention;

Figure 2 is a sectional view taken in the plane of line 2—2 of Figure 1; and

Figure 3 is a detailed vertical sectional view taken through the cable entrance and the cable clamping and packing means.

The various novel features of the invention will be apparent from the following description and drawings, and will be particularly pointed out in the appended claims.

Referring to the figures of the drawings, it will be noted that my invention is illustrated in connection with a pothead having a metal body 10, to which is cemented a porcelain tube 11, over which a porcelain cap 12, is mounted. An electric cable 13 extends through the parts 10, 11 and 12, and is sealed to the latter by any suitable means 14. An intermediate portion of the cable is slightly twisted from its normal position for spreading the cable strands as shown at 15, for the purpose of receiving an insulating compound for sealing the cable or preventing seepage of moisture down through the cable 13. It will be understood that the interior of the pothead will be filled with any suitable insulating compound.

At the lower end of the pothead, a cable

entrance member 16 is provided, the upper end or barrel portion 17 of the entrance member being provided with the exterior threaded portion 18. An intermediate portion of the entrance member has a flange 19. A pothead support 20 is provided which may be secured to a pole by attaching arms 21, said support having a ring portion 22, through which the barrel portion 17 of the entrance member 16 may be passed upwardly. A lock nut 23 is then screwed down over the threaded portion 18 of the entrance member 16 for clamping the latter to the ring portion 22 of the support 20. In assembling the parts, the cable 13 is then passed upwardly through the entrance member 16, and packing 24 stuffed into the packing receiving portion 25 of the entrance member 16. A clamping cage 26, which is loosely or yieldably mounted within the barrel portion 17 of the cable entrance member 16, is then set in its position within said barrel portion so that the lower beveled angular portion 27 of said clamping cage rests upon the packing 24. The upper portion of the lead sheath 28 is stripped from the cable and another portion 29 of the lead sheath is belled over an annular supporting collar 30 of the clamping cage 26, whereupon a clamp ring 31 is placed over the belled portion 29 of the lead sheath and clamping studs 32 passed through openings in the clamping ring and screwed into the barrel portion 17 of the entrance member 16. In tightening the studs 32, not only is the lead sheath of the cable clamped between the clamping ring 31 and the cage 26, but also the packing 24 is packed down in place around the cable at the lower portion of the cage. In this connection it will be noted that the cage 26 is not threaded into the barrel portion 17 of the cable entrance member 16, nor does it have a tight fit therewith, but on the other hand, said cage is loosely or yieldably mounted within said cable entrance member to compensate for any irregularities in the amount of packing used. After the cable is thus clamped in position for supporting the latter, the pothead, including the metal portion 10 and the tube

11, is screwed down over the threaded portion of the cable entrance member 16, it being noted that the lower end of the metal pothead member 10 is provided with an internal threaded portion 33. Thereafter the cap 12 is placed in position and sealed, it being understood that the usual insulating compound has been supplied to the interior of the pothead.

10 By means of this pothead and method of assembling the parts thereof and securing the cable thereto, an arrangement and method are provided which are adapted to meet the commercial requirements.

15 I claim:

1. In a pothead arrangement, the combination of a pothead member into which a cable extends, a cable entrance secured in position with respect to said member and having a packing receiving portion, a clamping member to which the cable may be secured, said clamping member being yieldably and loosely mounted to engage the packing and compensate for any irregularities of the packing, and a clamping ring cooperating with said clamping member for securing the cable in position and being secured directly to said cable entrance, by securing means passing through said ring into said cable entrance.

30 2. In a pothead arrangement, the combination of a support, a cable entrance secured to said support and having a packing receiving portion, a cage loosely mounted in said cable entrance and engageable with packing therein to compensate for irregularities thereof, a clamping ring between which and said cage a portion of the cable may be secured for supporting the cable in position, said cage being integral and provided with a cable engaging surface and a packing surface, and means passing through said clamping ring for securing said ring directly to said cable entrance.

3. In a pothead arrangement, the combination of a support, a cable entrance secured to said support and having a packing receiving portion, a cage loosely mounted in said cable entrance and engageable with packing therein to compensate for irregularities thereof, a clamping ring between which and said cage a portion of the cable may be secured for supporting the cable in position, said cage comprising an integral member extending from said packing to said cable portion, adjustable means for securing said clamping ring directly to said cable entrance, and a pothead cable-receiving member secured to said cable entrance.

4. In a device of the character described, the combination of a member provided with a cable receiving entrance, means including a slidable packing cage having a cable engaging portion and a packing portion adapted to supportingly engage a cable covering device, and a cable ring fastened to

said member whereby said ring has limited sliding movement, said ring being adapted to cooperate with said slidable packing cage to insure wedging packing between said member, said cable and said cage.

5. In a pothead arrangement, the combination of a support, an entrance member having a cable entrance, a packing receiving portion, a threaded portion and a flanged portion, means for engaging said support and said threaded portion to retain the flanged portion of said entrance member in seated relationship to said support to thereby secure said entrance member to said support, a cage having packing and cable engaging surfaces slidably mounted within said cable entrance to engage packing and a portion of the cable therein to maintain the same in cooperating position, a clamping ring between which and said cage a portion of the cable may be clamped for securing the cable in position, and means for securing said clamping ring to said cable entrance for clamping said cable portion whereby said packing is pressed into position.

Signed at Chicago, Illinois, this 30th day of June, 1925.

GEORGE P. EDMONDS.