

[54] OILER SPOUT

[75] Inventor: **Basil B. Mann**, West Islip, N.Y.
 [73] Assignee: **Century Tool Company, Inc.**, Penn-
 del, Pa.
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 222/470, 385; 174/5 R, 138 R, 138 D;
 138/149; 285/47, 99

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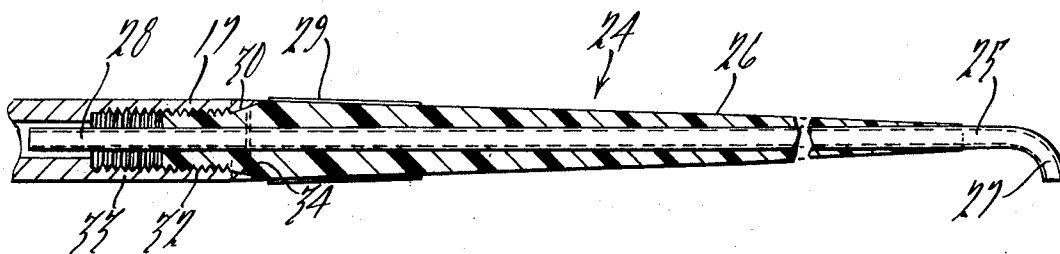
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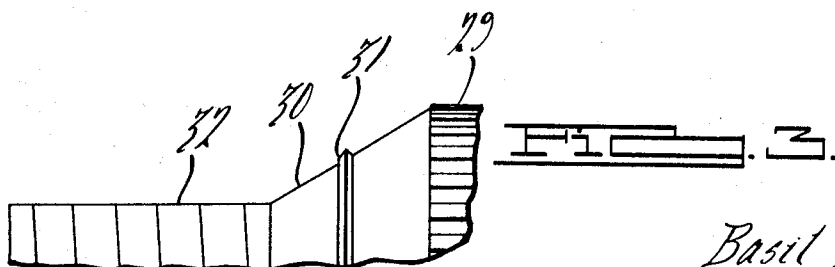
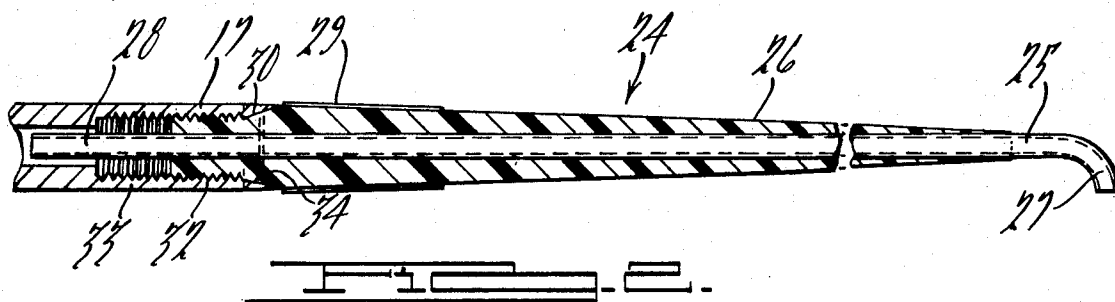
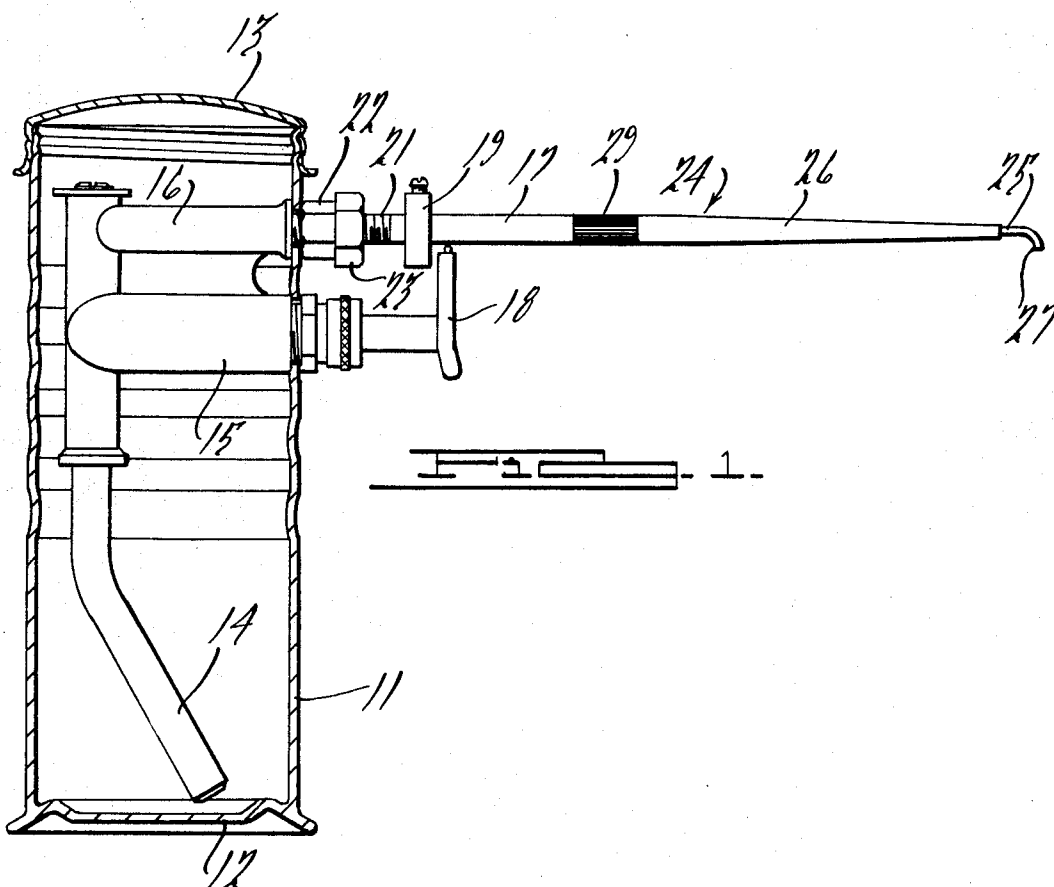
Primary Examiner—Samuel F. Coleman
Assistant Examiner—Norman L. Stack, Jr.
Attorney—Harness, Dickey & Pierce

[57] ABSTRACT

An oiler spout for use in electrical installations comprising a metal inner tube surrounded by a plastic outer shell. The exposed outer end of the tube is formed into a curved tip. The inner end extends into the spout base but not in contact therewith. The shell has a threaded inner portion mounted on the base so that the metal tip of the spout is insulated from the oiler body.

1 Claim, 3 Drawing Figures





INVENTOR.
Basil B. Mann.
 BY *Harnes, Dickey & Pierce*
 ATTORNEYS.

OILER SPOUT**BACKGROUND OF THE INVENTION****1. Field of the Invention**

The invention relates to oilers, and particularly to hand operated oilers which are to be used in or near electrical apparatus.

2. Description of the Prior Art

Prior oilers have had spouts made of metal which are conductively connected to the body of the oiler. Thus, should the tip or any other portion of the spout accidentally contact an element having an electrical charge, this charge would be transmitted to the operator's hand, possibly causing injury or death.

BRIEF SUMMARY OF THE INVENTION

According to the illustrated embodiment of the invention, the spout on the oiler is made up of two parts, an inner metal capillary tube and an outer shell of an electrically insulative plastic material. The inner tube extends from both ends of the shell, the outer end comprising the spout tip and the inner end extending into a tubular spout base on the oiler from which the oil is emitted. This inner tube end however is not in direct contact with the base. The shell has a tapered inner end which is threadably mountable on the outer end of the base. Thus, the metal portion of the spout will be effectively insulated from the oiler body.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a cross-sectional view in elevation of the oiler showing the spout mounted thereon;

FIG. 2 is an enlarged cross-sectional view of the spout showing its attachment to the base; and

FIG. 3 is an enlarged fragmentary view of the inner end of the spout shell.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The oiler comprises a body 11 in the form of a tubular oil container with a bottom 12 and a screw-on top 13. The oil is withdrawn upwardly through a tube 14 and a pump 15 to a delivery tube 16, passing through the housing into a spout base 17. Pump 15 is operated by a reciprocable handle 18 the stroke of which is limited by an adjustable stop 19 on base 17. The base comprises a tubular member threadably mounted at 21 to a boss 22 which receives the oil from tube 16, the base being held in position by a lock nut 23.

The spout is generally indicated at 24 and comprises two members, the first being an inner capillary tube 25 and the second an outer shell 26. Tube 25 is constructed of metal such as copper and has a bent outer end to form the spout tip 27. This end projects beyond

shell 26 as does the inner end 28 of tube 25. The inner diameter of tube 25 is so chosen as to control the rate of flow of oil therethrough.

Shell 26 is fabricated of an electrically insulative material such as any of a number of known plastics, and is of gradually tapered shape, being narrower at its outer end. It encloses the major portion of tube 25 and its inner end has a raised knurl 29, a tapered sealing portion 30 with a sealing ridge 31, (FIG. 3), followed by an externally threaded portion 32. Portion 32 is threadably mounted in an internally threaded portion 33 of base 17, the outer end 34 of this base having a shape complementary to that of shell portion 29. It should be noted that shell portion 32 extends into base 17 sufficiently to provide a strong connection so that the spout will be rigidly supported.

When spout 24 is mounted on base 17 as shown in FIG. 2, oil within the base will pass through tube 25, with leakage being prevented by mating portions 30 and 34 of the shell and base. At the same time shell 26 will prevent contact of the metal portion of the spout with any terminal or other electrically charged element which may be in the vicinity of the part being oiled. Should tip 27 come into contact with such a charged element, the charge will not be transmitted to base 17 nor to the remainder of the oiler since tube 25 is completely isolated electrically therefrom.

What is claimed is:

1. In an oiler having a base section defining an internally threaded spout attachment portion having a first tapered sealing surface, a two-piece spout assembly comprising an elongated inner metal tube and an outer shell formed with an elongated bore adapted to receive said tube and fabricated of an electrically insulative material, each end of said tube extending longitudinally outwardly relative to the adjacent ends of said shell, whereby said tube is substantially enclosed by said shell and is supported coaxially thereof, the inner end of said shell being formed with an externally threaded mounting portion and a second tapered sealing surface of complementary shape with respect to and adapted for detachable sealing engagement with the attachment portion of the oiler base section, said mounting portion being spaced radially outwardly from the outer periphery of the inner end of said tube whereupon engagement of said mounting portion of said shell with said attachment portion of said base section locates one end of said tube in radial clearance relative to the inner periphery of said spout attachment portion, whereby a fluid tight seal is provided between said mounting portion of said shell and said attachment section of said base, and said inner end of said tube is spaced away from the adjacent part of said base section to prevent direct contact therebetween.

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