June 28, 1938. M. H. L. JACOBSEN 2,121,916

COMBINED GUIDE AND GUARD FOR WIRES

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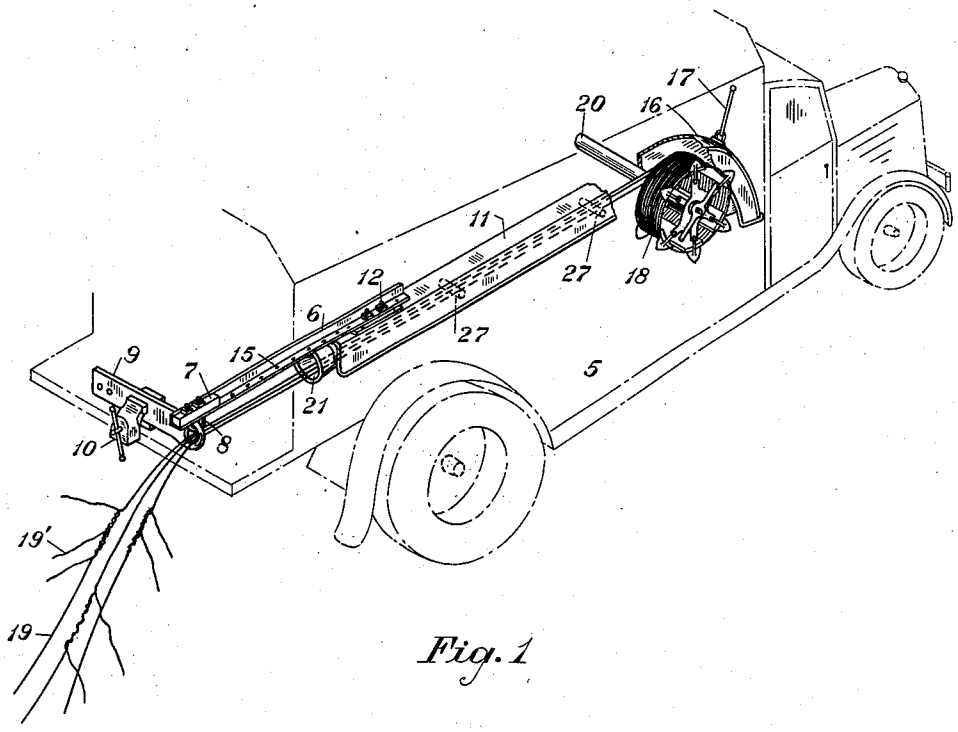


Fig. 1

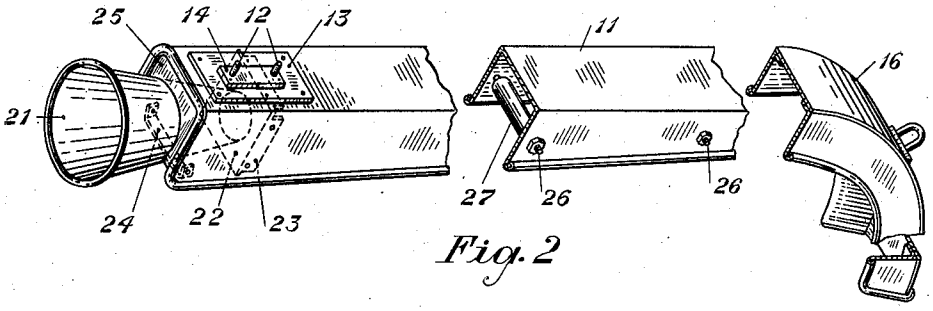


Fig. 2

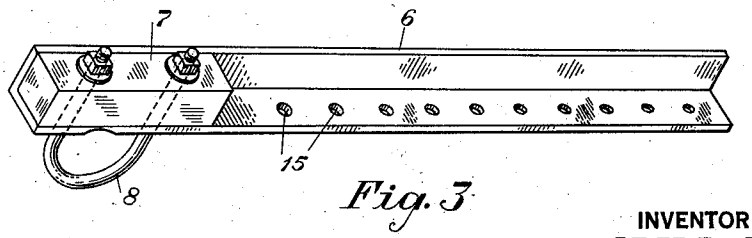


Fig. 3

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COMBINED GUIDE AND GUARD FOR WIRES

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1 Claim. (Cl. 242—157)

This invention relates to means for guiding and guarding taken-down wires, or wires removed from poles of electric transmission lines, in their travel to be wound upon reels.

Line wires are sometimes removed for various reasons from insulators carried on arms of poles. The line wires are secured to the insulators by tie wires, and it is necessary that these tie wires be cut or otherwise detached in order to release the line wires from the insulators. The ends of the tie wires which are rough extend outwardly or angularly from the line wires. It is common practice to draw these removed wires and form them into coils on reels carried on the sides of trucks. In the travel of the line wires and associated tie wires to the reel, damage is likely to be caused to the body finish of the truck upon which the reel is mounted, or to other objects with which the wires may come in contact. Injury also may be caused to men engaged in the work.

Accordingly, it is an object of this invention to provide a guard which will afford protection against the damages or injuries enumerated.

Another object is to provide a guide which will effectively direct the line wires and tie wires to a position where they may be readily wound upon a reel to form a neat and uniform coil.

These and further objects will be apparent from the following description when considered in connection with the accompanying drawing in which one embodiment of the invention is illustrated.

In the drawing Figure 1 is a perspective view of the improved arrangement mounted on the side of a truck; Fig. 2 is a broken away perspective view of the casing or duct through which the wires are drawn, and Fig. 3 is a perspective view of an angular bracket by which the casing or duct is secured to the truck.

The improved arrangement is shown in the drawing as being mounted upon the side of a truck **5** by means of an elongated angular bracket **6**. This bracket is more clearly shown in Fig. 3 of the drawing, and is provided at one end with a reinforcing block **7**. A U-shaped bolt **8** passes through this block, through the bracket **6** and engages with an eye at the end of a draw-bar **9**. This draw-bar is held in a vise **10** mounted on the rear extension of the truck platform. It will be understood that other suitable means for holding the end of the angular bracket may be substituted for the draw-bar and vise, if desired.

A metal casing or duct **11**, which is shown for example, as being substantially rectangular in cross-section, is attached to the bracket **6** by studs **12** extending through and above reinforcing plates **13** and **14** secured to the top surface and at the rear end of the casing. These studs pass through openings **15** in the horizontal portion of the angular bracket **6**. These openings are so spaced and of such number as to permit proper longitudinal adjustment of the bracket and casing on the side of the truck. The bottom of the casing **11** is open and the edges thereof are rolled about a rod which extends throughout the entire perimeter of the casing and serves as a reinforcement therefor. The forward end **16** of the casing is of arcuate formation and is attached to the side of truck **5** in any suitable manner such, for instance, by any suspension means as shown at **17** in the drawing. This portion of the casing forms a guard for the power reel **18** upon which the line wires **19** and associated tie wires **19'** are wound into coils. The reel is preferably of any well known collapsible type, and may be driven by a power shaft **20** operated by mechanism controlled from the cab of the truck or other source.

The rear end of the casing **11** has a cone-shaped tube **21** extending therefrom through which the line wires and tie wires are introduced into the casing. The inner end of the tube is provided with a supporting plate **22** of rectangular form, which is attached to the inner wall surface of the casing by means of flanges **23** carried by the plate. The tube **21** is tightly wedged between a bracket **24** secured to the bottom of the casing **11** and a plate **25** secured by its flange to the top of said casing. The plate **25** is provided with a surface contacting with the tube which corresponds to its contour. The bracket **24** and plate **25** are positioned near the outer end of the casing and cooperate with the inner plate **22** in holding the tube securely in position with respect to the casing. A suitable number of rods or pipes **26** extend through and are bolted near the bottom edge of the casing, and spacers **27** journaled thereon provide rollers which prevent downward displacement of the line wires and tie wires from the casing and facilitate their travel as they are advanced toward the reel **18**.

The line wires **19**, and tie wires **19'** are introduced through any suitable opening, for instance, the eye of the draw-bar **9** into the cone-shaped tube **21** and thence through the casing **11** and wrapped about the drum of the reel **18**. After the wires are so wrapped, power is applied to rotate the reel, and the wires are wound thereon into

coil formation. When the coil is of sufficient size, it may be readily removed by lifting or rotating the casing about its hinged connection formed by the U-bolt and eye of the draw-bar, and collapsing the arms of the reel in a well understood manner. The wires in their travel, as just outlined, are bunched, and the tie wires are caused to lay back substantially parallel with the line wires. When the tie wires are in this position they will not present any outwardly extending rough or sharp ends which will damage the body finish of the truck or cause injury to workmen.

While the arrangements of this invention have been illustrated as embodied in a certain specific form which has been deemed desirable, it will be understood that they are capable of embodiment in many and widely varied forms without departing from the spirit of the invention as defined in the appended claim.

What is claimed is:

A device adapted to be attached to the side of a vehicle to guide taken down line wires and attached tie wires by which they have been affixed to insulators in the travel of said line and tie wires toward a reel upon which they are to be wound, said device including a longitudinal casing of rectangular cross-section forming a guide for said line and tie wires and a guard to protect the truck from damage in the travel of said wires, roller members in said casing over which the wires advance, and a conical member at one end of the casing for grouping said line wires and for forming said tie wires in substantially parallel horizontal layers therewith, said casing having an arcuate portion at its other end lying closely adjacent the periphery of the reel tending to prevent the tie wires from coming in contact with workmen and with the sides of the vehicle as the tie wires advance with the line wires to be wound on the reel.

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