

Dec. 6, 1966

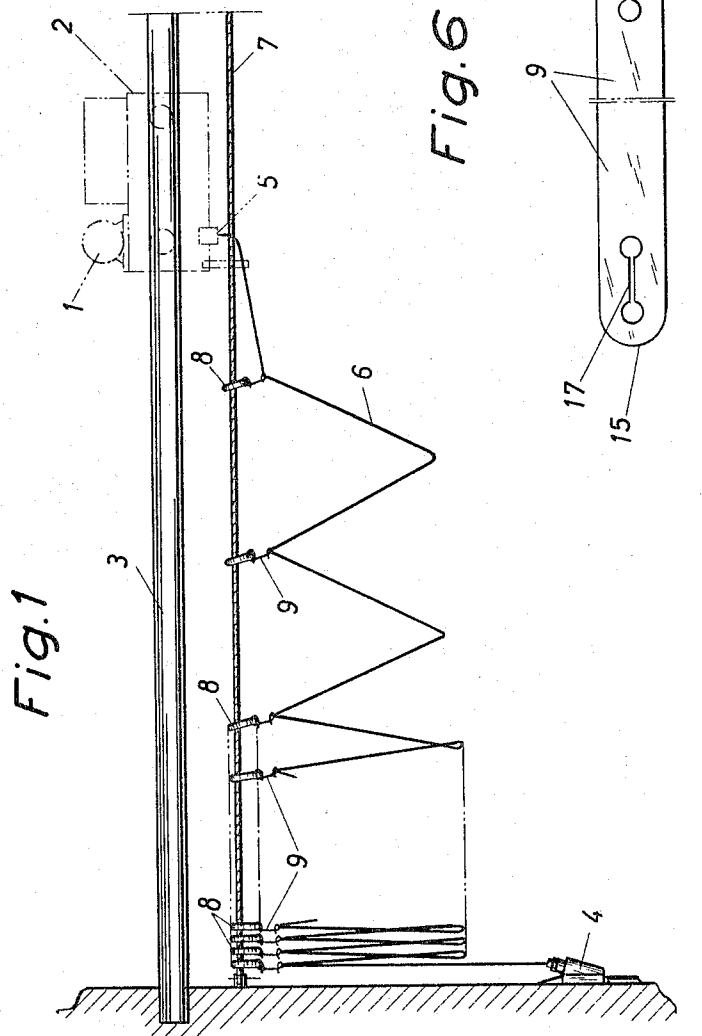
C. E. MENNERDAHL

3,289,983

DEVICE FOR CARRYING AN ELECTRIC CABLE

Filed March 11, 1966

2 Sheets-Sheet 1



Carl Erling Mennerdahl,
INVENTOR

BY Wendt, Lind
and Ponack, Attorneys

Dec. 6, 1966

C. E. MENNERDAHL

3,289,983

DEVICE FOR CARRYING AN ELECTRIC CABLE

Filed March 11, 1966

2 Sheets-Sheet 2

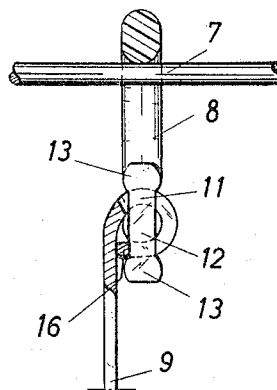
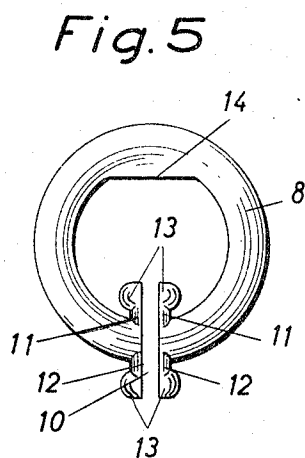
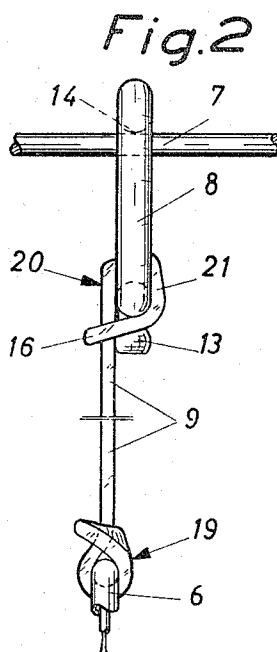
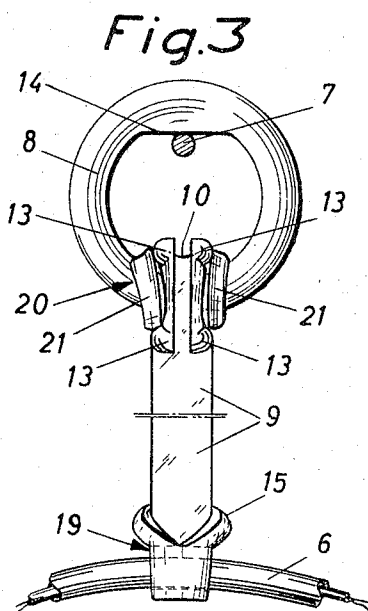


Fig.4

Carl Erling Mennerdahl,
INVENTOR

BY *Weenderoth, Ford*
And Bonack, Attorneys

1

3,289,983

DEVICE FOR CARRYING AN ELECTRIC CABLE

Carl Erling Mennerdahl, Ladspikaregatan 6,
Goteborg, Sweden

Filed Mar. 11, 1966, Ser. No. 533,580

Claims priority, application Sweden, Mar. 19, 1965,
3,561/65

4 Claims. (Cl. 248—60)

For instance at electrically driven machines which are displaceable on carrying beams, e.g. telfers, in which the electric current from a wall socket is fed to the electric motor via a flexible cable, it is often necessary to carry this cable displaceably on a rope (or a wire) which extends parallel to the carrying beam. It has previously been common to put, before the arranging of the carrying rope with its ends at each other opposing walls in the location where the displaceable machine is arranged, a number of running rings on the rope and the electric cable is equidistantly attached to these rings. A drawback in connection with such rings which generally are manufactured from synthetic resins or a similar material is to be seen therein that when a ring bursts it is not possible to put a new ring on the carrying rope without loosening the latter at one of its ends. According to another proposal the ring has been replaced by a metal hook which can be hooked on the carrying rope from the side and which is provided with a bow-shaped holder in the shape of a swivel and the electrical cable is attached to this holder. However, it is on one hand difficult to attach the cable to the holding bow and on the other hand, the hook during its displacement on the rope frequently slides off the same.

The purpose of the present invention, which refers in particular to rings which are slidable on the rope for carrying an electric cable, is to overcome this drawback. The main feature of the invention is to be seen therein that the ring which is manufactured from a hard and wearing resistant material, is provided with a transverse slot through which the ring can be put from the side onto the rope and that on both sides of the slot there extend radially, at least inwardly, abutments which serve for retaining with the upper end to the ring a strap which with the lower end is laid about the cable. Due to the slot a ring may whenever needed be replaced by another one and due to the abutments it is, as will be explained more in detail in the following, easy to attach the strap carrying the electric cable to the ring simultaneously as the upper end of the strap closes the ring in such a way that it does not have any possibilities to leave the carrying rope.

The invention will now be elucidated with reference to the accompanying drawings. In the drawings:

FIG. 1 shows diagrammatically a lateral elevation of an electrically driven telfer with a flexible electric cable suspended in a device according to the invention,

FIG. 2 shows on an enlarged scale one of the rings with its strap,

FIG. 3 shows this device from the right in FIG. 2,

FIG. 4 shows a vertical section through the ring according to FIG. 2 but it shows the upper end of the strap according to another way of attachment,

FIG. 5 is a side elevation of the ring, and

FIG. 6 is a side elevation of a strap comprised in the device, said strap being manufactured from leather or a similar resistant material.

In FIG. 1 there is shown a telfer 2 provided with an electric motor 1 and running on a horizontal beam 3. A flexible electric cable 6 extends from a wall socket 4 to a

2

connection box 5 on the telfer 2. A carrying rope (or wire) 7 extends parallel with and below the beam 3, and a number of rings 8 with each having a strap 9 for carrying the helically wound electric cable 6 at equal distances run on the carrying rope 7.

The rings 8 one of which is clearly shown in FIG. 5, are manufactured from a hard and wear-resistant resin, preferably of the kind which is denoted nylon 6.6. The ring has a transverse slot 10 with a width which is equal to or somewhat smaller than the diameter of the rope 7. By means of a spreading of the branches of the ring on either side of the slot 10 for a minor broadening of this slot it is rendered possible to put the ring from the side onto the rope 7. On both sides of the slot 10 the ring 8 is provided with inwardly directed and also radially outwardly directed abutments 11 and 12, respectively. Each abutment is at its free end provided with a thicker portion or a head 13. Diametrically opposite the slot 10 the ring 8 is provided with a straight portion 14. Thus, the ring 8 is here somewhat thicker than at the other places. The purpose of this arrangement is to obtain a certain compensation for the wearing of the ring caused by its sliding on the rope 7. Due to the fact that the portion 14 is straight, the ring will slide against the rope 7 at different places along this portion whereby the wearing will be rather equally distributed over said portion 14.

The strap 9 (see in particular FIG. 6) which is usually of leather, is at its ends 15, 16 provided with two longitudinal slots 17 and 18, respectively.

The electric cable 6 is suspended with the device according to the invention in the following manner. The strap 9 is laid around the cable 6 and the strap end 16 is put through the slot 17 thus forming a running loop 19 as shown in FIGS. 2 and 3. Also at the upper end 16 there is arranged a similar running loop 20 which initially is put up through the slot 10 in a ring 8 put on the rope 7 and thereupon the strap portions 21 situated on both sides of the strap slot 18 are brought to extend over the heads 13 and are then pushed down on the outside of the abutments 11 and 12, as indicated in FIGS. 2 and 3. Thereupon the cable 6 is steadily suspended in the strap 9 which nevertheless permits the cable during the displacement of the telfer 2 on the beam 3 to rotate in the desired extent in such a way that it as indicated in FIG. 1 can be positioned in helical loops. Due to the fact that the strap 9 with its upper end 16 can be arranged at the ring 8 in such a way that the strap end be suspended in a running loop 20 over the abutments 11, 12, the slot 10 is closed by the strap 9 and the ring is hereby prevented from accidentally leaving the carrying rope 7.

As shown in FIG. 4 the strap 9 can be suspended on the abutments 11, 12 without first forming a running loop. According to FIG. 4 the upper end 16 has first been put with its slot from above over the abutments 11. Also in this case there is obtained a good and effective suspension.

The invention has been described in the foregoing for purposes of illustration only and is not intended to be limited by this description or otherwise except as defined in the appended claims. Thus, the ring 8 as well as the strap 9 may be modified in many ways without departure from the inventive idea. The radially outwards directed abutments 12 may be dispensed with if the strap is arranged on the ring 8 with the running loop 20 as shown in FIGS. 2 and 3. The manner of suspending according to FIG. 4 requires, however, the abutments 12 and for the reason that the last mentioned way of suspension is the simplest one it is probably suitable to shape the ring as shown in FIG. 5, i.e. with abutments 11, 12 directed

3

essentially radially inwards as well as outwards. The strap 9 may of course be manufactured from another material than leather. The ring 8 could be manufactured from metal or another material with a high resistance to wearing.

What I claim is:

1. Slidable ring for suspending a flexible electric cable on a rope, said ring being manufactured from a hard material with a high resistance to wearing and having a transverse slot, for enabling the ring to be put onto said rope, abutments extending on either side of said slot essentially radially inwards, said abutments being adapted to retain the upper end of a strap to said ring.

2. Slidable ring for suspending a flexible electric cable on a rope as claimed in claim 1, in which abutments extend from both sides of said slot essentially radially outwards.

3. Slidable ring for suspending a flexible electric cable on a rope, as claimed in claim 1, in which the inner

4

side of said ring is provided with a straight portion opposite to said slot.

4. Slidable ring for suspending a flexible electric cable on a rope as claimed in claim 1, in which abutments extend from both sides of said slot essentially radially outwards, in which the inner side of said ring is provided with a straight portion opposite to said slot.

References Cited by the Examiner

UNITED STATES PATENTS

10	260,721	7/1882	Whitmarsh	2—334
	861,887	7/1907	Peirce	248—61
	2,192,946	3/1940	Towner	102—1
	2,373,328	4/1945	Moorehouse	248—61
15	2,703,359	3/1955	Miller	240—10
	2,914,280	11/1959	Verges et al.	248—63
	3,007,666	11/1961	Hamel	248—317

CLAUDE A. LE ROY, *Primary Examiner.*