Oct. 4, 1960 J. LA RAUS 2,954,942

COMBINED CABLE REEL AND CARRYING CASE

Filed Jan. 30, 1959

FIG. 1

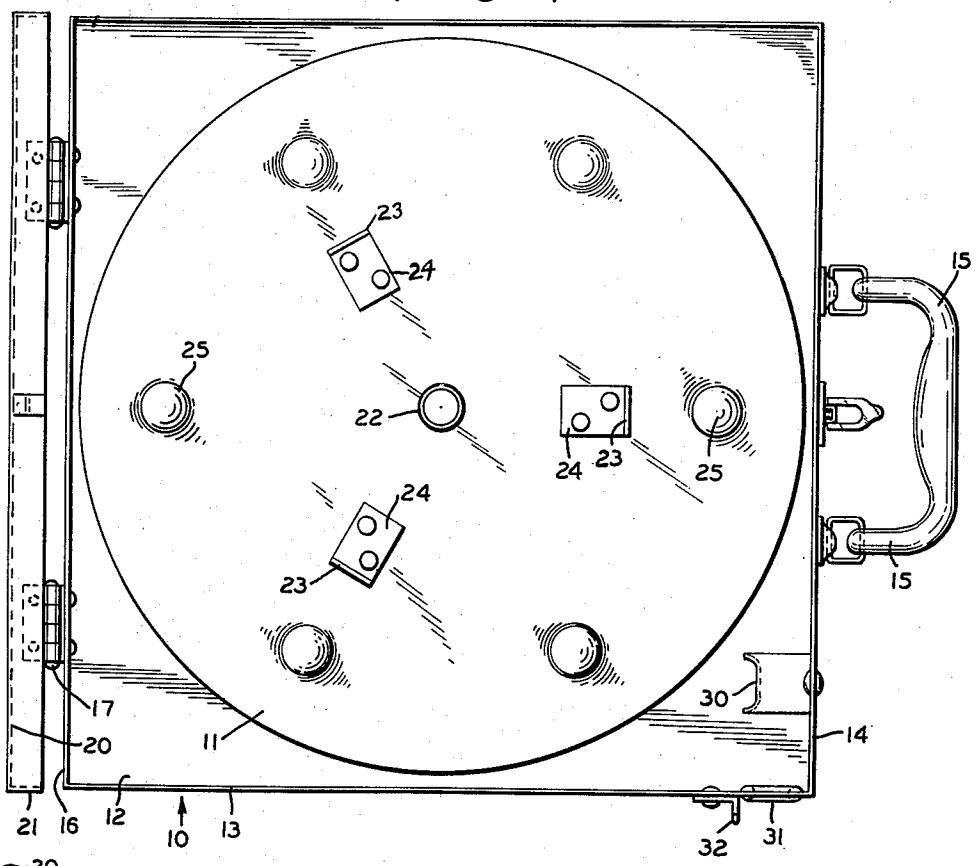


FIG. 2

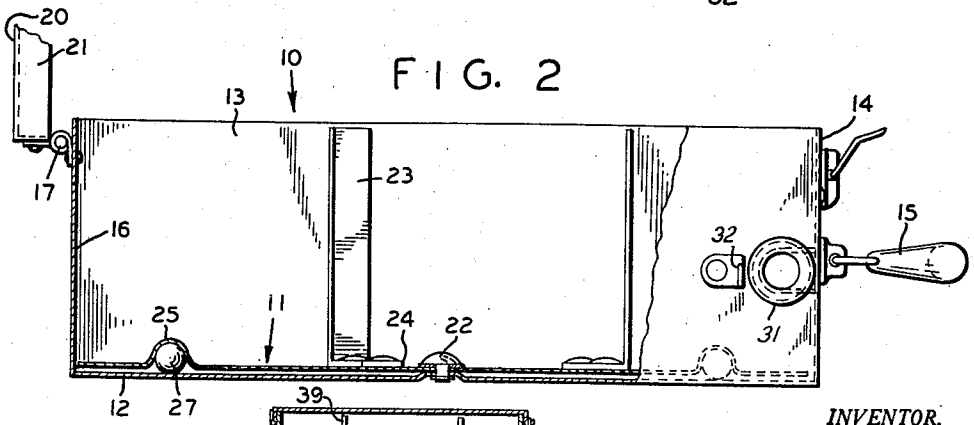
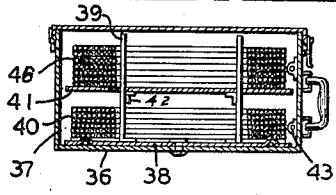


FIG. 3



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COMBINED CABLE REEL AND CARRYING CASE

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1 Claim. (Cl. 242—129)

This invention relates to improvements in reels for wire, cable, rope or chains and has for its principal object the provision of a novel reel and carrying case construction wherein a supply reel is journalled for free rotation within a housing forming a carrying case.

Many types of electrical and other cables are factory wound in a coil of certain dimensions and the reel of the present invention comprises a freely rotatable disc having a plurality of circularly arranged supports spaced apart a sufficient distance to receive the coil, and the housing is provided with an opening through which the cable may pass and readily unwind by the simple action of pulling the cable through the opening. A hook located adjacent the opening receives the outer end of a flexible measuring tape so that when the user wants, for example, to cut 25 feet from the coil he simply pulls the cable and tape until the latter reads 25 feet and then cuts the cable from the parent roll.

Another object of the invention is to provide a novel reel which is journalled for free rotation at the center of one wall of the case which is placed lowermost in a horizontal position when the cable is to be drawn, and improved anti-friction means comprise balls located at spaced intervals in dimpled areas near the outer margin of the reel disc. The balls require no retainers other than the annular side walls of the dimpled sections and the balls rotate over the surface of this now lower wall and support the considerable weight of the cable without imposing too great a strain on the central pivot.

The reel housing also acts in a second capacity of a carrying case for one coil of the cable and when the entire coil has been used up the hinged lever for the casing is opened and another coil of the cable or rope is dropped into place.

A further object of the invention is to provide an apparatus of the character described wherein the reel may carry a plurality of separate rolls of the wire or cable which may be simultaneously drawn from the housing.

In the drawing:

Fig. 1 is a plan view of the combined reel and carrying case with the cover in open position.

Fig. 2 is a side elevation thereof with parts broken away to show the reel arrangement in the interior of the housing.

Fig. 3 is a section showing a modification.

The apparatus of the present invention includes a carrying case **10** and a reel **11**. The case includes a generally square wall **12** forming the base wall when the cable is being drawn from the reel but which occupies a vertical position when the case is being carried. A continuous side wall **13** extends upwardly from the base wall and it includes one wall **14** to which a carrying handle **15** is secured and the opposite wall **16** forms the bottom wall during carrying and supports hinge member **17** for a cover **20** having a continuous shallow flange

21 enclosing the outer margins of the side walls of the housing. The cover is secured in closed position by the usual latch means.

The housing may be made from sheet metal or from sheet plastic material or plywood. The reel **11** is formed from sheet metal or other material and is rotatably mounted centrally of itself on the base wall **12** by means of a pivot element **22**.

A spool section or arbor for the reel may comprise a plurality of upstanding angles **23** whose base sections **24** are riveted to the reel disc and the angle brackets are arranged equi-distant from the axis of rotation. The disc is formed with a plurality of upwardly dimpled sections **25** spaced equally from the axis and each dimpled recess receives a large bearing ball **27**. As a result of the bearing balls very little strain is imposed on the central pivot so both the casing wall and the reel disc can be formed from relatively light gauge material and still support relatively heavy coils.

The top wall **14** has secured thereto a cable guide **30** which is aligned with a side wall opening in which is fitted a grommet **31**. A hook **32** serves as an anchor for a ring at the end of a measuring tape for the cable. The standard factory wound cable has a central opening in the coil which receives brackets **23** and the free end of the cable is passed through guide **30** and grommet **31** and can then be drawn freely outwardly.

Fig. 3 shows a modification wherein the reel supports a plurality of separate coils of wire. It is frequently necessary to employ multiple wires in the same conduit and in the past it has been customary to separately unreel each wire from the roll and cut it off at a given length and then perform the same operation for the second and third wire. In the arrangement shown in Fig. 3 the housing **36** has side walls **37** of greater height than that shown in Fig. 2 and the reel **38** has longer guides or uprights **39** for the coil. One such coil **40** is placed on the reel and a spacer plate **41** whose downward travel is limited by stops **46** is then applied to the guide and a second coil **42** laid on the spacer plate. Each coil has a separate opening **43** for the wire.

The arrangement shown may be used for two coils but it may be modified to receive three or more coils and, if desired, the stops **42** may be eliminated and each spacer plate **41** may rest on the coil below it.

While there have been described herein what are at present considered preferred embodiments of the invention, it will be obvious to those skilled in the art that many modifications and changes may be made therein without departing from the essence of the invention. It is therefore to be understood that the exemplary embodiments are illustrative and not restrictive of the invention, the scope of which is defined in the appended claim, and that all modifications that come within the meaning and range of equivalency of the claim are intended to be included therein.

What I claim is:

A combined cable reel and carrying case therefor within which the reel is supported for rotative movement, said carrying case having a generally rectangular body with continuous side walls, and a cover therefor, the wall opposite the cover being in a lowermost horizontal position when the cable is being unreeled and forming a base wall, the reel comprising a generally flat disc provided at its center with pivot means extending to said base wall, and cable positioning brackets secured on the upper face of the disc at points substantially equally spaced from the center and arranged to receive a coreless coil of cable centered thereon, anti-friction elements

comprising balls between the base wall and the disc adjacent the periphery thereof, the disc being provided with upwardly extending dimples in which the balls are positioned to roll over the surface of the base wall as the reel is rotated, one side wall having an opening through which cable from the reel may pass as the reel is rotated, and a cable guide positioned between the reel and side wall opening.

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