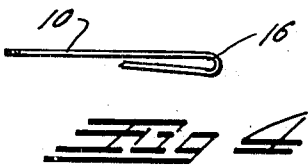
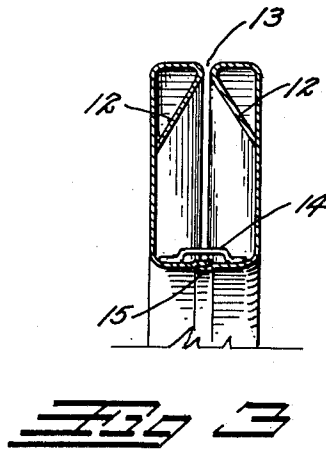
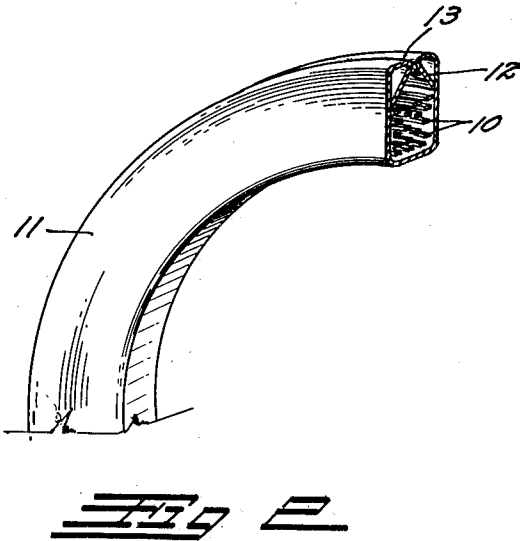
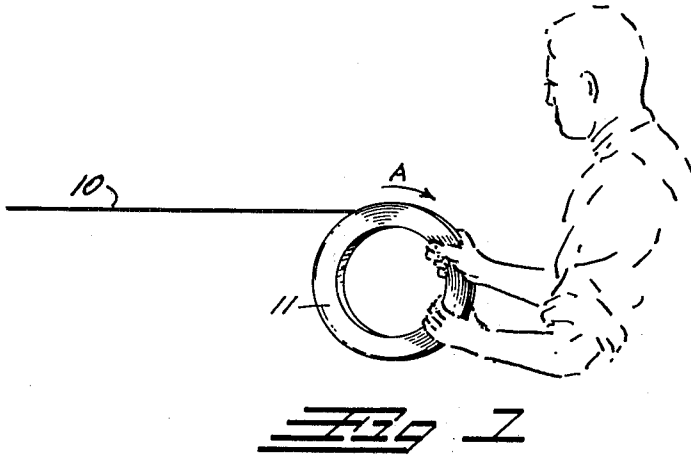


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C. C. HORMEL
REEL FOR METALLIC TAPES

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Inventor

CHARLES C. HORMEL

By

Attorney

UNITED STATES PATENT OFFICE

CHARLES C. HORMEL, OF DENVER, COLORADO

REEL FOR METALLIC TAPES

Application filed July 13, 1931. Serial No. 550,491

This invention relates to a reel and carrier for steel tapes. It is more particularly designed for use by electricians, wiremen and the like, for handling the steel wire commonly known in the trade as a "fishing" tape. In explanation, it might be noted that a "fishing" tape is a long wire used for reaching through electrical conduits and pulling the electric conductors therethrough. It is usually rectangular in cross section and formed of relatively stiff spring steel. Owing to its stiffness and resiliency, the handling of a "fishing" tape is a difficult matter since it readily springs out of a coil and when handled adjacent to switchboards and other current carrying devices, electrocution and damage to equipment is always an imminent possibility.

The principal object of this invention is to provide a reel in which all or any part of a coil of steel tape will be securely held in position at all times and yet which will allow the tape to be readily and rapidly unreeled.

Another object of the invention is to so construct the reel that it will frictionally engage the tape as it is unreeled so as to maintain a constant tension thereon to prevent kinking.

A further object of the invention is to so construct the reel that it can be employed as a pulling device or hand hold for the electrician when pulling wires through electrical conduits.

A still further object of the invention is to so construct the reel that the final end of the tape will be effectively and automatically locked in place and entirely enclosed by the reel and yet, in which, ready access may be obtained to this final end.

Other objects and advantages reside in the detail construction of the invention, which is designed for simplicity, economy, and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention reference is had to the accompanying drawing which forms a part hereof. Like numerals refer to like parts in all views of the drawing and throughout the description.

In the drawing:

Fig. 1 illustrates the invention in use.

Fig. 2 is a fragmentary sectional view of a portion of the improved reel.

Fig. 3 is a cross section through the rim of the reel drawn to a substantial full size scale.

Fig. 4 illustrates the inner extremity of a typical tape.

In the drawing a typical steel "fishing" tape is illustrated at 10.

The invention comprises an annular hollow channel member 11 arranged to receive the coil of steel tape 10 in its hollow interior. The outer edges of each side of the channel member are turned inwardly as shown at 12 to form inclined shoulders. The turned back portions 12 co-act to form an outwardly pointed V-shaped guide extending to a peripheral tape slot 13. The channel member 11 may be formed of any desired material. It is preferred, however, to form it of sheet steel having a natural spring-like resiliency. The width of the tape slot 13 is normally narrower than the width of the tape 10 so that as the tape is withdrawn the rounded sides of the slot 13 will snugly and firmly frictionally engage the sides of the tape.

A suitable attachment clip 14 is secured at some point in the bottom of the channel member 11. In use, a hook is formed on the inner extremity of the tape 10 as shown in Fig. 4. The two sides of the slot 13 are forced apart by the operator's fingers and the hooked extremity of the tape is passed through and hooked about the attachment clip 14. The tape is now maintained taut and the member 11 is rotated as indicated by the arrow A, Fig. 1. This causes the tape to slide through the slot 13 forcing the two sides of the channel member apart as it moves about the reel.

When the final extremity of the tape 10 is reached it is pushed into the slot 13 with the fingers and the entire tape will then be securely enclosed by the channel member 11. To release the tape the operator notes the position of the final extremity of the tape. He then forces his thumb into the slot 13 immediately over this extremity. This allows the natural resiliency of the tape to snap the tape outwardly through the slot. It will be

noted that the inwardly turned sides 12 act as guide surfaces to always guide the extremity of the tape toward the slot 13. The entire tape can then be unreeled by simply pulling thereon and allowing the channel member 11 to slide through the hands. If the tape is being used for a "pulling" job, the operator grasps the channel member 11 as shown in Fig. 1, so as to prevent it from rotating and then places his weight thereon so as to put the desired tension into the tape 10.

The channel member 11 can, if practical, be formed of a single piece of sheet metal, spun, stamped, or otherwise formed into the form of Figs. 1 and 2. It has been found, however, that it can be very efficiently manufactured in two halves which are readily adaptable to spinning or pressing operations. The two halves can then be joined by means of a suitable lap joint such as indicated at 15, Fig. 3, and either soldered, brassed, welded, or riveted together.

While the invention has been described as particularly adaptable for use by electricians in handling steel "fishing" tapes, it is desired to be understood that it is, of course, not limited to this use but will be found valuable wherever it is desired to reel and hold a relatively stiff wire-like article such as surveyor's tapes and the like. All such uses are contemplated as within the scope of the invention.

While a specific form of the improvement has been described and illustrated herein, it is desired to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what is claimed and desired secured by Letters Patent is:—

1. A reel for metallic tapes comprising: an annular, hollow, outwardly-opening channel member, the peripheral edges of said channel member being turned toward each other at the outer circumference of said member, thence turned inwardly toward the axis of said member so as to form two rounded edges, said edges being spaced apart so as to leave an open slot entirely around the outer circumference of said member opening to the interior thereof.

2. A reel for metallic tapes comprising: an annular, hollow, outwardly-opening channel member, the peripheral edges of said channel member being turned toward each other at the outer circumference of said member, thence turned inward toward the axis of said member so as to form two rounded edges, said edges being spaced apart so as to leave an open slot entirely around the outer circumference of said member opening to the interior thereof, said edges being extended into said hollow member and flared outwardly within said member toward the outer walls

thereof so as to form an annular V-shaped guide to direct said tape from within said member toward said slot.

In testimony whereof, I affix my signature.

CHARLES C. HORMEL.

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