March 27, 1934. J. W. COOK 1,952,056

WIRE CONTAINER

Filed Feb. 9, 1932

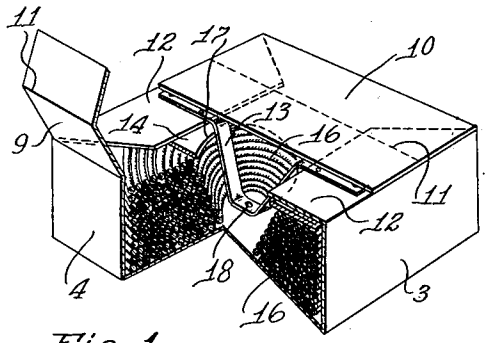


Fig. 1.

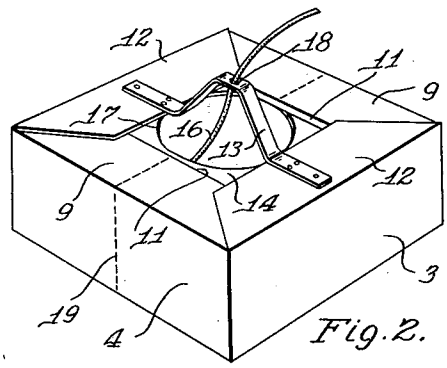


Fig. 2.

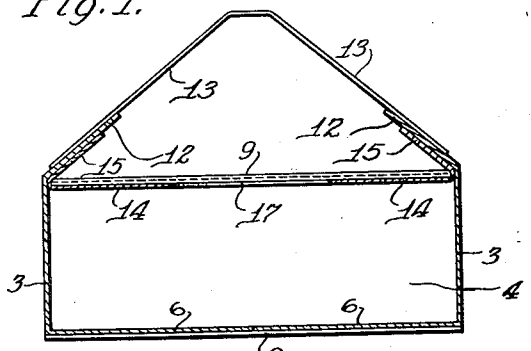


Fig. 3.

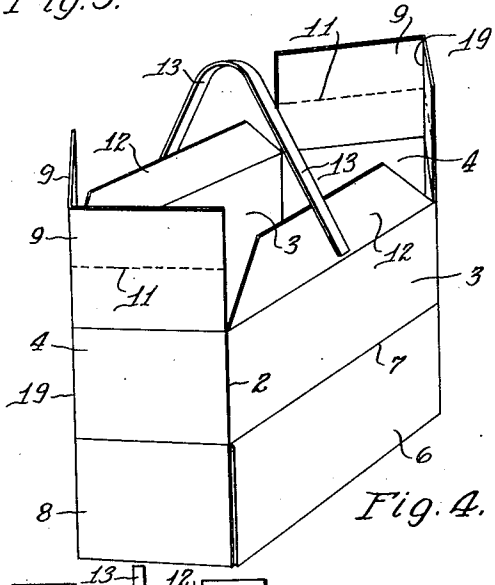


Fig. 4.

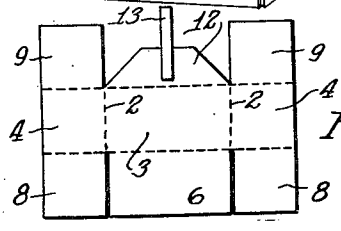


Fig. 5.

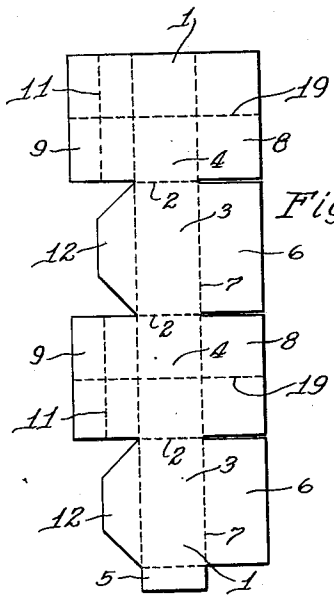


Fig. 6.

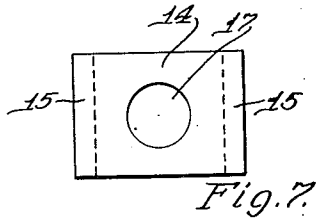


Fig. 7.

INVENTOR

Jay W. Cook

BY

ATTORNEYS

Patented Mar. 27, 1934 1,952,056

UNITED STATES PATENT OFFICE

1,952,056

WIRE CONTAINER

Jay W. Cook, Detroit, Mich., assignor to The C and W Wire Container Company, Detroit, Mich., a corporation of Michigan

Application February 9, 1932, Serial No. 591,914

7 Claims. (Cl. 242—129)

The present invention relates to a combined carton, holder and dispenser for wire in coil form, and an object of the invention is to provide a container of the carton form for holding a coil of wire while being shipped, said carton being of simple construction and embodying means for facilitating its being carried about and for guiding the wire while being pulled out as it is used. A further object is to provide a carton of such construction that it may be made by the usual methods and may be folded flat for shipping to the wire manufacturer, and which carton may be conveniently used by the workman to carry the coil from place to place while installation is in progress, said carton being provided with a member which serves as a handle or bail therefor and also as a guide for the wire as it is pulled out, preventing kinking or binding of the wire as it leaves the coil within the carton.

A further object is to provide certain other new and useful features, all as hereinafter set forth and more particularly pointed out in the appended claims, reference being had to the accompanying drawing in which—

Figure 1 is a perspective view of a container or carton illustrative of an embodiment of the invention and showing the same partly in section and partly in folded position with coiled wire therein;

Fig. 2 is a similar perspective view of the container in condition to have the wire drawn therefrom and showing the guiding means for the wire in operative position;

Fig. 3 is a transverse section through the container in the position shown in Figure 2;

Fig. 4 is a perspective view showing the empty carton or container in partly folded condition;

Fig. 5 is a side elevation of the carton in the position shown in Figure 4;

Fig. 6 is a plan view of the blank for forming the carton before being folded; and

Fig. 7 is a blank adapted to form an inside top for the carton.

Reference to the several parts of the device embodying the invention will now be made by the use of reference characters designating corresponding parts throughout the several views.

The blank which is folded to form the box or carton is shown in Figure 6 and comprises a longitudinal strip 1 extending from end to end of the blank and when folded upon the lines 2, forms the side walls 3 and end walls 4 of the box, the ends of this strip being secured together by means of a tab 5 at one end of the strip to overlap the opposite end thereof and be secured thereto, the portions of said strip forming the side walls 3, being formed with laterally extending tabs 6 which are folded inwardly along the lines 7 over similar tabs 8 on the end walls 4, together form a double bottom for the box. The wall portions 4 are, at the side thereof opposite the tabs 8, formed with tabs 9 which, when folded along the line of the edge of the strip, together form a top wall 10 for the box, said tabs being of a width to meet at their edges when so folded and provide a tight closure. Each of these tabs 9 are preferably creased as at 11 along their longitudinal median line for a purpose hereinafter set forth, and the side wall portions 3 are formed at their sides opposite the tabs 6, with tabs 12 to fold inwardly beneath the tabs 9, forming a partial double top for the box, these tabs 12 being comparatively narrow to leave a space between their inner edges at the center of the top and if found desirable, the free corners of these tabs 12 may be cut away as shown.

These tabs 12 provide a place of attachment for the ends of a strap 13 which is preferably formed of thin flexible metal, for the purpose of strength and durability, and this strap extends diametrically across the box and is of greater length than the width of the box from side wall to side wall thereof, thus forming a loop above the plane of the box top to serve as a handle by means of which the workmen may carry the box with its coil of wire therein, from place to place.

In Figure 7 is shown a blank 14 adapted to be secured within the box with the end portions 15 of the blank folded and made fast to the under side of the tabs 12 close to the walls 3, to form a supplemental top cover lying directly above and close to the upper end of the coil of wire 16 in the box and this inside supplemental top is formed with a central circular opening 17 concentric with the center of the coil so that when the box is opened, the end of the wire may be drawn from the center of the coil, out through this opening and then passed through an opening 18 in the strap, the supplemental top 14 preventing the turns of the wire coil from slipping up through the open top of the box and becoming tangled, and the opening 18 in the strap serving as a guide for the wire as it is pulled out, preventing kinking of the wire, regardless of the direction in which it is led after passing through the guide.

As illustrated in Figure 1, in packing the wire coil in the box for shipping purposes, the coil is placed in the box, and then the loop of the strap

13 is bent downward through the opening 17 in the supplemental top and into the center of the coil where it is out of the way, the flaps 12 being drawn down flat upon this supplemental top 14, and then the flaps 9 may be folded thereover, the free edges of these flaps meeting above the strap and tightly closing the box, they being secured in that position in any suitable manner.

In opening the box to dispense the wire therefrom, the cover flaps 9 are first loosened and turned back to the position in which one of these flaps is shown in Figure 1, the strap 13 is then grasped and pulled up to the position shown in Figure 3, thereby swinging the flaps 12 upwardly. With the parts in this position, in order that the flaps 9 may not be in the way in carrying the box from place to place by means of said strap which forms a handle or bail therefor, the flaps 9 are folded, the edge portion downward upon the attached portion, along the lines or creases 11 and then these double flaps are tucked in beneath the ends of the flaps 12, the cutting away of the corners of these flaps 12 assisting in so positioning the flaps 9.

The parts are thus brought to the position shown in Figure 2, ready for dispensing the wire, the end of the wire being first pulled out through the opening 17 and passed through the guide opening 18 in the strap, so that the box may be set down and the wire drawn therefrom without kinking or becoming entangled, thus dispensing with the necessity for removing the coil from the box and placing it upon a reel.

In order that the blank forming the entire box, may be folded flat after the tab 5 has been secured to the opposite end of the strip 1 with the strap 13 secured to the tabs 12 as shown in Figure 4, the tabs 8 and 9 and the portions 4 are creased transversely along the central lines 19, thus permitting the sides 3 and their flaps 6 to be folded, flat against each other in shipping the carton to the wire manufacturer.

This construction provides a very strong box which, not only serves as a container in which the wire coil may be shipped, but also as a holder in which the coil may be carried from place to place and from which it may be directly dispensed, the strap not only serving as handy means for carrying the box, but also as a guide for the wire as it is pulled from the box. The construction is also such that the box may be manufactured by the usual methods employed in making such cartons, and is simple and easy to form from blanks and may be cheaply assembled.

Obviously changes may be made in the construction and arrangement of parts within the scope of the appended claims, and such changes are contemplated.

Having thus fully described my invention, what I claim is:—

1. A carton for wire coils comprising a box having side walls, and a flexible strap connected at its ends to said walls and extending upwardly therefrom and across the box in the form of a flexible loop, said strap being provided with an opening intermediate its ends through which an end portion of the wire from said coil in said box is adapted to be passed to guide said wire.

2. A carton for holding wire coils and dispensing the wire therefrom, said carton being formed from a blank providing side and end walls for said carton and tabs forming bottom walls, a thin flexible metal strap connected at its ends to the opposite sides of said carton and extending across the open top thereof, and means integral with certain of said walls and foldable to form a top closure, said strap being adapted to be flexed into the open top of said carton and to be covered by said top closure.

3. A carton for holding a coil of wire and dispensing the wire from said coil, said carton comprising side and end walls and inwardly foldable to form the top and bottom walls of the carton, and a thin flexible strap connected to certain of said walls and extending across the top of said carton and provided intermediate said walls, with an opening through which the wire from said coil is adapted to be led to guide said wire as it is pulled from said coil.

4. A carton formed from a blank foldable to provide side, end and bottom walls, a strap connected at its ends to certain of said walls and extending across said carton in the form of a loop, certain other of said walls being formed with tabs adapted to be folded over the open top of said carton and depress said strap into said open top and conceal it therein.

5. A carton formed from a blank providing a longitudinal strip to form side and end walls of the carton and tabs extending laterally from said strip and adapted to be folded inward over the open top of said carton, and a flexible metal strap secured to certain of said tabs and extending across said open top, said other tabs being foldable inward over said strap to conceal the same and to close the open top of the carton.

6. A carton formed from a blank folded to form a rectangular box having side, end, top and bottom walls, a supplemental top wall within said box adjacent its top and formed with an axial opening above the upper end of a wire coil in said box, and a strap connected at its ends to said side walls of said box to extend across said box below the top thereof and of greater length than the width of said box, said strap having an opening opposite said opening in said supplemental top.

7. A carton comprising a box having side walls formed with integral inwardly foldable short flaps and end walls formed with integral inwardly foldable flaps to overlie said side wall flaps and close the upper end of said box, and a flexible strap secured at its ends to said short flaps and of greater length than the distance between said side walls to provide a loop adapted to be depressed into said box between the inner edges of said short flaps and to be concealed by the inward folding of the end wall flaps over said side wall flaps.

JAY W. COOK.