Dec. 18, 1951 G. C. TINSLEY 2,579,131

DISPENSING CONTAINER FOR COILED WIRE

Filed Dec. 10, 1948

FIG. 1

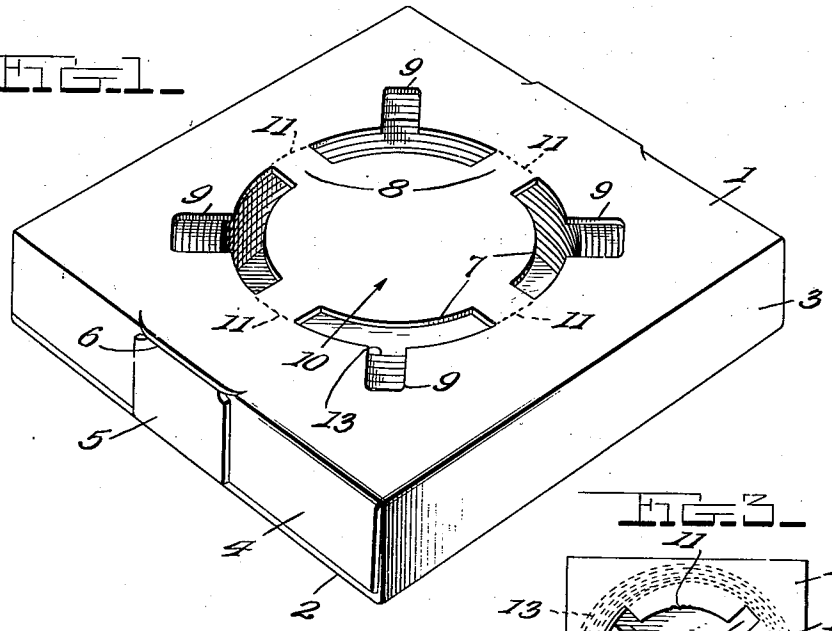


FIG. 3

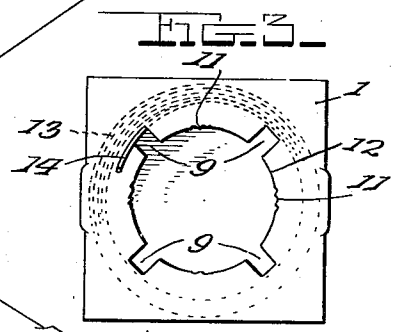
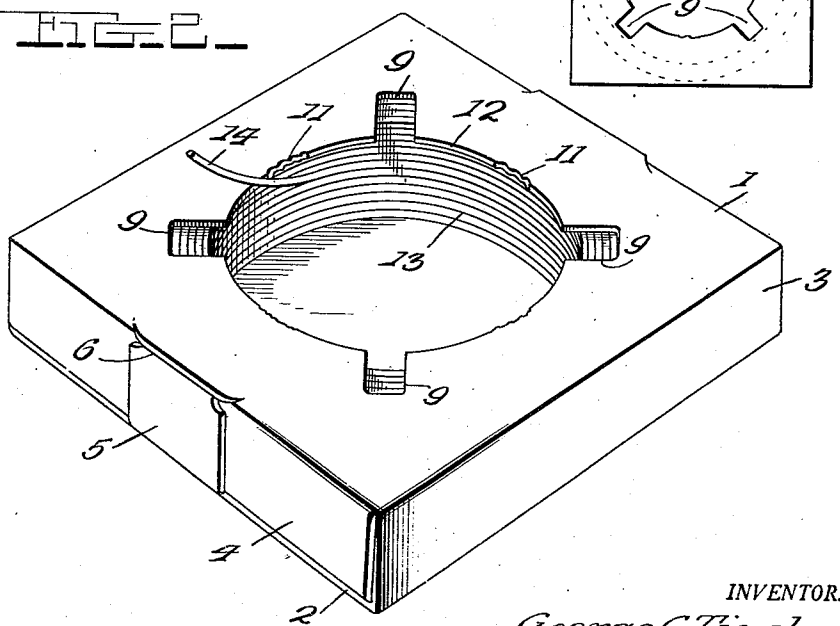


FIG. 2



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UNITED STATES PATENT OFFICE

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DISPENSING CONTAINER FOR COILED WIRE

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2 Claims. (Cl. 206—52)

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My invention consists in new and useful improvements in a dispensing container for coiled wire and relates more particularly to containers for tension-coiled wire such as music wire, the primary object of the invention being to provide a container which will facilitate the handling of the coil during the dispensing operation and at the same time protect the coil and retain it firmly in position to prevent its uncontrolled unwinding.

In handling coils of wire, particularly highly resilient wire such as music wire, considerable difficulty has been encountered due to the inherent tendency of the tension-coiled convolutions of wire to unwind and to spring outwardly in all directions from the coil. This is not only likely to cause damage to the wire in a subsequent attempt to rewind it for storing, but constitutes a decided inconvenience to the person handling the wire. Furthermore, especially in cases of relatively strong resilient wire, there is an attendant danger of injury to the handler, due to the uncontrolled spring action of the wire.

I am familiar with various attempts heretofore made to provide dispensing containers for coiled products such as wire, string, thread and the like, but most of these have been concerned with material of a flexible nature which does not present the problem of a highly resilient wire. Furthermore, most of the previous containers with which I am familiar have included a relatively small centrally disposed opening in one wall of the container through which the end of the wire or thread to be dispensed is projected. The wire or thread was pulled through this central opening, unwound from the coil and a selected length severed, leaving the projecting end in position for further dispensing. However, a container of this type is not satisfactory for use in connection with resilient music wire and the like, for the reason that in uncoiling such wire through a small central opening, the coil within the container must rotate as the wire is unwound or the wire is likely to become twisted.

It is therefore an object of my invention to provide in one wall of the container, a relatively large central opening substantially of the diameter of the inner convolutions of the coil, whereby the convolutions may be easily uncoiled without twisting and without the necessity of rotating the coil within the container.

A further object of my invention is to provide a series of radially disposed notches spaced at intervals around the central opening and adapted to receive the projecting end of the succeeding

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convolution of wire to be dispensed and retain the same in readiness for further uncoiling.

A still further object of my invention is to provide a dispensing wall for a tension-coiled wire dispensing carton which is prestamped or die cut to provide a readily removable central section which, when removed provides the dispensing opening and radial wire retaining notches.

With the above and other objects in view which will appear as the description proceeds, my invention consists in the novel features herein set forth, illustrated in the accompanying drawing and more particularly pointed out in the appended claims.

Referring to the drawing in which numerals of like character designate similar parts through the several views;

Figure 1 is a perspective view showing one form of container embodying my improved dispensing wall;

Figure 2 is a similar view with the central portion of the wall removed, showing the dispensing opening and radial notches; and

Figure 3 is a plan view of the container, on a reduced scale, showing the position of the projecting end of the wire disposed in one of the retaining notches.

Although the box or container per se, may take various forms, I have illustrated in the drawing the preferred embodiment of my invention which consists of a rectangular box having top and bottom walls 1 and 2, side walls 3, and end walls 4. The latter are preferably adapted to act as closures and are provided with conventional retaining tabs 5 which are integral with bottom wall 2 and when bent, fit into suitable slots 6 adjacent the edge of the top wall 1.

The top wall 1 of the container forms the dispensing wall and is weakened as shown in the path of a circle as by the provision of a plurality of concentric parti-circular openings or slots 7, annularly spaced from one another by webs 8 which are integral with the body of the top wall 1. The diameter of the circle defining the outer boundaries of the collective openings 7, is substantially the same as the inner diameter of a coil of wire to be inserted in the container. Adjacent the outer edge of each of the openings 7 and centrally disposed with respect thereto, I provide a radially extending notch which is cut into the edge of the top wall 1. These notches as will later appear, serve to receive and retain the projecting end of a coil of wire in the container.

The central portion of the dispensing wall 1

thus forms a disc-like section 10 which may be removed by severing the relatively narrow webs 8 at 11, along a circular line forming a continuation of the outer boundaries of the collective openings 7, thus leaving a relatively large central opening 12, as will be seen from Figure 2.

A coil of music wire or the like is inserted through the closure wall 4 which is secured in closed position by slipping the flap 5 in slot 6 in the conventional manner. When it is desired to dispense the initial length of wire, the webs 8 are respectively severed along lines 11 and the central disc 10 is removed. The inner end 14 of a coil of wire 13 is then withdrawn through the opening 12 and after a sufficient length has been uncoiled and snipped off, the end of the succeeding convolution is inserted in the appropriate notch 9 located the proper distance from the end of the wire. The normal tendency of the resilient wire to uncoil, forces the projecting end 14 to seek the outermost limit of the selected notch 9 as shown in Figure 3, and thus in effect retains itself in place for future dispensing and prevents the uncontrolled uncoiling of the wire.

The openings 7 and their respective notches 9 may be stamped or die cut in the blank forming the container by conventional methods, during the original manufacture of the container.

It will thus be seen that I have provided a convenient carton for coils of resilient wire which not only greatly simplifies the handling of the wire but serves as protection against damage by twisting and bending. Furthermore, these containers may be attractively designed and embellished with various ornamental and advertising features.

From the foregoing, it is believed that my invention may be readily understood by those skilled in the art without further description, it being borne in mind that numerous changes may be made in the details disclosed, without departing from the spirit of the invention as set forth in the following claims. For example, the boxes or cartons may be cylindrical in shape, and instead of the closure arrangement illustrated, they may be of the type wherein one part of the box telescopes into the other. In all instances however, the dispensing wall should lie perpendicular to the axis of the coil of wire within the container.

I claim:

1. A package comprising a container having substantially parallel flat walls and connecting walls therefor, a coil of wire housed in said container, one of said first-mentioned walls being weakened in the path of a circle thereby to define a portion removable to provide a central dispensing opening, said one wall having a plurality of generally radially outwardly extending notches leading from said circle, said wire being dispensible through said central opening, and the end thereof being selectively retained in said notches.

2. A package according to claim 1 wherein said one wall has a plurality of annularly spaced arcuate openings effecting the said weakening of such wall in the path of a circle.

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