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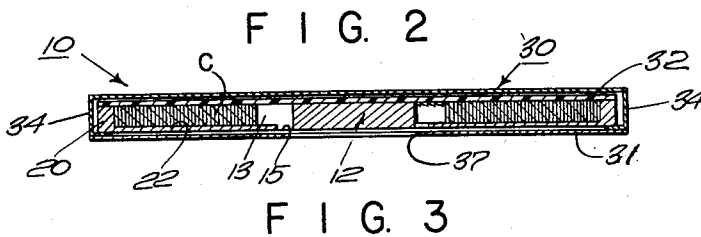
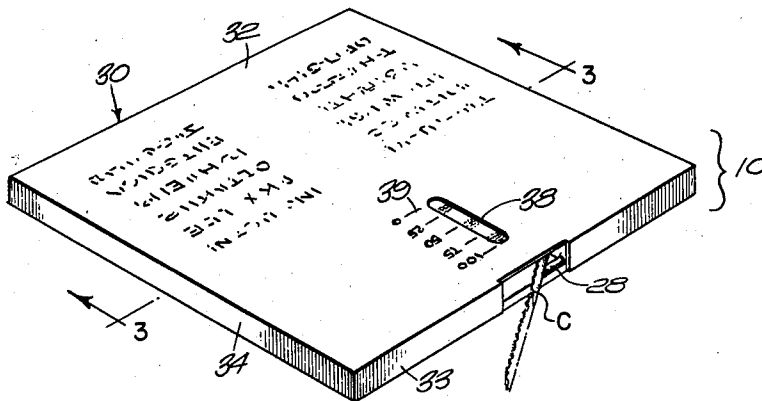
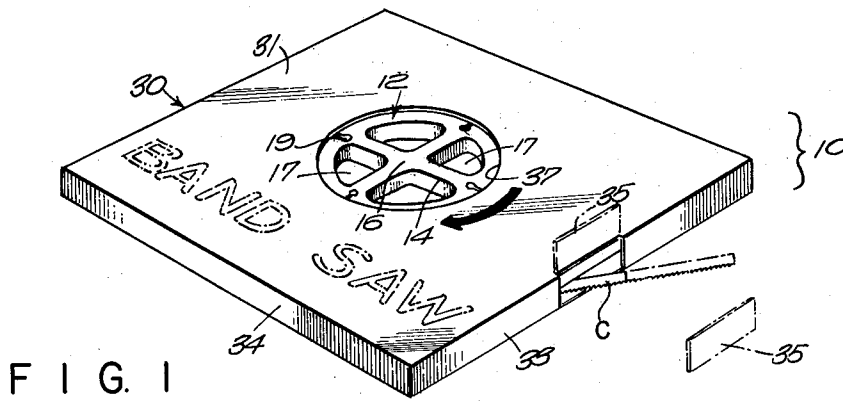
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3,115,242

METAL STRIP COIL DISPENSING CONTAINER PACK

Filed Dec. 23, 1960

2 Sheets-Sheet 1



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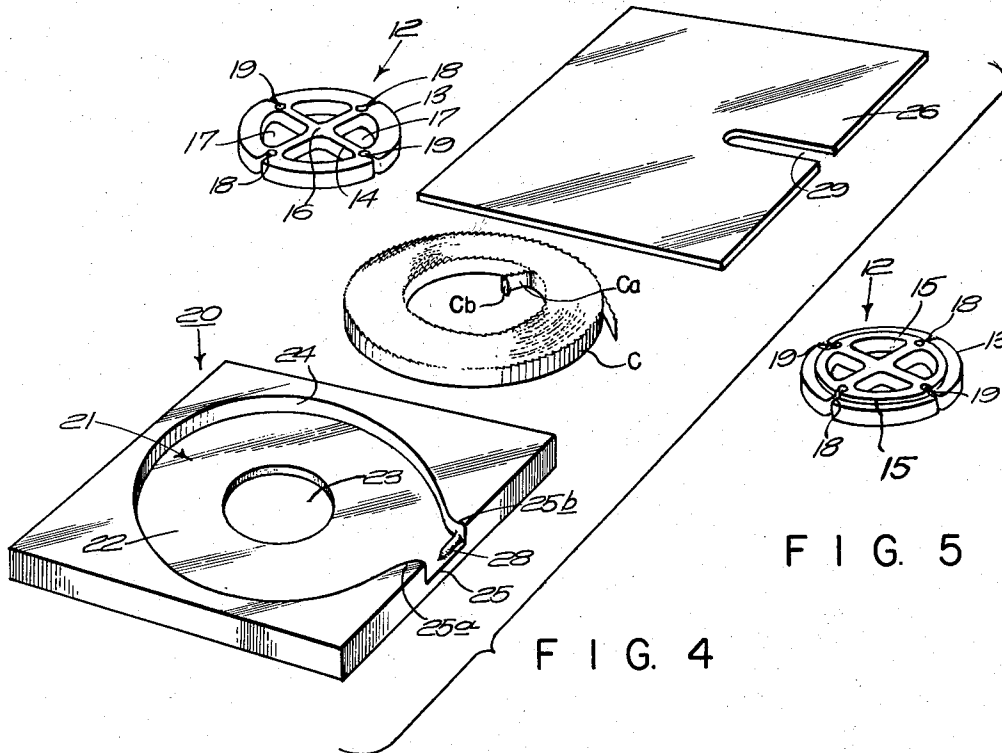
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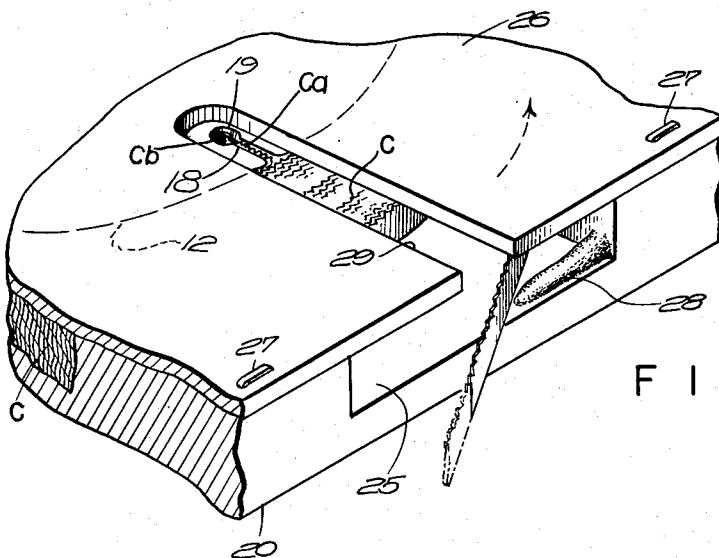
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2 Sheets-Sheet 2



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F I G. 4



F I G. 6

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3,115,242 METAL STRIP COIL DISPENSING CONTAINER PACK

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8 Claims. (Cl. 206—52)

This invention relates to packing and dispensing spring metal strip in coil form, especially such strips as saw-band and steel rule. It aims to provide new and improved means useful not only for packaging such coils for shipment, storage and sale, as unit packs, but also for dispensing any desired strip lengths directly from the coil pack.

The invention has among further objectives to provide such pack comprising a coil container unit adapted to be loaded with the spring strip after full assembly of such unit ready for any wrapper, the unit also being capable without disassembly of being reloaded and re-used if desired yet being of a low-cost material and construction consistent with throw-away disposal where such is more convenient and preferably being combustible for disposal by burning.

In the drawings illustrating by way of example one embodiment of the invention:

FIG. 1 is a top perspective view of a coil pack or dispensing-container and package in accordance with the invention;

FIG. 2 is a similar view of the pack of FIG. 1, inverted;

FIG. 3 is a section as one the line 3—3 of FIG. 2;

FIG. 4 is an exploded perspective view of elements of the container unit of the pack of FIGS. 1 to 3 including a container-dispenser body, a carrier reel and a cover plate, with a bandsaw strip in coil form as after assembly of the container unit and loading of the strip into it by center winding;

FIG. 5 shows the reel separately, inverted from the position thereof in FIGS. 1 and 4; and

FIG. 6 is an enlarged detail view at the region of the delivery port, with the outer carton or wrapper omitted, the inner pack or container unit elements being in the "inverted" position as in FIG. 2.

In accordance with the invention the shipping and dispensing pack, designated generally at 10, FIGS. 1 to 3, comprises first a circular carrier element or reel generally indicated at 12, see also FIGS. 4 and 5, with a cylindrical carrier portion or drum 13 for coaxial reception of the saw-band or other flexible resilient metal strip coil and an axially offset concentric bearing portion 15 for piloting the reel for rotation about its axis. Such coil carrier reel 12 is adapted to be installed in a receiving compartment or well 21 of a flat housing container element 20 dimensioned to accept a strip coil C, FIG. 4, of given initial size as to diameter and thickness, e.g. 100 ft. or other length of saw-band, steel rule, or the like of maximum width for the particular pack, e.g. $\frac{1}{8}$ ", $\frac{3}{16}$ ", $\frac{1}{4}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ ", etc. A circumferential wall of the container is provided with a dispensing port 25 tangential to the coil C and at which the free end of the outer convolution of the strip is automatically projectable for delivery. The pack 10 as a whole desirably also comprises a special housing carton or wrapper 30.

In more retail, as seen separately in FIGS. 4 and 5, the carrier reel 12 is of a circular plate or disc-like form, preferably being an integral one-piece body molded of a commercial plastic composition having substantial strength, hardness and rigidity, as for example one of the materials comprising a cellulosic or fibrous filler in a plastic vehicle known variously as particle board, molded wood chip,

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molded fibre and the like. This constituent material will be further described with reference to the container body 20 also made of the same.

The mentioned cylindrical carrier portion or annular drum 13 in this instance is at and defines the periphery of the reel 12. It is adapted for location in the manner of a core at the center space of a convolute metal strip coil C, shown as a saw-band. Under the invention the installing of the strip on the reel drum portion 13 as will be explained is enabled to be by direct winding onto it in the pack. This contrasts with the more difficult and generally less desirable procedure of separately coiling the strip and relatively telescoping the coil and the reel concentrically for insertion into a pack before assembly of the parts such as the body 20 and side cover 26 of FIG. 4.

The earlier mentioned bearing portion of the reel is herein an integral concentric journal or hub-like mounting collar 15 offset axially from the carrier portion 13 and constituting means by which the reel 12 as a whole and a strip coil C on or to be wound thereon are centered and piloted for rotation about the common axis thereof within the package. In the present example such centering collar or journalling element 15 is of lesser external diameter than the coil carrier portion 13, and projects axially and concentrically at one flat face thereof; see particularly FIG. 5.

The mentioned container element or body of the package comprises a flat coil-housing container 20 shown as an integral plate or block of a composition as mentioned for the reel 12 and more fully described later. It has recessed in from one main face a coil-receiving well 21, conveniently circular but which may have other contour, with a bottom wall 22 having a central circular through aperture 23 of like diameter as the reel collar 15 for providing rotative bearing support therefor. As apparent from the sectional view, FIG. 3, the reel 12 and saw-band coil thereon are located and guided in the plane radial thereof by flatwise reception against the bottom wall 22 of the container well 21, outwardly of and around the central bearing aperture 23. The inherent resilience of the coil C causes it to seek to expand radially in the manner of a clock spring. This is restrained and controlled by the encompassing circumferential wall 24 of the container well 21.

As a salient feature of the invention the container 20, the carrier reel 12 and the saw-band or other resilient coil C thereon are constructed and arranged for central rotative control or center-winding of the strip and coil by the user. Thereby the coil may be rotated in the package for access ejection of the free end, and also may be rotated, in the same direction, for retracting any excess length of the strip after dispensing a desired portion, or for reloading. Accordingly the reel 12 is equipped with means for anchoring the inner end of the strip relative to it, and with center-operating means whereby the reel may be engaged from without the pack for turning it and the coil C to project or to retract the free end of the strip, and for use in loading the pack.

For said purposes the reel 12, in the particular example here selected for illustrating the invention, has a central portion herein of spider-like form including a plurality of radial spokes 14. These merge at the outer ends into the inner circumferential walls of the carrier drum and bearing portions 13, 15 of the reel. At the inner ends said spokes 14 come together into a common center piece 16. The number of spokes 14 may be varied, four being shown in the illustrated example symmetrically arranged and providing a like number of quadrant-shaped spaces 17 between them and the peripheral body of the reel, whereat the latter may be gripped for applying center-wind torque. It will be understood that other shapes and arrangements

of reel engaging means or grip formations may be employed for the manual or tool engagement of the reel to turn it.

For anchoring the inner end of the strip of the coil one or more generally radial slots 18 extend from the outer margin of the heel 12. These are of sufficient radial extent to receive an intumed end portions Ca of the strip, FIGS. 4 and 6, adequate to serve as an anchoring hook. For minimum weakening of the reel the anchor slots 18, of which four are shown, are located in line with the spokes 14. For additionally secure anchorage of the inner end of the coil, the slots 18 desirably terminate in keyhole-like enlargements 19 at their inner ends, for hooking reception of a further upset detent Cb at the extreme terminus of the strip inner end. At the outer ends the retainer slots 18 may be flared and formed with rounded corners substantially as shown.

The container element or body 20, already referred to, comprises a flat block or plate, herein rectangular but susceptible to other contour. Such body 20 is integrally molded, stamped or otherwise formed from material of inexpensive composition such as earlier mentioned. The well 21 in this container 20 has a depth to receive the carrier drum portion 13 of the reel and the coil C thereon with the flat top face of the reel, the face uppermost in FIG. 4 and opposite to that having the bearing collar 15, flush with the main flat top face of the container 20, i.e. the face having the open end of the well 21 thereat. The expressions "top" and "bottom" herein as to the main flat faces of the various elements will be understood as primarily for identification and not as implying any necessary horizontal or other positioning of the pack in use.

The constituent material for the container body 20, also herein for the reel 12, for the purposes of the present invention is required to have the characteristics of substantial strength as against crush and shear stresses coupled with toughness and warp-resisting rigidity, also a surface hardness to afford bearing support and guidance for the strip coil both at the well bottom wall 22 and the circumferential wall 24, and desirably also for frictional or wedging engagement with the outer strip end at the port 25 to be described. But from considerations of economy in manufacture and distribution it is essential that the material be of a low cost nature consistent with throw-away disposal, and preferably being combustible for waste-use or disposal by burning. As the result of extensive experiment and testing applicant has found especially suited to the present purposes a moldable composition as herein disclosed and to be identified by the term "particle board." The base ingredient and bulk of this particle board is wood chip, saw dust and like cellulosic or fibrous particles of various sizes and conformations, from the relatively finer wood saw "dust" through the coarser particles and flakes as produced at lumber mills in sawing boards from logs and up to larger wood particles and chips are produced in other lumber mill and wood-working operations. The mixtures of such particles may include some longer shreds and strands of fibre or cellulose. An appropriate mass of such composition well mixed and dried is thoroughly impregnated with and worked into a carrier vehicle comprising a thermoplastic synthetic binder material such for example as a commercially available urea-formaldehyde composition. The material so compounded is placed in the appropriately shaped cavity of a pressure mold or die-casting press and subjected to pressure molding in the presence of heat. The resulting container block 20 having the well 21 and other features as herein illustrated integrally molded therewith and having the stated desired characteristics is thus rapidly and inexpensively fashioned of a material and in a manner to permit of economic one-time use and throw-away disposal. Nevertheless the resultant container block 20, also the reels 12, have such properties of strength, toughness, rigidity and surface hardness as mentioned as to make them capable of repeated re-use for the coil packaging and dispensing purposes of the present

invention. At the same time the material as disclosed is combustible in the entirety so that where disposal rather than re-use is more convenient the entire empty container may be burned in any conveniently available manner, whether as fuel or otherwise, leaving a minimum of ash or residue. Further by way of example the density and hardness of the particle board as here concerned, composed of the pressed and plastically bonded initially discrete and rather coarse grained wood or cellulose particles, are substantially as in a block of seasoned white birch of good grade as suitable for furniture.

Referring again to the drawings, the dispensing port 25 at a circumferential wall portion of the well 21 is located centrally of one edge face of the container block 20, herein centrally of such edge face. Said port 25 comprises a trough-like recess in the block communicating between the well 21 and the exterior of the selected block edge face and being open upwardly at the main face at which the well 21 opens. This port 25 is of similar depth as the well 21 and of sufficient width circumferentially and tangentially of the coil C to permit a substantial length of the leading or free end of the coil strip automatically to spring out with a snap action when brought opposite the port 25 under rotation of the reel and coil in the appropriate direction.

In the illustrated example the wind of the coil C on the reel 12 is such that with the pack positioned as in FIGS. 2 to 4 and 6, herein referred to as the "inverted" position, rotation of the reel 12 for ejecting the free strip end, also for subsequently retracting the same, is counterclockwise as indicated by the dotted arrow on FIG. 6. Correspondingly, in the reverse or "top up" position of the pack as in FIG. 1 said end-ejecting and retracting direction is clockwise. The correct wind direction desirably is indicated to the pack user as by an arrow prominently imprinted on the top face 31 of the carton or wrapper 30, FIG. 1.

To facilitate the automatic snap-out projection of the strip end, also subsequent retraction thereof when desired, the end walls of the slotted port 25 desirably are rounded at the inner corner portions as indicated at 25a, 25b, FIG. 4. Also at the "snap out" end 25a of the port the juncture thereof with the well 21 desirably is somewhat flared to enable the strip end to prepare for ejection by starting to separate from the next inner convolution of the coil as the end approaches the port 25. At the opposite or retracting and dispensing end 25b of the port 25 the juncture thereof with the well 21 may be more abrupt, allowing the strip easily to pay out tangentially under manual draft thereon.

The container elements of the coil pack 10 further comprise a container cover or retainer plate 26 of shape and size conformant to the container block 20. Such cover plate 26 is placed flatwise over the open face of the block 20, that uppermost in FIG. 4, also in FIGS. 2 and 3. It is secured in such position by any preferred means such as adhesive, rivets, staples or otherwise, as at 27, FIG. 6.

This container cover plate 26 may be formed of fibre-board, paperboard or other material selected to be substantially rigid or semi-rigid but desirably presenting at least at the inner face, if to overlies the toothed edge of a saw-band coil C, a surface softer than the saw and adapted to yield to the saw-band teeth under rotation of the coil.

For a purpose further referred to, the inner cover plate 26 preferably is provided with a radial slot 29 extending toward the center of the plate over the full radial dimension of the strip coil C and inwardly beyond it over the reel bearing portion 15 to the circle defined by the inner ends of the strip anchor slots 18, 19. For convenient identification of the location of the dispensing port 25, and for use in anchoring the inner coil end when initially installing a strip for winding into the assembled container, such coil-exposing slot 29 preferably is located medially of said port.

The coil C may be loaded in the pack, in the case of a toothed-edge strip shown, with the toothed edge either "up" or "down" relative to the container well bottom

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wall 22. In the materials of the container body 20 and the cover 26 differ in surface hardness the toothed edge preferably is toward the wall which is softer or more readily markable by the teeth, such generally being the cover 26, the coil C accordingly herein being shown with the teeth "up" or adjacent thereto, FIGS. 2 and 6.

The operation of initially loading the pack, or of reloading when re-using it, is readily accomplished. Assume now that the container unit consisting of the molded body 20, the reel 12 and the cover plate 26 is fully assembled and the cover plate fixed in place. Viewing this unit with the cover 26 uppermost, as in FIG. 6, the reel 12 is turned to bring one of the radial anchor slot formations 18, 19 into line with the loading and viewing slot 29 of the cover 26. The end of the flexible resilient strip which is to be innermost, having the upset hook-like detent Cb at the extreme end, is then merely placed edgewise down through the cover slot 29 so as to pass the strip end edgewise into the exposed anchor slot 18 of the reel and to hook the detent Cb into the slot enlargement 19. Then by turning the reel in the winding direction, counterclockwise in the instance of FIG. 6, the entire loading length of the saw-band or other strip is wound into the container, such as 100 ft. or other length according to the capacity of the given unit.

Turning of the reel whether for loading or in subsequent dispensing and rewind operations is in any case readily effected by gripping the central portion thereof where it is exposed at the central bearing aperture 23 in the bottom wall 22 of the container block 20, at the side of the container opposite the cover 26, the side which is bottom-most in FIG. 6, also FIG. 4. The reel spokes 14 and intervening quadrant spaces 17 afford one form of convenient means for so gripping the reel either manually, as generally in dispensing, or by means of a turning tool or device. For large scale operations, as in initial or reloading at the saw-band factory, or in any instance, a convenient procedure is to support the container unit horizontally, in the position of FIG. 6, with the head of a winding spindle having a crank pin or the like engaged with the reel gripping formations, herein the spokes 14, serving in the manner of a clutch. Following loading of the strip coil C into the container unit any desired wrapper or carton may be applied to complete the package for transport and for dispensing use, such as the outer element or carton 30 to be described.

In subsequent dispensing operations, assuming now the free end of the coil strip C is concealed somewhere within the container well 21, the user grasps one or more of the spokes 14 of the reel, from the bearing hub or collar side thereof, that seen uppermost in FIG. 1, and turns it in the indicated direction until the free end of the coil snaps out at the port 25, as indicated by the full-line portion, FIG. 6, also FIGS. 1 and 2. Such projected free end of the strip may then readily be grasped and any desired length withdrawn. Under such drafting of the strip the reel and coil turn reversely from the described direction in loading, or in retracting a length or in excess ejection of the strip end. It is apparent that any length up to the total available may be so withdrawn and the same or any then unneeded length may subsequently be rewound into the pack. Upon exhaustion of the strip another coil-forming length may be windingly loaded into the container when it is elected to re-use the same.

With springy strips as here concerned there is a tendency under rapid turning of the coil and particularly when about half or more of the total length has been dispensed, for the free end to travel past the port 25 without full ejection. To aid projection of the free strip end and the retaining thereof in exposed position under such or any circumstances, means may be provided at the port 25 for outwardly camming and for restraining the strip end in projected position.

For this purpose the carrier body or block 20 may be provided at the port 25 with frictional holding means

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such as best seen in FIG. 6. As illustrated this comprises an elongate nubbin 28 of wedge form integrally molded on said body 20 and rising from the level of the well bottom wall 22 at the port mouth and toward the overlying plate 26, the taper being toward the direction from which the strip end approaches as the reel 12 is turned. Thus when the strip end comes opposite the port 25 the inherent expanding and straightening force which springs it outward brings it into engagement with and causes it to ride up over the holder wedge 28 and into a vertically narrowed portion of the port where it is accessibly retained. In the case of a toothed strip such as the saw-band illustrated the teeth come into pressing engagement with the adjacent wall of the container, against the cover 26 in the illustrated example, FIG. 6, with increased positive holding effect in presenting the strip end in grasping position.

As seen in FIGS. 1 to 3 the coil pack of the invention further comprises the mentioned outer carton or wrapper element 30 for the described inner assembly or coil dispensing container unit. Such housing or outer element comprises a cardboard or like carton of a size and shape snugly to receive the described container unit, after assembly and loading thereof. In general construction, aside from the special features thereof for particular cooperation with the container unit, such wrapper or outer housing may be of the conventional Brightwood or other folding box type, herein including main top and bottom walls 31, 32, a pair of integral closed walls 33, 33 at two opposite edges and a pair of infolding tuck-flap hinged closure walls 34, 34 at the other two edges, in the rectangular example illustrated.

At one edge wall of the carton 30, herein one of the closed edge walls 33 and central thereof the carton is formed with a readily displaceable or tear off door or flap 35, perforated or cut-and-nicked around the edges thereof for easy opening. It is adapted to overlie the port 25 of the inner unit and to be lifted or torn off to expose said port for dispensing use of the pack.

At one main wall of the carton, the wall 31 in FIGS. 1 and 3, herein identified as the "top" wall, the central area is formed with an access aperture 37, herein central and generally conformant in size to the there exposed bearing hub portion 15 of the reel 12. By reason of the correlation in shape and size of the inner assembly unit and the carton 30 such access aperture 37 in the completed pack is substantially concentric with the reel 12 and coil C thereon, giving ready gripping access to the reel and facilitating the described center-wind operation thereof. The areas of the carton top wall 31 around the aperture 37 are available for the imprinting of operating instructions, the center-wind direction indicating arrow previously mentioned and such decorative and advertising matter as may be desired to be displayed.

At the opposite main or bottom wall 32 the carton 30 as illustrated has a generally radial elongate window 38 located and dimensioned to match the loading and viewing slot 29 of the inner cover element 26. As shown in FIG. 2 the carton window 38 has associated with it a scale 39 calibrated to indicate remaining footage on the contained saw-band coil C when the latter is wound down taut upon the reel 12 while the outer end is restrained. By so winding down against the reel drum 13 while holding the outer end whatever remnant length is in the container more closely accurate readings are made available, the scale 39 being calibrated accordingly and being graduated to read up from zero in the radial direction outwardly across the tight-wound coil C. This further contrasts the center-wind pack of the present invention with prior non-center-windable springy strip coil packages wherein the relatively loose convolutions are variously spaced from each other radially and increasingly so toward the outside, causing difficulty and inaccuracy in any attempt to measure or estimate remnant lengths.

Other areas of the carton walls, particularly the "bot-

tom" wall 32 of the illustrated example, present panels for imprinting technical information concerning use of the content strip, such as a speed and tooth selection chart for different materials to be cut, in the case of saw-bands, with recommendations of blade sizes for different operations, and the like.

It will be understood that the container unit or inner pack assembly comprising the coil, reel, container and cover elements C, 12, 20 and 26 of FIGS. 4 and 6 following assembly and loading is slid into the carton element 30, at one of the hinged closure edge walls 34 thereof. In so doing the container unit is entered with the port 25 of the container 20 disposed to come opposite the openable port-covering flap 35 of the carton. Such relative positioning also brings the loading and viewing slot 29 of the container cover 26 into line with the carton window 33, on full insertion of the unit into the housing carton 30, with the reel center-wind access aperture 37 of the carton exposing the central torque-receiving portion of the reel thereat.

With reference to the drawings, in comparing the container assembly unit of FIGS. 4 and 6 with the complete pack 10 of FIG. 1 it is to be noted that said unit has the opposite side uppermost in FIG. 1 from that in FIGS. 4, 6, while in the "inverted" pack position of FIGS. 2 and 3 (from that of FIG. 1) the inner container unit is in the same position thereof as in FIGS. 4, 6.

In sum, the present invention provides a dispenser pack for coiled spring strip, particularly saw-band and rule, wherein now for the first time adequate control is had for the coil convolutions within a container. As apparent from the foregoing description taken with the drawings of an illustrating embodiment, by availing of center-wind for the springy coiled strip, such as the illustrated saw-band, and windingly connecting it at the inner or center end to a reel in a container and which is easily rotatable from without the container, control is had at all times for the coil convolutions. This applies whether the convolutions are those of a full-length maximum capacity coil or of a lesser or partially depleted coil. Excess lengths withdrawn are readily re-windable back into the container. The leading free end of the strip if deliberately retracted into the container, or if otherwise "lost" inside it, is immediately available, with an automatic snap-out action, merely by turning the reel until the end ejects at the dispensing port, under the center-wind provision for the coil.

One difficulty heretofore encountered in attempting to package coils of spring metal such as saw-band, steel rule and the like has been that such coils generally expand outward in the package, particularly in the course of jostling in shipment. The expansive force attending the inherent resiliency of the coiled strip is often such that the coil in effect positively locks itself against the package inner wall, with such firmness that even if the outer end is somehow accessible for grasping it is a practical impossibility for any person of normal strength to pull out the strip manually. But with the provision for center wind under applicant's disclosed invention any such withdrawal problem, if it arises, is immediately solved merely by winding down the coil centrally sufficiently to free it for easy rotation in the pack as made possible through the accessibility of the reel for turning from outside the container.

Together with the above major advantages the pack and dispenser-container of the invention presents the various others as described including particularly the reloading and re-use capacity without need for disassembly of the container unit, along with disposability where such is preferred, all in a low-cost pack both as to material and as to manufacture, assembly and loading. At the same time the package is extremely compact and easy to handle yet is of a secure and rugged structure, well serving the heretofore not satisfactorily answered problem of dispens-

ing saw-band and like spring strip from a packaged coil thereof.

My invention is not limited to the particular embodiment thereof illustrated and described herein, and I set forth its scope in my following claims.

I claim:

1. A center-winding, containing and dispensing carrier receiving bandsaw and like coilable resilient metal strip therein, comprising:

a generally rectangular flat housing having opposed spaced parallel flat rigid side walls and interposed rigid peripheral masses forming marginal edge walls, all said walls fixedly united and together defining a circumferentially continuous annular coil-receiving compartment centered in said housing,

a cylindrical rigid-walled bearing formation extending through one side wall of the housing and being axially centered within and with its bearing wall radially inwardly beyond the periphery of said compartment,

a strip-winding reel rotatably disposed in the housing and comprising a strip-coil accumulating and holding portion of effective winding diameter greater than that of said cylindrical bearing formation and defining the inner circumference of said compartment, said reel further comprising a cylindrical journalling portion conformant to and rotatively mounted in and by the rigid cylindrical wall of said bearing formation,

a strip intake and pay-out port opening laterally from said compartment through a housing edge wall area of calculated angular extent for automatic projection thereat of the free end of a strip coil in the compartment,

an attaching formation on the strip-coil holding portion of the reel anchoring the inner end of a strip to the reel by insertion of said inner end through said strip intake and pay-out port,

grip means fixed on the journalling portion of the reel and operatively accessible from without the housing for initial winding and for rewinding such strip onto the reel through said port;

and a coil of the metal strip in said compartment with its inner end anchored by said attaching formation of the reel.

2. A combined winder, container and dispenser package receiving strongly expansible coils of bandsaw and like metal strip, comprising:

a flat rigid housing resistant to impact and crushing forces and having a flat outer side wall portion and around the margin of the inner face of said side wall portion having normal thereto a massive peripheral edge wall portion, said housing portions together presenting a compartment for inwinding reception of a coil of the metal strip with the axis thereof central of and perpendicular to said side wall portion;

a reel having a strip wind-on portion of operative diameter receiving thereon the innermost convolution of such metal strip coil which diameter is sufficiently less than that of said compartment to accept the coil between said reel wind-on portion and said edge wall portion of the housing;

said housing side wall portion having a central cylindrical bearing aperture of lesser diameter than said wind-on reel portion and said reel further having a central axially projecting bearing portion conformant to and journaled in said bearing aperture;

center-wind grip means on said reel bearing portion and accessible from without the housing;

a strip intake and pay-out port extending through the housing side wall portion and of a peripheral extent and area for entering insertion of the inner end of the strip and for grasping presentation of the free outer end thereof;

strip inner-end anchor means on said wind-on portion of the reel;

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and a coil of the metal strip having the inner end held by said anchor means and being wound onto said wind-on portion of the reel and into said compartment via said strip port with the free end always accessibly presentable thereat by turning the reel in the winding direction.

3. A combined winder, container and dispenser package receiving strongly expansible coils of bandsaw and like metal strip, comprising:

a flat body block having inner and outer side faces and being resistant to impact and crushing forces;
a central recess let in from the inner side face of the block to a depth of maximum metal strip width and with an encompassing wall inner diameter that of a maximum coil of the strip,

said recess having a flat outer end wall integral with the body block and having a concentric cylindrical bearing aperture opening through said end wall to the outer side face of the block;

a reel rotatably mounted concentrically in said recess and comprising

a flat drum portion of axial dimension conformant to the strip width

and a central axially offset concentric bearing portion having piloted and supportive bearing reception in said recess end wall bearing aperture and having torque applying grip means accessibly exposed at said outer side face of the block;

said reel drum portion having a diameter dimension providing between it and the encompassing recess wall a circumferential compartment receiving said metal strip;

the package further comprising a retainer plate permanently affixed flatwise at said inner face of the body block and covering it, said circumferential compartment and said reel drum portion therein;

a strip intake and pay-out port opening laterally through the body block from said compartment and of calculated circumferential extent for automatic snap-out ejection of the free end of a contained strip trailed past it under center-winding of a coil thereof;
strip inner-end anchor means on the reel drum portion and engageable with a strip end inserted at said strip port;

and a coil of the metal strip having the inner end so engaged with said anchor means and having the component strip length wound in through said port and onto the reel drum so as to be contained in said compartment with the free strip end when fully retracted being automatically ejectable at said strip port by further turning of the reel in the winding direction.

4. A winding, storing and dispensing package unit receiving a coil of bandsaw and like resilient metal strip comprising in combination:

a housing body element consisting of a substantially flat block having at one wide face a well for flatwise seating and circumferential confining of such coil,
said well having a lateral port for inwinding loading and for reverse dispensing of the metal strip and having a bottom wall formed with a central cylindrical bearing aperture of lesser diameter than the well;

a reel for winding a metal strip into a coil thereon, said reel consisting of a one-piece flat disc-like body presenting a cylindrical coil-receiving drum of strip width in axial extent and of a radius intermediate the well and the bearing aperture radii providing a coil-receiving compartment about the drum and within the well;

said reel further comprising an axially offset cylindrical bearing portion of lesser diameter than the reel drum and journaled in said well bottom wall bearing aperture for rotatively piloting and supporting the reel and having externally available torque-applying grip means rigidly fixed thereon within said bearing aperture;

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a radial anchor slot in said reel body retaining the inner end of a metal strip for windingly loading the strip onto and by turning of the reel,

and a coil of said metal strip in said well compartment and encompassing the reel drum with the inner strip end so affixed to the reel body and the free strip end projectably available to said well port.

5. A self-contained package unit receiving an incoiled continuous-length flexible resilient metal strip such as hardened and tempered saw-band and steel rule and storing such strongly expansive coil subject to pay-out dispensing of the strip therefrom, said package unit comprising:

a flat housing body block resistant to impact and crushing forces and having opposed parallel flat faces;

a central well sunk in from one flat face of the otherwise substantially solid block to a depth approximating the strip width and having an integral bottom wall paralleling and proximate to the other flat face of the block;

a strip receiving and controlling reel comprising a flat disc-like drum of axial dimension conforming to the depth of the well and having a radial dimension sufficiently less than that of the well to provide when centrally positioned in the well a circumferential chamber between the drum and the encompassing well wall receiving a strip coil of maximum strip length and number of strip turns for the given package, said drum having at the inner flat face thereof a marginal zone flatwise supported against said well bottom wall;

said reel further comprising a coaxial piloting and rotatively mounting cylindrical bearing hub projecting from said inner face of the drum within said marginal zone thereof and said well bottom wall having formed therethrough a central cylindrical bore for journalling said reel hub;

a well cover plate on and permanently fixedly secured at said recessed face of the block for laterally confining the reel between said plate and the well bottom wall;

a strip intake and tangential pay-out port opening radially from the well chamber through the solid mass of the housing body block and of restricted but sufficient angular extent for automatic snap-out projection thereat of a finger-graspable length of the free end of a contained strip coil when said end is trailed into exposure at said port under center-winding of the coil;

a generally radial anchor slot formation on said drum of the reel and receiving via said port and holding the inner end of the strip;

said reel hub having at the outer end grip means for application at times of power-driven and at other times of manual turning torque thereto in one and the same direction relative to the housing block for inwinding the strip initially, for effecting said snap-out projection of the strip free end for pay-out grasping thereof, and for subsequently rewinding any projecting strip portion not removed for use;

and a coil of said flexible resilient metal strip on the drum of the reel and within said circumferential chamber with the inner strip end held in said anchor slot formation of said reel drum,

said package being loadable and when desired reloadable by inner end insertion and winding in of the strip coil after assembly and permanent intersecuring of the housing block and said cover plate, and whereby center-wind control for the strip coil and automatic ejection of the free end thereof is afforded at all times.

6. A package unit according to claim 5 wherein said body block has at the strip port at the level of the well bottom wall an upwardly inclined formation narrowing the port at one end thereof for wedging engagement edge-

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wise with the strip end to assist presentation and holding thereof in projected position for grasping.

7. A package unit according to claim 5 including in combination therewith a carton for snug reception of said unit, the carton having top and bottom walls and connecting edge walls, one edge wall having a covering flap overlying the strip port of the body block and displaceable to expose the same, and the top wall of the carton being wholly external to and mechanically independent of the reel and having a central aperture operatively accessibly exposing said piloting and controlling hub of the reel.

8. The package according to claim 7 wherein the well cover plate on the body block has a radial slot exposing the full radial dimension of the coil and the carton bottom wall has a slot-conforming window and associated therewith a scale calibrated to indicate remaining footage of the contained coil when the latter is wound taut onto

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the reel, said scale being graduated to read from lower to higher values in the radial outward direction.

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