ABSTRACT OF THE DISCLOSURE

A watch band calendar dispenser in the form of a container having a top open window and end slot incorporates a unique spring geometry for urging a stack of calendar elements in the form of thin sheets of metal in an upward direction for successive dispensing from the container. The biasing spring is in the form of a flat rectangular metal member dimensioned to fit in the container and having transverse cuts extending inwardly from opposite sides adjacent to the ends. The side portions between these cuts are biased upwardly to define a semi-cylindrical section, the top edges of the side portions being parallel to each other and serving as engaging guides for the underside of the stack of calendar elements. With this configuration, when the container is completely filled with elements, the spring structure is held in a substantially flat configuration so that a maximum number of elements may be incorporated within the container.

This invention relates to watch band calendars and dispensers thereof and more particularly, to an improved dispenser structure for watch band calendars in the form of thin metal sheet elements.

BACKGROUND OF THE INVENTION

Watch band calendars are well known and have enjoyed a considerable commercial success in the last few years. Generally these types of calendars take the form of thin metal sheets having monthly calendars imprinted on their top surfaces. The metal is sufficiently thin that end portions may be bent to encircle a portion of a person's watch strap to hold the calendar to the watch strap so that it is always readily accessible for easy observation. Because of the limited surface available for imprinted calendar, each of the thin metallic sheets will generally include a calendar for only one month. Accordingly, unless both sides are used, at least twelve of the thin sheets must be provided to represent a yearly calendar.

It is, of course, impractical to simply affix all twelve sheets representing a year calendar to a person's watch strap. Not only would there probably not be sufficient room on the strap itself, but some of the calendars would necessarily be positioned at an awkward location and thus not readily observable. Accordingly, the practice is to simply remove one calendar and replace it with another at the end of each month from a supply usually maintained at a person's home. However, for persons on extended trips who may wish to change their calendars, it would be more practical if a means were provided for permitting a person to carry at all times a complete set of the monthly calendars. Any such holder or container for the monthly calendars would desirably be as small and compact as possible. In addition, the container for maximum efficiency should be so designed as to enable successive dispensing of calendars as needed without having to undergo undue manual manipulation of the container itself.

BRIEF DESCRIPTION OF THE INVENTION

With the foregoing background in mind, the present invention comprehends an improved dispensing container particularly designed for watch band calendars of the type described. This dispenser comprises a container for holding a stack of calendar elements in the form of thin metal sheets having suitable calendars imprinted on their top surfaces. The top surface of the container includes an open window which will expose the top most element and calendar on its top surface. The container also includes a transverse end slot. A unique biasing spring is provided within the container between the bottom of the container and the bottom of the stack. This spring is generally in the form of a rectangular metal member dimensioned in accord with the dimensions of the container itself such that when received in the bottom of the container it is held against transverse movement in its own plane. The metal member has transverse cuts extending from opposite longitudinal sides adjacent to its ends towards its center longitudinal axis. The side portions between these cuts are biased upwardly to define a semi-cylindrical section. The upper edges of these side portions engage the underside of the stack of calendar elements to continuously bias the stack upwardly. On the other hand, because of the formation of the semi-cylindrical section from an initial flat rectangular metal member, when the container is completely filled, the spring can lie in substantially a flat plane so that maximum utilization of the interior of the container is realizable. The dispensing container can thus be made relatively small.

The open window on the top of the container serves a dual function. First, it permits a user to engage the top most element with his thumb and slide this element from the end slot. Second, it permits visual observation of the calendar imprinted on the top most element without having to remove the same from the container.

Finally, the container may include a suitable attachment means for ready securement to a conventional key chain so that it may readily be carried around on a person's key chain in the manner of normal keys.

BRIEF DESCRIPTION OF THE DRAWINGS

A better understanding of the invention will be had by referring to a preferred embodiment thereof as illustrated in the accompanying drawings in which:

FIG. 1 is an exploded perspective view of the various components making up the watch band calendar dispenser of this invention;

FIG. 2 is a cross section of the components of FIG. 1 after being placed in assembled relationship taken generally in the direction of the arrows 2-2 and illustrating the dispenser completely filled with watch band calendars;

FIG. 3 is a view similar to FIG. 2 but illustrating the relative positions of components after several of the watch band calendars have been dispensed from the container;

FIG. 4 is a perspective view of the assembled container illustrating the manner in which a watch band calendar is removed therefrom;

FIG. 5 is a fragmentary perspective view showing a first manner of securing the watch band calendar dispensed from the unit of FIG. 4 to a person's wrist watch strap and;

FIG. 6 is another fragmentary perspective view of the watch band of FIG. 5 showing a second means of securing the watch band calendar to the strap.

DETAILED DESCRIPTION OF THE INVENTION

Referring first to FIG. 1, the dispenser portion of the present invention comprises three basic components. To wit: a generally rectangularly shaped box 10, a spring means in the form of a leaf type spring 11, and a top cover 12. The box 10 includes a flat interior bottom 13 and is provided with an annular channel 14 extending around its exterior wall. The box 10 may also include
an attachment means 15 for connecting the same to a watch chain.

The spring means 11 takes the form of a generally rectangularly portion of metal member dimensioned to be received in the box 10 in such a manner that it is held against translational movement in its own plane. The member includes transverse cuts designated 16a, 16b and 17a, 17b extending from opposite sides towards the central axis of the member adjacent the opposite ends 16 and 17. Side portions between these cuts are bent upwardly to define a generally semi-cylindrically shaped section 18. There are thus provided upper side edges 19 and 20 generally parallel to each other and preferably curled to provide smooth guiding engaging edges for bearing against the bottom of a stack of calendar elements to be held in the container. The semi-cylindrical section 18 may include transversely extending cut-outs such as indicated at 21 to decrease the material content of the member and thus enable control of the upward biasing force exerted by the side edges 19 and 20.

Referring now to the cover 12 as shown in FIG. 1, the top surface is provided with an open window 22. Further removal being effected by reversing the process employed in forming the wall portion of the cover. One end of the cover terminates in a transverse end slot 24.

Also illustrated in FIG. 1 is a typical watch band calendar element 25. This element takes the form of a thin metal sheet having smoothly finished upper and lower surfaces 26 and 27. Opposite end portions of this sheet include cut-outs such as illustrated at 28 and 29 and the central top has imprinted thereon a calendar 20. The opposite surface 27 of the element 25 may also have a calendar imprinted thereon if desired.

The various components of FIG. 1 are assembled by positioning the blasing spring 11 on the bottom 13 of the box 10 and thereafter inserting the cover 12 over the box 10 such that the annular rib 23 will mate with the annular channel 14 of the box. The rib may be welded to the channel by ultra-sonic welding means to provide a permanent container.

FIG. 2 illustrates the manner in which the rib 23 may be snapped into the channel 14. By utilizing ultra-sonic type welding, the outer wall surfaces of the box portion 10 and cover 12 may be flush as shown.

A stack of watch band calendars 25 may then be received in the container by feeding the same through the transverse end slot 24 of the calendar readily sliding along the top bearing side edges 19 and 20 of the spring 11. As further calendars are inserted, the semi-cylindrical section of the spring member is gradually flattened until the container is filled such as illustrated in FIG. 2. Because of the manner of forming the spring member 11, the semi-cylindrical section will fit between the ends 16 and 17 so that the entire spring member can lie substantially flat and thus provide maximum interior volume in the container for receiving the stacked elements 25.

FIG. 3 illustrates the position of the spring 11 after several of the calendar elements 25 have been removed, this being indicated by removing the spring member employed in inserting the elements. As indicated by the arrows, the side edges 19 and 20 exert an upward biasing force substantially evenly on either side of the longitudinal axis of the members and thus urge them towards the top of the cover 12 in such a manner that the top most elements may be removed by the next successive element properly positioned for subsequent removal.

FIG. 4 illustrates the position of an element upon partial removal. In this operation, the user will simply engage the top most element with his thumb through the window 22 and slide the element out of the end slot 24 as indicated by the arrow.

The dimensioning of the window 22 in the cover 12 is such as to not only serve the purpose of permitting a user to frictionally engage the element with his thumb for removing purposes but also to expose the imprinted calendar of the upper most element. The particular month depicted by the top most calendar is thus readily visible to the user.

FIG. 5 illustrates a first manner in which the watch band calendar element 25 may be secured to a watch strap. In FIG. 5, the watch strap 31 is threaded through the openings 28 and 29 in the calendar element to secure the calendar to the watch strap.

FIG. 6 illustrates a second manner of securing the calendar element to the watch strap. As shown, the end portions defining the cut-outs 28 and 29 are simply wrapped around or bent to underlie the undersides of the watch strap 31 and thus hold the calendar 25 in a secure position.

As mentioned heretofore, a second calendar may be imprinted on the bottom surface of each of the elements and in this respect, a total of only six elements would be necessary to provide a year's supply of calendars. Under these circumstances, the user would simply remove the metal element and turn it over and then reinsert it on the watch strap either in the manner depicted in FIG. 5 or of the manner depicted in FIG. 6. Alternatively, the same calendar may be on both sides but one side finished in gold and the other silver so that the user can expose that side which matches his watch.

OPERATION

The operation of the watch band calendar and dispenser will be evident from the foregoing description. After the box 10, spring means 11 and cover 12 of FIG. 1 have been assembled as illustrated in FIGS. 2, 3 and 4, a user may secure the dispenser to his key ring or chain as by means of the attachment structure 15. He may then load the container with a stack of calendar elements such as indicated at 25 by inserting the same successively through the end slot 24. As described, this action will compress the spring 11 into a flat configuration so that a maximum number may be held within the dispenser.

The user will remove the top most calendar, the calendars being stacked in proper chronological order and may secure the same to his watch band in either of the manners depicted in FIGS. 5 and 6.

At the end of the month, the user can simply remove the calendar element from his watch band and in the event the next successive month calendar is on the opposite side of the element, turn the element over and reinsert it on the band. In the event the next month appears on the next calendar within the dispenser, the user can simply slide this top most calendar from the dispenser as described in conjunction with FIG. 4.

As the calendars are successively dispensed from the container, the spring means 11 will assume the position illustrated in FIG. 3. Because of the smoothly provided parallel upper side edges 19 and 20, sliding movement of the calendars when inserting the same and when removing the last calendar relative to the spring is greatly facilitated. Furthermore, the structure is stable within the container in view of the dual rails defined by the upper side edges. Each of the calendar elements themselves may include suitable surface finishing for the top and bottom surfaces to provide essentially a lubricated surface for easy sliding movement relative to each other and the upper side edges of the spring.

Finally, as a next step of the simple construction of the container itself in the form of a box and cover, twotone coloring may be readily provided prior to assembly and the top cover then simply snapped onto the box with the rib received in the groove. Thereafter, sonic welding techniques may be employed to provide a permanent container.

From the foregoing, it will be evident that the present invention has provided a greatly improved watch band calendar and dispenser wherein various problems en-
countered with watch band calendars in the past have been overcome.

What is claimed is:

1. A watch band calendar dispenser, comprising:
   (a) a rectangularly shaped box having a flat interior bottom and annular channel extending around its exterior side wall;
   (b) a rectangular shaped cover for said box having a central top window opening and a transverse end slot, the interior side wall of said cover including an annular rib for mating with said channel when said cover is assembled on said box to define a container; and
   (c) a metal leaf type spring in the form of a rectangularly shaped metal member dimensioned to fit in said container on said flat bottom, said member having transverse cuts extending from opposite longitudinal sides adjacent to its ends towards its center longitudinal axis, the side portions between said cuts being biased upwardly to define a semi-cylindrical section, the upper edges of said side portions being formed to define smooth guide surfaces serving to bear against the underside of a stack of calendar elements in the form of thin metal sheets having calendars imprinted on their top surfaces, downward pressure by said sheets urging said upper edges downwardly to hold said leaf type spring in a substantially flat configuration when said container is completely filled with said calendar elements, said semi-cylindrical section in-