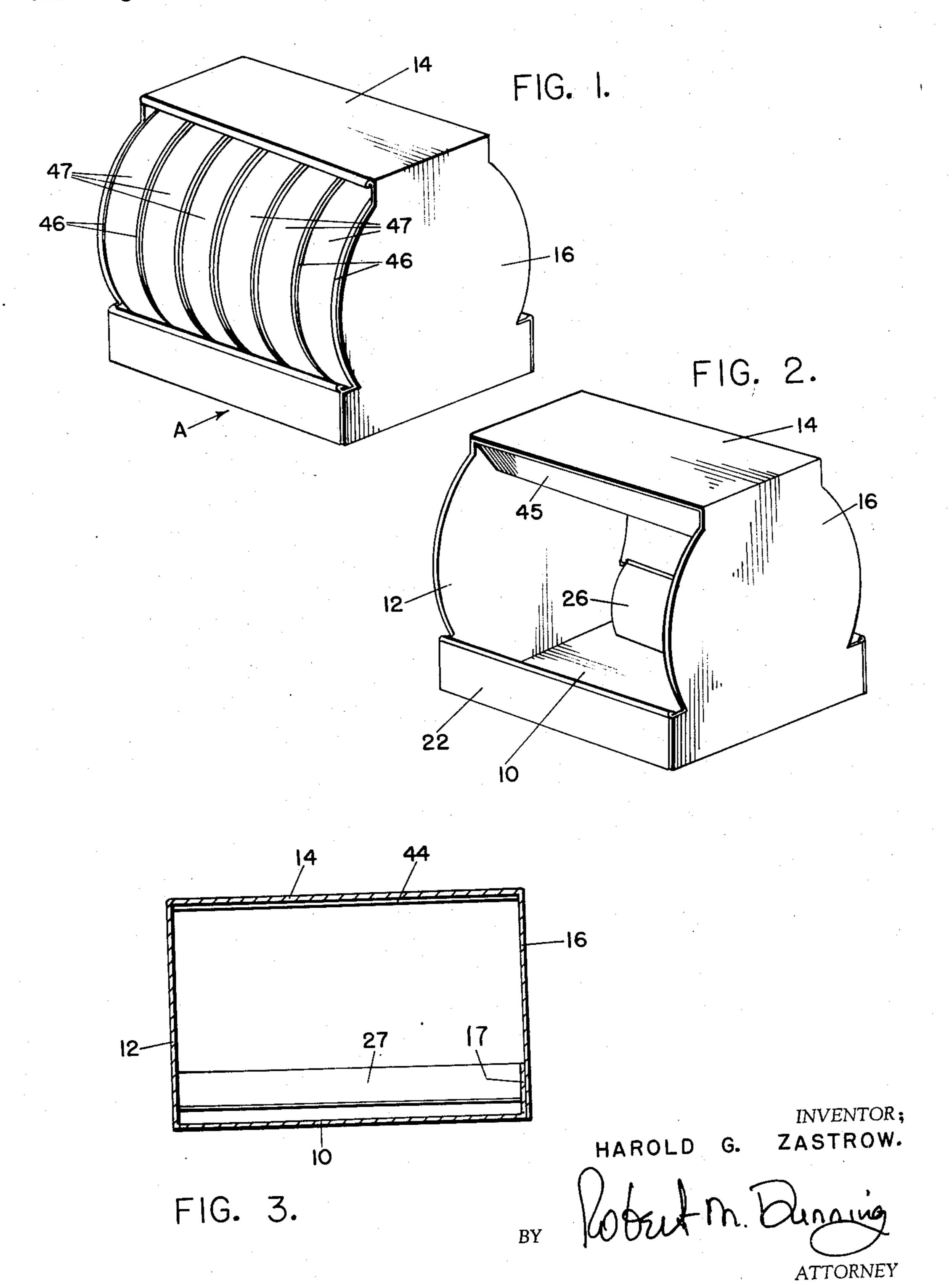
RIBBON SPOOL HOLDER

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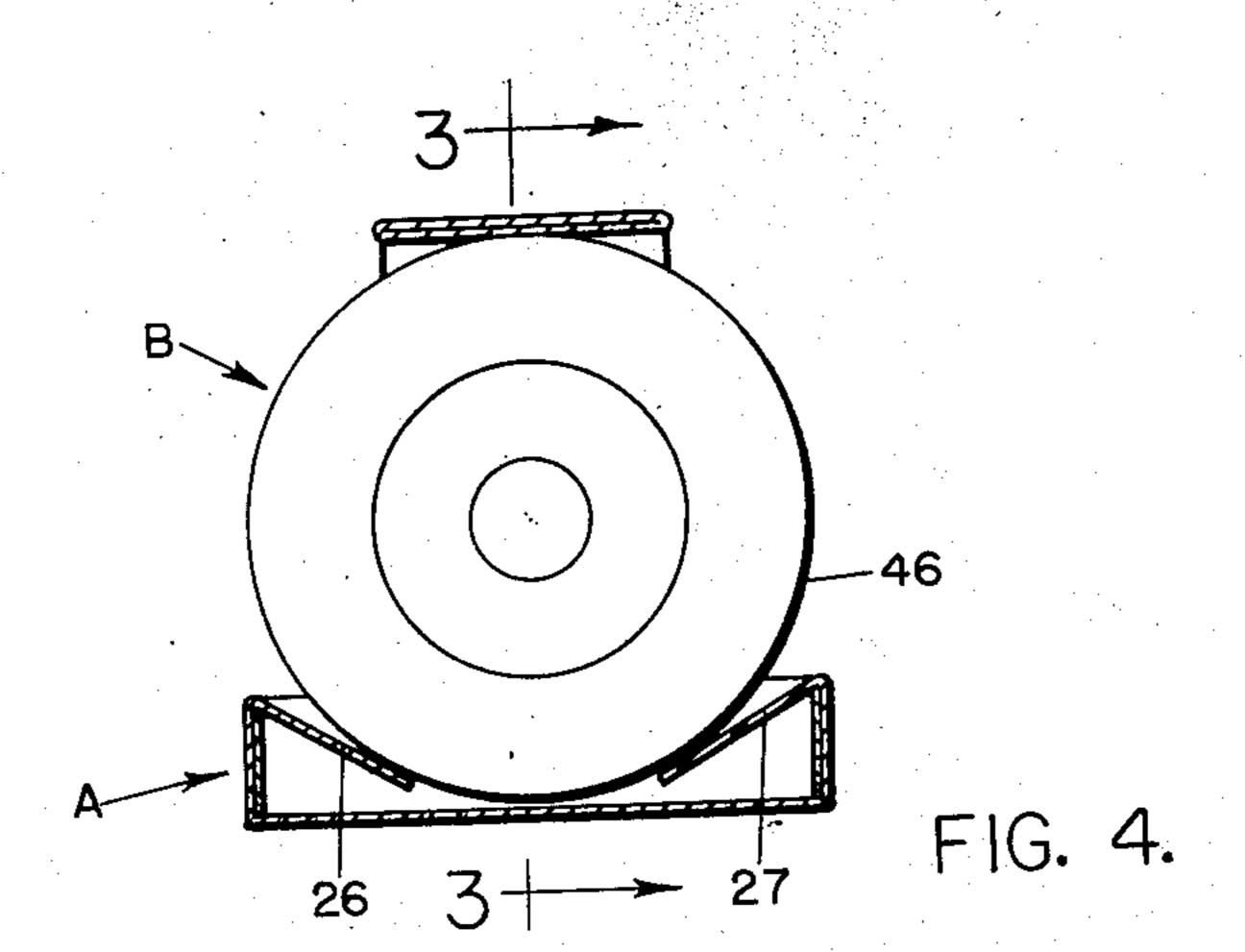
H. G. ZASTROW

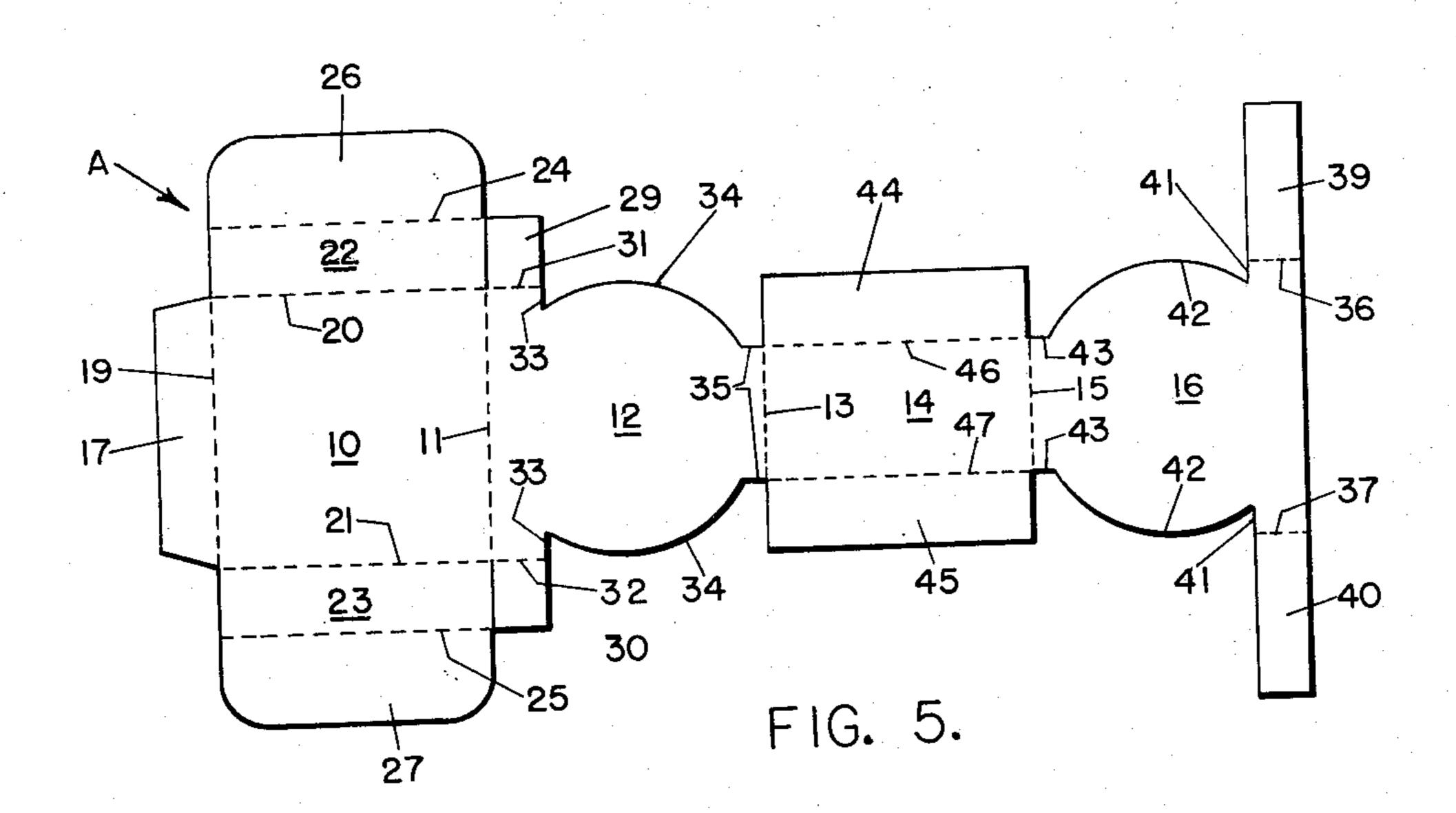
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RIBBON SPOOL HOLDER

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United States Patent Office

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RIBBON SPOOL HOLDER

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This invention relates to a sleeve for holding one or a 15 series of spools supporting ribbon or tape and from which the material on the spools may be dispensed.

Ribbon such as is used in tying or decorating gift packages is now being produced in a great number of colors and designs. It is common practice for the housewife to purchase several rolls of the ribbon at a time during the holiday season so that the various packages and gifts being wrapped may be varied in appearance. The present invention comprises a package capable of holding a series of spools of such a product in such a manner that any of the spools may rotate relative to the others. As a result, the end of the ribbon on any spool may be grasped and unwound to the desired extent.

A feature of the present invention resides in the provision of a simple sleeve of paper board or the like designed to contain a plurality of rolls of ribbon or a similar product and in confining the spools in such a manner that they remain in the sleeve during the unrolling operation. The sleeve includes parallel side walls designed to extend normal to the axis of the spools and top and bottom panels connecting the edges of the side walls. The sleeve also includes relatively short front and rear walls which are of sufficient height to hold the spools in the sleeve and short enough to expose a considerable part of the periphery of the spools. As a result, the end of the ribbon may be readily located and unrolled from the spool.

A further feature of the present invention resides in the provision of a sleeve of the type described including flanges foldably connected to certain of the walls and folded to apply friction to the spool flanges. The folded sleeve flanges have a tendency to return to their normal unfolded position in which they are supplied prior to filling and act to hold all of the spools from unrolling 50 with the exception of the spool from which ribbon is being removed.

These and other objects and novel features of the present invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of the specification. Figure 1 is a perspective view of the spool package as it is sold.

Figure 2 is a perspective view of the spool package in set up form but with the spools removed to disclose cer- 60 tain of the interior construction.

Figure 3 is a cross-sectional view through the sleeve, the position of the section being indicated by the line 3—3 of Figure 4.

empty sleeve.

Figure 5 is a diagrammatic view of the blank from which the sleeve is formed.

With reference now to Figure 5 of the drawings, the sleeve A is shown as having a bottom panel 10 foldably 70 connected along a fold line 11 to a side wall panel 12. The side wall panel 12 is foldably connected along a fold

line 13 to the top panel 14. This top panel 14 is foldably connected along the fold line 15 to the second side wall panel 16. A glue flap 17 is foldably connected to an edge of the bottom panel 10 along a fold line 19. All

of the fold lines described are parallel.

As is indicated in the drawings, the top panel 14 is substantially narrower in a direction from front to rear of the package than is the bottom panel 10. The side walls 12 and 16 may be of any suitable shape but are 10 shown as being shaped to fit the curvature of the spools which the sleeve contains in order to make the product readily accessible. The sides of the bottom panel 10 which are at right angles to the fold lines 11 and 19 are connected along fold lines 20 and 21 to a front wall 22 and a rear wall 23 respectively. The walls 22 and 23 are connected along their upper edges by fold lines 24 and 25 respectively to flanges 26 and 27.

The side wall 12 is connected at its front and rear edges to corner flaps 29 and 30 along parallel fold lines 31 and 32 respectively which are substantially aligned with the fold lines 20 and 21 and which extend vertically in the erected condition of the sleeve. The corner flaps 29 and 30 are approximately the same height as the front and rear walls 22 and 23 and are designed to fold inwardly thereof as will be later described. A short cut line 33 extends into the side wall flush with the upper edges of the flaps 29 and 30 and arcuate cut lines 34 connect the inner ends of these cut lines 33 to the ends of short cut lines 35 which are aligned with the front and rear edges of the top panel 14. The radius of curvature of the arcuate cut lines 34 is similar to that of the

spools to be contained within the sleeve.

The side wall 16 is formed in a manner similar to the side wall 12 and the lower portions of the side wall 16 are connected along fold lines 36 and 37 to corner flaps 39 and 40 respectively. Short horizontal cut lines 41 flush with the upper edges of flaps 39 and 40 extend into alignment into the side walls and the inner ends of these cut lines 41 are connected by arcuate cut lines 42 to short cut lines 43 aligned with the front and rear edges of the top panel 14. The center of arcuation of the cuts 42 is co-axial with the centers of the spools to be contained and the radius of curvature is substantially equal to that of the spools.

Flanges 44 and 45 are connected along parallel fold lines 46 and 47 respectively to the front and rear edges of the top panel 14. In using the term "front and rear edges", it must be remembered that the package is symmetrical and either open side of the package could

comprise the front side.

The blank shown in Figure 5 is glued into tubular form by attaching the glue flap 17 to the marginal edge of the side wall panel 16. The sleeves are stored and shipped 55 in this flat form. When the sleeve is to be used, the walls are folded into rectangular or right angular relation and the flaps 39 and 40 are folded into right angular relation with the side wall 16 so as to extend across the front and rear edges of the sleeve. Usually the flaps on the front or rear of the package are first folded leaving the other side open until the spools are inserted. For example, the flaps 29 and 39 can be folded inwardly into a common plane, the front wall 22 folded into vertical position, and the flange 26 folded over the upper edges Figure 4 is a sectional view longitudinally through the 65 of the corner flaps 29 and 39. The flanges 44 and 45 on the top panel 14 are then folded to underlie the top panel. The spool or spools B may then be inserted through the open side of the sleeve, the spools extending beneath the inturned flaps 44 and 45 and holding these flaps in folded form. The spools also bear against the flange 26 and hold this flange from swinging upwardly thereby holding the front side of the carton assembled.

The other side of the sleeve is then closed by folding the corner flaps 30 and 40 inwardly into a common plane, folding the rear wall 23 upwardly, and tucking the flange 27 between the rolls B and the bottom of the carton, when thus inserted, the spaced flanges 46 of the spools 5 B hold the flaps 26 and 27 from swinging upwardly,

holding the sleeve assembled.

As the space between the upper edges of the front and rear walls 22 and 23 and the front and rear edges of the top panel 14 is materially less than the diameter of the 10 spools B, the spools cannot be removed while the sleeve is in the set up form described. Furthermore, the tendency for the flanges 44 and 45 on the top panel 14 to unfold, causes the edges of these flaps to bear against the flanges 46 of the spools B thus supplying a fric- 15 tional force tending to hold the spools from rotation. The flanges 26 and 27 also engage the flanges 46 of the spool and add to the frictional force tending to hold the spool from rotation. As a result, when it is desired to remove the ribbon 47 or other material from the spools 20 B a pull upon the end of the ribbon will rotate the single roll B upon which it is wound but will not cause rotation of the remaining spools. Thus if the ribbon is cut off so that an end is available through an open side of the sleeve, it will tend to remain in this position until more of 25 the ribbon is removed.

In accordance with the patent statutes I have described the principles of construction and operation of my product enclosing band, and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A ribbon spool holder including a generally rectangular sleeve including a bottom panel, a top panel, and parallel side panels foldably connecting said top and

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bottom panels, front and rear panels foldably connected to said bottom panel, corner flaps hinged to said side panels and folded inwardly of said front and rear panels, a ribbon spool in said sleeve and arranged with its axis perpendicular to said side panels and held in place by said front and rear panels, said front and rear panels being less than one-half the height of said side walls, and flanges hingedly connected to the upper edges of said front and rear panels and folded to underlie said ribbon spool and to overlie the upper edges of said corner flaps.

2. The construction described in claim 1 and including flanges on the front and rear edges of said top wall and

folded to overlie said ribbon spool.

3. The structure of claim 1 and in which said bottom panel is substantially wider than said top panel.

- 4. A ribbon spool package supporting spools of ribbon having spaced side flanges of equal diameter and a core of smaller diameter, a sleeve including parallel side walls, a top wall and a bottom wall foldably connected in tubular relation, the side walls being of a height substantially equal to the diameter of said spool flanges, front and rear walls hingedly connected to said bottom wall and being of a height less than half the diameter of said spool flanges, and flanges hingedly connected to the upper edges of said front and rear walls and folded beneath said spool flanges to apply friction thereto.
- 5. The structure of claim 4 and including flanges on said top panel folded over said spool flanges to apply friction thereto.
- 6. The structure of claim 4 and in which said top panel is substantially narrower than said bottom panel.

References Cited in the file of this patent UNITED STATES PATENTS

	OTHER D	TATIONAL	,		
2,217,397	Armitt	 	Oct.	8.	1940
2,368,797	Bailar	 	Feb.	6,	1945