March 1, 1960 J. J. JACOBSON 2,926,862

TRIMMING DISPENSER AND DISPLAY APPARATUS

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FIG. 1

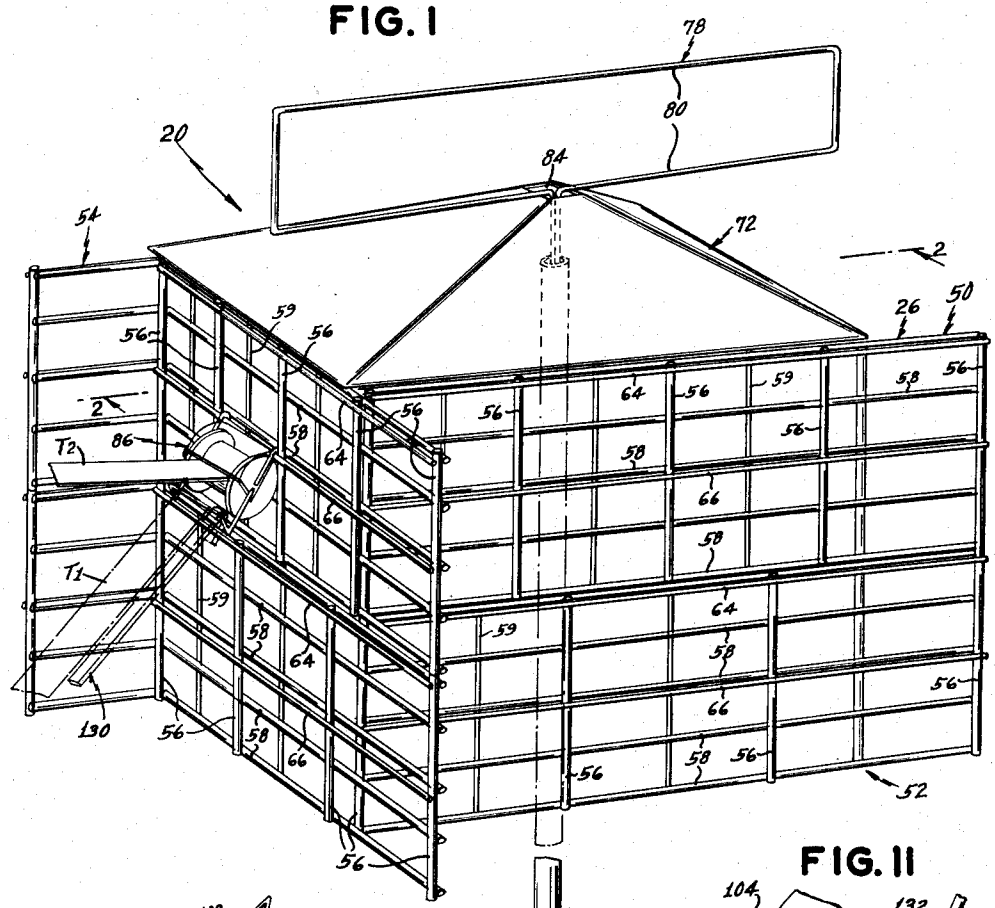


FIG. 10

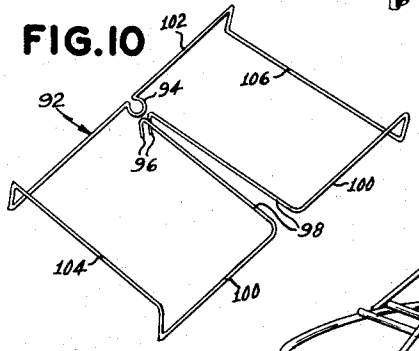


FIG. 10a

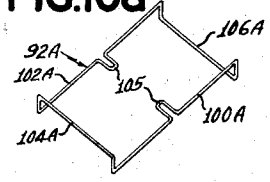
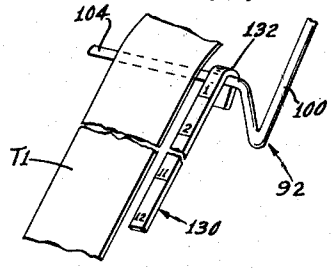


FIG. 11



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TRIMMING DISPENSER AND DISPLAY APPARATUS

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FIG. 2

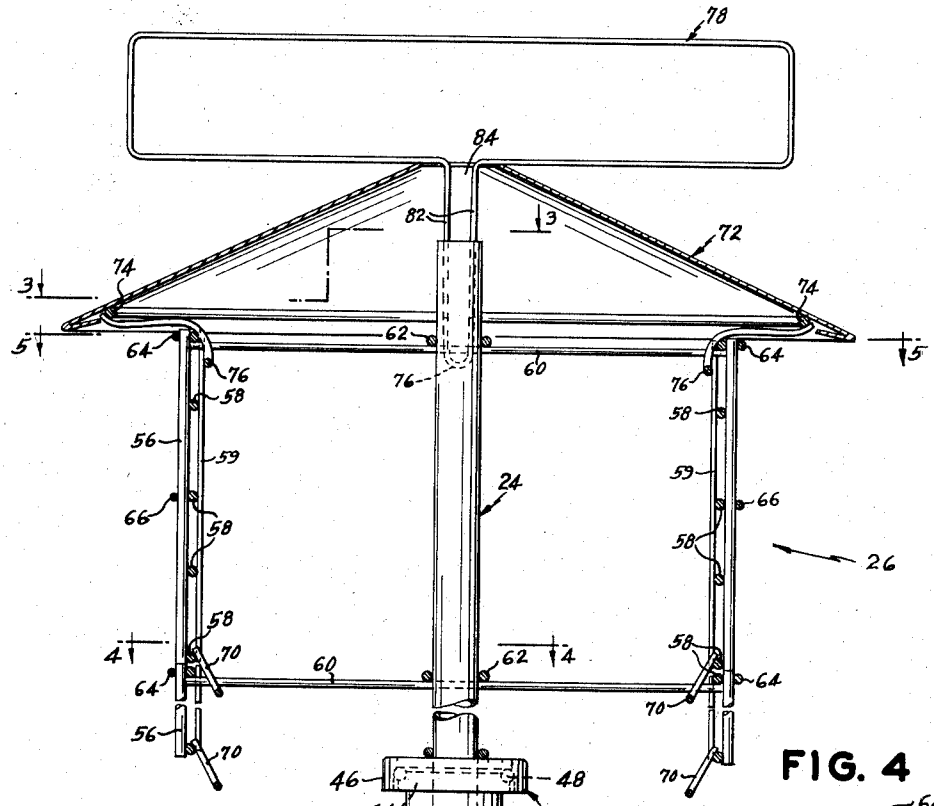


FIG. 13

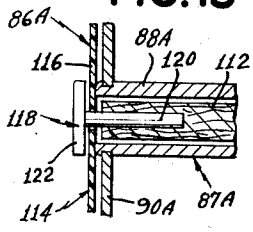


FIG. 3

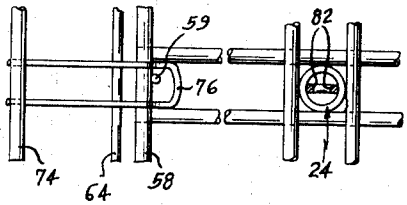
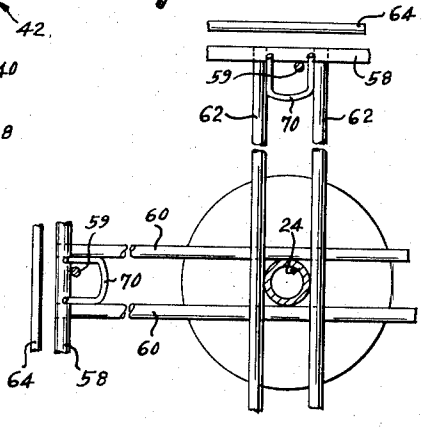


FIG. 4



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TRIMMING DISPENSER AND DISPLAY APPARATUS

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FIG. 5

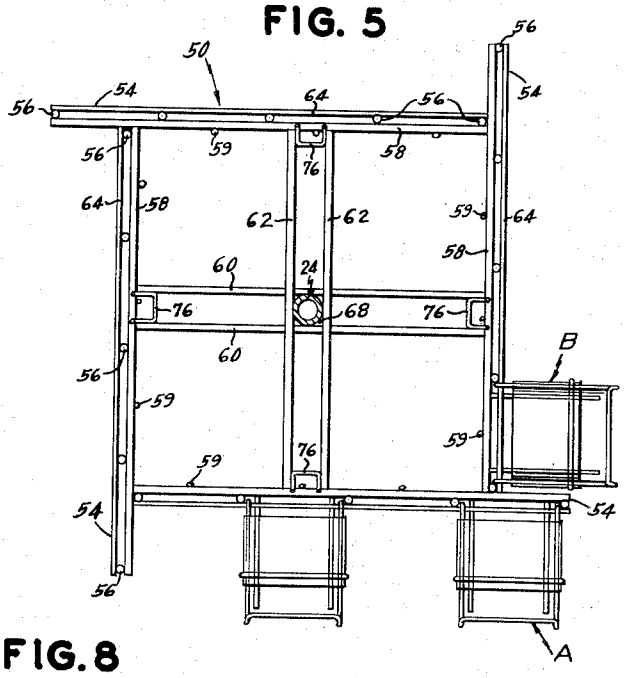


FIG. 6

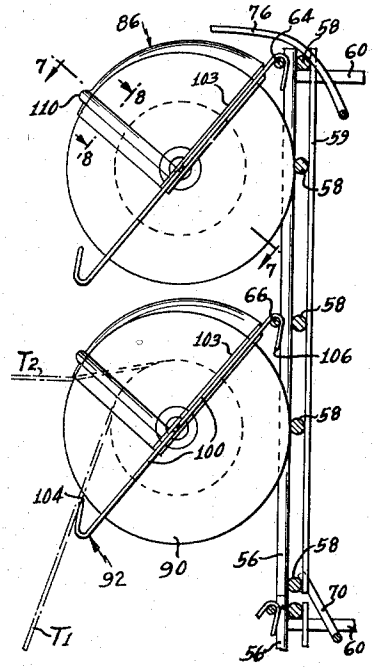


FIG. 8

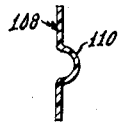


FIG. 9

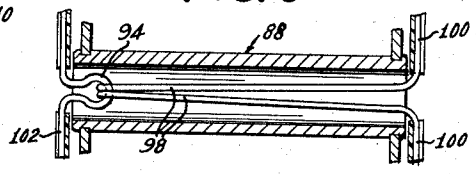


FIG. 7

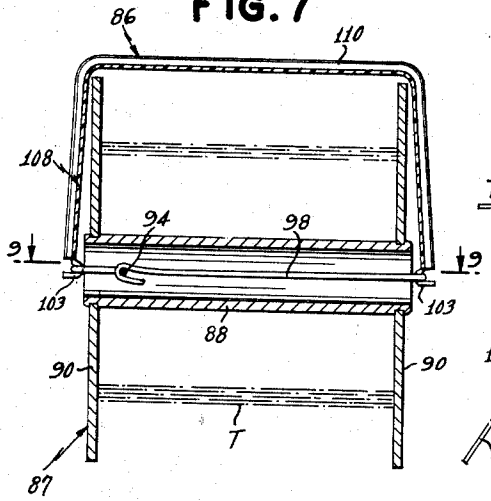
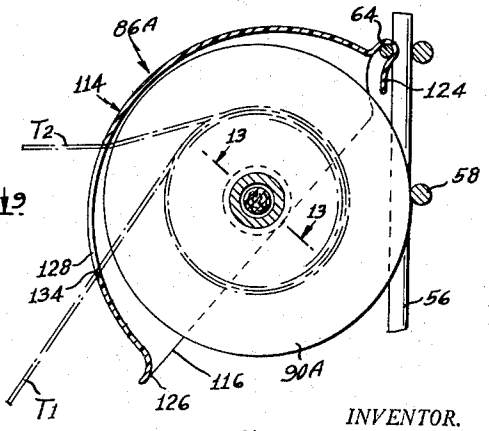


FIG. 12



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2,926,862

TRIMMING DISPENSER AND DISPLAY APPARATUS

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Application March 14, 1955, Serial No. 493,912

3 Claims. (Cl. 242—55.53)

The present invention relates to a trimming dispenser and display apparatus.

An object of the present invention is the provision of an apparatus for dispensing and displaying trimmings, the capacity of which apparatus may be readily expanded or reduced as may be required.

Another object is the provision of such an apparatus wherein provision is made for maximum utilization of the available space thereof for dispensing and displaying the trimmings.

Another object is the provision of a generally rectangular spool carrier wherein spools are mounted beyond the corners of the rectangle without, however, increasing the rectangular periphery defined by the spools mounted between adjacent corners of the rectangle.

A further object is a highly novel spool assembly for displaying and dispensing the material wound thereon, which assembly incorporates a spool hanger and indexing means.

A still further object is the provision of a generally improved, simplified, and highly efficient apparatus for dispensing and displaying trimmings.

The above and other objects, features and advantages of the present invention will be more fully understood from the following description considered in connection with the accompanying illustrative drawings.

Referring now to the drawings which illustrate the best mode presently contemplated of carrying out the invention:

Fig. 1 is a perspective view of an apparatus for dispensing and displaying trimmings, pursuant to the present invention;

Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1;

Fig. 3 is a fragmentary sectional view taken on the line 3—3 of Fig. 2;

Fig. 4 is a fragmentary sectional view taken on the line 4—4 of Fig. 2;

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 2;

Fig. 6 is an enlarged view of a portion of Fig. 2 and illustrates a plurality of spool assemblies provided on the apparatus;

Fig. 7 is a sectional view on the line 7—7 of Fig. 6;

Fig. 8 is a fragmentary sectional view on the line 8—8 of Fig. 6;

Fig. 9 is a sectional view on the line 9—9 of Fig. 7;

Fig. 10 is a perspective view of a spool assembly frame;

Fig. 10A illustrates a modified form of frame;

Fig. 11 is an enlarged fragmentary view of a spool assembly and illustrates the utilization of the indexing part thereof;

Fig. 12 is a view similar to Fig. 6, on an enlarged scale, and illustrates another embodiment of the spool assembly; and

Fig. 13 is a fragmentary sectional view taken on the line 13—13 of Fig. 12.

Referring now to Figs. 1 through 5 of the drawings in detail, the reference numeral 20 indicates a trimming dispenser and display apparatus pursuant to the present invention. As here shown, the apparatus 20 comprises a base support 22 having a vertical post or shaft 24 on which there is mounted the trimming dispenser and display assembly 26.

The support 22 comprises a circular base member 28 which is provided, diametrically thereof, with a first pair of spaced rods 30, the opposite ends of which are suitably secured, as by welding, to the member 28. A second pair of spaced rods 32 is similarly secured diametrically of the base member 28 and transversely of the rods 30. The intersecting portions of said rods define a substantially square socket 34 in which the lower end of the circular shaft 24 is secured, preferably by welding, as at 36. The shaft 24 may be a single member of predetermined length, or may be formed of a plurality of separate sections the adjacent ends of which may be connected together by a suitable coupling 38.

Provision is made for a spacer 40, through which the shaft extends, and which is mounted on the coupling element 38, as best illustrated in Fig. 2. The spacer mounts an anti-friction device 42 for effecting the rotation of the display assembly 26 relative to the shaft 24, as hereinafter described. The anti-friction device may be of any conventional type suitable for the purpose. As here shown, provision is made for the companion circular bearing members 44 and 46. Member 44 is suitably mounted on the spacer 40 and member 46 mounts the display assembly 26. Said members are separated by the anti-friction or ball bearing rollers 48, whereby the bearing member 46 may be rotated relative to the bearing member 44. It will be noted from Fig. 2 that the shaft 24 extends through the anti-friction bearing device 42.

The assembly 26 is constituted by a walled spool carrier enclosure adapted to mount the spool assemblies on the exterior thereof. As here shown the enclosure is formed by the two tiers 50 and 52, of open grid framework. The tiers 50 and 52 are generally similar in construction but differ in that they are each adapted to accommodate spool assemblies of different sizes, respectively. The construction of the grid framework 50 is best illustrated in Fig. 5. Said framework is of generally rectangular construction, being provided with a lateral extension 54 at each corner thereof. Each side wall of the framework 50 is formed by five, equally spaced, vertically extending rods or wires 56 which are welded, at the inner sides thereof, to five spaced, horizontally disposed rods or wires 58, at one side of the latter. Rods 58 are interconnected, at the opposite sides thereof, by the vertical rods 59. The four side walls are welded together in the rectangular disposition thereof illustrated in Fig. 5. Provision is made at the upper end of tier 50 for a pair of spaced rods 60, interconnected between one pair of opposing upper rods 58, and for a pair of spaced rods 62 interconnected between the other opposing upper rods 58. Said rods 58, 60 and 62 are welded together and it will be noted that the intersecting portions of the paired rods 60 and 62 define a socket 68 through which the shaft 24 extends, as best illustrated in Figs. 2 and 5.

With the four side walls of the tier or framework 50 in assembled relation, one vertical rod 56 of each wall extends laterally outwardly of the adjacent corner defined by adjacent side walls to provide the previously mentioned extension 54 at each side and outwardly of each corner of the framework 50 to expand the outer surface area of the carrier enclosure. In order to mount spools of trimmings on the outer surface of each wall, provision is made on each side wall of the framework 50 for a air of vertically spaced horizontally extending

rods 64 and 66 secured to the outer sides of the vertical rods 56. The rod 64 is welded at the upper end of each side wall of the framework 50 and the rod 66 is welded substantially at the middle of each side wall thereof. The lowermost horizontal rod 58 at each side wall of the framework 50 is provided, substantially centrally thereof, with a downturned hook, index connector, or lock 70 (Fig. 4) which is suitably secured thereto, as by welding, the function of which is hereinafter described in detail.

Referring now to the framework tier 52, said tier differs from the tier 50 in that each side wall thereof is provided with four equally spaced vertically extending rods 56 instead of having five rods 56, as in the tier 50. In all other respects, the framework 52 is constructed in the same manner as the framework 50. The spool carrier enclosure 26 of the present invention may be constituted by a single tier or framework assembly 50 or 52. However, where it is desired to expand the capacity of the spool carrier 26, a plurality of tiers 50 or 52 may be used, or tiers 50 and 52 may be used together. For example, and not by way of limitation the enclosure 26, illustrated in Fig. 1, is constituted by an upper tier or framework 50 and a lower tier or framework 52. Said tiers, when asasembled, are stacked one on top of another, with the adjacent ends of the outer vertical rods 56 in each side wall of each tier being in abutting relation, where a tier 50 is stacked upon a tier 52, or vice versa. However, it will be apparent that where similar tiers 50 or 52, are stacked upon each other, the adjacent ends of all the vertical rods 56 in each side wall will be in abutting disposition.

With one tier stacked upon another tier, the hooks 70 at the bottom of the uppermost tier will index the tiers in proper position by engagement of the hooks between the paired rods 60 and 62 of the lowermost tier, as best shown in Fig. 4. It will be noted that there is a pair of confronting hooks engaged at the opposite ends, respectively, between each pair of cross rods, whereby to retain the tiers against relative rotation. The paired cross rods 60 and 62 of the lowermost tier, or where only one tier is used, then the cross rods of said tier, rest upon bearing member 46 of the anti-friction bearing assembly 42. Consequently the carrier 26, constituted by one or more tiers, as the case may be, may be rotated relative to the shaft 24 which extends therethrough.

Provision is made for a cover 72 for the spool carrier enclosure 26. The cover is preferably formed of suitable sheet material and is provided, adjacent the bottom thereof, with a rod or wire 74 suitably secured, as by welding, to the inner periphery of said cover. Said rod 74 is provided with four equally spaced downturned hooks 76 (Fig. 3) suitably secured, as by welding, to the rod 74 and substantially similar to the previously mentioned hooks 70. The hooks 76 engage between the paired rods 60 and 62 at the opposite ends thereof, as best illustrated in Fig. 5, for removably mounting the roof 72 on the upper end of the uppermost tier 50 or 52, as the case may be.

Provision is made for a sign holder 78. Said holder is formed of a rod which is bent to provide an elongated sign retaining portion 80 and a depending U-shaped portion 82 which is adapted to frictionally engage the interior of the shaft 24 at the upper end thereof, as best illustrated in Figs. 1 and 2. In this connection, it will be noted that the roof 72 is provided with the aperture 84 which overlies the upper end of the shaft 24 in order to accommodate the sign retainer 82 which extends therethrough.

Referring now to Figs. 6 through 10 in detail, provision is made for a spool assembly 86 for the trimming material T which, for example, and not by way of limitation, may be constituted by lace or ribbon, or the like. The spool assembly 86 comprises a spool 87 having a barrel 88 formed of suitable sheet material, for example and not by way of limitation, cardboard, metal or plastic, which rigidly mounts, at opposite ends thereof, the circular end members or flanges 90. The flanges are mounted on the barrel, to prevent relative rotation of the barrel and the flanges. In order to mount or suspend the spool assembly 86 on the dispenser and display apparatus 20, provision is made for the wire frame 92, preferably formed of a single rod or wire which is bent or formed into the shape best illustrated in Fig. 10. The frame 92 comprises at one side thereof a bowed intermediate part 94 which constitutes a catch or detent for the hooks 96. Each hook 96 is provided at the free end of a transversely extending rod or intermediate frame part 98 which terminates in a side portion 100. The side portions 100 together constitute one side of the frame 92, the other side thereof being indicated by the reference numeral 102 and being provided with the previously mentioned detent 94 substantially centrally thereof. The side 102 is connected, at the opposite ends thereof, with the side portions 100, by the transversely extending end parts 104 and 106. It will be noted that the frame parts 104 and 106 are reflexed in opposite directions respectively. When the spool 87 is assembled with the frame 92, it will be noted that the catch 94 extends into one end of the hollow barrell 88 and the parts 98 extend into the opposite end of the barrel to effect the engagement of the catch 94 by the hooks 96. Said transversely extending parts 98 and the catch 94 constitute an axle on which the spool may rotate, the spool being straddled by the frame parts 104 and 106. The assembly 86 is preferably also provided with a dust cover 108, preferably formed of a suitable plastic. The dust cover or hood 108 is provided with reinforcing ribs 103 and 110. Ribs 103 form longitudinally extending recesses at the sides of the hood in which the frame sides 100 and 102 are engaged for holding the hood in position on the spool.

In order to removably mount the spool assembly 86 on the carrier 26, the downwardly reflexed end part 106 of the frame 92 is hooked over a cross member 64 between adjacent vertical members 56, as best illustrated in Figs. 1 and 6. As previously indicated, the upper tier 50 is provided at each side wall thereof, with five equally spaced vertical rods 56, whereby to accommodate four spool assemblies 86 between the adjacent rods on each side wall of the tier. In this connection, it will be noted that the utilization of the additional vertical rod 56 outwardly of each adjacent corner of the tier provides for the previously mentioned extension 54 on each side of the tier whereby to accommodate an additional spool 86 on each side of the tier. Since the spool assemblies 86 which are accommodated at adjacent sides of each tier are disposed at right angles to each other, as best shown in Fig. 5, it will be noted that the extensions 54 do not cause interference of the adjacent spools carried by the adjacent side walls, but readily permit for the described mounting of the adjacent spools on adjacent side walls, respectively. Therefore, it will be apparent that the wall extensions 54 increase the spool holding capacity of the carrier 26 without, however, increasing the peripheral boundary of the carrier with the spools provided thereon. In this connection it will be noted from Fig. 5 that the spool assembly A mounted on the extension 54 at the lower right hand corner of said figure, does not project beyond the spool B mounted on the adjacent wall. As previously indicated, each side wall of each tier is provided with a pair of vertically spaced horizontal rods 64, 66, whereby to accommodate a pair of vertically spaced spool assemblies 86 on each side wall of each tier between each pair of adjacent rods 56. Consequently, it will be apparent that the tier 50, as here shown, can accommodate eight spool assemblies 86 at each side wall thereof, the spool assemblies being mounted in end-to-end relation in horizontal rows thereon and being also aligned in vertical rows thereon.

As previously mentioned the tier 52 is provided at each

side wall thereof, with four vertically extending rods **56**, so that, since one spool can be accommodated between each pair of adjacent rods **56**, each side wall of the tier **52** can accommodate six spool assemblies **86**. However, it will be understood that the spool assemblies which are accommodated by the tier **52** can be of larger dimension, axially of the barrel **88**, than is the case with the spool assemblies **86**, since the spacing between the rods **56** of the tier **52** is greater than the spacing between the rods **56** of the tier **50**.

Referring now to Figs. 12 and 13 there is illustrated another embodiment of the spool assembly. As here shown, provision is made for a spool assembly **86A** wherein an axle for the barrel **88A** is constituted by a rod **112** preferably formed of wood or other suitable material. The rod **112** extends into the hollow barrel **88A** which is provided at the opposite ends thereof with the rigidly mounted circular flange **90A** to form a spool **87A**. A dust cover **114** preferably formed of plastic or other suitable material, partially encompasses the flanges **90A** and is provided with the opposing sides **116** which are secured to the axle **112**, as by the headed pins **118**. The shaft **120** of said pins are secured in the axle **112** and the heads **122** thereof are spaced from the opposite sides **116** of the hood **114**. At one end thereof, the hood is provided with a hooked portion **124** which is adapted to engage over one of the transversely extending mounting rods **64** or **66** for mounting or suspending the assembly **86A** on a tier **50** or **52**, as the case may be. The opposite end of the hood **114** terminates as at **126** and is provided with a transversely extending slot **128**, through which the trimming T extends for the dispensing thereof.

The unauthorized dispensing of the trimming T from the spools, as by a customer, is prevented. In this connection, it will be noted that if the trimming is pulled from the spool assembly **86**, in a generally downwardly direction, as indicated in phantom at T1 in Fig. 6, the material will abut the upwardly reflexed end **104** of the axle frame **92** whereby to urge the flanges **90** against the tier framework. This provides a frictional engagement of the flanges **90** against the metal rods of the tier which is sufficient to prevent the rotation of the spool due to said frictional engagement. However, in the case of the authorized dispensation of the trimming from the spool assembly, as by a sales person, the material is pulled outwardly from the spool assembly, as indicated in phantom at T2 in Fig. 6, so as not to force the flanges against the rods disposed rearwardly thereof. This permits for the ready rotation of the spool assembly about its pivot or axle. The spool assembly **86A** operates in the same manner. When the trimming is being withdrawn in a generally downward direction therefrom, as at T1 in Fig. 12, the material engages the slot edge **134** to force the spool flanges **90A** against the framework of the carrier assembly and the frictional engagement of the flanges **90A** against the framework prevents the rotation of the spool assembly. However, when the material is withdrawn in an outward direction, as at T2, the spool assembly is free to rotate.

Provision is made for a measuring or yard stick **130** (Figs. 1 and 11) which is hooked at one end thereof as at **132**, so that it may be hooked over any cross rod **64** or **66** of the carrier assembly **26**, when not in use. However, when in use, the measuring stick **130** is hooked over the transverse end part **104** of the frame **92** in the spool assembly **86**, or is hooked over the lower transverse edge **134** of the spool **86A**. Said part **104** and edge **134** constitute indexing means for effecting a measured dispensing of the material when the yard stick is hooked thereto. The trimming is unwound from the spool assembly **86** or **86A**, as the case may be, and measured along the measuring stick hooked over portion **104** and **134** of spool assembly **86** or **86A**, as the case may be. This measures the length of material outwardly of the spool assembly. When the desired length of material has been withdrawn from the spool, the measuring stick can be urged toward the framework to urge the spool thereagainst to prevent rotation of the latter. The desired length of the material may then be readily severed from the supply on the spool while the latter is prevented from rotating.

Fig. 10A illustrates a modified spool frame **92A**. Frame **92A** is of one piece construction having the opposing sides **100A** and **102A**, and the opposing end portions **104A** and **106A**, which extend between said sides. Pursuant to the present embodiment, the frame sides are provided with the confronting intermediate portions **105**. It will be understood that the opposite sides of the frame can be moved apart for inserting the intermediate portions **105** into the opposite ends of the spool barrel **88** for mounting the spool **87** for rotation on the frame **92A**. Frame end **106A** serves to pivotally mount the spool frame **92A** on the framework **26** and frame end **104A** provides an indexing means, as previously described in connection with frame **92**. The hood **86** is mounted on the frame **92A** in the same manner as on the frame **92**.

While I have shown and described the preferred embodiments of my invention, it will be understood that various changes may be made in the idea or principles of the invention within the scope of the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:

1. A spool assembly comprising a spool, and means straddling the spool at the sides thereof to provide a mount on which the spool is carried for rotation for the withdrawal of the material wound thereon, said spool having axle means, and said straddling means being a cover having opposing sides mounted on said axle means, one end of said cover being spaced outwardly of said spool axis and having a formation for pivotally suspending said assembly on a support, the other end of said cover being spaced outwardly of said spool axis at the opposite side thereof from said one end of said cover, and said cover having a slot defined therein adjacent said other end thereof, one side of said slot providing an indexing means for facilitating the measurement of material withdrawn from the spool.

2. A material packaging and dispensing device, comprising a spool having a barrel on which the material is wound and provided with end flanges, a winding of narrow fabric material on said barrel, a transparent hood secured to said spool and having a part overlying said barrel at the upper part of the barrel and covering the upper part of fabric winding, said hood having provision for unwinding and withdrawing the material from the spool while the hood is in position therein, and means for mounting said spool for rotation while the hood is in operative position on the spool, said mounting means comprising a frame having intermediate axial portions on which the spool is engaged for rotation therearound and radially extending portions disposed adjacent the opposite flanges respectively of the spool and engaging said hood for securing said hood in position, said radially extending frame portions having provision for mounting the frame on a support.

3. A material packaging and dispensing device, comprising a spool having a barrel on which the material is wound and provided with end flanges, a winding of narrow fabric material on said barrel, a transparent hood secured to said spool and having a part overlying said barrel at the upper par of the barrel and covering the upper part of fabric winding, said hood having end portions overlying the opposite flanges, respectively, of the spool, said end portions having radially extending recesses, and a frame for mounting said spool for rotation having radially extending parts disposed in said recesses and holding said hood in position on said spool.

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