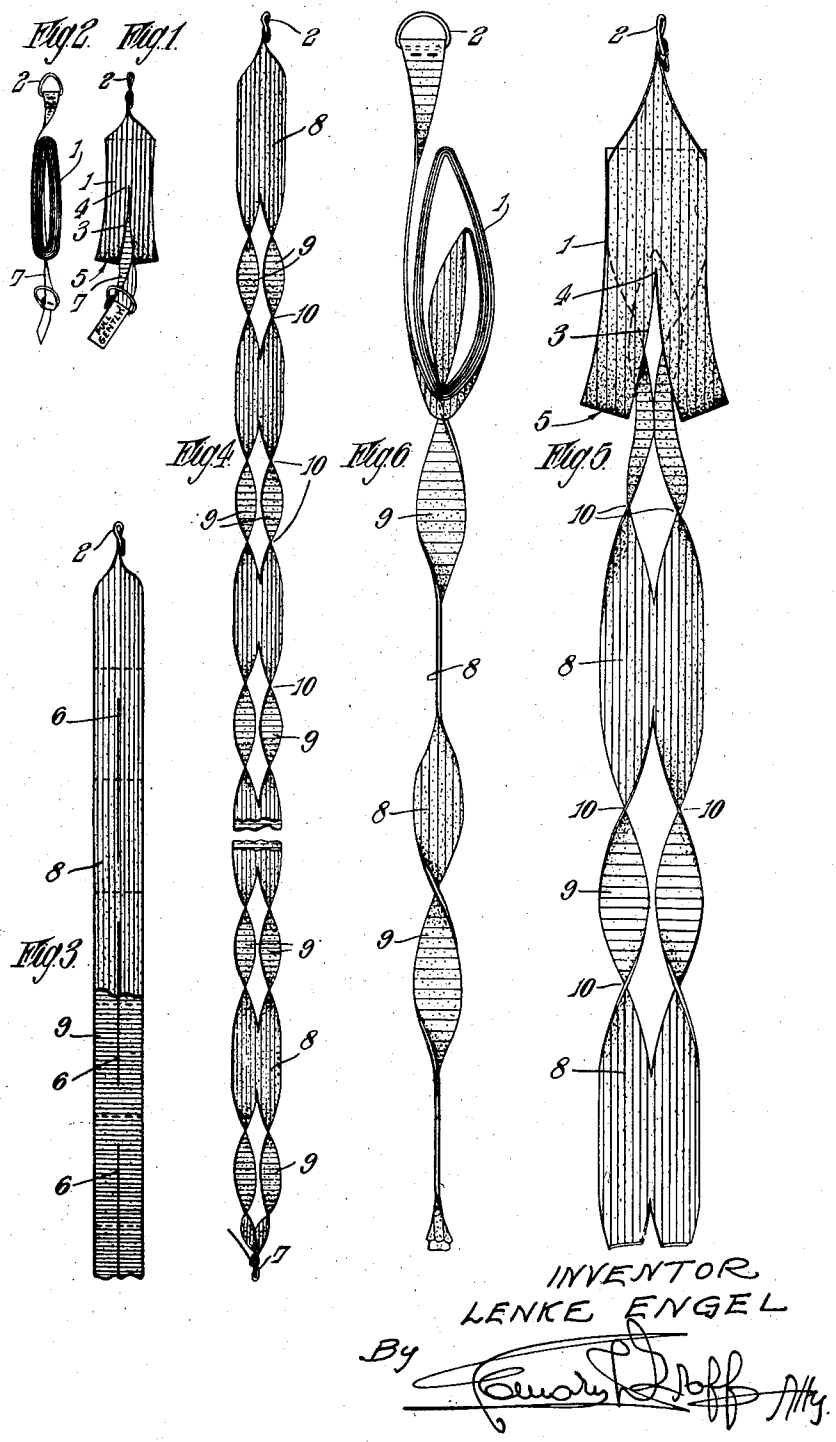
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CREPE PAPER AND SIMILAR BANDS

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CREPE PAPER AND SIMILAR BANDS

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This invention has reference to improvements in bands of crepe paper, plain tissue paper, plastics material, transparent film, and other materials used for decorative wrapping or advertising purposes and has for its object firstly to facilitate the unwinding of the band from the centre of a roll, and in particular (with band used for decorative purposes) to improve the ornamental effect of such material. It is to be understood that although the invention is particularly applicable to wound rolls of crepe paper bands which are usually employed for making festoon, garland and similar decorations, it is equally applicable to ornamental bands of other materials such as textiles, plastics and metal foils, and also to bands supplied in roll form for other purposes.

According to the invention, a band of crepe paper or the like in the form of a wound roll is cut through from the outside convolution to the centre convolution forming a succession of spaced slits or other openings along the length of the band in register with one another when the band is wound and forming a passage from the roll centre to the exterior through which the inner end of the band may be pulled to unwind the roll from the interior. The inner end may be picked up and pulled through the passage in any suitable way, but it is preferred to supply the roll with the inner end of the band pulled through the said passage to an extent that the end projects out of the outer convolution to constitute a gripping tongue for unwinding the roll from the interior.

A wound roll according to the foregoing may be produced by a method wherein a band of crepe paper or the like is wound into a roll, then flattened to fold the convolutions, and cut through from a folded straight-edge of the periphery either as a slit or so as to remove a portion of the roll through all the windings up to the centre winding.

By means of the invention the band, if unrolled from the inside through the aperture made by the cut, will present a parallel-edged band with a number of holes or slits having a configuration according to the shape of the through-cut made. For example, a V-shaped cut with the apex of the V terminating at or near the centre of the roll would result in substantially diamond-shape holes in the unwound band.

Thus, the cut-away opening enables the inner end of the band to be picked up and pulled out radially through the opening. In so doing the band not only presents the line of holes in the unwound band but the portions of the band top and bottom of the hole develop a twist giving the unwound band surprisingly a twisted effect with a line of holes, and this is particularly useful when the band is to be used for decoration.

In order that the said invention may be readily understood an embodiment thereof will be described by way of example with the aid of the accompanying drawings wherein:

Figures 1 and 2 are respectively front and side views of a roll of material prior to unrolling any of the length thereof;

Figure 3 shows a portion of the band as it would appear if unrolled conventionally starting with the outer convolution;

Figure 4 shows a portion of the band when unrolled starting from the inner end as provided by the invention;

Figure 5 is a view similar to Figure 1 (to a larger scale) showing the band partly unrolled starting with the inner end of the band; and

Figure 6 is a side view of Figure 5.

Like numerals of reference indicate the same or corresponding parts in the several views.

Referring to Figures 1 and 2 it will be seen that a band has been wound into a roll **1** the end of the outer convolution being provided with a loop **2** for suspension or joining to another band. The roll has been flattened out to fold the convolutions and then has been cut at **3** from the outside convolution at a folded straight-edge **5** of the periphery to the centre convolution, the slit terminating at a point **4** located so as to secure such a length of slit. This cut forms a succession of spaced slits **6** (Figure 3) along the length of the band which are in register with one another when the band is rolled as in Figures 1 and 2 and this forms a passage from **4** to the edge **5**. The cut **3** has been gapped open as seen in Figure 1 and the inner end of the band has been pulled through this passage from the roll centre to the exterior and projects out of the outer convolution at **7** to constitute a gripping tongue for unwinding the roll from the interior. In preparing such a form ready for use the flattening made for the purpose of conveniently cutting the slit **3** has been slightly bulged out as seen in the side view Figure 2.

It will be understood that in a simple form the band is a single ply, but multiple plies may be used, and in the illustrated embodiment a double ply is shown, the plies being superimposed one on the other prior to winding into a roll. One of the plies is represented by longitudinal shade lines and the other by transverse shade lines as at **8** and **9** respectively. By using contrasting colours for the two plies the ornamental effect is heightened.

Referring to Figures 5 and 6, the band is unwound from the centre convolution by gripping and pulling the end **7** (see Figure 1) which commences unwinding the inner convolution of the wound roll, the band passing through the passage made by the slitting **3**. By threading itself through each individual slit **6** as convolution after convolution emerges, the band develops a twist at **10** whereby the undersurface of the band (e.g. **9**) alternates with the upper surface (e.g. **8**), and in the example portions of each ply are exposed in alternation on each side of the band. The final effect is seen in Figure 4.

As already indicated the slits **6** may be replaced by holes of any desired pattern. For example, as aforesaid, a V-cut gives diamonds, a semi-circle or shorter arc would give substantially circles or oblate circles, a U-cut would result in an elongated slot-like hole with rounded ends, and so forth.

When using double plies these could be secured together continuously along their edges, or at intervals, or by means of spots of adhesive or heat welding at various spaced intervals anywhere in the width of the band. In one form, using transparent film or other suitable plastics material, a pair of welded lines could run continuously along the band on each side away from the punched opening, and the chambers so formed could be inflated after drawing out the band. Alternatively the multiple plies could be quite separate one from the other so that when drawn out, one ply could be moved longitudinally in relation to the other or others, giving a most artistic effect.

In cutting out the portion of the roll as aforesaid, a punch could be used which will not only apply the de-

sired configuration to the cut edges to produce the main holes but also punch a separate hole or holes of suitable design further into the material so as to produce ornamental openings in addition to the main holes.

In a further modification, in addition to what may be termed the main hole or incision through which the main roll is to be unwound by pulling out from the middle, there may be provided one or more subsidiary holes or slits in the roll cut through the windings diametrically opposite the main hole and an extra narrower band threaded through this subsidiary hole or each subsidiary hole into the centre of the main roll. This narrower band would be rolled up separately outside the main roll. Thus when drawing out the main roll winding from the centre, the narrower band could also be drawn out through the main roll and finish as a threaded embellishment along the band of the main roll. Such a modification is applicable to bands used for decoration.

The length of the band contained in the wound roll can be of any length within the usual limits of ordinary rolls of crepe and other paper or the like, and if desired a connecting device of any suitable form may be formed on or attached to the ends of the band so that the length of one roll can be readily attached to the length of another when longer stretches of festoon or like decoration are required.

For advertising purposes, various advertising matter can be printed or otherwise applied to the band.

The end of the band at 2 on the exterior of the roll may be stuck down, and the end 7 of the interior which is to be drawn out may be reinforced by applying thereto an adhesive strip or finger piece of suitable toughness.

I claim:

1. A band of flexible material in the form of a wound roll which is cut through in the radial direction from the outer convolution to the inner convolution to form an opening extending partly around the perimeter but not to either edge of said roll, said opening forming a passage from the inside to the outside of said roll through which the inner end of said band may be drawn outwardly to unwind said roll from the interior.

2. A band as claimed in claim 1 wherein said flexible material is crepe paper.

3. A band as claimed in claim 1 wherein said flexible material comprises more than one ply.

4. A band as claimed in claim 1 wherein said inner end of said band is pulled through said passage and projects from said outer convolution to form a gripping tongue for unwinding said roll from said interior.

5. A band as claimed in claim 4 wherein said flexible material is crepe paper.

6. A band of crepe paper in the form of a wound roll having a slit cut through the entire radial thickness of said roll, said slit extending part of the way round the circumference of said roll but not to either edge of said roll whereby parting the portions of said roll on either side of said slit forms a passage from the interior to the exterior of said roll through which said roll may be unwound from the interior.

7. A band as claimed in claim 6 wherein said crepe paper comprises more than one ply.

8. A method of producing a wound roll wherein a band of flexible sheet material is wound into a roll, then flattened to fold the convolutions, and then cut through from a folded straight edge of the periphery to form an opening extending through the whole radial thickness and part of the way around the circumference but not to either edge of said roll, to enable said roll to be unwound from the interior thereof through said opening.

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