

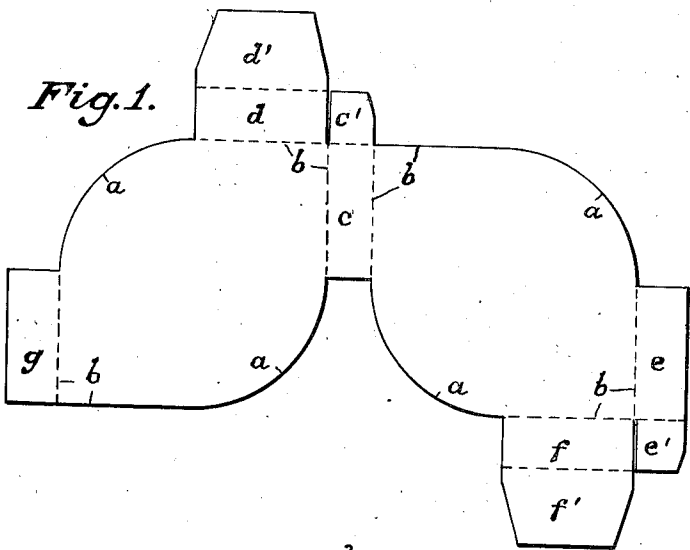
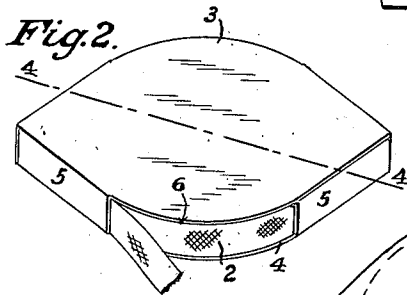
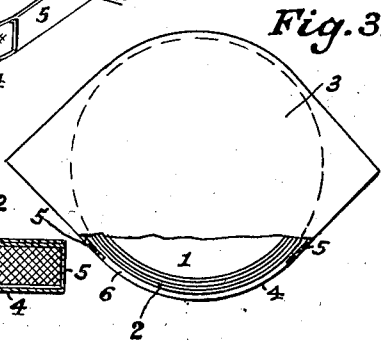
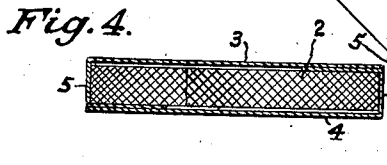
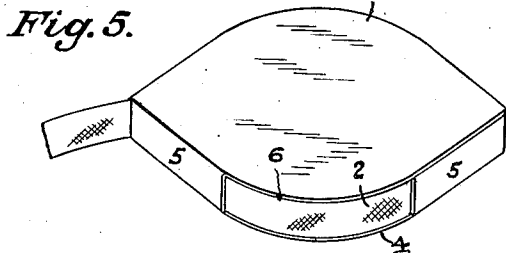
Sept. 30, 1941.

G. WAGNER

2,257,208

RIBBON PACKAGE

Filed April 20, 1940



BY

INVENTOR,
George Wagner,
John M. Steward.
ATTORNEY.

UNITED STATES PATENT OFFICE

2,257,208

RIBBON PACKAGE

George Wagner, Haledon, N. J., assignor to R. G. Buser Silk Corp., Paterson, N. J., a corporation of Delaware

Application April 20, 1940, Serial No. 330,733

5 Claims. (Cl. 206—52)

This invention relates to packages, as ribbon-packs, comprising a wound mass of some lengthy material, as a ribbon, and a container therefor from which the material may be withdrawn with incidental rotation of the wound mass within the container.

The principal object of the invention is to provide an article of manufacture of this class whose container shall be of such form that it may be developed from a blank of suitable sheet material, such as cardboard, thus to make the container a relatively inexpensive part of the article, and which container will permit not only the delivery of the material therefrom but the ready rewinding of the mass when any part of its length has been left extending.

In the drawing, Fig. 1 shows the blank from which the container, for the sake of economy in its production, may be formed, that face of the blank being shown which will be its outer face when it has been shaped to form the container; Fig. 2 is a perspective view of the package; Fig. 3 is a plan of the package, with the container partially broken away; Fig. 4 is a sectional view on approximately the line 4—4, Fig. 2, with the wound mass shown in elevation; and Fig. 5 is a perspective view of a modified form of the article.

The wound mass (Fig. 3) here comprises a suitable core 1 of common type, say of cardboard, and a length of ribbon 2 wound thereon. The container may be generally described as follows:

3 and 4 designate elongated main walls (forming, as will appear, counterparts of each other) so spaced apart that when the wound mass exists interposed between them they stand closely opposed to its respective ends or plane faces; by "closely opposed" I mean that said walls are so spaced apart that the wound mass is by them confined against being inverted end for end. The halves of each such wall existing at opposite sides of its median transverse axis are tapering counterparts of each other. The two walls exist in registry with each other, that is, with the longitudinal axis of each (coincident with the apices of its tapering portions) in the same plane cutting the two walls perpendicularly. The width of each wall is about the same as the diameter of the wound mass, wherefore the tapering portions thereof project beyond the perimeter of such mass when the latter is contained in the container.

Wall-forming means connects the margins of the main walls, being arranged to obstruct displacement of the mass, when present between the main walls, in any direction from between the

latter, such means here consisting of walls 5 in planes perpendicular to the planes of the main walls. There will be two such walls at (in this example) each side of that (longitudinal) plane which cuts the main walls in coincidence with their apices, and such walls will be spaced apart as shown in Figs. 2 and 3; at least, the walls at one side of the last-named plane will be so spaced. This space 6 is of less extent from one wall 5 to the other than the diameter of the wound mass.

The container being thus formed and the wound mass contained therein the ribbon or equivalent material may be withdrawn therefrom through the opening formed by the space 6; and whenever there is occasion to rewind the ribbon the wound mass is accessible at such opening; if there are two such openings, diametrically opposite each other, the rewinding can be effected by holding the container in one hand and using the thumb and forefinger of the other hand to engage the wound mass at said openings.

The container may be formed from such a single-piece blank as shown in Fig. 1. Here each of the parts thereof shown bounded by opposite 90° arcs *a* and four lines *b* which are tangents of such arcs and so give said part its elongated form, with tapers at both ends, is to form one of the main walls 3—4. The connecting oblong *c* is to form one of the walls 5. The other oblongs *d*, *e* and *f* are to form the three other such walls 5. Having bent the blank on the lines *b*, always in this case from the observer, the container will have assumed its ultimate general shape. A tab *g*, shown opposite to oblong *e*, may be glued face to face with such oblong, thus to maintain the blank in its bent state. The oblongs *d* and *f* have extensions *d'* and *f'* which, when bent on the dotted lines shown between them and such oblongs, may be tucked in between the main walls to hold such oblongs in the position in which they form walls 5. Each of these extensions or tabs *d'*—*f'* may be glued to that wall 3 or 4 which it immediately adjoins when it has been so tucked in, but usually at least one of them will be left unattached so as to permit the contained roll to be bodily removed from the container. In addition to the tabs *d'*—*f'* there may be tabs *c'*—*e'* forming end extensions of the oblongs *c*—*f* in the blank and adapted in the completed container to close the gaps otherwise existing between the adjoining ends of the oblongs *c*—*d* and oblongs *e*—*f*.

In Fig. 5 a modification is shown in which at least one of the tabs *c'*—*e'* is assumed to be

omitted to leave the gap at this point as an outlet through which the ribbon may be delivered.

In Figs. 2 to 5 the walls 3 and 4 existed as corresponding parts respectively at the right and left in the blank; the two walls 5 appearing at the right and left next to the observer were respectively the oblongs *d* and *e* in the blank; the two walls 5 not seen and remote from the observer were the oblongs *c* and *f* in the blank.

I claim the blank substantially as shown in Fig. 1 regardless of the presence as integral parts thereof of the portions *d-e-f-g*, since the equivalents of the latter as separately formed parts may in any way, for the purpose of providing walls 5, be attached to the structure which will exist when the blank has been bent as described on the long sides of the rectangle *c* (which latter will form one such wall 5) to bring the portions which are to go to form the main walls 3-4 into the spaced face-to-face and registering relation to each other. The convexities at *a* are not essential.

Having thus fully described my invention, what I claim is:

1. In combination, a substantially circular wound mass of lengthy material and a container therefor comprising, with spaced elongated substantially counterpart main walls closely opposed to the respective ends of the mass and existing in registry with each other and each having the portions thereof both sides of a plane substantially diametrically cutting the mass existing as tapering substantial counterparts of each other and extending beyond the perimeter of the mass, wall-forming means perpendicular to said walls and arranged in coincidence with their respective tapering margins and obstructing displacement of said mass in any direction from between said walls, said means affording an opening for access to the mass arranged at one side of a plane perpendicular to the first-named plane.

2. In combination, a substantially circular wound mass of lengthy material and a container therefor comprising, with spaced elongated substantially counterpart main walls closely opposed to the respective ends of the mass and existing in registry with each other and each having the portions thereof both sides of a plane substantially diametrically cutting the mass existing as tapering substantial counterparts of each other and extending beyond the perimeter of the mass, wall-forming means perpendicular to said walls and arranged in coincidence with their respective tapering margins and obstructing displacement of said mass in any direction from between said walls, said means affording openings for access to the mass arranged at each side of a plane perpendicular to the first-named plane.

3. In combination, a substantially circular wound mass of lengthy material and a container therefor formed of flexible sheet material and comprising, with spaced elongated substantially counterpart main walls closely opposed to the respective ends of the mass and existing in registry with each other and each having the portions thereof both sides of a plane substantially diametrically cutting the mass existing as tapering substantial counterparts of each other and extending beyond the perimeter of the mass, other walls perpendicular to said main walls and arranged in coincidence with their respective tapering margins and obstructing displacement of said mass in any direction from between said main walls, two of said other walls being spaced apart to afford an opening for access to the mass arranged at one side of a plane perpendicular to the first-named plane and one of them forming an extension of one and being free of the other of such main walls.

4. The hereindescribed blank from which to form the main walls and one connecting wall of a container, said blank including a rectangular intermediate part and elongated portions immediately flanking said part at two opposite sides and both projecting beyond a third side thereof and existing as counterparts of each other and having their longitudinal axes converging at the same angle with relation to the respective first-named sides and coinciding with the respective apices of the angles formed by said first-named sides and the fourth side of said part, the end of each such portion which adjoins said part being tapered at the same angle as the corresponding end of the other such portion and having the apex of its taper coinciding with said axis.

5. The hereindescribed blank from which to form the main walls and one connecting wall of a container, said blank including a rectangular intermediate part and elongated portions immediately flanking said part at two opposite sides and both projecting beyond a third side thereof and existing as counterparts of each other and having their longitudinal axes converging at the same angle with relation to the respective first-named sides and coinciding with the respective apices of the angles formed by said first-named sides and the fourth side of said part, each end of each such portion being tapered at the same angle as the corresponding end of the other such portion and each such portion having the apices of its tapers coinciding with said longitudinal axis.

GEORGE WAGNER.