July 13, 1943. J. A. NEUMAIR 2,324,017

CIGAR ENVELOPING

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Fig. 1.

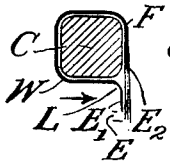


Fig. 2.

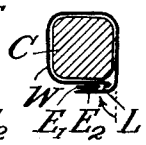


Fig. 3.

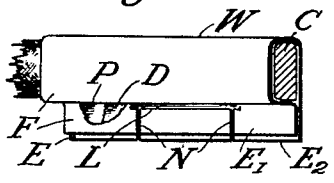


Fig. 4.

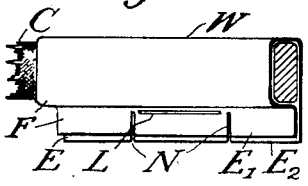


Fig. 5.

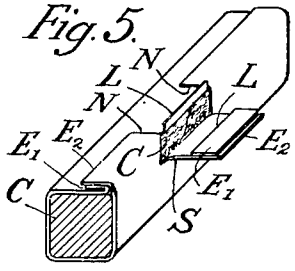


Fig. 6.

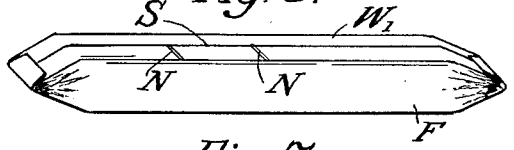


Fig. 7.

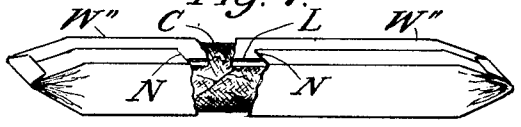


Fig. 8.

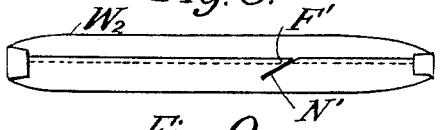


Fig. 9.

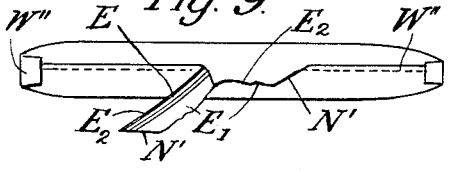


Fig. 10.

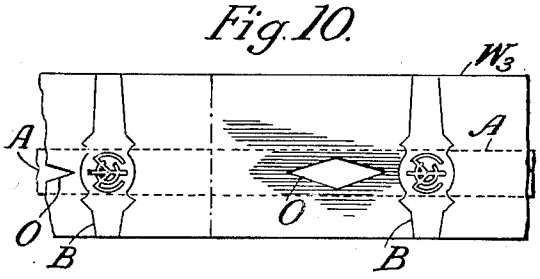


Fig. 11.

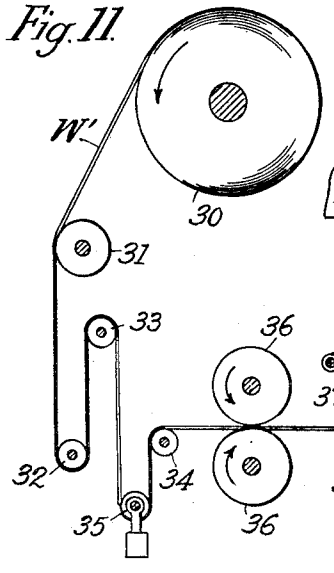
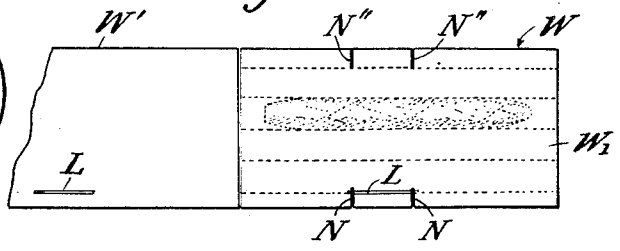


Fig. 12.



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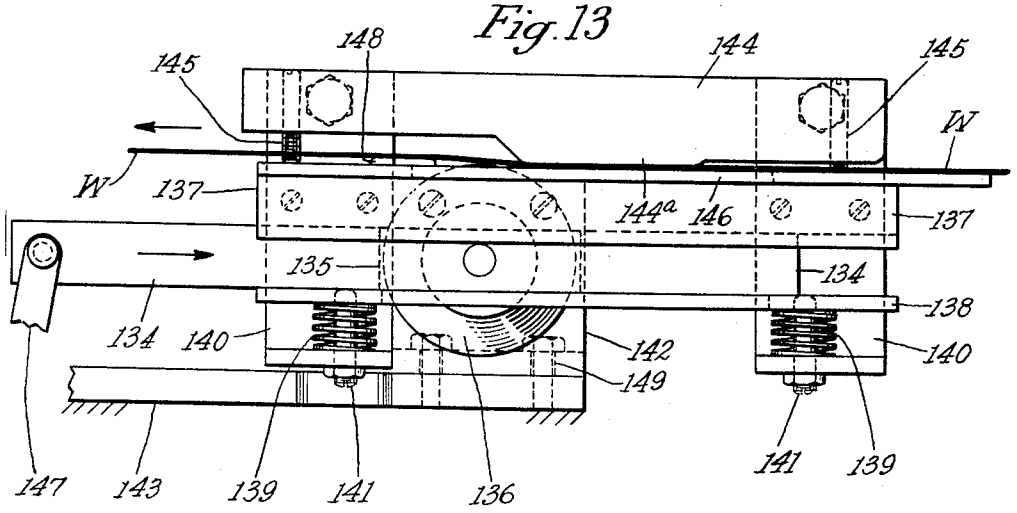
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CIGAR ENVELOPING

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Fig. 13



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2,324,017

CIGAR ENVELOPING

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Original application June 8, 1937, Serial No. 147,003. Divided and this application March 25, 1939, Serial No. 264,075

3 Claims. (Cl. 229—51)

This invention relates to cigar packages, especially to the provision of cigars with individual wrappers, and more particularly to the provision of a cigar with a readily detachable envelope or sealed wrapper made of a bright material such as a polished metal foil backed with a cellulosic fabric coated with an elastic lacquer.

The use of metal foil wrappers backed with glassine paper coated with a thermoplastic material such as a suitable lacquer is known, and a cigar with a polished metal foil envelope constitutes an attractive package and a desirable marketable article, but such use is subject to certain disadvantages which have interfered with satisfying the present demand for a cigar thus packaged.

Among these disadvantages is the inconvenient necessity for tearing the metal foil, which is an operation difficult to initiate if the envelope be adequately sealed in order to preserve the cigar in fresh smokable condition, with its aroma unimpaired and its proper moisture content preserved.

Under these conditions, an object of the present invention is to provide, as a new article of manufacture, a cigar enfolded transversely by a readily detachable wrapper having a metal foil wrapping component formed with a lengthwise heat-sealed seam.

A cognate object is to provide such a metal foil wrapper in which the continuity of the edge of the metal foil component is interrupted to provide a tongue or like salient portion which may be readily pulled, thereby developing a tear along one or more lines, effective to rupture the wrapper suitably to accomplish the destruction of the wrapper, and to permit its complete removal by slipping it from the cigar, leaving the latter intact.

Another object is to provide a metal-foil wrapped cigar having a heat-sealed longitudinal seam concealed completely by the terminal free lengthwise edge of the polished foil wrapper, which accordingly presents a bright highly polished metallic finish throughout its superficies.

Other objects and features of the invention will appear as the description of the particular physical embodiment of the invention selected for disclosure herein progresses.

In the accompanying drawings, which form a part of this specification, and in which like characters of reference indicate the same or like parts:

Fig. 1 is a transverse sectional view of a diagrammatic character, illustrating a step in the method of providing a cigar with a wrapper in accordance with the present invention;

Fig. 2 is a similar view illustrating a further step in carrying out said method;

Fig. 3 is a fragmentary, detail view in sectional perspective, illustrating a cigar with a wrapper provided with a longitudinal seam having a lengthwise slit and transverse nicks, formed prior to folding the seam against the cigar;

Fig. 4 is a fragmentary, detail view similar to Fig. 3, in which the relative disposition of the transverse nicks and lengthwise slit is somewhat modified;

Fig. 5 is a fragmentary detail view in perspective, illustrating the initial step of opening the package;

Fig. 6 is a full view in perspective of the completed package ready for the market;

Fig. 7 is a similar view illustrating the package with a medial part of the wrapper torn away by propagation of the rupture initiated as shown in Fig. 5;

Fig. 8 illustrates in perspective a package having a longitudinal heat-sealed seam provided with a modified interruption of the seam to facilitate rupture, and to permit ready removal of the wrapper;

Fig. 9 is a view of the package shown in Fig. 8, illustrating the mode of initiating and continuing the rupture of the wrapper;

Fig. 10 is a fragmentary detail view in plan of a foil wrapper with transparent windows;

Fig. 11 is a view of a schematic character illustrating various steps included in the method of preparing a continuous web of wrapping material for severance into individual wrappers, preliminary to fabrication of the packages, according to the present invention;

Fig. 12 is a fragmentary detail view in plan of a section of the web in course of its preparatory treatment as illustrated in Fig. 11; and

Fig. 13 is a fragmentary detail view of a device for scoring the web of wrapping material longitudinally, instead of slitting it, the device of this view being adapted for substitution in the arrangement shown in Fig. 11, where it may take the place of the elements **37** and **38**.

In its broad, generic aspect, the initial step in fabrication of the article which constitutes an illustrative example of various products that may be similarly fabricated according to the present invention, is herein shown as accomplished by folding around the four sides of a cigar C a blank W of wrapping material in such a manner that the edges E1 and E2 of the blank meet at one

corner of the cigar and project from that corner with their like faces facing one another, as shown in Fig. 1, it being understood that, for purposes of illustration, the wrapper blank is made of metal foil F, (see Figs. 1, 3 and 4), backed with glassine paper as at P, and coated with a suitable thermoplastic lacquer, as at D. This adhesive may take the form of any well-known lacquer on the market to-day, such for instance as a lacquer composed of nitrocellulose with a synthetic resin added to make the cellulose thermoplastic. It may also have an ingredient of elastic material, as for example, an addition of latex in suitable proportions. Preferably the foil will project slightly, as at E in Figs. 1, 3, 9, etc., so that where the free edge of the foil extends along the underlying wrapper it will have a thickness of only the one ply of metal foil, and thus makes an almost invisible joint. These protruding edges E1 and E2 are pressed together and sealed by heat, and the seam so formed is then folded back upon the cigar package as shown in Fig. 2.

Provision for removal of the wrapping in a manner which will preserve the cigar intact is achieved by forming in the overlapping seam two transverse cuts or nicks N, Figs. 3 and 4, and by forming in the inner edge E1 of the web, near the fold of the overlap, a longitudinal cut L, Figs. 1 and 2, extending across, Fig. 3 or between, Fig. 4, the transverse cuts N, so that the section S of the wrapper between the transverse cuts can be easily torn out, as shown in Fig. 7, leaving the residual parts of the wrapper free to be slipped off the ends of the cigar. The cut L is preferably made a little distance away from the cigar, so that, when the web is folded as shown in Fig. 2, there is a portion of the sealed lap between the cigar and the cut, thus sealing the cigar completely. The same object may also be achieved by only scoring instead of cutting the web longitudinally, so that there is no actual opening in the web even if the line L is made at the fold of edge E1 or between the fold and the cigar. The latter method however requires tearing of the web on the scored line L and thus makes the removal of the wrapper more difficult. If desired, the cut or score-line L may even be omitted entirely, in which case it is necessary to first tear across the edge E1 of the wrapper along the inner fold between the nicks N, and then to remove the strip S by pulling the edge E2 between the nicks away from the cigar as before. The transverse cuts N serve to define the width of the tear strip S and to start the tearing; the longitudinal cut L all but separates the sealed lap of the tear strip from the inside layer of the wrapper and thus makes it possible to tear across the fold of the inside layer almost unobstructedly, the sealed portion of the inside layer coming away practically without any tearing.

The longer longitudinal cut, across the transverse cuts, as in Fig. 3, is preferable from the standpoint of easy removal of the wrapping, because, with the shorter cut shown in Fig. 4, the material remaining between the ends of the longitudinal cut and the transverse cuts must be torn in removing the nicked section and therefore offers additional resistance.

The ends of the wrapping W, after the longitudinal seam has been sealed and nicked, are folded and sealed in the usual manner, the finished cigar package presenting the appearance shown in Fig. 6. Upon tearing out the nicked section S, the ends W'' of the wrapping are loose on the cigar C, Fig. 7, and can be readily slipped off endwise.

The improved package may be simplified by omitting the longitudinal cut and by replacing the two transverse nicks N by a single oblique nick N', as in Fig. 8. The wrapping W may then be removed by pulling up the loose flap and tearing off a portion of the seam E1, E2 in the axial direction as shown in Fig. 9. This will expose the torn edge E1 of the inner fold, which can then be lifted up and torn transversely, thus freeing the ends W'' of the wrapper as before.

If desired, a window for the inspection of the cigar may be provided by cutting openings O in the tinfoil web W3 at package-length intervals and by attaching a strip A of Cellophane or other suitable transparent material to the back or inside of the web, as shown in Fig. 10, in which the wrapper also has a cigar band B printed on it.

The longitudinal cut L is made before sealing the axial seam, preferably outside of the folding unit of the enveloping machine, while the transverse cuts N or the oblique cut N' are most expediently made during the sealing period, immediately after pressing together the edges E1 and E2, although, in case of a short longitudinal cut Fig. 4, they may be made before folding, outside of the sealing unit. In Fig. 11, an arrangement for cutting the longitudinal slit L into the web is shown. The web W' is intermittently fed from a reel **30** over rollers **31**, **32**, **33** and **34**, carrying a floating roller **35** in the loop between rollers **33** and **34**, to take up any slack. The motion is imparted by feed rollers **36** or other known means. At the proper points, a knife blade **37** co-acting with a suitable ledger block **38**, and a cut-off **39** are placed, the former being actuated by a cam-operated lever **40**, and the latter by a cam-controlled lever **41**. The nicked wrapper W is shown in Fig. 12, the cut panel being put back into place, the wrapper being shown as it would appear if opened up after folding and nicking. Thus, at one margin, as at N'', N'', the web is shown as only nicked, and not slitted.

Fig. 13 illustrates a now-preferred form of device for scoring the wrapping web, this device when employed being substituted in the position occupied by the cutting members **37** and **38**, Fig. 11. A slide **134** is provided with a slot **135** in which is journaled the scoring member **136**, said slide being guided in a slideway **137** and retained in position by a bottom plate **138**. Plate **138** is held in position by compression springs **139** disposed between said plate and the base of hanging bracket **140**. Studs **141** supported in each of the brackets **140** at their lower end, fit loosely into openings provided near the ends of plate **138** preventing said plate from shifting in a lengthwise direction. A bracket **142**, adjustably mounted on a bar **143** of the machine carries the slideway **137**. The brackets **140** depend from the member **137** and at their upper ends carry a cutting bar **144** equipped with adjusting screws **145** providing finely adjustable means for maintaining the desired clearance between the scoring disk **136** and the portion **144a** of bar **144**. The web W, fed in the same manner as previously described, passes over a table **146** carried by slideway **137** and under bar **144**. When the forward feeding of the web is stopped, a lever **147** actuated by a cam, not shown, moves the slide **134** causing member **136** to engage the portion of the web W resting against section **144a**, thereby scoring the web. The movement of the slide is so timed that the scoring of the

web is done at desired spaced intervals. When the scoring operation is completed, the slide retreats, returning member 136 to its starting position before advancement of the web. A cross strip 148 of table 146, over which strip the web W passes, raises the same sufficiently to clear member 136. The bracket 142 is provided with elongated slots 149 permitting lateral adjustment of the device to care for the different widths of wrapping webs.

From the foregoing disclosure, it will be understood readily that provision is made for avoiding substantially the inconveniences heretofore encountered in removing heat-sealed wrappers each embodying a metal foil wrapper component from individual cigar packages, and so this desirably bright and attractive polished metal finish is made more available, without detracting from the preservation of the cigar, intact as to structure and aroma.

It is also apparent that this desirable result has been attained by the novel method of slitting the wrapper herein pointed out; and that improved apparatus of both turret type and chain type has been provided to carry the aforesaid method into effect.

It is to be understood that while I have disclosed what I believe to be the best embodiments of the present invention now known to me, nevertheless the particular physical embodiments herein illustrated and described are not to be considered as exhausting the possible embodiments of the basic idea of means underlying the invention.

This application constitutes a division of my prior application S. N. 147,003, filed June 8, 1937.

What is claimed is:

1. As a new article of manufacture, a cigar enfolded transversely by a wrapper fabricated of sheet metal foil with an outstanding longitudinal heat-sealed seam constituted by contiguous matched marginal portions of said wrapper having at least one stratum of heat-sensitive material adhered to the metal faces of said margins at their mutually contiguous areas, said seam being interrupted by a plurality of transverse slits through both of the edges of said seam defining between them a tongue portion so disposed as to be grasped readily and when pulled in a direction lengthwise of and across said tongue portion to rupture the adjoining wrapper structure and free it for complete removal, leaving the cigar intact, at least one slit on each of the matching marginal portions extending inwardly across the seam and coinciding with a similar slit on the other matching edge of the wrapper.

2. As a new article of manufacture, a cigar enfolded transversely by a wrapper fabricated of sheet metal foil with a longitudinal heat-sealed seam constituted by contiguous matched marginal portions of said wrapper having at least one stratum of heat-sensitive material adhered to the metal faces of said margins at their mutually contiguous areas, said seam being interrupted by a plurality of transverse slits through both of the edges of said seam defining between them a tongue portion so disposed as to be grasped readily and pulled to rupture the adjoining wrapper structure and free it for complete removal, leaving the cigar intact, in which said tongue is weakened along a line extending lengthwise thereof for a substantial part of the distance btween said transverese slits in one thickness of the wrapper only.

3. As a new article of manufacture, a cigar enfolded transversely by a wrapper fabricated of sheet metal foil with a longitudinal heat-sealed seam constituted by contiguous matched marginal portions of said wrapper having at least one stratum of heat-sensitive material adhered to the metal faces of said margins at their mutually contiguous areas, said seam being interrupted by a plurality of transverse slits through both of the edges of said seam defining between them a tongue portion so disposed as to be grasped readily and pulled to rupture the adjoining wrapper structure and free it for complete removal, leaving the cigar intact, in which said tongue is weakened along a line extending lengthwise thereof and intersecting said slits at the root of said tongue in one thickness of the wrapper only.

JOSEPH A. NEUMAIR.