Sept. 9, 1958 L. C. GISH ET AL 2,851,158

ART OF PACKAGING INCANDESCENT LAMPS AND CARTON THEREFOR

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Fig. 1.

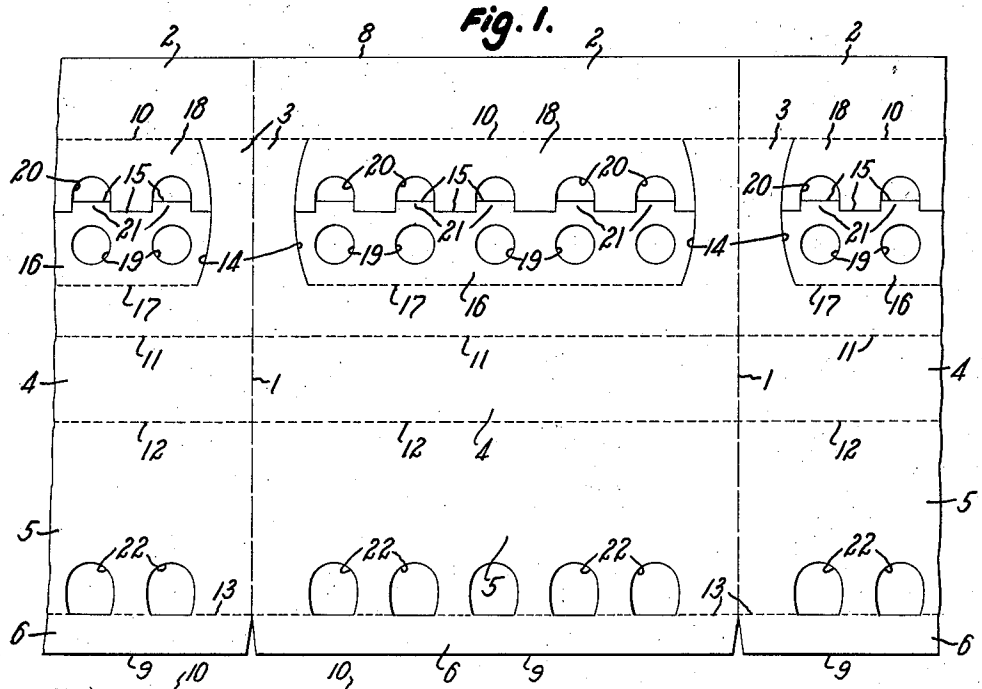


Fig. 2.

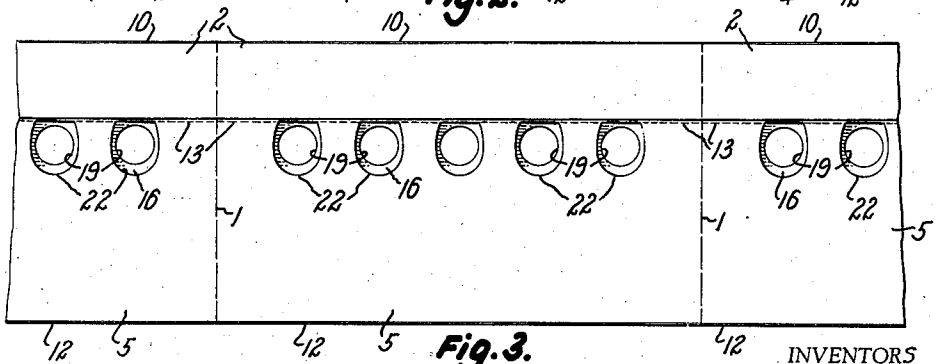


Fig. 3.

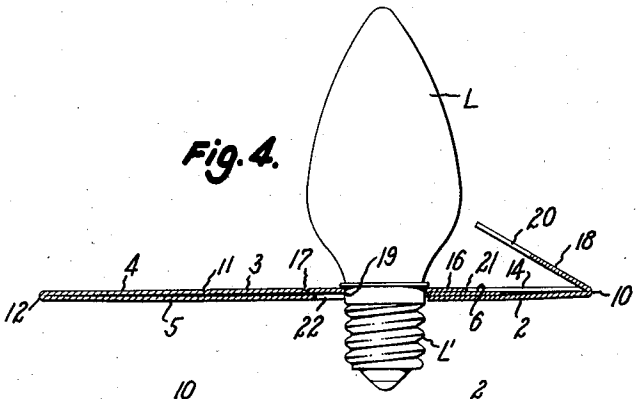
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ART OF PACKAGING INCANDESCENT LAMPS AND CARTON THEREFOR

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Fig. 4.



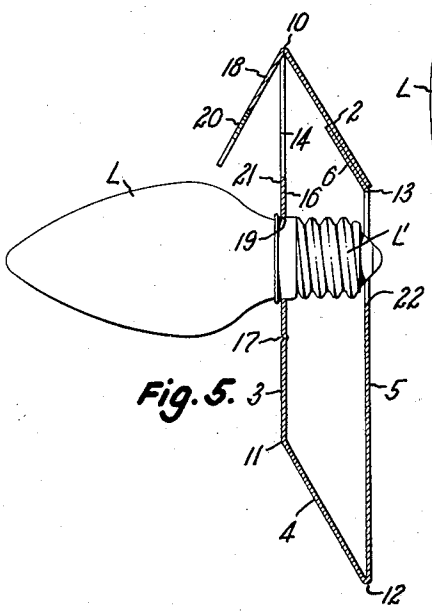




Fig. 5.

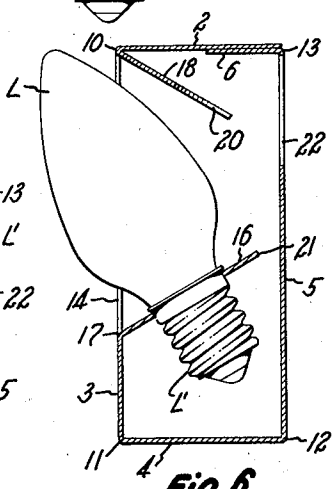



Fig. 6.

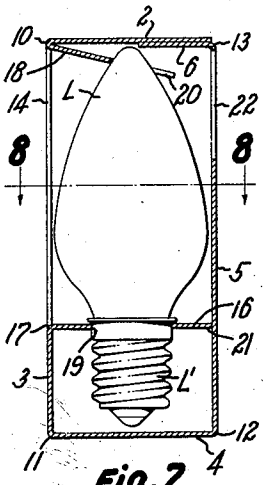



Fig. 7.

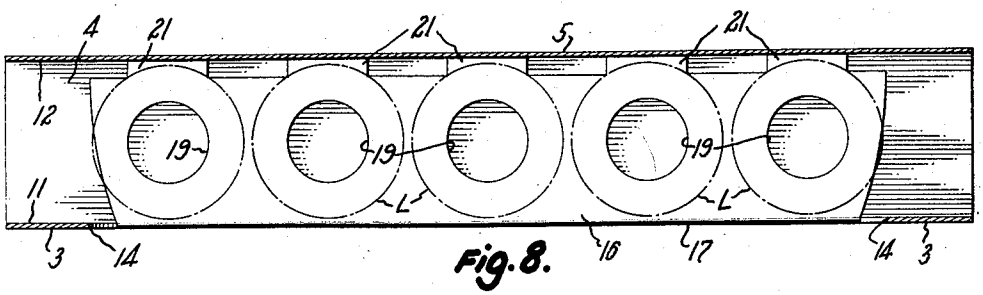



Fig. 8.

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ART OF PACKAGING INCANDESCENT LAMPS AND CARTON THEREFOR

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Fig. 9.

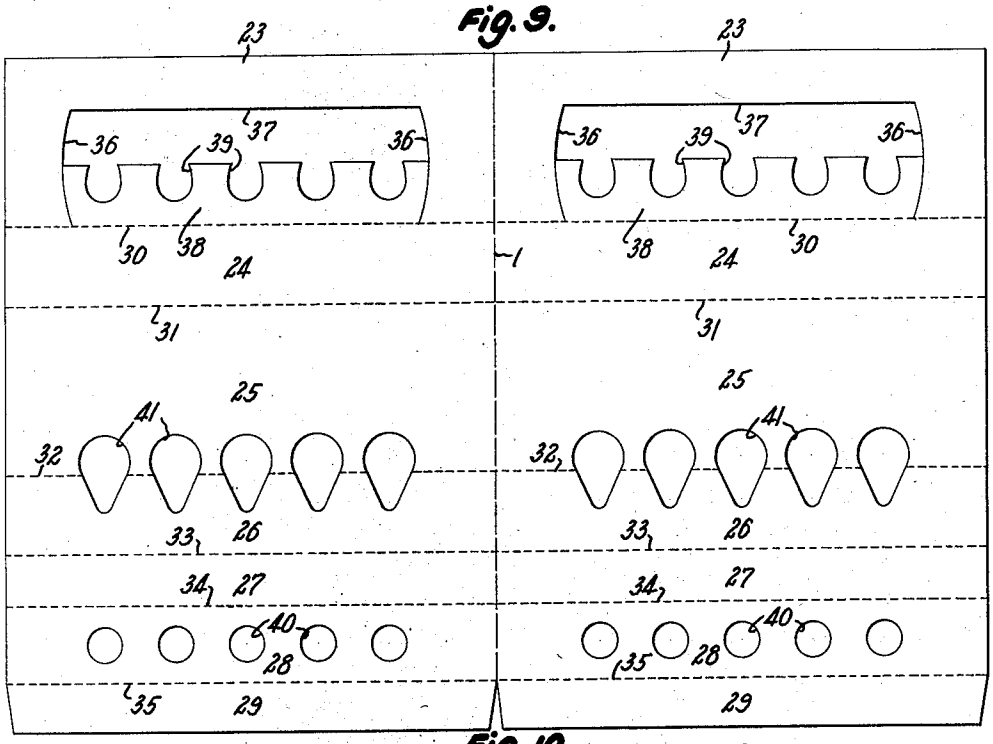



Fig. 10.

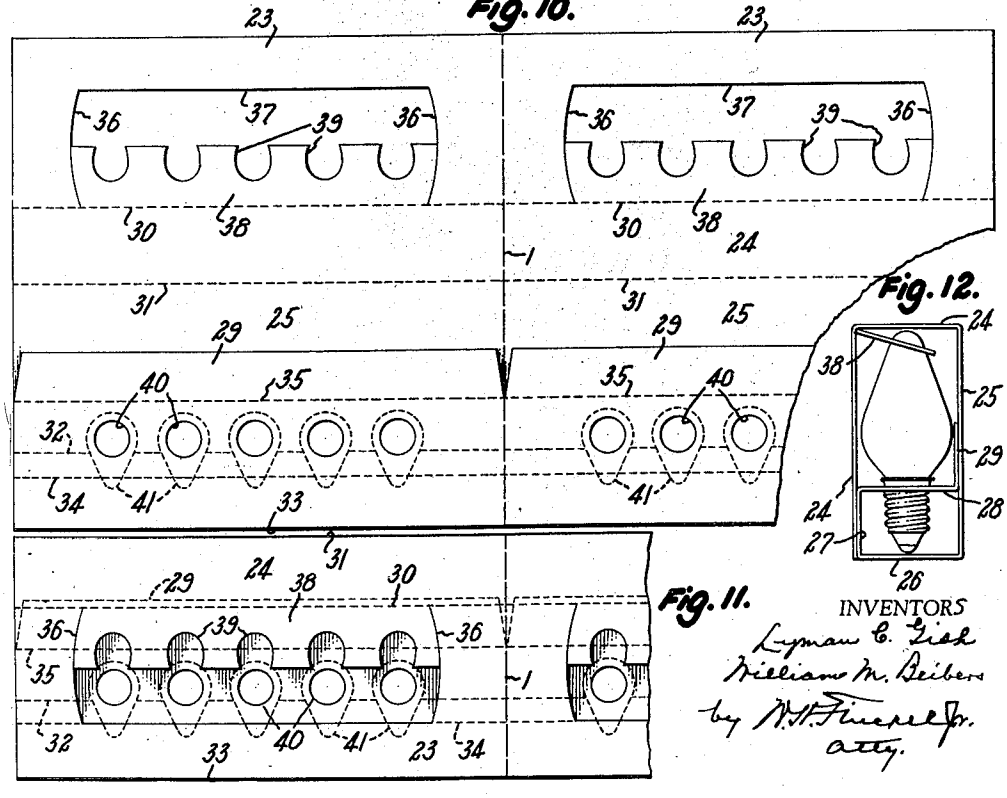



Fig. 11.




Fig. 12.



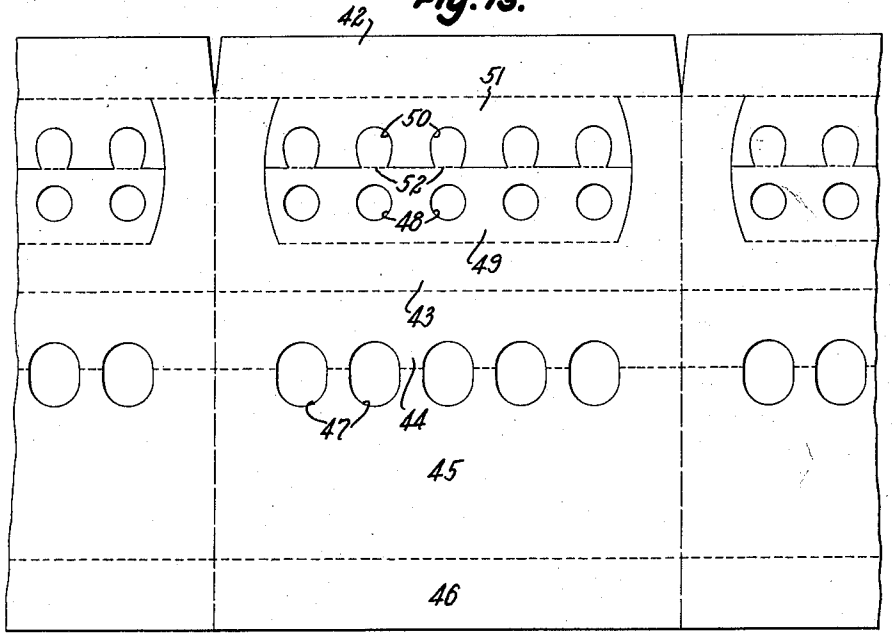

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Fig. 13.



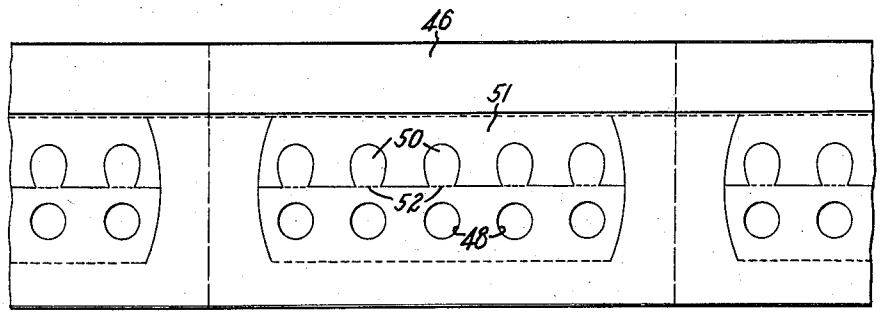




Fig. 14.

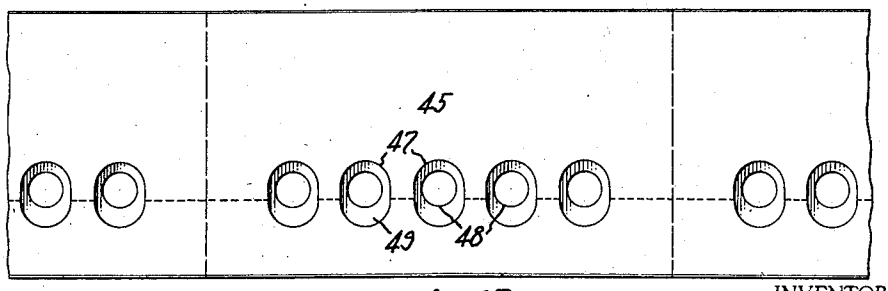



Fig. 15.

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ART OF PACKAGING INCANDESCENT LAMPS AND CARTON THEREFOR

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Fig. 16.

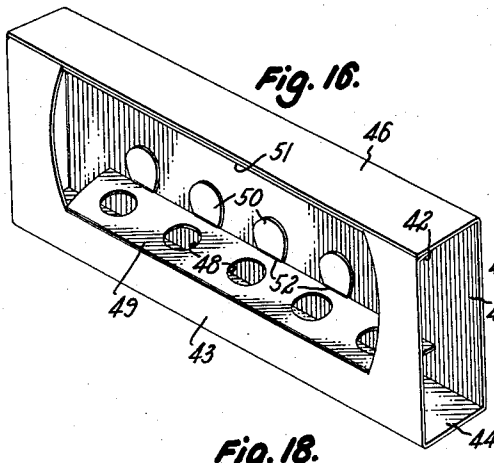



Fig. 17.

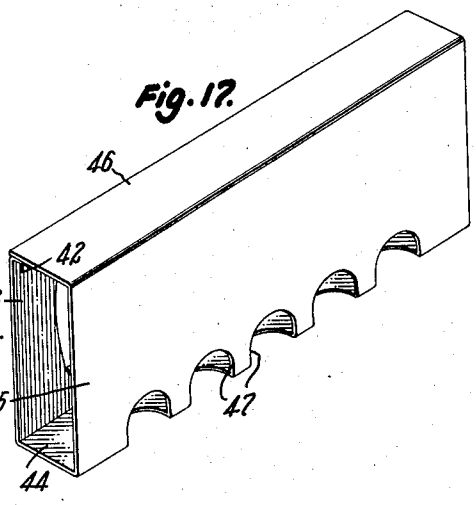



Fig. 18.

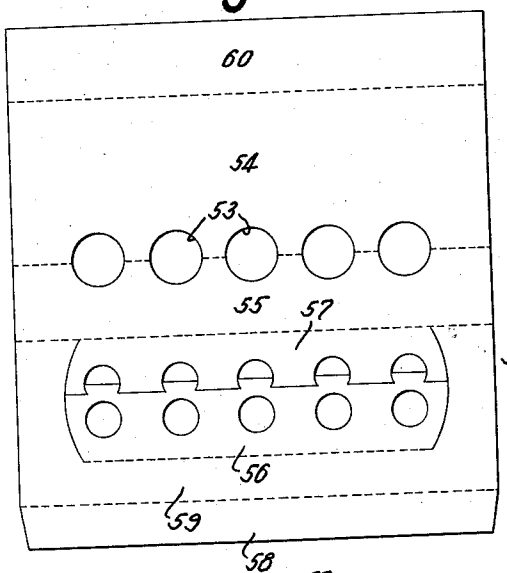



Fig. 19.

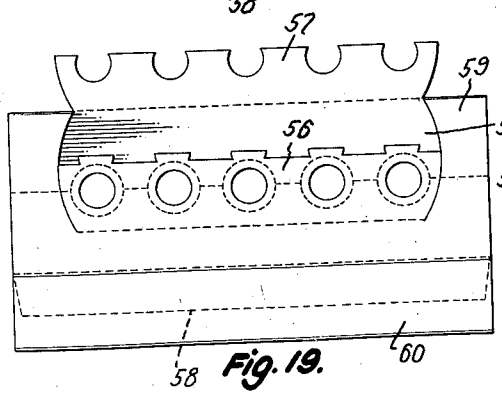



Fig. 20.

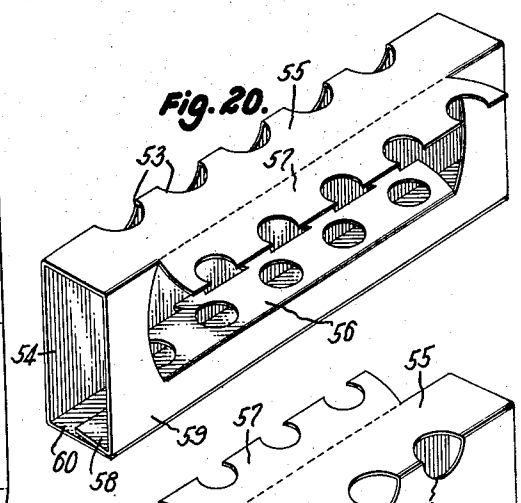
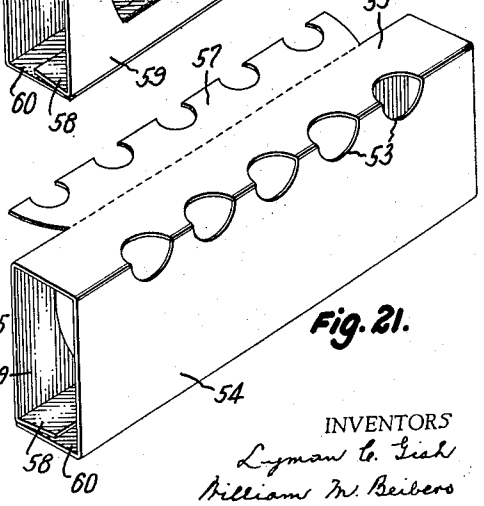



Fig. 21.




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United States Patent Office 2,851,158 Patented Sept. 9, 1958



2,851,158

# ART OF PACKAGING INCANDESCENT LAMPS AND CARTON THEREFOR

Lyman C. Gish, Rittman, Ohio, and William M. Beibers, Memphis, Tenn., assignors to The Ohio Boxboard Company, Rittman, Ohio, a corporation of Ohio

Application November 21, 1956, Serial No. 623,645

14 Claims. (Cl. 206—45.19)

This invention relates to paperboard cartons, and it has particular reference to a carton for use in the packaging of incandescent lamps in such a manner as initially to afford an assembly of the lamps with the flat-folded carton which will present their bases in position for testing purposes, and ultimately, as after such testing, and squaring-up or erecting of the carton from its flat-folded condition, to enclose the lamps for handling, shipment, storage, display and sale.

One of the objects of the invention is to provide a carton which will furnish a display package for miniature incandescent lamps of the type used as Christmas lights so that such lamps may be available for shelf display in packages of appropriate multiples; and in order that no imperfect lamps will be included in the packages the carton is so formed that after the lamps are assembled with it their bases will project in position for testing prior to completion of the packaging operation whereby substitutions of lamps may be made where necessary or the partially completed package of the multiple of lamps discarded, at least temporarily, from the production line.

Another object of the invention is to provide a carton of the type referred to which is erectable from flat-folded to squared-up condition while the lamps are assembled with it, and which, after such erection, will enclose the lamps in proper relation, and in injury-resistant retention, for handling, shipment, storage, display and sale.

A further object is to provide a carton of this type in which one of its wall panels is furnished with a window opening through which the assembled, packaged lamps will be displayed.

Another object is to provide a carton of this type which is formed from a single, integral blank of paperboard material which may be folded to flat form, with chosen parts adhesively secured, by simple and inexpensive procedures of well recognized efficiency.

With these and other objects in view, as will appear hereinafter, the invention is directed to a carton which, in the interest of simplicity, economy, ease of handling and functional adequacy, is preferably in the form of an open-ended tube comprising a single, integral blank of paperboard material provided with cuts and folding scores to define therein a front wall panel, a rear wall panel and top and bottom edge wall panels, such blank being flat-folded upon two of its folding scores and adhesively secured in tube form so that portions of at least two of its wall panels are in juxtaposition, substantially registering lamp base receiving apertures in such juxtaposed portions in which the lamps to be packaged are accommodated in projection through the flat-folded blank for testing purposes, a window opening in said front wall panel through which the lamps are displayed in the ultimately erected carton, and preferably means adjacent to such window opening for engagement with the base-opposite tips of the lamps to hold them erect within the set-up carton; the carton, with the lamps assembled therewith in its flat-folded condition, being erectable to set-up package form by a simple manipulation of the carton parts, all as will be explained hereinafter more particularly and finally claimed.



In the accompanying drawings illustrating the invention, in the several figures of which like parts are similarly designated,

Fig. 1 is a plan view of parts of a multiple blank showing one embodiment of the invention,

Fig. 2 is a front view of the blank of Fig. 1 with its parts appropriately flat-folded and secured in tube form,

Fig. 3 is a rear view of the flat-folded blank of Fig. 2,

Fig. 4 is an enlarged sectional elevation of the flat-folded and secured blank of Figs. 1 to 3 with a miniature incandescent lamp assembled therewith,

Fig. 5 is a view of the blank and lamp of Fig. 4 showing a preliminary step of erection of the blank from flat-folded to set-up condition, and illustrating the manner in which, during such erection, the base of the lamp carried by one wall panel portion will clear the edge of the opening in the other wall panel portion,

Fig. 6 is a view similar to Fig. 5 but showing the carton squared up and the lamp supporting panel elements in a state of partial adjustment to their final lamp positioning arrangement,

Fig. 7 is a view similar to Fig. 6, but with all parts of the carton, and the lamp, in complete package condition,

Fig. 8 is a longitudinal sectional elevation taken on the line 8—8 of Fig. 7, with a plurality of lamps indicated in dot-and-dash lines,

Fig. 9 is a plan view of the inner surface of a blank for producing a carton of modified form embodying the essential features of the invention,

Fig. 10 is a view similar to Fig. 9 but showing the first folding of parts of the blank,

Fig. 11 shows the blank of Fig. 9 completely flat-folded and secured,

Fig. 12 is an end view of the erected carton of the blank of Figs. 9 to 11, with a lamp in packaged position therein,

Fig. 13 is a view similar to Fig. 1 but showing another modified form of blank in which the principles of the carton of the invention are embodied,

Fig. 14 is a front view of the blank of Fig. 13 flat-folded and secured in tube form,

Fig. 15 is a rear view of the flat-folded blank of Fig. 14,

Fig. 16 is a front perspective view of the erected carton of Figs. 13 to 15 but omitting a showing of any packaged lamps,

Fig. 17 is a rear perspective view of the carton of Fig. 16,

Fig. 18 is a plan view of another modified form of blank for forming a carton embodying the principles of the invention,

Fig. 19 shows the blank of Fig. 18 flat-folded to tube form and secured,

Fig. 20 is a front perspective view of the erected carton of Figs. 18 and 19 but omitting a showing of any packaged lamps, and

Fig. 21 is a rear perspective view of the carton of Fig. 20.

As will be apparent particularly from the showing of Figs. 1 to 3 and Figs. 13 to 15, respectively, the blanks for the cartons of the invention may be made in multiple from sheets of paperboard material, the number of such blanks, having reference especially to their longitudinal dimension, being limited only by the corresponding dimension of the sheet, and the individual blanks being formed for separation by spaced cut scores in a well known manner.

It will be noted, moreover, that the cartons of individual blanks are, as shown, designed for the packaging of five lamps, which is in accordance with a preferred merchandising practice.

Furthermore, especially in the case of miniature lamps of the smaller sizes, it may be desired to present them for sale in multiples of ten at the option of the purchaser, and to this end the cartons may be furnished as "split cartons" each of which comprises two of the individual five-lamp cartons joined along, and optionally capable of being separated, or "split," upon an intervening cut score line, as indicated by the showing of Figs. 9 to 11.

Obviously, also, the cartons may be designed for the packaging of lamps in multiples of other than five lamps, or for the packaging of individual lamps, and by the "split carton" arrangement packages of various desired multiples of lamps may be presented for sale as unit packages.

The blank of the carton of Figs. 1 to 8 shown particularly in Figs. 1 to 3 as being one of a longitudinal plurality or multiple thereof separated from its longitudinally adjacent similar blanks by spaced cut-scores **1**, comprises, seriatim, a top edge wall panel **2**, a front wall panel **3**, a bottom edge wall panel **4**, a rear wall panel **5**, and a glue flap **6**, these elements of the blank being defined by its free edges **8** and **9** and, intermediately, by folding scores **10**, **11**, **12** and **13**.

The front wall panel **3** is provided adjacent to its ends with similar cuts **14**, preferably of arcuate shape for a purpose hereinafter explained, to provide a window opening, and the material of the blank within the window opening is cut longitudinally, as indicated at **15** to form therefrom a lamp supporting shelf member **16** hinged upon a folding score **17** and a retaining flap **18** hinged upon the folding score **10** between the top edge wall panel **2** and the front wall panel **3**.

The shelf member **16** is provided with a longitudinal series of apertures **19** of a size to receive and preferably frictionally engage the through-projected bases of the lamps to be packaged, and the apertures are so relatively spaced as to hold the packaged lamp out of possible contact with each other.

The retaining flap **18** is provided with notches **20** equal in number to and axially aligned with the apertures **19** of the shelf member and serving, in the completed package, to engage and properly position the tips of the packaged lamps. Those portions of the cut **15** which extend across the notches **20** of the retaining flap **18** are offset from the balance of the cut **15** to furnish upon the free edge of the shelf member off-standing lugs **21** for engagement with the rear wall panel **5** when the carton is in its erected, square-up condition.

The rear wall panel **5** is provided with a plurality of apertures **22** so located that when the carton blank is flat-folded to tube form, Figs. 2 and 3, with the top edge wall panel adhesively joined to the glue flap **6**, they will substantially register with the apertures **19** of the shelf member **16** of the front wall panel **3**, Fig. 3.

Considering the blank of Fig. 1 to be shown as presenting its inner face, the folding and securing of it in tube form, as viewed particularly in Fig. 3, is accomplished by folding the rear wall panel **5**, with its attached glue flap **6**, upwardly upon the folding score **12** and then downwardly so that it lies flat over the bottom edge wall panel **4** and a portion of the front wall panel **3**. Then, with glue applied to the glue flap **6**, preferably prior to its folding with the rear wall panel **5**, the top edge wall panel **2** is folded over upon it on the folding score **10** and adhesively affixed to it by the applied glue.

As shown in Fig. 4, a plurality of the lamps L to be packaged may have their bases L′ inserted through, and frictionally gripped in, the apertures **19** of the shelf member **16**, and, inasmuch as these lamps are thus assembled while the carton is in flat-folded condition, their bases will extend through the mating, substantially registering apertures **22** in the rear wall panel **5**, and will project below such panel sufficiently to permit their engagement with, or by, testing apparatus, so that, while the carton is flat-folded, any defective lamps may be detected and replaced with perfect ones.

After appropriate testing of the lamps the carton will be squared up to its fully erected condition by application of pressure at the edge folds of the folding scores **10** and **12**, bending inwardly and downwardly of the shelf member **16** and bending inwardly of the retaining flap **18**.

During the initial erecting step, by application of pressure on the opposite fold lines **10** and **12**, the front wall panel **3** will be moved away from the rear wall panel **5** with a parallel motion guided by the top and bottom edge wall panels **2** and **4** which form two sides of the parallelogram of the four carton wall panels, and during this motion the bases L′ of the lamps L, moving with the shelf member **16** will be drawn outwardly through the apertures **22** of the rear wall panel **5**. Inasmuch as the relative movement of the front and rear wall panels **3** and **5**, guided as sides of a parallelogram by the top and bottom edge wall panels **2** and **4**, entails a relative displacement of the apertures **19** and **22** of the front and rear wall panels, and as the lamps are relatively fixedly carried by the shelf member **16** in relation substantially normal thereto, the apertures **22** of the rear wall panel are preferably made sufficiently large, and larger than the apertures **19** of the shelf member **16**, to permit this movement of the lamp bases through them without obstruction by, or fouling upon, their edges. This is clearly illustrated in Fig. 5.

As shown in Fig. 6, when the group of lamps L is pivoted inwardly of the squared-up carton along with their mounting shelf member **16**, their tips will ride under the retaining flap **18** and will, when the shelf member is bent downward sufficiently, move into snap engagement with the walls of the notches **20** of this flap. Meanwhile, the inward and downward bending of the shelf member **16** will bring its lugs **21** into engagement with the inner face of the rear wall panel **5**, and as the dimension of the shelf member from its hinge fold at **17** to the outer edges of its lugs **21** is substantially equal to the inner dimension of the top and bottom edge wall panels **2** and **4** between the inner faces of the front and rear wall panels **3** and **5**, the free edges of the lugs of the shelf member will somewhat frictionally engage the inner face of the rear wall panel to hold the shelf member in proper horizontal position and also to aid in retaining the carton in squared-up, erected condition.

If desired, the lugs **21** may be omitted from the free edge of the shelf member **16**, and this, obviously, will not impair the proper packaging characteristics of the carton, particularly when the diameter of the bulbs of the lamps is such that the front-to-rear dimension of the shelf member, without lugs, will be sufficient to span the distance between the inner faces of the front and rear wall panels of the carton.

In the modified embodiment of the invention shown in Figs. 9 to 12 the blank, which may be of dual form, comprises, seriatim, a front wall panel **23**, a top edge wall panel **24**, a rear wall panel **25**, a bottom edge wall panel **26**, an auxiliary front wall member **27**, a shelf member **28**, and a positioning flap **29**, and these elements are relatively foldable upon folding scores **30**, **31**, **32**, **33**, **34** and **35**.

The front wall panel is provided with a window opening defined by longitudinally spaced side borders **36**, a lower border defined by an edge **37** and an upper border defined by the folding score **30** between the front wall panel **23** and the top edge wall panel **24** and provided with a retaining flap **38** for the same purpose as, and provided with notches **39** similar to, the retaining flap **18** of the form of carton illustrated in Figs. 1 to 8.

The shelf member **28** is provided with a series of lamp base receiving apertures **40**, and portions of the rear wall

panel 25 and the bottom edge wall panel 26 are provided with apertures 41 which, when the blank is properly flat-folded to tube form, will substantially register with the apertures 40 of the shelf member 28.

Flat-folding of this form of blank to tube form is accomplished by first folding, as a unit, the positioning flap 29, shelf member 28 and auxiliary front wall member 27 upon the folding score 33 lying between such auxiliary front wall member and the bottom edge wall panel, and preferably adhesively affixing the positioning flap 29 to the underlying portion of the rear wall panel 25, see Fig. 10. Then the front wall panel 23 and the top edge wall panel 24 are folded, as a unit, upon the folding score 31 between the rear wall panel 25 and the top edge wall panel 24, so that, as shown in Fig. 11, the free edge portion of the front wall panel 23 will overlie, and may be adhesively affixed to, the auxiliary front wall member 27.

The flat folded blank of this carton, Fig. 11, may have a plurality of lamps positioned in the apertures 40 of its shelf member 28 with their bases extending therethrough and through the underlying registering openings 41 formed in the juxtaposed wall portions of the carton so that they may be tested as hereinbefore described.

When this carton is squared-up to erected form with the complement of lamps carried by its shelf member 28, it will be apparent that, due to the connection of the auxiliary front wall member 27 with the front wall panel 23, and the connection of the positioning flap 29 with the rear wall panel 25, the shelf member 28, and with it the complement of lamps, will be moved automatically to its proper packaging position to bring the lamps within the confines of the carton, and while the carton is thus being erected, the retaining flap 38 will be folded inwardly upon its folding score 30 so that as the lamps are rotated with the shelf member 28 their tips may be caused to engage with the notches 39 of the retaining flap, all as indicated in Fig. 12.

If desired, the positioning flap 29 need not be adhesively affixed to the rear wall panel 25, in which case it can be caused to act as a frictonal positioning member after the carton is erected, and its parts adjusted, much in the manner as described with relation to the carton of Figs. 1 to 8.

In the modified embodiment of the invention shown in Figs. 13 to 17 the relative locations of the glue flap 42, front wall panel 43, bottom edge wall panel 44, rear wall panel 45, and top edge wall panel 46 are altered from the arrangement of these parts in Figs. 1 to 8 so that the apertures 47 of the rear wall panel 45 which substantially register with the lamp carrying apertures 48 of the shelf member 49 are located, in the squared-up carton, adjacent to its bottom edge rather than to its top edge. Also, portions 50 of the front wall panel which are cut from the retaining flap 51 to provide the desired lamp tip-engaging notches therein are left attached to the free edge of the shelf member 49 so as to be bendable with respect thereto upon folding scores 52 for frictional engagement with the rear wall panel 45 when the carton is squared up, as shown in Fig. 16.

The modified embodiment of the carton of the invention shown in Figs. 18 to 21 is formed from a blank which embodies characteristics of the forms illustrated in Figs. 1 to 8 and Figs. 13 to 17, respectively, but differs from both of these forms. Although the registering openings 53 are so formed in a portion of the rear wall panel 54 as to lie adjacent to the top edge wall panel 55, in much the same arrangement as that of Figs. 1 to 8, and the shelf member 56 and retaining flap 57 are quite similar to those of Figs. 1 to 8, the glue flap 58 is attached to the front wall panel 59 at its bottom edge rather than at its top edge as it is shown in Figs. 13 to 17, and is affixed to the bottom edge wall panel 60.

These differences although not vital will, in some instances, make possible production of a carton having the



characteristic properties of the invention which is better adapted to the packaging of particular types of lamps than is the carton illustrated in either Figs. 1 to 8 or in Figs. 13 to 17.

It will be apparent from the foregoing disclosure that the carton of the invention may take a variety of forms, particularly as regards the carton blank and its arrangement of panel elements and their mode of connection in flat-folded tubular arrangement, but in all forms provision is made for so assembling a complement of lamps with the flat-folded blank that their bases are suitably exposed for test purposes prior to completion of the package by erection of the flat-folded blank to squared-up, lamp enclosing, condition.

Moreover, in all of its forms the carton may be erected by a simple manipulation of its parts while the lamps which are ultimately enclosed are carried by the shelf member, and when its erection is completed the lamps will be attractively displayed at the window opening of the front panel and will be supported by the shelf member and retaining flap in such proper spaced relation as to guard them against breakage during shipment, storage, display and handling. Also, the dimensions of the carton, having reference to a particular type and size of lamps to be packaged therein, are such as to reduce possible play of the lamps within the carton to a minimum, thus further guarding against breakage and at the same time accomplishing a saving in paperboard stock and economy in shipping, storage and display space.

In furtherance of the saving in paperboard stock it will be noted that, in forming the end borders of the window opening by arcuate cuts, provision is made for adequate display of the lamps at the ends of the packaged rows, while at the same time reducing the overall length of the carton and also furnishing a relatively long connection between the ends of these cuts and the longitudinally outstanding portions of the front panel, and this is of particular advantage at the ends of the cuts which join the top edge folding score of the front wall panel as it tends to avoid tearing and buckling along this folding score at these portions, particularly during erection of the lamp-loaded, flat-folded blank to squared-up condition.

A further advantage of the carton of the invention is that all of its elements, including the lamp receiving and supporting shelf member, are formed from a single, integral blank, and that this blank may be folded and glued in accordance with simple and well-known practices and by machinery of known types.

It will be appreciated, moreover, that the one-piece construction of the carton is advantageous to the packager in that, after the flat-folded blank is loaded with its complement of lamps, it may be handled as a unit to thus provide an economy in packaging time and expense.

Various changes and modifications are considered to be within the principle of the invention and the scope of the following claims.

What we claim is:

1. A carton for packaging incandescent lamps, initially for testing and ultimately for handling, shipment, storage, display and sale, said carton comprising front and rear wall panels and top and bottom edge panels joined at their edges by longitudinal folding scores, and one of said panels carrying a shelf member hinged to it by folding score means, said carton being flat-folded upon certain of said longitudinal folding scores with said shelf member in juxtaposition to said rear wall panel, said shelf member and the portion of said rear wall panel juxtaposed thereto each being provided with an aperture for the reception and through-projection of the base of an incandescent lamp, the edge of the aperture in said shelf member serving to frictionally engage the lamp base to support the lamp in the flat-folded carton with its base projecting through the aperture in said rear wall panel in position for application to it of test means, and said

carton being erectable upon said longitudinal folding scores to substantially rectangular tube form with said lamp carried by said shelf member within the tubular confines of the carton.

2. A carton as claimed in claim 1, in which the aperture in the portion of the rear wall panel which is juxtaposed to said shelf member is of a dimension sufficiently large to permit its edge to clear, and hence not obstruct movement of, the lamp base during erection of the carton from flat-folded to tubular form.

3. A carton as claimed in claim 1, in which the aperture in the rear wall panel is located wholly within the confines of said panel.

4. A carton as claimed in claim 1, in which the bottom edge panel is in part juxtaposed to said shelf member and the aperture in said rear wall panel extends into said bottom edge panel and spans the folding score between said panels.

5. A carton as claimed in claim 1, in which the top edge panel is in part juxtaposed to said shelf member and the aperture in said rear wall panel extends into said top edge panel and spans the folding score between said panels.

6. A carton as claimed in claim 1, in which said front wall panel is provided with cuts and folding scores defining a window opening, and the lamp supporting shelf member is integral with said front wall panel and normally extends into said window opening in the plane of said panel from one of said window-defining folding scores and is foldable inwardly at right angles to said front wall panel upon said folding score so as to span the space between the front and rear wall panels in the erected carton.

7. A carton as claimed in claim 6, in which said front panel is provided with a retaining flap hinged to the other window-defining folding score, said retaining flap being inwardly foldable upon such other folding score to a position above and spaced from said shelf member when the carton is in erected condition, said flap being formed with means for positioning and retaining engagement with the tip of the lamp bulb.

8. A flat-folded carton for packaging incandescent lamps, initially for testing and ultimately for handling, shipment, storage, display and sale, said carton comprising front and rear wall panels, top and bottom edge panels, and a glue flap, said panels and glue flap being defined from each other by longitudinal folding scores and being secured together in collapsed tube form by said glue flap with certain of said folding scores constituting its longitudinal edges and the front wall panel juxtaposed to at least a portion of the rear wall panel, said front wall panel being provided with a pair of spaced vertical cuts and a pair of spaced longitudinal folding scores defining the ends and the upper and lower borders respectively of a window opening, longitudinal cut means in said front wall panel lying substantially medially between said last-named folding scores and terminating at said vertical cuts and serving to divide the material of the front wall panel which lies within the defined window opening into two parts hinged respectively upon the said last-named folding scores to provide respectively a lamp supporting shelf member and a lamp retaining flap, said shelf member being provided with apertures to receive at their edges and frictionally engage the bases of a plurality of lamps, the portion of the rear wall panel which is juxtaposed to said shelf member being provided with a plurality of apertures in substantial register with those of the shelf member and through which the lamp bases may project while engaged in the apertures of the shelf member in position for subjection to test means, the flat-folded carton being erectable to tube form with its front and back wall panels and its edge panels respectively in substantial parallelism, and the shelf member and lamp retaining flap extending inwardly from said front wall panel toward said back wall panel within the window opening in hinged connection upon their respective folding scores, said shelf member when thus disposed lying substantially normal to said front wall panel, whereby the lamps carried by said shelf member are supported thereby within the confines of the erected carton and are viewable through the window opening with their bases extending below said shelf member and the tips of their bulbs engaged by said retaining flap.

9. A carton as claimed in claim 8, in which the edge of the shelf member opposite its folding score hinge is provided with offstanding lug means for spacing and frictional engagement with the back wall panel of the erected carton.

10. A carton as claimed in claim 8, in which the retaining flap is provided with a plurality of apertures which open through the edge of said flap opposite its folding score hinge and are in axial alignment with the apertures of said shelf member, and the edge of the shelf member opposite its folding score hinge is provided with offstanding lug means for spacing and frictional engagement with the back wall panel of the erected carton, such lug means being formed from portions of the material of the front wall panel which lie within the confines of the apertures of the retaining flap.

11. A paperboard blank for a carton for packaging incandescent lamps, initially for testing and ultimately for handling, shipment, storage, display and sale, said blank being provided with cuts and folding scores defining, seriatim, a front wall panel, a top edge panel, a back wall panel, a bottom edge panel, an auxiliary front wall member, a shelf member of an extent between its defining folding scores substantially equal to that of the top and bottom edge panels, and a glue flap, said blank capable of being flat-folded upon the folding scores lying respectively between the top and bottom edge panels and the rear wall panel with the free edge of the front wall panel secured to the outer face of the auxiliary front wall member, the glue flap secured to the inner face of the back wall panel and the shelf member juxtaposed to a portion of the back wall member, said shelf member and the juxtaposed portion of the rear wall panel being provided with mating apertures for through projection of the bases of a plurality of incandescent lamps with such bases supportingly engaged in the apertures of the shelf member, said front wall panel being provided with means defining a window opening which in the flat-folded and secured blank has its lower border in substantial alignment with the folding score between said auxiliary front wall member and said shelf member, the flat-folded and secured carton blank being erectable to squared-up, tubular form upon the folding scores defining the edges of the top and bottom edge wall panels, and the shelf member by virtue of its connection through said glue flap with the back wall panel being automatically adjusted during such erection to a position in parallelism with but spaced from said bottom edge wall panel and carrying with it said lamps into erect position within the confines of the carton.

12. A carton as claimed in claim 11, in which the upper border of the window opening is provided with a retaining flap foldable inwardly of the squared-up carton into position to engage the tips of the lamps supported by the shelf member.

13. The method of packaging incandescent lamps, comprising providing a flat-folded carton having front and rear wall panels and top and bottom edge panels defined from each other by longitudinal folding scores, and a shelf member hinged to one of said panels and disposed in juxtaposition to said rear wall panel, said shelf member and the portion of the rear wall panel juxtaposed thereto being provided with mating apertures, inserting through said apertures the base of an incandescent lamp with said base frictionally engaged in and supported at the aperture of the shelf member and its end extending outwardly of the rear wall panel, erecting the carton upon said longitudinal folding scores to substantially rectangular tube form and during such erection causing inward move-

ment with said shelf member of the end of said lamp base through said rear wall aperture, and rotating said shelf member upon its hinge connection to a position substantially normal to said rear wall panel to thereby locate said lamp within the confines of the tubular carton.

14. The method of packaging incandescent lamps, comprising providing a flat-folded carton having front and rear wall panels and top and bottom edge panels defined from each other by longitudinal folding scores, and a shelf member and a retaining flap hinged to certain of said panels and disposed in juxtaposition to said rear wall panel, said shelf member and the portion of the rear wall panel juxtaposed thereto being provided with mating apertures, inserting through said apertures the base of an incandescent lamp with said base frictionally engaged in and supported at the aperture of the shelf member and its end extending outwardly of the rear wall panel, erecting the carton upon said longitudinal folding scores to substantially rectangular tube form and during such erection causing inward movement with said shelf member of the end of said lamp base through said rear wall aperture, rotating said shelf member upon its hinge connection to a position substantially normal to said rear wall panel to thereby locate said lamp within the confines of the tubular carton, and rotating said retaining flap upon its hinge connection into retaining engagement with a portion of the lamp remote from its base.

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# UNITED STATES PATENT OFFICE

# CERTIFICATE OF CORRECTION

Patent No. 2,851,158 September 9, 1958

Lyman C. Gish et al.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction and that the said Letters Patent should read as corrected below.

Column 3, line 41, for "lamp" read -- lamps --; line 52, for "square-up" read -- squared-up --; column 10, list of references cited, after line 17, insert the following:

FOREIGN PATENTS

216,042 Great Britain - - - May 22, 1924

Signed and sealed this 25th day of November 1958.

(SEAL)

Attest:

KARL H. AXLINE

Attesting Officer

ROBERT C. WATSON

Commissioner of Patents