Sept. 28, 1937. F. A. VOSBURGH, JR 2,094,387

CARTON

Filed June 12, 1936 3 Sheets-Sheet 1

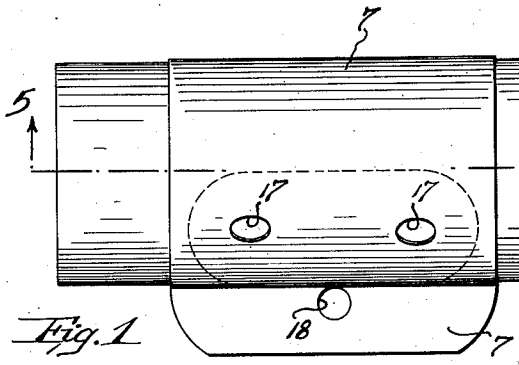


Fig. 1

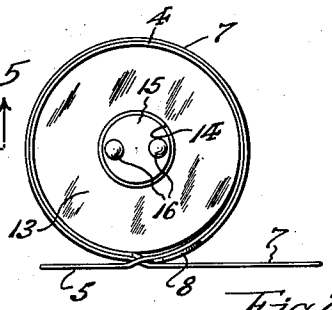


Fig. 2

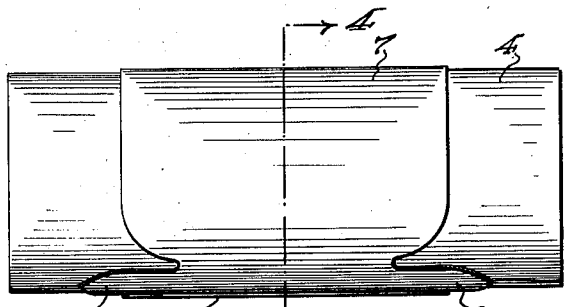


Fig. 3

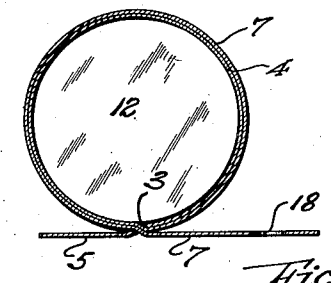


Fig. 4

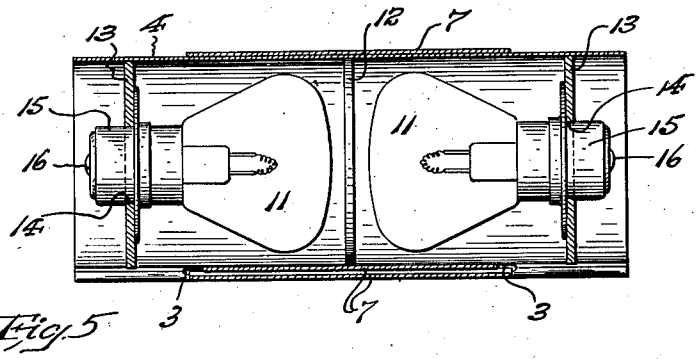


Fig. 5

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CARTON

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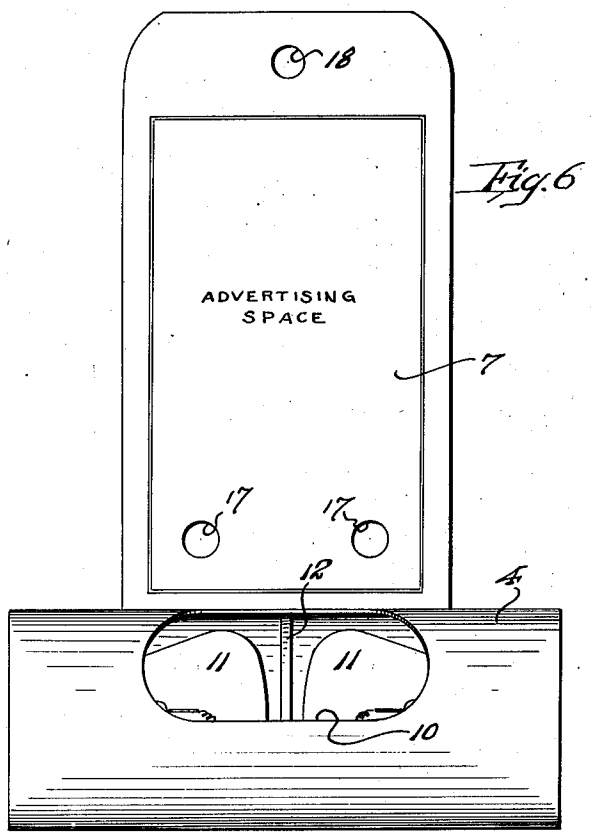


Fig. 6

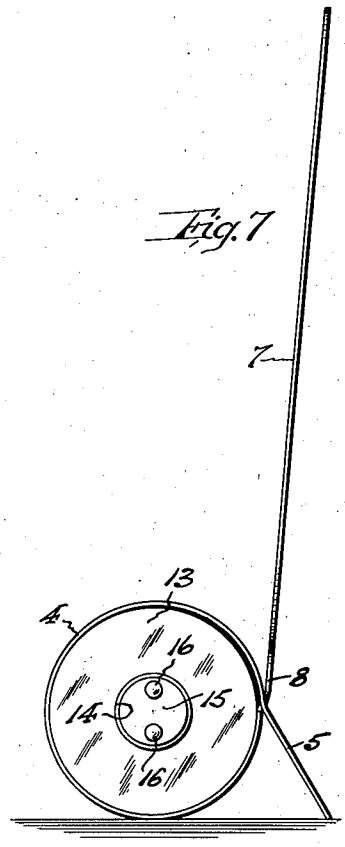


Fig. 7

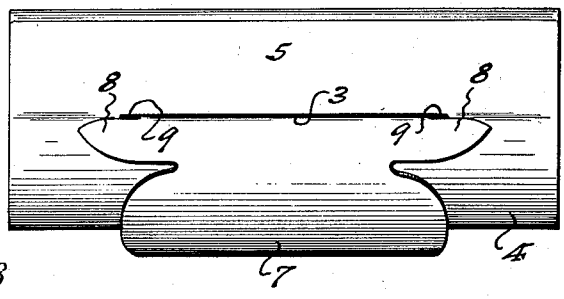


Fig. 8

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CARTON

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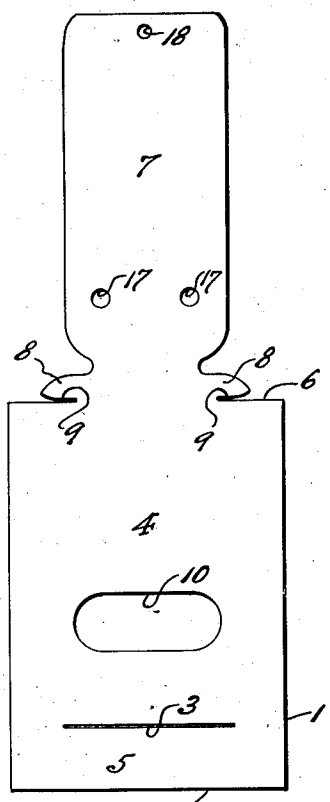


Fig. 9

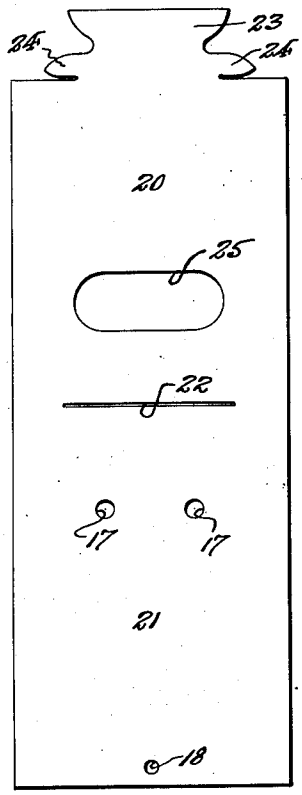


Fig. 10

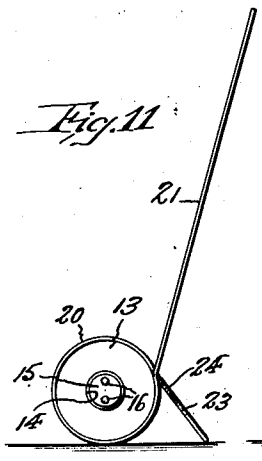


Fig. 11

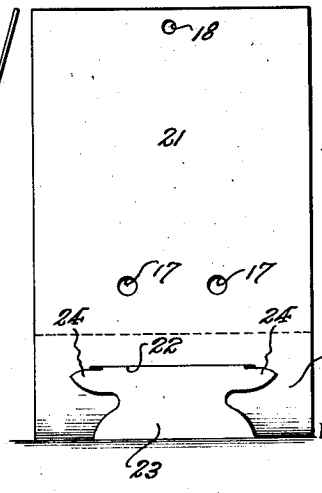


Fig. 12

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Patented Sept. 28, 1937 2,094,387

UNITED STATES PATENT OFFICE

2,094,387

CARTON

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Application June 12, 1936, Serial No. 84,867

8 Claims. (Cl. 206—44)

This invention relates to a novel construction of carton or receptacle especially adapted to enclose incandescent lamp bulbs, radio tubes, or other articles for commercial distribution and handling.

The invention has for an object to provide a carton or receptacle, the body of which is made of a single piece or blank of sheet material capable of being rolled into substantially cylindrical form, the same having self-contained locking features for securing it in such form, ready for service, without necessity for the use of glue, staples or other independent fastening means; the form and arrangement of the novel carton or receptacle being such that a plurality thereof will compactly pack together in larger, quantity containers.

The invention has for another object to provide cartons or receptacles, of the kind mentioned, equipped with means which not only support the enclosed lamps, etc., subject to testing without necessity for the removal of the latter therefrom, but also being adapted to adequately reenforce the carton or receptacle bodies against crushing or collapsing stresses, thereby protecting the lamps, etc. against injury; means also being provided which permits visualization of light from the lamps when the latter are tested.

The invention has for a further object to provide cartons or receptacles adapted, when so desired, for the display of the content thereof; means being also provided for supporting the carton or receptacle bodies upon a counter or for suspending the same, as may be elected; and means being further provided whereby convenient display of advertising matter in connection with each carton or receptacle is attained, said latter means serving also as further reenforcement for the carton or receptacle bodies, when the latter are stored or packed together.

Other objects of this invention, not at this time more particularly enumerated, will appear in the following detailed description of the same.

Illustrative embodiments of the invention are shown in the accompanying drawings, in which:

Fig. 1 is a top plan view of the novel carton or receptacle in fully closed condition; Fig. 2 is an end elevation of the same; Fig. 3 is a side elevation of the same; Fig. 4 is a transverse vertical section, taken on line 4—4 in Fig. 3; and Fig. 5 is a longitudinal vertical section, taken on line 5—5 in Fig. 1.

Fig. 6 is a front elevation of the carton or receptacle opened up for display of its content and associated explanatory or advertising matter; Fig. 7 is an end elevation of the same; and Fig. 8 is a bottom plan view, with the easel or prop portion folded down.

Fig. 9 is a plan view of a blank form which is made of the carton or receptacle, in the form shown by Figs. 1 to 8 inclusive.

Fig. 10 is a plan view of a blank from which is made a modified form of the carton or receptacle; Fig. 11 shows a carton made from the blank of Fig. 10 as opened up for display of its content and associated explanatory or advertising matter; and Fig. 12 is a back view of the same.

Similar characters of reference are employed in the above described views, to indicate corresponding parts.

Referring to Figs. 1 to 8 inclusive, the form of carton or receptacle therein shown is made from a blank such as shown in Fig. 9. This blank is cut or died out from a suitable sheet material, such e. g. as paper, cardboard or like suitably flexible material; and the parts thereof hereinafter described are preferably, although not essentially, integral. The blank comprises a main section 1 having, parallel to and spaced from one end 2 thereof, a transverse slot 3 of less length than the width of said section 1. Said slot 3 divides said section 1 into a carton body portion 4 extending above slot 3, and an easel or prop portion 5 extending below slot 3. Extending longitudinally and centrally from the opposite end 6 of said main section 1, and thus projecting from the carton body portion 4, is an external panel portion 7 of reduced width. Formed in connection with said panel portion 7, adjacent to its juncture with said carton body portion 4 from which it projects, are laterally and oppositely projecting lock tongues 8, the free end portions of which are separated from said body portion 4 by inwardly extending slits 9. The distance between the free extremities of said oppositely projecting lock tongues 8 is in excess of the length of slot 3, but the distance between the inner ends of slits 9 is somewhat less than the length of slot 3. Cut out of the carton body portion 4, at a suitable location between its sides and intermediate end 6 and slot 3, is a window opening 10.

To form the novel carton from the above described blank, said blank is turned endwise upon itself and the free end of panel portion 7 is threaded and drawn through said slot 3, and by suitable lateral shifting operations lock tongues 8 are also passed through the slot 3 to the exterior side of body portion 4, whereupon the slits 9 will embrace the material beyond the ends of the slot 3. By this manipulation, body portion 4 is rolled into an open ended cylindrical carton body, the meet-

ing ends of the body portion 4 being interlocked against separation by the engagement of the lock tongues 8 through slot 3 (see Fig. 8), thus retaining the body portion in the aforesaid cylindrical shape. Panel portion 7 is thereupon wound externally around the cylindrical carton body thus obtained, and its free end portion is again inserted through slot 3 (see Figs. 2 and 4), to thereby retain said panel portion in enveloping relation to the carton body 4; in which position it not only aids in reenforcing and strengthening the body portion 4, but also serves as a cover for window opening 10.

In the drawings, the novel carton or receptacle is shown supplied with a content comprising two incandescent electric lamp bulbs 11, although it will be obvious that the carton or receptacle is equally adapted to enclose but a single bulb, radio bulb or other article adapted for insertion and support therein. When employing the carton to enclose the two bulbs 11, a center disk 12 of comparatively heavy cardboard, or of any other relatively rigid material, is inserted within the carton interior to extend transversely across such interior midway between the carton ends. The perimeter of said disk 12 frictionally engages the inner wall surfaces of the cylindrical carton body 4, so that the same is thereby held in place. Said disk 12 not only reenforces and supports the carton body walls against crushing or collapsing stresses, but also forms a light impervious partition between the enclosed lamps 11; an advantage the desirability of which will later be referred to. Adapted for insertion within the respective open ends of the cylindrical carton body 4 are end disks 13. These end disks 13 are likewise made of comparatively heavy cardboard or other relatively rigid material, and are transversely disposed with their perimeters frictionally engaging the inner wall surfaces of the cylindrical carton body 4, whereby the same are held in place and also serve to further reenforce and support the carton body walls against crushing or collapsing stresses. Said end disks 13 are provided with central perforations or openings 14 sized to receive therethrough and frictionally engage the base portions 15 of the lamp bulbs 11, whereby not only are the lamps firmly supported within the carton interior, but the contacts 16 thereof, which are carried at the ends of said base portions 15, are exteriorly exposed through the open ends of the carton body, and thus are accessible for engagement, through said open ends, by the terminals of a suitable lamp testing means. Said panel portion 7 is provided with suitably disposed small ports or openings 17 which, when the panel portion is arranged in initial enveloping relation around the carton body 4, and across the window opening 10 of the latter, are adapted to register over said window opening respectively at points on opposite sides of said central partition disk 12, so that when either lamp is tested, the light emitted therefrom may be seen through a corresponding port or opening 17. Owing to the presence of the central light impervious partition disk, when a given lamp is tested the light emitted therefrom cannot gain access to the enclosure containing the other lamp, and consequently testing errors are easily avoided, and each lamp may be independently tested without confusing one with the other.

When the novel cartons are to be assembled in quantity to be packed in a large quantity container, or to be stored, as on a store shelf, the easel or prop portion 5 and the free end of panel portion 7 may be folded contiguous to the exterior surface of the cylindrical carton body, and consequently compact assembly of the cartons in groups or piles is easily accomplished. When a single carton is removed and laid on a counter, it will not roll, with risk of falling and consequent injury to the lamps contained therein, since, when free of restraint, said easel or prop portion 5, and said free end of said panel portion 7 will project in such manner as to form a more or less flat footing or base for the stationary support of the carton (see Figs. 2 and 4).

If it is desired to utilize a carton for displaying the contained lamps, and also for displaying explanatory or advertising matter in connection therewith, the panel portion 7 is disengaged from slot 3, and the same is unwound from enveloping relation to the carton body exterior, and is extended lengthwise in upstanding position, as shown in Figs. 6 and 7, and at the same time easel or prop portion 5 is outswung to operative position (see Fig. 7), so that the carton is supported against rolling, while the panel portion extends upwardly behind the same. When the carton is thus disposed, its window opening 10 will be uncovered to expose the interiorly disposed lamps 11 to view, and, at the same time, any explanatory or advertising matter printed upon the inner surface of panel portion 7 will likewise be exposed to view. In some cases, instead of thus standing the carton on a counter, show-case top or like place of support, it may be desired to suspend the same against a wall or in similar disposition. To allow this, a suspension perforation 18 is provided in panel portion 7 adjacent to its free end which may be engaged over a hook, peg or other suitable means of suspension support.

In Figs. 11 and 12 there is shown a somewhat modified form of the novel carton or receptacle, the arrangement of which is such as to provide a larger area of advertising display space. This modified form of the carton receptacle is produced from the blank of suitable sheet material shown in Fig. 10. This blank comprises a body portion 20 and an external panel portion 21 extending therefrom, a transverse slot 22 being provided between said body and panel. Extending from the free end of said body portion 20 is an easel or prop portion 23, in connection with which are formed, adjacent to its juncture with said body end, oppositely projecting lock tongues 24. The body is provided with a suitably disposed window opening 25, and the panel with the sight openings 26 and suspension opening 27, if desired. In the formation of the carton or receptacle from the thus modified blank, the body is rolled into cylindrical form in such manner that the easel or prop portion 23 and lock tongues 24 may be passed through slot 22, thereby locking the body in the desired tubular cylindrical form. The lamps 11 and reenforcing partition and holding disks 12 and 13 are inserted in the formed body 20 in the same manner and relations already above described. The panel 21 may be initially wrapped around the body 20 and its free end tucked beneath the easel or prop 23; when it is desired to use the carton for display purposes, said panel portion 21 may be unfolded and erected, and the easel or prop extended as shown in Figs. 11 and 12. It will be noted that, in this modified arrangement, the panel 21 furnishes a considerably enlarged area of advertising space.

It will be obvious that various modifications of

arrangement and shape of the parts, other than those above mentioned by way of illustration, may be made within the spirit and scope of this invention; and, in fact, many apparently widely different embodiments of this invention could be made without departing from the scope thereof as defined by the following claims. It is therefore intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

I claim:—

1. A carton comprising a body having a transverse slot, a member extending from an end of said body, laterally and oppositely directed lock-tongues projecting from said member adjacent to its juncture with said body, said body being turned on itself into a tubular formation and secured in such form by the engagement of said member and the lock-tongues through said slot, partitioning and reenforcing disks engaged within and across the interior of the thus formed body, and a second member extending from the opposite end of said body beyond said slot, said members being adapted to be initially folded externally over the formed body subject to unfolded extension therefrom whereby one may be erectly projected from the body for display purposes and the other angularly extended from said body to serve as a prop.

2. A carton comprising a body having a transverse slot, a member extending from an end of said body, laterally and oppositely directed lock-tongues projecting from said member adjacent to its juncture with said body, said body being turned on itself into a tubular formation and secured in such form by the engagement of said member and the lock-tongues through said slot, partitioning and reenforcing disks engaged within and across the interior of the thus formed body, said body having a window opening through which the content enclosed therein may be viewed, and a second member extending from the opposite end of said body beyond said slot, one of said members being adapted to be initially folded around the formed body in closing relation to said window opening.

3. A carton comprising a body having a transverse slot, a member extending from an end of said body, laterally and oppositely directed lock-tongues projecting from said member adjacent to its juncture with said body, said body being turned on itself into a tubular formation and secured in such form by the engagement of said member and the lock-tongues through said slot, partitioning and reenforcing disks engaged within and across the interior of the thus formed body, said body having a window opening through which the content enclosed therein may be viewed, and a second member extending from the opposite end of said body beyond said slot, one of said members being adapted to be initially folded around the formed body in closing relation to said window opening, said latter member having an apertured portion to register with said window opening when the member is closed thereover.

4. A carton for the purposes described, comprising a body having a transverse slot, a member extending from an end of said body, laterally and oppositely directed lock-tongues projecting from said member adjacent to its juncture with said body, said body being turned on itself into a tubular formation and secured in such form by the engagement of said member and lock-tongues through said slot, partitioning and reenforcing disks engaged within and across the interior of the thus formed tubular body, at least one of said disks being located adjacent an open end of said tubular body and having a central opening to receive and externally expose the contact base of a lamp bulb enclosed within said tubular body, said tubular body having a window opening, and a second member extending from the opposite end of said body beyond said slot, one of said members being adapted to be initially folded around the tubular body in closing relation to said window opening, said latter member having a light emitting apertured portion to register with said window opening when the member is closed thereover.

5. A carton for the purposes described, comprising a body having a transverse slot, a member extending from an end of said body, laterally and oppositely directed lock-tongues projecting from said member adjacent to its juncture with said body, said body being turned on itself into a tubular formation and secured in such form by the engagement of said member and lock-tongues through said slot, partitioning and reenforcing disks engaged within and across the interior of the thus formed tubular body, at least one of said disks being located adjacent an open end of said tubular body and having a central opening to receive and externally expose the contact base of a lamp bulb enclosed within said tubular body, said tubular body having a window opening, and a second member extending from the opposite end of said body beyond said slot, one of said members being adapted to be initially folded around the tubular body in closing relation to said window opening, but subject to unfolded and window disclosing disposition relative to said body, and the other member being subject to angular extension from said body to serve as a prop, said window closing member having a light emitting apertured portion to register with said window opening when in closed relation thereto.

6. A carton for the purposes described, comprising a body having a transverse slot, an external panel member of less width than said slot extending from an end of said body, laterally and oppositely directed lock-tongues projecting from the sides of said panel member adjacent to the juncture of the latter with said body, said body being turned on itself into a tubular formation and secured in such form by the engagement of said panel member and lock tongues through said slot, an imperforate partition disk engaged centrally within and across the interior of said tubular body, perforate lamp supporting disks engaged across the interior of said tubular body adjacent each open end thereof and adapted to receive and externally expose the contact bases of lamp bulbs disposed within said tubular body respectively on opposite sides of said partition disk, said tubular body having a window opening through which the bulb ends of said enclosed lamps may be viewed, said panel member being adapted to be initially folded around said tubular body so as to close said window opening and being secured in such condition by insertion of its free end portion through said slot.

7. A carton as defined by claim 6, wherein said panel member is provided with light emitting apertures to register with said window opening respectively at points adjacent to the opposite

sides of said partition disk when said panel member is closed over said window opening.

8. A carton comprising a slotted body, a member extending from an end of said body, lock tongue means carried by said member, said body being turned on itself into a tubular formation and secured in such form by the engagement of said lock tongue means with its slotted portion, a second member extending from the opposite end of said member beyond its slotted portion, one of said members being adapted to be folded externally around the formed body subject to unfolded extension therefrom and the other member being adapted to be angularly extended from said formed body to serve as a prop.

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