

Aug. 31, 1948.

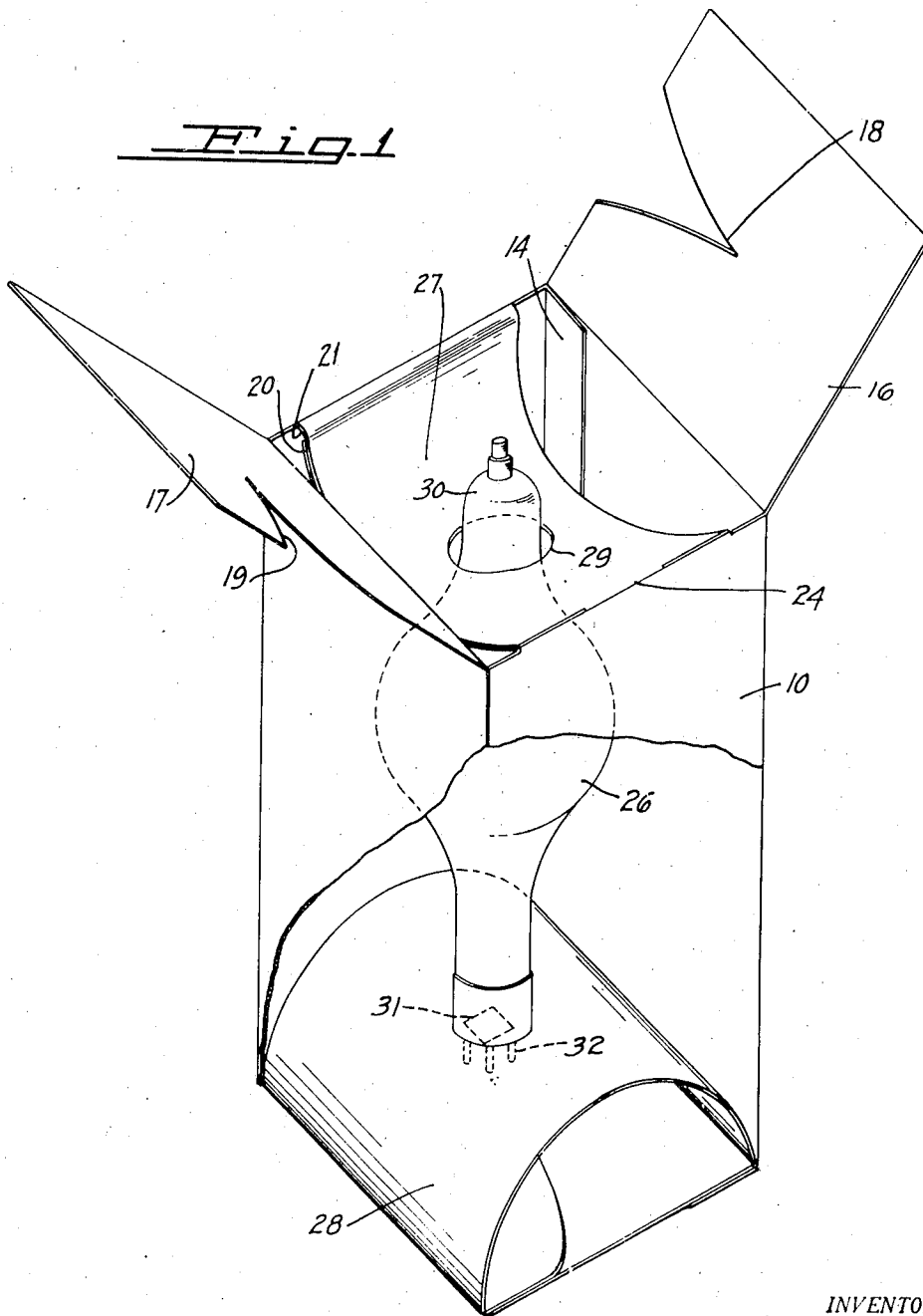
E. STONE

2,448,401

CARTON HAVING INTEGRALLY FORMED CUSHIONING MEANS

Filed Oct. 20, 1944

2 Sheets-Sheet 1



INVENTOR.
Edward Stone

BY *Naylor and Lammagne*

ATTORNEYS

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E. STONE

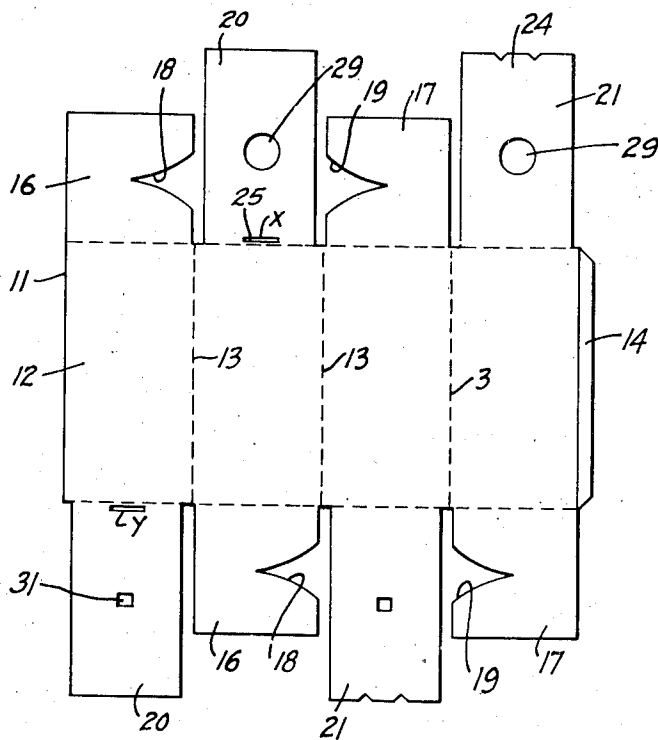
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Fig. 2



INVENTOR.
Edward Stone

BY *Naylor and Lassagne*

ATTORNEYS

UNITED STATES PATENT OFFICE

2,448,401

CARTON HAVING INTEGRALLY FORMED CUSHIONING MEANS

Edward Stone, San Francisco, Calif.

Application October 20, 1944, Serial No. 559,561

2 Claims. (Cl. 229—39)

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The present invention relates to a carton for radio tubes and other fragile articles.

One of the principal objects of the invention is to provide a carton for radio tubes and like fragile articles which will furnish a maximum degree of protection against breakage or damage in the handling of the articles incident to storage and shipment.

Another object of the invention is to provide a safety carton which can be inexpensively manufactured from cardboard or similar lightweight packaging materials, and which may be quickly and easily assembled. A further object of the invention is the provision of a carton having the above-described characteristics and which may be made from a one-piece blank so designed as to reduce to a minimum the loss of raw material when the design is cut from a stock sheet. It is also an object of the invention to provide a safety carton furnishing a resilient support for the article to be packaged whereby protection may be afforded the delicate contents of radio tubes and like articles in the event that the same are roughly handled during shipment.

Other objects of the invention will become apparent as this specification proceeds and the novel aspects thereof will be pointed out in the appended claims with the requisite degree of particularity.

In the drawings forming a part hereof, wherein in one preferred form of the invention is illustrated,

Figure 1 is a perspective view of the carton embracing the invention, with parts broken away for sake of clarity, and

Figure 2 is a plan view of a blank of cardboard from which the carton of Figure 1 may be formed.

As indicated in Figure 1, the carton 10 is a four-sided boxlike structure made up from the central portion 12 of the cardboard blank 11 shown in Figure 2, wherein the wall panels are defined by the vertically extending score lines 13. This shell may be retained in its boxlike form by any conventional means, such as a glue flap 14, formed as an extension on one edge of the central portion 12 of the blank 11, and to be secured to the opposite edge of the element 12. The use of the glue flap is a well-known expedient in the art and is preferred although there are other ways of joining the edges to form the box, such as by stapling and the like.

The box shell 10 is additionally provided at its two ends with closure flaps 16 and 17, formed as extensions of alternate wall panels of the blank 11, and provided with the oppositely arranged interlocking slits 18 and 19, respectively.

The resilient support for the radio tube or other fragile article to be packed is provided by forming elongated extensions 20 and 21 on wall panels of the blank 11, alternating with the

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panels carrying the closure flaps 16 and 17. In order to facilitate assembly of the box 10 and access to the contents thereof, the widths of the flaps 20 and 21 are reduced in comparison to the wall panels of the blank 11. The extension flaps 20 and 21 are arranged in pairs at opposite ends of the box 10 and are adapted to be overlapped and interlocked by such means as a locking tab 24 disposed at the outer edge of extension 21 and a slot 25 arranged in extension panel 20 adjacent its inner end, to form the inwardly bowed tube supports 27 and 28.

It will also be noted that the pairs of complementary panels 20 and 21, at opposite ends of the box 10, are arranged at ninety degree angles to each other (see Figure 1), to provide two-way resiliency in the supports 27 and 28 for the tube 26.

In order to positively engage and suspend the radio tube 26 within the carton 10, the inwardly bowed supports 27 and 28 are provided with apertures characteristic of a portion of the radio tube to be received thereby. For example the bowed support 27 is provided with a circular aperture 29 to receive the crown end 30 of tube 26, whereas the bowed support 28 is provided with a square aperture 31 to receive the contact pins 32 of the butt end of tube 26.

The assembly of the box should be readily understood from the foregoing, but for sake of completeness may be described as follows: When the box shell 10 has been set up by attachment of glue flap 14, the extension flaps 20 and 21, at either end of the box, are folded and interlocked in inwardly bowed form by the locking tab 24 and slot 25. The selected end of the tube 26 is then inserted in the aperture 29 or 31, as the case might be, and the extension flaps 20 and 21 at the opposite end of the box are then similarly joined to form the other support engaging the opposite end of the tube. Following this the closure flaps 16 and 17, for the respective ends, are interconnected to complete the package.

It will be appreciated that access to the box, to permit inspection or removal of the contents, can be had upon simple disengagement of the closure flaps 16 and 17 and support flaps 20 and 21 at one end of the box, leaving the opposite end set up for re-packaging of the article.

It has been observed that even the most sensitive radio tubes can be safely packed in the container forming the subject matter hereof, even though the package and contents be subjected to unusually rough treatment. When tossed about in drop tests, shock such as would normally render a radio tube useless, is absorbed by one or the other of the resilient supports 27 or 28. Moreover, the shock absorbing characteristic of the carton is increased in substantial degree by the arrangement of the supports at 90° to each

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other, as this presents an over-all springy support capable of absorbing a blow from either of the sides as well as the ends of the package.

While I have shown and described a preferred form of the device, it will be understood that the principles of the invention may be employed in other forms, and for this reason full protection is desired in accordance with the scope of the appended claims.

The invention claimed is:

1. A carton for fragile articles comprising, a box shell, closure means for the ends of the shell, extension flaps integral with the walls of the shell arranged in complementary pairs at opposite ends of the shell, the pairs of extension flaps at the respective ends of the shell being disposed at right angles to each other, and means for interconnecting the complementary extension members to form inwardly projecting bowed and resilient supports for the article to be packed.

2. A carton for fragile articles comprising, a box shell, closure means for the ends of the shell, extension flaps integral with the walls of the shell arranged in complementary pairs at opposite ends of the shell, means for interconnect-

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ing the complementary extension members to form inwardly projecting bowed supports for the article to be packed, the pairs of said complementary extension members being disposed at right angles to each other.

EDWARD STONE.

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