

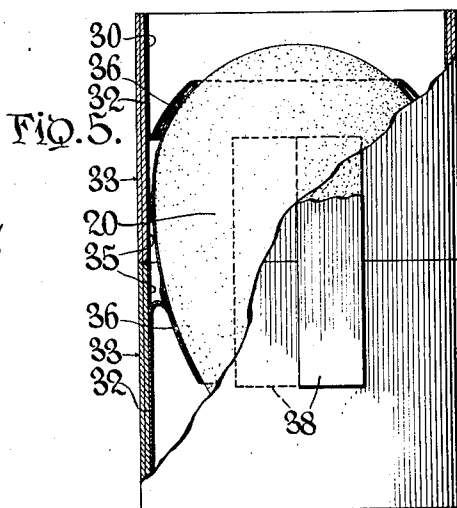
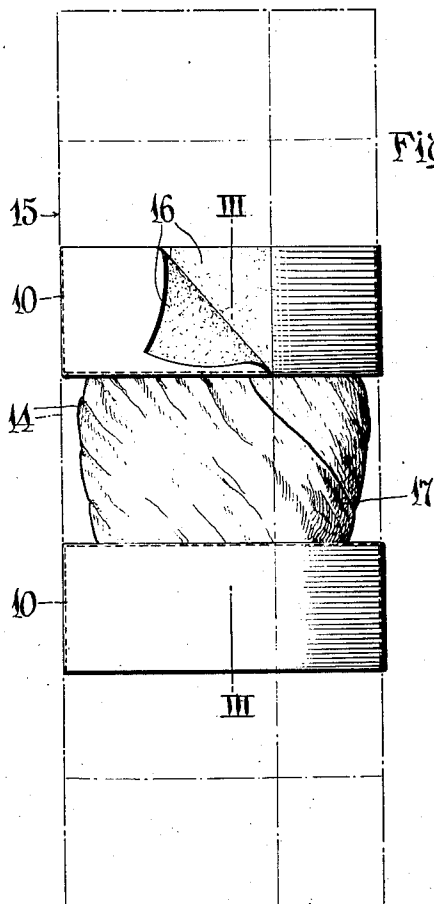
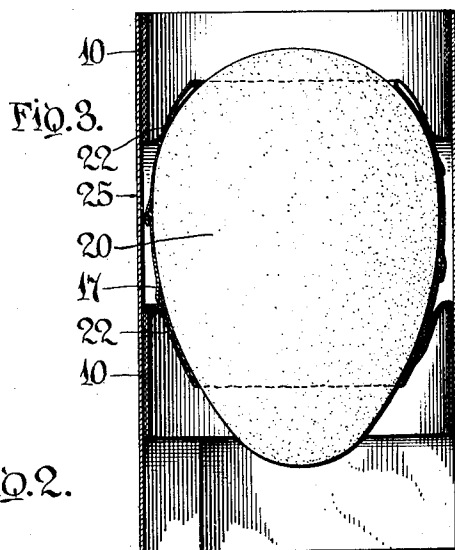
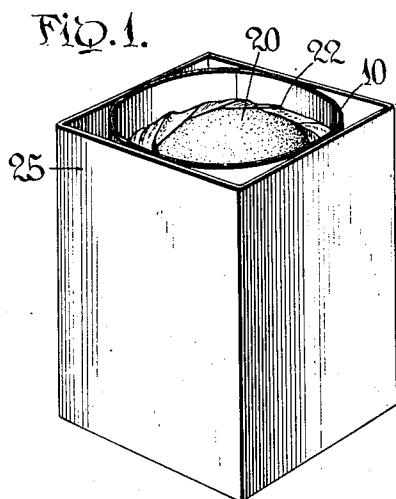
Sept. 29, 1936.

A. J. DREUX

2,055,968

SHIPPING CONTAINER

Filed July 12, 1935



INVENTOR
Alexander J. Dreux,
BY
Beau, Brooks, Buckley & Beau,
ATTORNEYS

UNITED STATES PATENT OFFICE

2,055,968

SHIPPING CONTAINER

Alexander J. Dreux, Pittsburgh, Pa.

Application July 12, 1935, Serial No. 31,063

7 Claims. (Cl. 229—39)

This invention relates to containers and it has particular relation to an article-packaging container for protecting fragile articles against injury.

5 In the transportation and commercial handling of articles, such as electric light bulbs, other glassware, eggs, or other fragile articles, it is important to pack these articles in such manner that they can be protected against injury which might otherwise occur as a result of striking other articles, falling, or being thrown or dropped in handling. These containers, in many instances, are employed for packaging relatively inexpensive articles which are customarily packed individually, and hence, it is important that the containers be inexpensive, as well as efficient in protecting the articles.

One of the principal features of this invention resides in the provision of a container which insures cushioning or yielding action of article-supporting parts upon subjecting the container to jolts, shocks, or rough handling, and yet is very simple and inexpensive in construction. The articles are actually suspended in cradle-like cushioning portions of shock-absorbing material which also adequately space the articles from the container walls and maintain the spaced relation until the article is unpacked.

Referring to the drawing:

30 Fig. 1 is a perspective of a container embodying the invention;

Fig. 2 is a side elevation of a tubular body for containing and cushioning an article packed therein;

35 Fig. 3 is a vertical section taken substantially along the line III—III of Fig. 2; and

Fig. 4 is a fragmentary plan of the structure shown in Fig. 1; and

40 Fig. 5 is a view partially in section and partially in elevation, illustrating another form of construction.

In practicing the invention, a plurality of rings 10 of suitable material, such as one or more plies of cardboard, relatively stiff paper, or the like, are spaced axially and a sheet of flexible material 14, which can be in the form of tissue or other paper, fabric, or like material, is wound or wrapped about the rings to form a tubular body 15. Overlapping edge portions 16 of the wound or wrapped flexible material are secured by means of paste, glue, cement, or the like; or the ends of the flexible material can extend in opposite directions beyond the rings 10 and then can be stuffed into, or folded back over, the end portions of the rings for securing without pasting.

This assembly provides an article-containing central portion 17 that is located between the end rings 10 and is freely flexible and twistable.

It is not necessary that the flexible portion 17 between the rings 10 be cemented with respect to its overlapping portions so long as the ends of the tubular body are secured to the rings. While the drawing illustrates a structure in which the end portions 16 of the flexible material overlap only slightly, it is to be understood that the sheet of material can be wound one or more convolutions about the rings, depending upon the amount of cushioning material desired in the section 17.

An article 20 which is to be protected in the package is placed in the tubular body 15 between the rings 10 by insertion through one of the latter, and then by holding the ends of the tubular body and twisting it, a plurality of twisted portions 22 are formed. The article 20 is embraced between the twisted portions, which may be said to constitute constricted cushioning portions with respect to the original size of the tubular body, and the rings at the ends of the tubular body then serve as spacing supports. These twisted, constricted cushioning portions suspend the article, as well as space it axially or inwardly from the edges of the rings 10. These twisted cushioning portions 22 also space the article in cushioned relation inwardly with respect to the over all circumference of the tubular body.

A cover or carton 25 is provided for receiving the assembled article and tubular body and the entire assembly completely insulates and protects the article against shocks or contact with other articles from all directions.

If desired, a sheet of flexible material 30 (Fig. 5) can be disposed and secured, as indicated at 32, inside longer rings 33, and adjacent portions 35 of the opposed rings can be free from the flexible material, that is, not cemented thereto. Thus the beginning of each twisted cushioning portion 36 will be at a location intermediate the axial ends of each ring. Upon twisting the tubular body thus formed opposed edges of the rings will be drawn closely together, and thus, a complete article-protecting package is devised without utilizing a cover. One or more strips of adhesive or other material 38, can be applied to the rings to maintain them in their closely assembled relation and the twisted portions in their properly constricted article-cushioning relation.

Although only two forms of the invention have been shown and described in detail, it will be apparent to those skilled in the art that the

invention is not so limited, but that various changes can be made therein without departing from the spirit of the invention or from the scope of the appended claims.

5 I claim:

1. A container for fragile articles comprising a tubular body of flexible material, said body portion having a pair of relatively stiff portions spaced axially thereof whereby the flexible portion is twistable to enclose an article between 10 twisted cushioning sections, and the stiff portions constituting protecting supports for the article-carrying twisted portions.

2. A container for fragile articles comprising a 15 tubular body of flexible material, relatively stiff rings incorporated in opposite end portions of the tubular body, said flexible material having an article-containing intermediate section, and portions of the body between the article containing 20 section and each ring being constricted to support the article between constricted portions.

3. A container for fragile articles comprising a tubular body of flexible material, relatively stiff 25 rings incorporated in opposite end portions of the tubular body, said flexible material having an article-containing section between the rings, portions of the flexible body between the article-containing section and each ring being constricted to support the article, and a cover for 30 enclosing the tubular body.

4. A container for fragile articles comprising a tubular body of flexible material, a pair of cardboard sections incorporated in opposite end portions of the tubular body, said flexible material 35 having an article-containing section between said cardboard sections, portions of the flexible body

between the cardboard sections being in twisted form to constrict the body and provide cushioning supports for the article.

5. A container for fragile articles comprising a tubular body of flexible material, relatively stiff 5 sections incorporated in opposite end portions of the tubular body, said body portion having an article-containing intermediate section, portions of the body between the article-containing section and each relatively stiff portion being constricted to support the article in cushioned relation, said stiff sections spacing the constricted 10 portions from the ends of said body and providing supports therefor.

6. A tubular container comprising a plurality of 15 ring-like sections spaced axially of one another, a sheet of material in wound relation constituting a tubular configuration, said spaced ring-like sections being connected to the tubular sheet material, a portion of the sheet material between 20 the ring-like sections having constricted portions for receiving and cushioning an article.

7. A container for fragile articles comprising a substantially tubular body, a portion of the tubular body being more flexible than other portions 25 thereof, the more flexible portion of the body including a twistable section and in its twisted relation normally embracing and cushioning an article to be protected, parts of said more flexible portion of the tubular body constituting spacing 30 and suspending structure carrying the article-embracing section in spaced relation to the less flexible structure of the body and inside said less flexible structure.

ALEXANDER J. DREUX. 35