

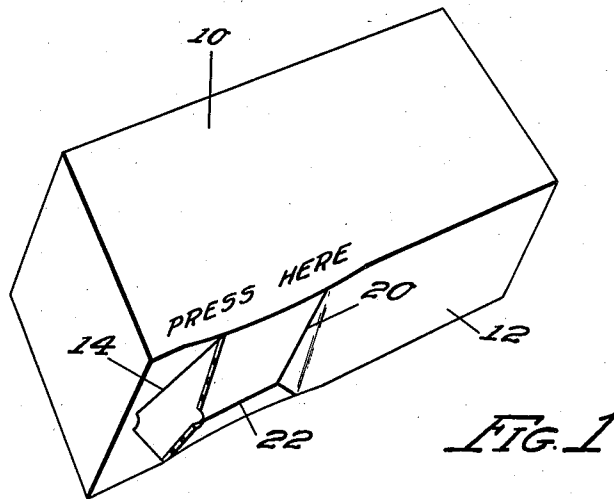
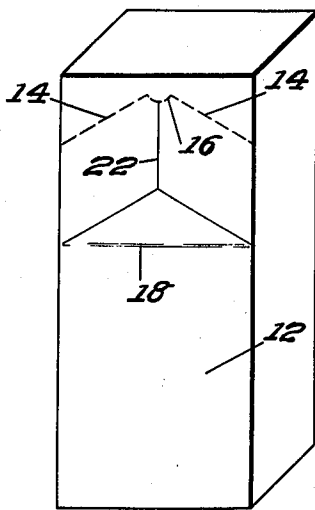
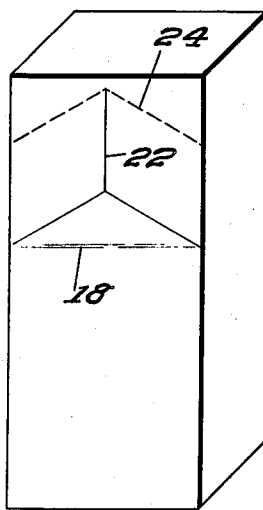
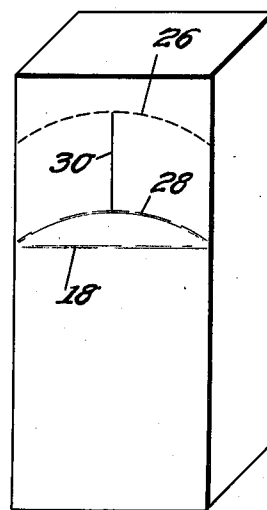
April 29, 1930.

A. J. GANZ

1,756,150

READY OPENING AND SELF SEALING CARTON

Filed Nov. 14, 1928



ALBERT J. GANZ
INVENTOR

PER
Miner and Fike
ATTORNEYS

UNITED STATES PATENT OFFICE

ALBERT J. GANZ, OF LOS ANGELES, CALIFORNIA

READY-OPENING AND SELF-SEALING CARTON

Application filed November 14, 1928. Serial No. 319,407.

This invention relates to improvements in cartons, cardboard boxes and the like, and has, for one of its principal objects, the provision of a carton or package adapted for containing granular material, such as, cereals, coffee, tea, salt and similar items and which is so constructed that the contents may be readily removed therefrom in any desired quantity.

of substantially 120°, but not quite meeting at their apex, at which location there is provided a downwardly curved heavily scored, perforated, or partly cut line as shown at 16. These scores, perforations, or cuts are formed in the carton to such a depth and in such a manner that the package may be readily opened along these lines by comparatively light pressure of the fingers or the like.

One of the important objects of this invention, is the provision, in a carton, particularly for cereal products and the like, of means for economically and quickly removing any portion of the contents without disturbing or marring the appearance of the package and, which further provides means for automatically closing and again sealing the package after the desired quantity of its contents have been removed.

Associated with these heavily scored or partly cut lines 14 and 16, is a number of other scored lines, which, however, are not so deeply made and which are illustrated at 18, 20 and 22 in Figure 2, being shown in lighter unbroken lines so as to distinguish from the more heavily scored or partly cut lines 14 and 16.

Still another and further important object of this invention, is to provide a cardboard carton or package, which, while possessed of the ready-opening and self-sealing features, will at the same time be economically constructed and capable of ready manufacture in considerable quantities with a minimum expenditure of material and labor.

The scores may be replaced as stated by lines cut entirely through the material, the parts being held in place by certain uncut spaces, this being known as a "nicked" or perforated cut. The scores 20 and 22 are also designated as heavy cut scores while the scores 18 are merely crease scores.

Other and further important objects of this invention will be apparent from the disclosures in the accompanying drawings and following specification.

The crease score line 18, extends directly across the package, and is parallel to the top and bottom edges, while the scores 20 join the ends of the line 18 at their outer ends and are themselves formed parallel to the deeper scores 14 and 16, having, however, a common meeting point at the middle of the sides of the carton. At this point begins the scored line 22, extending upwardly and longitudinally along the middle of the face 12, and this scored line 22 joins the lowest central portion of the deeply scored curve 16.

The invention, in a preferred form, is illustrated in the drawings and hereinafter more fully described.

In the drawings:

It will be obvious that after the heavily scored, perforated, or partly cut lines 14 and 16 are punched out and an opening is made, a pressure upon the sides of the package, particularly at the points indicated by the words, "Press here" in Figure 1, will result in a bulging outward or opening of those portions of the sides 12, included between the lines 14, 16, 18, 20 and 22, thereby, as illustrated in Figure 1, allowing the contents to flow outwardly in an easily controlled stream. As soon as the pressure is released, the natural resiliency of the cardboard, aided by the fact that the scores 18, 20 and 22 are not very deep, will re-

Figure 1 is a perspective view of the improved self-sealing carton of this invention, showing the same in operation.

Figure 2 is a side view of the same.

Figure 3 is a view similar to Figure 2, illustrating a slight modification.

Figure 4 shows still another modification as shown in the drawings:

The reference numeral 10 indicates generally the improved carton of this invention, one face or side of which is provided with certain heavily scored, perforated, or partly cut lines, preferably of the configuration shown at 14, in Figure 2, the two lines 14, approaching each other upwardly at an angle

of substantially 120°, but not quite meeting at their apex, at which location there is provided a downwardly curved heavily scored, perforated, or partly cut line as shown at 16. These scores, perforations, or cuts are formed in the carton to such a depth and in such a manner that the package may be readily opened along these lines by comparatively light pressure of the fingers or the like.

sult in an immediate closing of the opening, thereby resealing the package against air, moisture, dust and any other foreign or undesirable elements.

In the modification illustrated in Figure 3, the scores 14 and 16, are replaced by scores 24, formed at an angle to each other of approximately the same extent as that formed by the lines 14, but the depression 16, is omitted. At this point, it is explained that this depression 16 is provided for insuring a thin and more easily controlled stream of small grained materials, such as salt, sugar or the like, while in packages used for cereals and larger and lighter grained goods, this depression is not so necessary.

It will be obvious that other forms and adaptations of this device may be used, as, for example; by providing a heavy scored, perforated, or partly cut curved line as shown at 26 in Figure 4, this being preferably, parallel to a lighter scored line 28, the two having their middles joined by a longitudinal still more lightly scored line 30. This construction is also preferably provided with the transverse crease line 18.

It will be evident that herein is provided a package which is particularly adaptable for food stuffs and any other or similar perishable products; and which combines in a simple construction, means for adequately protecting the contents, while at the same time an immediate, ready and convenient access is provided to the goods themselves.

I am aware that many changes may be made and numerous details of construction varied throughout a wide range without departing from the spirit of this invention, and I therefore do not purpose limiting the patent granted hereon, otherwise than as necessitated by the prior art.

I claim as my invention:

1. A ready-opening and self-sealing carton, including in combination, a top, sides, and bottom; one of the sides provided with a plurality of heavily scored lines adapted to be converted into self-closing cuts for use, and a number of lightly scored lines adapted to provide bends but not cuts, said heavily scored lines being at angles to the side edges of the carton and converging adjacent to the middle of said side, and one of the lightly scored lines parallel to the side edges of the carton and joining the said heavily scored lines.

2. A ready opening and self-sealing carton, including in combination, a top, sides and bottom; one of the sides provided with a plurality of cuts, said cuts being at angles to the side edges of the carton and converging adjacent to the middle of the side, and a plurality of scored lines in addition to the cuts, all adapted to provide an opening in the side of the carton upon the application of pressure to the face thereof.

3. A ready opening and self-sealing car-

ton, including in combination, a top, sides and bottom; one of the sides provided with a plurality of partly cut lines, said lines being at angles to the side edges of the carton and converging adjacent to the middle of the said side, and additional scored lines, certain of said scored lines being more heavily indented than others and all adapted to provide a self-closing opening in the side of the carton upon the application of punching pressure thereto, the lighter of said scored lines being provided for increasing the capacity and the operativeness of said opening, without actually penetrating the material of the carton.

4. A ready opening and self-sealing carton, including in combination, a top, sides and bottom; one of the sides provided with a plurality of heavily scored lines adapted to be converted into self-closing cuts for use, said heavily scored lines comprising nicked perforations and being at angles to the side edges of the carton and converging adjacent to the middle of the side, and certain other lines more lightly scored, and parallel respectively to the side and bottom edges of the carton, together with a downwardly curved scored line joining the lightly scored straight lines.

In testimony whereof I affix my signature.

ALBERT J. GANZ.