

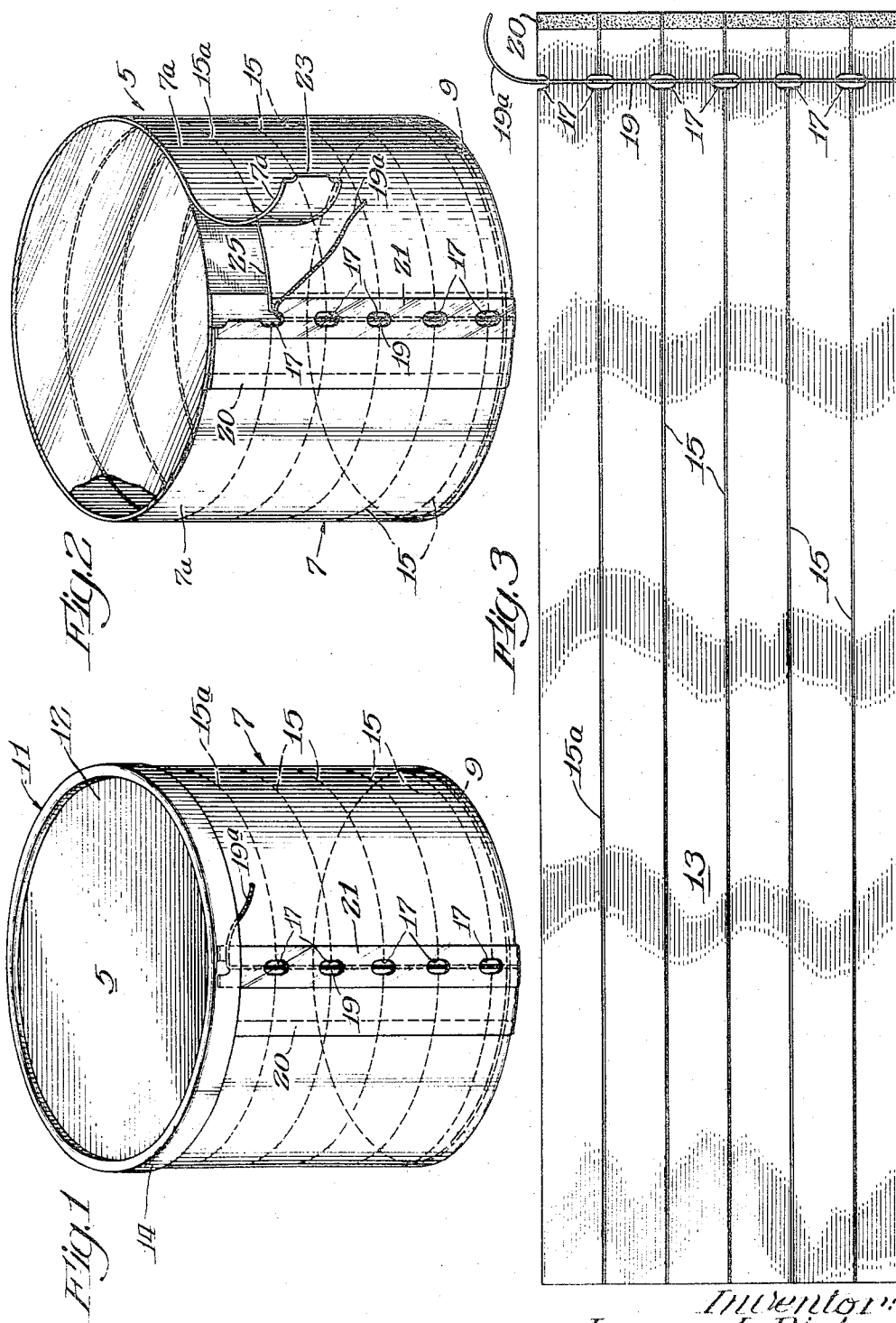
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CONTAINER

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CONTAINER

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The present application relates generally to containers, and is particularly directed to an improved form of container for food products, such as cheese, which are usually consumed over an extended period and which require protection against the air and outside contamination over such extended period of use, in order to maintain the product in an edible condition.

The packaging of cheese and similar food products, which are rather difficult to maintain in an edible condition after the sealed package has been opened and the cheese is exposed to the air for an extended period of time, presents some very difficult problems. The consumer desires to keep a reasonable supply on hand at all times, but generally finds that, unless a package of cheese or the like is used up rather readily, it becomes dried out to the point where it may no longer be edible.

The principal objects of the present invention are to provide an improved container which affords access to less than the entire contents thereof, while providing means for re-sealing the container in an air-tight condition; to provide a blank for forming the above described carton; and to also provide an improved container which includes means affording removal of defined sections thereof in sequence, so as to expose succeeding portions of the packaged product in their entirety for easy removal thereof, while retaining the remainder of the container in a condition affording ready re-sealing of the contents after each use.

Other objects and advantages will become apparent with the disclosure of the selected embodiment shown in the drawings, wherein:

Fig. 1 is a perspective view of the container;

Fig. 2 is a perspective view of the container, with the top omitted and the first removable section of the container partially removed; and

Fig. 3 is a plan view of a blank for forming the carton shown in Figs. 1 and 2.

As seen particularly in Fig. 1, the selected embodiment of the invention comprises generally a container 5 having a cylindrical body portion 7, a bottom 9, and a top 11. These component parts may be made of relatively light paperboard or any other suitable material. Furthermore, it will be desirable in many instances to coat the inside of the container with wax or the like, in order to make the container air tight and, also, to prevent the contents from adhering to the container.

Preferably the main body 7 of the container is formed from a rectangularly-shaped blank 13 (Fig. 3) which is scored lengthwise, as indicated at 15, at suitably spaced intervals and along generally parallel lines. Spaced inwardly a relatively short distance from one end of the blank is a line of spaced-apart openings 17 which extend in a direction generally normal to the score lines 15, with a sufficient number and disposition of such openings being provided so that at least one of the openings 17 intersects each of the score lines. To complete the blank for forming the cylindrical body 7, there is provided a tear tape or string 19 which extends transversely of the

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blank 13, generally along the center line of the openings 17, and includes at least one end portion 19a projecting beyond an edge of the blank. The tear tape 19 may be suitably bonded to the blank 13, as by glue or the like, to retain it in position relative to the openings 17 during the formation and filling of the container. In the packaging of cheese and the like the blank 13 may be additionally prepared for use by covering the entire inner surface, i. e. the side including the tear tape 19, with a film of wax or other suitable fluid-impermeable coating.

In forming the container 5, the blank 13 is rolled lengthwise to form the cylindrical body 7, and the ends are overlapped and suitably secured together, as by a glue line 20 indicated at one end of the blank 13 in Fig. 3. In this latter connection, it should be noted that the glue line 20, or other means for securing together the ends of the cylinder 7, is preferably located away from the line of openings 17, in order that the tear tape 19 may be free to perform its function. Although shown as being to one side of the openings 17, it may be desirable in some instances to use a pair of glue lines disposed on opposite sides of the line of openings.

In containers which are to be filled with material which is still in a fluid condition, such as hot cheese, it will be desirable to overlap the ends of the rectangular blank 13 sufficiently to close the openings 17, as shown in Fig. 2. The bottom 9, which preferably comprises a flat circular disc of paperboard or other suitable material, is then placed a short distance inwardly of one end of the cylinder 7 and suitably secured in position, as by crimping the edge of the cylinder into overlying engagement with the bottom 9. In the illustrated example the bottom-forming disc 9 is positioned at the end of the cylinder opposite that which includes the projecting portion 19a of the tear tape. The product to be packaged is then placed in the container and the top 11 is positioned, as seen in Fig. 1, to seal the container.

In using this container for cheese products, the cheese may be placed in the container in a molten condition and allowed to cool in the container, after sealing it by placing the top 11 over the open end of the container. In this respect, it will probably be desirable to also suitably coat the inside of the bottom 9 and seal the latter relative to the cylindrical body 7 with wax or other suitable material. The top 11 will be similarly coated on the inside and suitably sealed with respect to the main body of the container in order to thereby provide an air-tight container. As illustrated, the top 11 is formed from a circular disc 12 which is suitably held in position within a circular band 14, as by crimping one edge of the band. Furthermore, a film of wax or other suitable material may be coated over the outside of the openings 17, as indicated at 21 in Fig. 1 and Fig. 2.

It will be seen, therefore, that after opening the container 5 by removing the top 11, a portion of the contents may be readily exposed by pulling the tear tape 19 down along the side of the container to the upper one of the score lines 15a. In doing so, the portion of the container 7a intermediate the upper edge thereof and the first full opening 17 will be torn to provide a tab end 23, seen in Fig. 2. By grasping the tab 23 and pulling circumferentially of the container, the upper section of the container will be torn away along the score line 15a to thereby leave a generally even, circular rim.

In order to provide clearly defined tab ends 23 of adequate proportions, it is desirable that the openings 17 be made sufficiently large to extend a substantial distance above and below each of the score lines 15 as well as along such score lines. In this way the tab 23, which is formed when the tear tape 19 is pulled downwardly of the container, is sufficiently large and well defined with

respect to the remainder of the container wall to allow a person to grasp the tab 23 between his fingers and peel the scored container section away from the rest of the container.

The cheese or similar product can then be removed, as by slicing, and the carton can again be closed by placing the top 11 in sealing relation to the edge 25 formed at the upper end of the carton by removal of the portion 7a. Similarly, subsequent portions of the container and the product can be removed by pulling the tear tape 19 downwardly along the side of the carton to a position below another one of the score lines 15 extending around the lower sections of the container. The scored section or sections which have thus been divided along the line of the tear tape 19 can then be removed from the carton in the above manner. It may be found expedient in some cases to also provide a score line along the path of the tape 19, particularly where relatively heavy sheet material is used in forming the carton.

It is seen, therefore, that there is provided an improved container which affords easy removal of portions of the product within the container, while retaining the container in condition for use as an air-tight carton. Furthermore, the selected portion of the product is made readily accessible by completely removing the section of the container surrounding such portion, which is particularly advantageous with food products such as cheese wherein it is desired to slice off relatively small portions of the product.

Although described with respect to a particular embodiment and particular materials, it will be apparent that various modifications and other materials might be employed without departing from the principles of this invention. For example, while the score lines 15 are illustrated as being a continuous lineal indentation, it may be desired to use perforations or the like which may or may not extend through to the outer surface of the container. Also, although described with respect to a single ply sheet for forming the body 7, it may be desired in some instances to use a plurality of plies, either separate or bonded together, in forming the container body. In the latter type of construction rather thin paperboard or the like could be used for the individual plies, thereby facilitating the tearing of the separable portions of the container.

I claim:

1. A container comprising a side wall forming an open-end cylindrical portion, a bottom for said cylindrical portion, and a removable top which is adapted to be positioned in closing relation to the open end of said cylindrical portion, said side wall being provided with a plu-

ality of spaced-apart lines of scoring along the inner surface thereof which are generally parallel to each other and to the edge defining the open end of said cylindrical portion, said side wall including a pair of overlapping end portions, means sealing said overlapping end portions together at a position adjacent the outer end of the outermost one of said pair of end portions, a plurality of aligned, spaced-apart openings disposed in the outermost one of said pair of overlapping end portions, said aligned openings extending between said edge of the cylindrical portion and a position adjacent said bottom, and a tear tape fixed in position along the line defined by said aligned openings and disposed on said inner surface of said outermost one of the overlapping end portions, said tear tape including an end portion which extends beyond the open end of said cylindrical portion, each of said aligned openings extending on opposite sides of the associated line of scoring and being sufficiently wide in the direction of said line of scoring to provide with an adjoining one of said openings a well defined tab portion, when said tear tape is pulled to form a generally linear tear in the side wall portion extending between said pair of adjoining openings.

2. A carton forming blank comprising a generally rectangular sheet of flexible material, means defining a plurality of lines of weakness in said material which extend generally parallel to each other and to a pair of opposite edges of said sheet, said lines of weakness being formed so as to leave an unbroken surface on one side of said sheet, an area of adhesive material extending generally transversely to said lines of weakness and between opposite edges of said sheet, means defining a plurality of spaced-apart openings of substantial width and length with respect to said lines of weakness, which openings are disposed generally along a line extending transversely of said lines of weakness with one of said openings intersecting each of said lines of weakness, said line of spaced-apart openings being positioned in said sheet in inwardly spaced relation to said adhesive material, and a tear tape disposed along the axis of said aligned openings on the side of said sheet that includes said lines of weakness.

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