June 14, 1927. 1,632,412

R. C. McCRYSTAL

DISPENSING CARTON

Filed Jan. 19, 1926

Fig. 1.

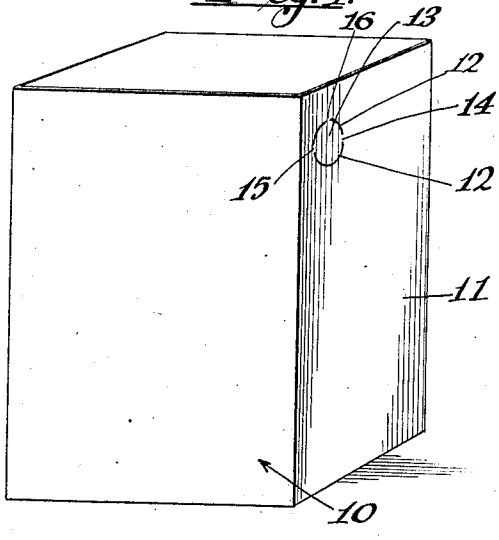


Fig. 2.

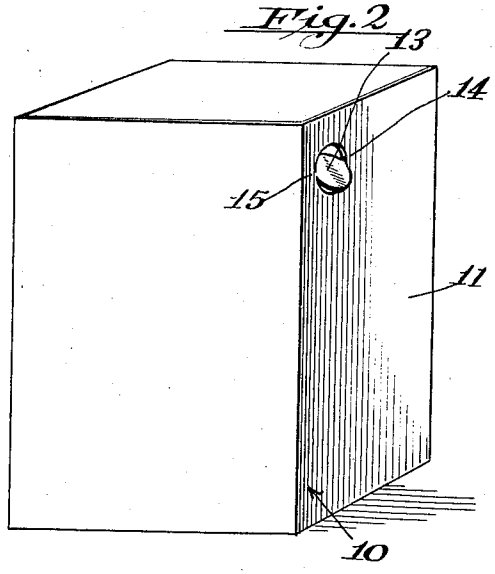


Fig. 3.

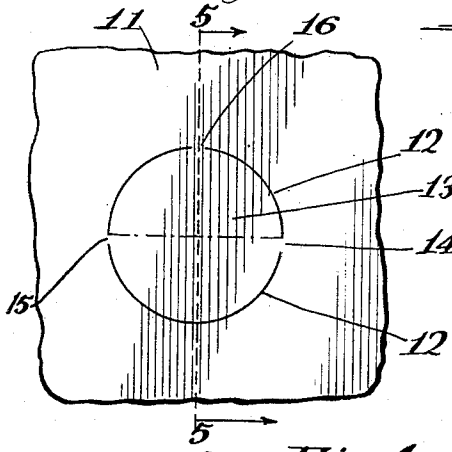


Fig. 5.

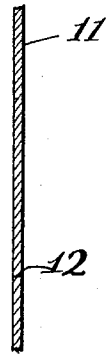


Fig. 7.

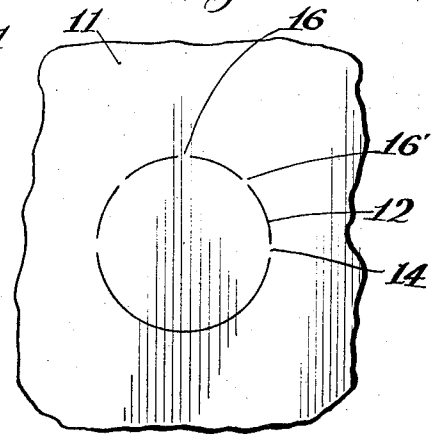


Fig. 4.

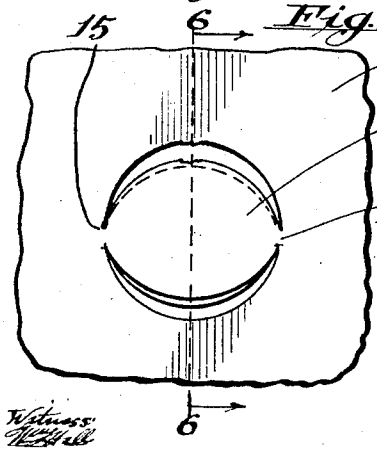


Fig. 6



Witness:

Inventor:
R. C. McCrystal,
by Hazard and Miller
Attorneys.

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UNITED STATES PATENT OFFICE.

ROBERT C. McCRYSTAL, OF LOS ANGELES, CALIFORNIA, ASSIGNOR OF ONE-HALF TO HERBERT D. FIELD, OF LOS ANGELES, CALIFORNIA.

DISPENSING CARTON.

Application filed January 19, 1926. Serial No. 82,217.

This invention relates to improvements in dispensing cartons and similar containers.

An object of this invention is to provide a carton or container with a dispensing door of improved construction, which will facilitate the removal of the contents of the container.

Another object of this invention is to provide a carton having a door adapted to open and close an opening through which the contents of the carton may be poured, and to so form the door that it may be easily, quickly and cheaply formed, and may also be easily opened and closed.

With the foregoing and other objects in view which will be made manifest in the following detailed description and specifically pointed out in the appended claims, reference is had to the accompanying drawings for an illustrative embodiment of the invention, wherein:

Figure 1 is a perspective view of the improved carton illustrating the door in closed position,

Fig. 2 is a view similar to Fig. 1 illustrating the door in open position,

Fig. 3 is a partial view in side elevation showing the door in closed position,

Fig. 4 is a view similar to Fig. 3 showing the door in open position,

Figs. 5 and 6 are vertical sections taken substantially on the lines 5—5 and 6—6 upon Figs. 3 and 4 respectively, and

Fig. 7 is a view similar to Fig. 3 illustrating a slightly modified form of construction.

Referring to the accompanying drawings wherein similar reference characters designate similar parts throughout, the carton or container 10 may be of any desired construction and in no way is limited to the form illustrated. On one of the walls of the carton, such as is indicated at 11, there are formed incisions 12. These incisions in the case of a carton of approximately those dimensions illustrated on the drawing are preferably arranged adjacent one of the upper corners of the wall. The incisions 12 cooperate to define the door 13, which is connected to the wall 11 by webs 14 and 15, which are arranged at approximately opposite sides of the door. The incisions also provide a breakable web 16 connecting the door 13 to the wall 11. The two webs 14 and 15 form a pivot or hinged connection between the door 13 and the wall.

The device is used in the following manner: When it is desired to withdraw the contents from within the container 10, the upper portion of the door 13 is pressed inwardly, breaking the breakable web 16 and causing the door to hinge or pivot upon the webs 14 and 15, which do not break. The upper portion of the door is caused to project into the container while the lower portion projects outwardly from the wall 11, as illustrated in Figs. 2, 4 and 6. After a sufficient quantity of the contents has been removed, the lower portion of the door 13 can be pressed backwardly, causing the door to swing into the plane of the wall 11. In this manner the door 13 can be opened and closed a definite number of times without breaking the webs 14 and 15, thus permitting the contents of the container to be removed, and also providing a closure for closing the container when the contents are not being withdrawn.

From a careful inspection of the drawing, it will be noted that the webs 14 and 15 are not located exactly upon a diameter but are preferably arranged slightly below a diameter. Obviously the webs can be positioned on a diameter, but the other construction is preferred for the following reasons: The edges of the door 13 remain in contact with the edges of the wall 11. It is very easy to press the upper portion of the door inwardly and cause these edges to disengage. However, the edges on the lower portion of the door are caused to disengage merely because of the stiffness of the material of which the container is formed. Consequently, by placing the webs 14 and 15 below the diameter, the lower edges of the door are reduced in length and also the lower portion of the door will be stiffer so that by pressing the upper portion inwardly, the lower portion will be caused to swing out in the desired manner without breaking the webs 14 and 15.

In Fig. 7 there is illustrated a slightly modified form of construction, wherein instead of having a single breakable web 16, there may be a plurality of breakable webs 16′.

Obviously, the particular shape of the door is not limited to the circular form, but may be varied, as desired. The important

part which must be associated with all doors regardless of their shape is that they have the connecting webs 14 and 15 at substantially opposite sides of the door on which the door may hinge.

From the above it will be readily appreciated that an improved dispensing carton is provided which can be very easily, quickly and cheaply manufactured, and which is quite efficient in operation and use.

It will be understood that various changes in the detail of construction may be made without departing from the spirit or scope of the invention as defined by the appended claims.

I claim:

1. A carton having incisions formed in one of its walls defining a substantially circular door which is connected by webs to the wall in which it is formed on which the door may swing, said webs being arranged other than on a diameter across the door for the purpose described.

2. A carton having incisions formed in one of its walls defining a substantially circular door which is connected by webs to the wall in which it is formed on which the door may swing, said webs being arranged adjacent a diameter across the door, but not exactly on the diameter for the purpose described.

3. A carton having incisions formed in one of its walls defining a door connected by webs to the wall in which it is formed on which the door may swing and also connected by at least one web which is breakable, the webs on which the door may swing being arranged adjacent a center line across the door but not exactly upon it for the purpose described.

4. A carton having incisions formed in one of its walls defining a cut-out forming a door which is connected by webs to the wall in which it is formed on which the door may swing, said webs being arranged on opposite sides of the cut-out so that a line connecting the center of the webs divides the cut-out portion into sections of unequal area, whereby inward pressure upon the larger section causes the smaller section to swing outwardly.

In testimony whereof I have signed my name to this specification.

ROBERT C. McCRYSTAL.