A. A. AINSWORTH.

BOTTLE.

APPLICATION FILED DEC. 23, 1913. RENEWED DEC. 22, 1915.

1,203,448. Patented Oct. 31, 1916.

Fig. 1.

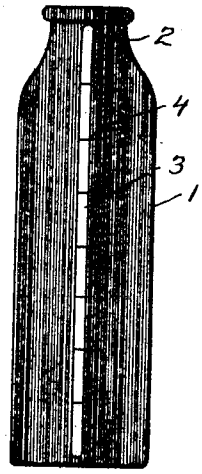


Fig. 2.

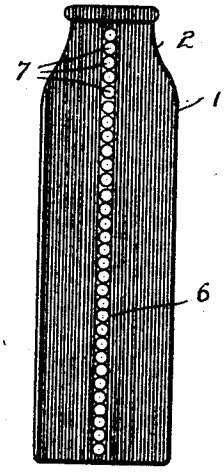


Fig. 3.

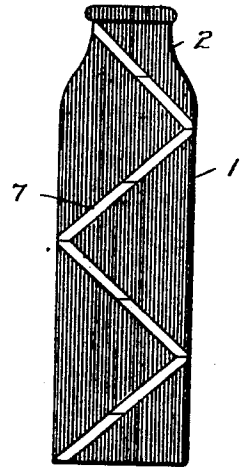


Fig. 4.

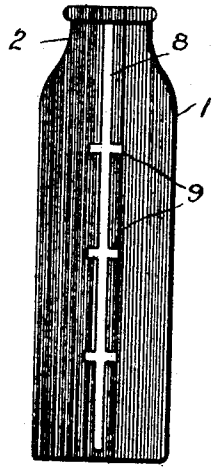


Fig. 5.

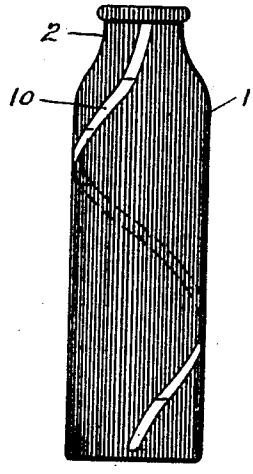
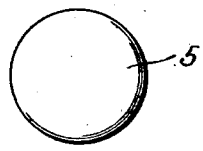


Fig. 6.



Witnesses

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BOTTLE.

1,203,448. Specification of Letters Patent. Patented Oct. 31, 1916.

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To all whom it may concern:

Be it known that I, ALBERT A. AINSWORTH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bottles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in bottles and resides particularly in the provision of a bottle adapted to contain milk, wherein the bottle is formed of colored glass and slightly opaque, but provided with a clear glass strip extending from the top of the bottle to the bottom whereby the exact amount of the contents of the bottle may be readily determined.

An important object of my invention is to provide a bottle of the character described which is formed generally of colored glass but provided with a clear glass bottom whereby the interior of the bottle may be readily viewed to determine its cleanliness.

It is a known fact that liquid, such as milk and others will be better preserved in opaque bottles; thus my invention aims to improve bottles for liquids which are readily affected by light so that the desired preservation of the liquid is had and exact measurement of the contents of the bottle is permitted and the cleanliness of the bottle determined owing to the novel construction I provide.

Another object of importance is to provide a bottle of the character described which is extremely simple, may be cheaply manufactured and which is more commercially desirable than clear glass bottles for reasons hereinbefore stated.

The above and additional objects are accomplished by such means as are illustrated in the accompanying drawings, described in the following specification and then more particularly pointed out in the claims which are appended hereto and form a part of this application.

With reference to the drawings, wherein I have illustrated the preferred embodiment of my invention as it is reduced to practice, and throughout the several views of which similar reference numerals designate corresponding parts: Figure 1 is a side elevation of a bottle of the preferred form of my invention, wherein a vertical clear glass space is provided, Fig. 2 is a view of a modified form of my invention wherein the clear space is formed as a number of circular portions, Fig. 3 is a side elevation of another modified form of my invention wherein the clear space is in a zigzag form, Fig. 4 is a side elevation of another modified form of my invention wherein the clear space is intersected by transverse clear strips or spaces, Fig. 5 is a side elevation of another modified form of my invention wherein the clear space is of a spiral formation, and Fig. 6 is a bottom plan view showing the bottom formed of clear glass.

Referring to the drawings forming a part of this specification and in which like characters of reference are employed to designate corresponding parts, the numeral 1, designates a glass bottle having a reduced neck portion 2 and which is, with reference to the preferred form of my invention as illustrated in Fig. 1 formed of suitable dark colored glass wherein the bottle is more or less opaque. A clear glass space 3 is formed in the construction of the bottle, and extends upon one side thereof from the top of the bottle to the bottom thereof and may be provided with graduations 4. The clear space 3 is preferably narrow but of sufficient width to enable graduations 4 to be placed thereon and to permit the determining of the exact contents of the bottle. The bottle is provided with a clear glass bottom 5 whereby the cleanliness of the bottle may be readily determined.

It will be apparent that I have provided a bottle for milk and the like which consists of a colored opaque body portion being provided with a clear, vertical strip and a clear bottom, whereby measurement of the contents of the bottle is permitted and the cleanliness of the bottle may be readily determined. Liquids which are affected by light when placed in the bottles hereinbefore described will be readily preserved by the colored and opaque nature of the glass of which the bottle is formed as hereinbefore described.

With reference to Fig. 2 wherein there has been illustrated a slightly modified form of my invention, the clear space 6 is formed in the nature of clear glass dots 7 which are slightly spaced from each other and extend in a vertical line from the top to the bottom of the bottle. In this form graduations

are not necessary owing to the nature of the clear spaces in the bottle.

With reference to Fig. 3 the bottle 1 is provided upon one side with a clear zigzag space 7 which extends from the top to the bottom of the bottle and is provided with graduations as in the form illustrated in Fig. 1.

With reference to Fig. 4 the bottle 1 shown therein is provided with a clear space or narrow strip of clear glass 8 which is intersected at different points intermediate its ends by transverse clear spaces 9. In this connection graduations may be marked upon the clear space if desired but it is not necessary owing to the arrangement of the transverse clear spaces 9.

With reference to Fig. 5 the clear space 10 is arranged in spiral formation around the bottle and is provided with graduations as in the form shown in Fig. 1.

All of the modified forms are constructed similar to the form illustrated in Fig. 1, that is they have colored opaque body portions and clear glass bottoms 5 but differ only in the arrangement of the clear portion for determining the contents of the bottle. In coloring the glass it is preferable to use dark colors such as red and the like. The container may be made of glass or other vitreous material. The colored portions of the container may be either opaque or translucent, and the transparent spaces, or portions are coherent parts of the material from which the container is made.

It will be apparent with reference to the foregoing description and accompanying drawings that there has been provided a bottle particularly adapted for containing liquids which are readily affected by light, that is capable of containing the liquids of the character described so that the desired preservation of the liquid is had and exact measurement of the liquid within the bottle may be had. The clear glass bottom affords the determining of the cleanliness of the bottle.

In reduction to practice, I have found that the form of my invention illustrated in the drawings and referred to in the above description, as the preferred embodiment, is the most efficient and practical; yet realizing that the conditions concurrent with the adoption of my device will necessarily vary, I desire to emphasize the fact that various minor changes in details of construction, proportion and arrangement of parts may be resorted to, when required, without sacrificing any of the advantages of my invention, as defined in the appended claims.

What is claimed is:

1. A bottle consisting of an opaque body portion with the exception of transparent strips extending longitudinally of the body from the top to the bottom thereof, said strips having graduations thereon whereby determination of the exact contents of the bottle may be had and the bottom of the bottle being formed of transparent material whereby the cleanliness of the interior of the bottle may be determined.

2. A container comprising opaque or translucent and transparent coherent parts of a vitreous material, the opaque or translucent part protecting the contents of the container from the deleterious action of light rays, and the transparent part providing a sight panel to permit the contents to be examined.

3. A container comprising opaque or translucent and transparent coherent parts of the same material, the opaque or translucent part protecting the contents of the container from the deleterious action of light rays, and the transparent part providing a sight panel to permit the contents to be examined.

4. A container comprising a side wall of opaque or translucent and transparent coherent parts of the same material, the opaque or translucent part protecting the contents of the container from the deleterious action of light rays, and the transparent part providing a sight panel to permit the contents to be examined.

5. A container comprising a side wall of opaque or translucent and transparent coherent parts of the same material, and a transparent coherent bottom wall of the same material, the opaque or translucent part protecting the contents of the container from the deleterious action of light rays, and the transparent part of the transparent bottom providing sight panels to permit the contents to be examined.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT A. AINSWORTH.

Witnesses:
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J. H. HAYDEN.