

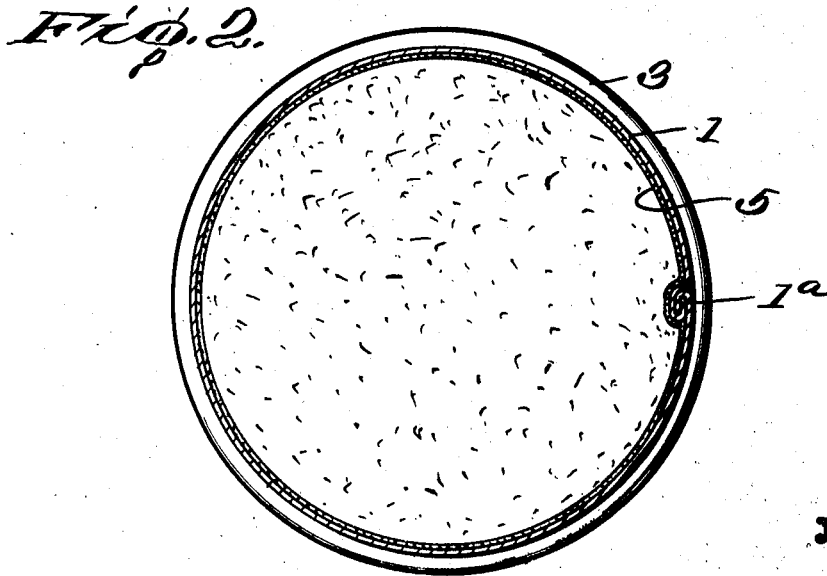
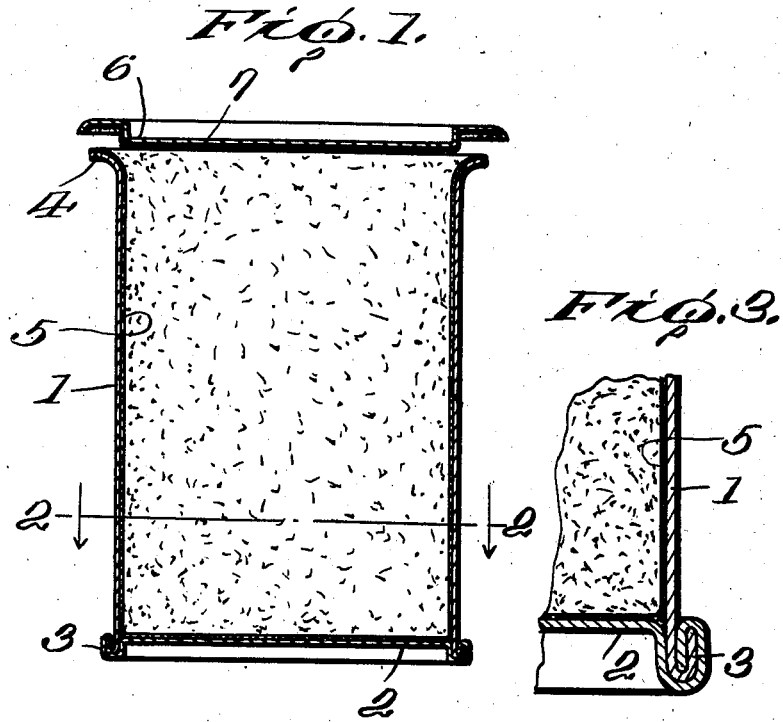
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PROCESS AND CONTAINER FOR PACKAGING BEVERAGES

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PROCESS AND CONTAINER FOR PACKAGING BEVERAGES

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1 Claim. (Cl. 220-64)

The invention relates to new and useful improvements in a process of packaging beverages such as beer and a container therefor. It is well known that when beer is placed in a metal container made from tin plate and in contact with the metal, a chemical reaction occurs resulting in clouding the beverage. An object of the present invention is to provide a process of packaging beer whereby a container made from metal may be used for storing the same without this resulting cloudiness and also without imparting any deleterious effect to the flavor of the beer. A further object of the invention is to provide a container which may be used in carrying out said process.

While the metal container may be of any desired shape and construction, it is preferably made of tin plate in the form of the ordinary container for food products. Such a container is illustrated in the drawing to better aid in the understanding of the invention.

Fig. 1 is a sectional view through a container embodying the improvements with a cover or closure end shown as loosely applied thereto.

Fig. 2 is a sectional view on the line 2-2 of Fig. 1.

Fig. 3 is an enlarged detail through the lower end of the container and at one side thereof.

The container includes a body portion 1 made from tin plate. It is preferably cylindrical in form and is provided with a side seam 1^a which may be soldered in the ordinary manner. Attached to one end of this cylindrical body portion 1 is a bottom closure end 2, which is secured to the body portion by a seam 3, which is shown in the form of a double seam uniting the flange on the body portion to the peripheral portion of the bottom end. The upper end of the container body is provided with the usual flange 4. The container body thus completed is then provided with a coating indicated at 5, which completely covers the entire inner surface of the container body and the bottom end thereof.

The coating consists of asphalt in the commercial form and gilsonite. Blown asphalt is preferably used as the blowing operation removes some of the volatile oils which might otherwise tend to impart off flavor to the beverage. This blowing also has a tendency to toughen the material, rendering it less susceptible to chipping at low temperatures. Preferably two parts of the blown asphalt to one part of gilsonite are used in the making of an enamel for the coating of the interior of the container. Carbon tetrachloride is used as a solvent for the asphalt and the

gilsonite. When fourteen parts of carbon tetrachloride are used with two parts of blown asphalt and one part of gilsonite, an enamel is produced which may be easily flowed or distributed over the surface of the metal for the coating of the same. The enamel may be poured into the container and after the container has been manipulated so as to cause the enamel to contact with the entire inner surface, both of the body portion and the bottom end, then the surplus is poured from the container. The enamel will adhere to the surface of the metal and form a thin coating completely covering the same and the joint between the interfolded parts of the bottom end and the body portion forming the double seam. After the container has been coated in the manner above stated, it is left to dry or for the solvent to evaporate. The carbon tetrachloride being very volatile will quickly evaporate, leaving deposited upon the metal surface an unevaporated residue which constitutes the protecting coating for the metal. This solvent will evaporate to produce a relatively hard smooth coating on the metal in a short interval of time at substantially room temperature so that the coating of the container does not greatly delay the manufacture and completion of the container for use. Furthermore, insasmuch as the coating will set or harden substantially at room temperature, there is no strain placed upon the solder bond joining the edge portions of the blank to form the body of the container.

Instead of pouring the enamel into the container, it may be sprayed onto the inner surface of the metal container. It is essential that the entire surface shall be covered so that when the beer is put into the container, it will not contact with the metal at any point. This enamel coating has a relatively hard surface and sufficient body so as to completely cover the metal surface. It will also resist fracturing or removal by scratching during the handling of the container. The coating as described does not in any way affect the flavor of the beer as there is no chemical reaction which takes place when the beer is in contact with this coating and not with the metal of the container. As it does not contact with the metal at any point, there is no resulting cloudiness.

The container as illustrated, is hermetically closed by means of a closure end or cover 6 which overlies the flange 4 on the body portion and is rolled with the flange into a double seam in the usual manner. The inner surface of the cover or closure end 6 is provided with a coating 7 of

the enamel described above. This coating may be flowed or sprayed onto the inner face of the cover and extends all the way across the same. The usual sealing compound is used and an hermetic seam produced by joining the cover or closure end to the container body. Inasmuch as the enamel coating on the inner face of the cover extends all the way across the body of the container end into the double seam, there is no metal whatever exposed with which the beer can contact when the container is closed.

The container may be of any desired form and construction, the essential feature residing in the completing of the container ready for filling, and then coating the container and the end which is to be attached thereto for closing the

same, so that every part of the container when closed will be covered with the coating, and therefore, the beer cannot contact with the metal and become clouded thereby.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:

A sheet metal container for beer comprising a body portion and a closure therefor, an enamel coating covering the entire surface of the body portion of the container and the closure for the container, said enamel coating consisting of the unevaporated residue of blown asphalt and gilsonite in substantially the proportions of two to one dissolved in carbon tetrachloride.

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