

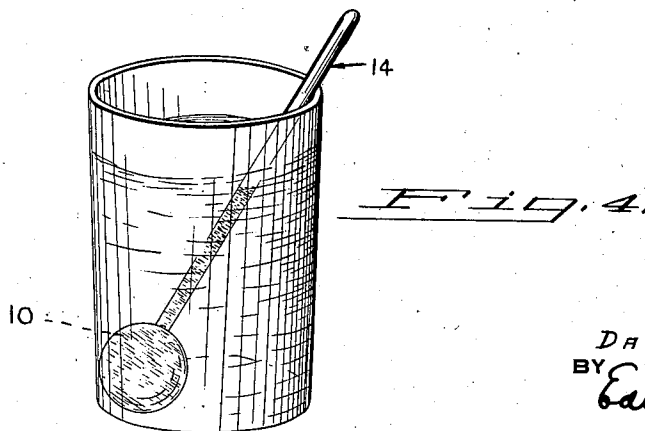
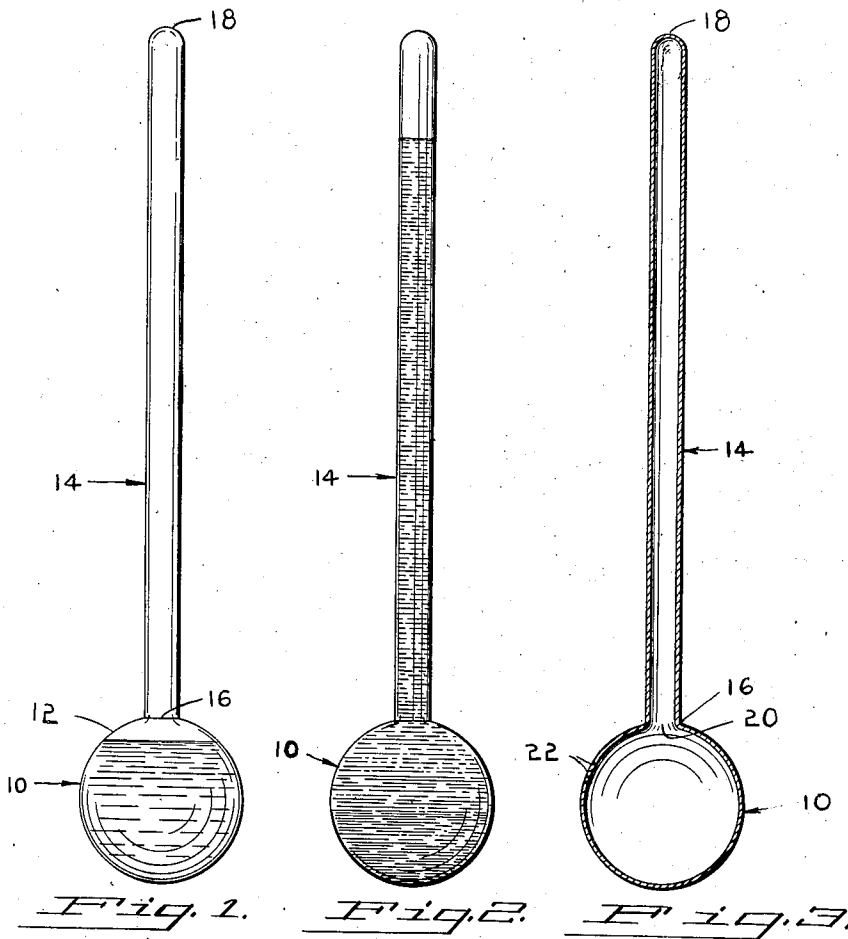
June 7, 1938.

D. FISK

2,120,201

COMBINATION LIQUID COOLER AND STIRRER

Filed Jan. 16, 1937



INVENTOR
DAVID FISK
BY *Edwin L. Lisker*
ATTORNEY

UNITED STATES PATENT OFFICE

2,120,201

COMBINATION LIQUID COOLER AND
STIRRERDavid Fisk, Astoria, N. Y., assignor to Fisk &
Fisk, Inc., New York, N. Y.

Application January 16, 1937, Serial No. 121,027

4 Claims. (Cl. 62—1)

This invention relates to a combination liquid cooler and stirrer intended primarily for use in connection with beverages and other liquids where it is desired to cool the liquid without adding melted ice thereto.

One object of the invention is to provide a combined liquid cooler and stirrer containing a quantity of liquid having a freezing point lower than water and capable of being frozen in the ordinary household artificial refrigerator, the construction of the device being such that a maximum quantity of the cooling liquid may be provided in the device while allowing for the expansion of the cooling medium in changing from its liquid state to its frozen state.

In serving drinks, especially in the household, it is desirable to provide means for identifying the glasses or other containers in which the drinks are served so that they may be distinguished with respect to the various individuals served thereby to avoid mixing the glasses when the latter are refilled. In accordance with the present invention and in the fulfillment of one of the objects thereof, the combined cooling device and stirrer or a part thereof, preferably the handle, is transparent, and the cooling medium is colored and sufficient in volume, particularly upon the freezing thereof when the cooling medium has a positive coefficient of expansion, to extend into a passage provided in the handle of the device, thus readily distinguishing the latter from other similar devices which may contain cooling liquids of different colors. Thus, with a sufficient number of devices containing cooling liquids of various colors, it is possible to identify the glasses or other containers of the drinks served to a number of individuals.

The above objects of the invention and other objects which might hereinafter appear will best be understood from the following description considered with reference to the accompanying drawing.

In the drawing:

Fig. 1 is a side view of a combined liquid cooler and stirrer embodying the present invention, the cooling liquid being unfrozen;

Fig. 2 is a view similar to Fig. 1, the cooling liquid being frozen;

Fig. 3 is a longitudinal sectional view of the device before it is filled with the cooling liquid;

Fig. 4 is a perspective view of the device immersed in a glass of liquid for cooling and/or stirring the latter.

Referring to the drawing in detail, the combined liquid cooler and stirrer comprises, in ac-

cordance with the preferred embodiment of the invention, a hollow glass member 10 containing a liquid 12 to be frozen, and a handle 14 consisting of a tubular glass member which has one end 16 sealed to the walls of member 10 and in communication with the interior of the latter. The opposite end 18 of the tubular member 14 is sealed. As clearly shown in the drawing, handle 14 projects from member 10 and is constituted by a hollow stem having a narrow bore and a substantially smaller volumetric capacity than that of member 10. The quantity of cooling medium in its liquid or unfrozen state is such as to substantially fill the member 10 so that upon expansion of said cooling medium in changing from its liquid state to its frozen or solid state extends into the passage in the tubular member 14. Thus the maximum quantity of the cooling medium may be provided in the device without danger of rupturing the latter when the cooling medium freezes, the passage in the tubular member constituting an expansion chamber for the cooling medium.

Numerous cooling liquids can be utilized in the present device. Ordinary water may be used, but preferably the cooling medium has a freezing point lower than that of water and within the range of freezing temperatures of the ordinary household artificial refrigerator. The liquid may also have a comparatively high latent heat of fusion. Cooling mediums having such characteristics are well known to those skilled in the art and hence no specific description of the compositions thereof is necessary, although it may be stated that ordinary brine or salt solutions which have a positive coefficient of expansion, that is which expand upon being frozen, are preferred. Also, in order to accomplish one of the objects of the present invention, it is preferred that the cooling mediums possess a characteristic color and that cooling devices contain cooling mediums of various colors be provided so that a glass or other container provided with the combined cooler and stirrer may be readily distinguished from other glasses with which such devices are used. For convenience in manufacture, the entire device is made of ordinary uncolored glass which is transparent so that the color of the cooling medium can be readily observed, but for the purpose of the present invention it is merely necessary that the device or a part thereof, preferably the handle 14, be sufficiently transparent and of such color as to permit the various colors of the cooling mediums in several of the devices to be distinguished one from the other.

In the manufacture of the above described cooling devices it is convenient to first form the member 10 leaving openings 20 and 22 therein. Then a length of glass tubing sufficient to form the handle 14 is fused to the walls of the container 10 at the opening 20, after which the free end of said tubing is fused to form the sealed end 18. The number 10 is then filled through the opening 22 with the desired quantity of cooling liquid after which said opening is closed by fusing the wall of the container.

It will be understood that the cooling devices may be made in various shapes and sizes and may be made of glass in various colors provided preferably that the color of the glass is such as to permit the color of the cooling liquid to be distinguished at least in contrast with the color of the cooling liquid in other similar devices. While the use of cooling mediums having positive coefficient of expansion is preferred, it is within the scope of the present invention to utilize cooling mediums having negative coefficients of expansion, that is which decrease in volume when changing from a liquid to a frozen or solid state. Substances of this character are described in the patent to Manters et al., 2,039,736, dated May 5, 1936. It will be noticed that the device as a whole is completely sealed without the use of packing or other liquid sealing materials so that it is impossible for the cooling liquid to leak from the device into the beverage. On the other hand, when the device is made of glass it does not affect the beverage either with respect to taste or otherwise and may remain in the beverage as long as desired. The use and advantages of the device as a stirrer as well as a cooling device are obvious.

Thus it is seen that the device herein shown and described is well adapted to accomplish the several objects of the present invention. It will be understood, however, that while the device as herein disclosed is the preferred embodiment of the invention, the latter may be embodied otherwise than as here shown or described. Therefore, I do not wish to be limited precisely to the present disclosure except as may be required by the appended claims.

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

1. A combined cooling device and stirrer comprising a one-piece sealed hollow glass member and an integral glass handle projecting therefrom, said member containing a cooling liquid,

and said handle comprising a narrow elongated stem having a passage in communication at one end thereof with the interior of said hollow member and sealed at its other end, said passage being constituted by an elongated bore of small diameter and of substantially smaller volumetric capacity than that of said hollow glass member.

2. A combined cooling device and stirrer comprising a one-piece sealed hollow glass member and an integral glass handle projecting therefrom, said member containing a colored cooling liquid, and said handle comprising a narrow elongated stem having a passage in communication at one end thereof with the interior of said hollow member and sealed at its other end, said passage being constituted by an elongated bore of small diameter and of substantially smaller volumetric capacity than that of said hollow glass member, the wall of said passage being sufficiently clear and transparent to enable the color of the cooling liquid to be distinguished from a differently colored cooling liquid in another similar cooling device.

3. A cooling device comprising a closed hollow one-piece glass member containing a liquid to be frozen, and handle thereof consisting of a hollow glass tube provided with a narrow bore and having one end sealed to the walls of said member in communication with the interior of the latter, and sealed at its opposite end, said tube having a volumetric capacity substantially smaller than that of said member, the quantity of liquid in said device being sufficient to partially but not wholly fill said tube when the liquid is frozen.

4. A cooling device comprising a closed hollow one-piece glass member containing a liquid to be frozen, and handle thereof consisting of a hollow glass tube provided with a narrow bore and having one end sealed to the walls of said member in communication with the interior of the latter, and sealed at its opposite end, said tube having a volumetric capacity substantially smaller than that of said member, the quantity of liquid in said device being sufficient to partially but not wholly fill said tube when the liquid is frozen, said liquid being frozen and said glass tube being sufficiently clear and transparent to enable the color of the liquid to be distinguished from a differently colored liquid in another similar cooling device.

DAVID FISK.