

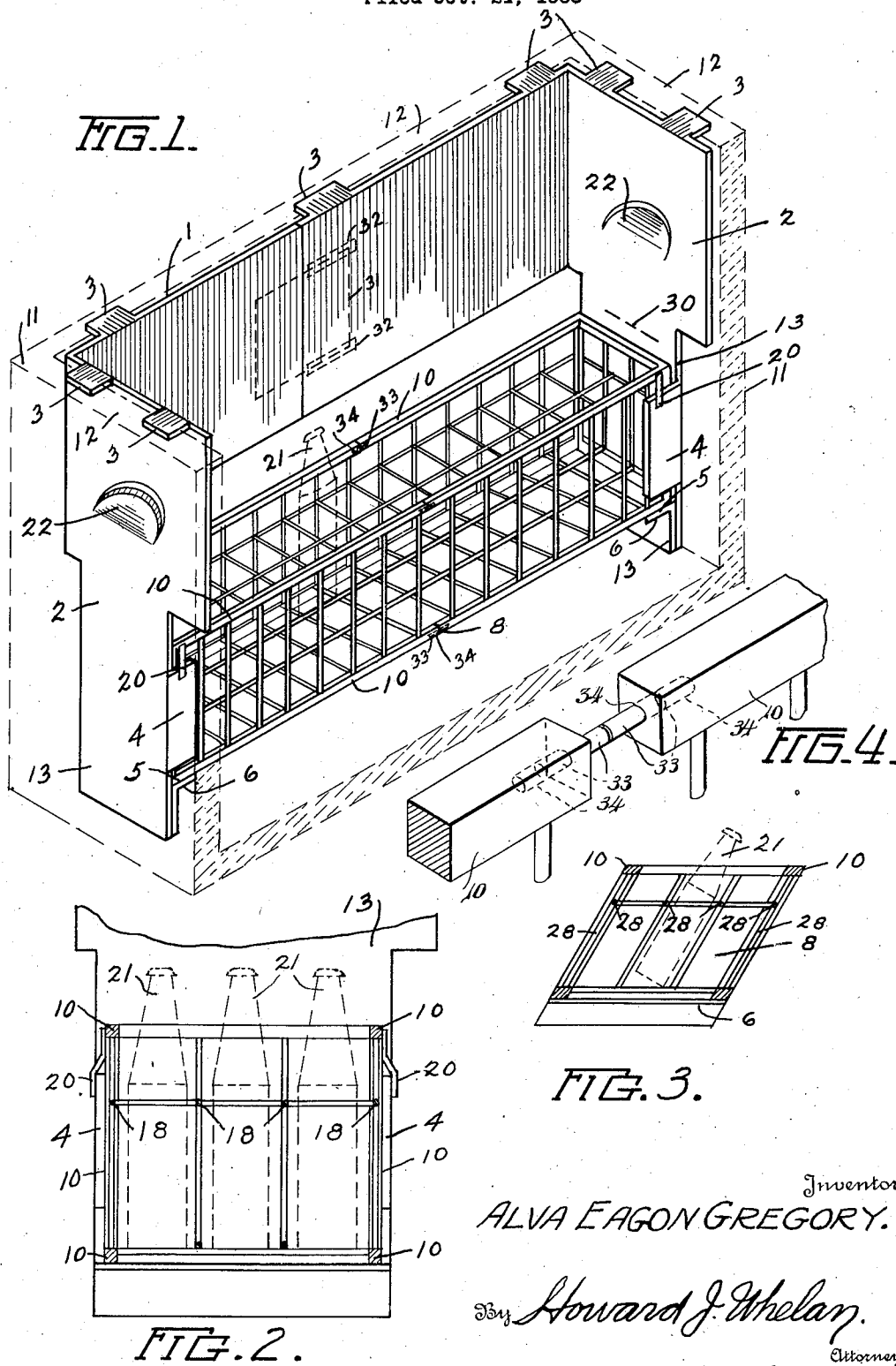
Feb. 13, 1940.

A. E. GREGORY

2,190,474

BOTTLE COOLING RACK

Filed Oct. 21, 1938



Inventor
ALVA EAGON GREGORY.

By *Howard J. Whelan.*
Attorney

UNITED STATES PATENT OFFICE

2,190,474

BOTTLE COOLING RACK

Alva Eagon Gregory, Nashville, Tenn.

Application October 21, 1938, Serial No. 236,355

2 Claims. (Cl. 312—172)

This invention refers to bottle holders and boxes and more particularly to arrangements for holding and securing bottles conveniently therein. It has among its objects to provide an insertable frame and basket for an ice or cooling box of conventional type, in such a manner as to make a more complete arrangement for holding bottles therein in the most convenient manner. A further object is to have the device simple in construction and adapted for easy manipulation and use. Another object is to have the bottles so held that they cannot be upset or turned over while in the device. Other objects will become apparent as the invention is more fully set forth.

In the conventional type of ice box or cooling cabinet, bottles are set loosely and upright in the same. When the box or cabinet is full, adequate support is given each bottle by the neighboring ones, to keep it from falling on its side. As bottles are removed or the box or cabinet is made less full, less support is given each bottle and its tendency to tip over is increased. The cooling water provided in the box to surround and closely contact the exterior surfaces of the bottles not only serves to make the cooling more effective, but also has a buoyancy effect that makes the bottles partially unstable. The lack of solid stability makes the taking and placing of the bottles in the box a matter of considerable inconvenience, particularly to a storekeeper or other manipulating the bottles for use. In this invention, the device provides a framework that attaches to the ice box or cooling cabinet in a convenient manner and provides a substantial arrangement in it, as well as provision for advertising matter. In this frame, a basket is inserted that provides an individual compartment for each bottle and keeps it positioned in the alignment selected by the user.

This affords many advantages, besides that of holding the bottles up and preventing them from tipping easily. The baskets may be partitioned to place the bottles at an angle to lessen the depth of the box or cabinet necessary to hold them, and also to position the bottles so their labels may be easily read and identified, without removing them from the cooling box as now required. The basket affords an attractive arrangement and takes up the wear that ordinarily is caused to the bottom of the box by the constant rubbing of the bottles. This wear is induced by the moving of the bottles on the bottom when each bottle is withdrawn, and by the constant vibration that the floor of a store receives, and

which is transmitted through the box to the bottles. This vibration is quite continuous and in time, causes the lining of the box to be worn through and leak. The frame and basket prevent this wear and also keep the bottles off the floor of the lining and any sediment that might accumulate there. The result of these arrangements makes the handling of the bottles more convenient and more sanitary, and enables the bottles to be given any desirable display position selected. There is also less liability of breakage and mishandling. The bottles also can be placed in the cooling box at one time instead of individually, saving much time and handling.

In the drawing which illustrates an embodiment of this invention:

Figure 1 is a perspective view of a cooling cabinet with a basket and frame embodying this invention, with the cooling cabinet shown in dotted outline.

Figure 2 is a side elevation of the basket and frame in section.

Figure 3 is a modified form of basket used to provide an arrangement for positioning the bottles angularly.

Figure 4 is a detail of the extensible arrangement used in the basket.

Similar reference characters refer to similar parts throughout the drawing.

In the drawing 1 represents the back of a cooling box frame that is constructed so as to readily fit into a conventional cooling box 11. The back is preferably made of sheet metal and has suitable ledge pieces 3 provided on it for securing same to the top edges 12 of the cooling box so they may rest on same. The sides 2 of the frame are T-like in form bent at right angles on two ends of the back as indicated, and are also provided with ledge pieces 3. The under portion of the frame is open and is arranged with legs 13 and formed with foot rests 6, basket shelves 5, and basket stops 4. A basket 8 is insertable on the frame and rests on the shelves 5. It is preferably composed of wire or rods of suitable mesh to allow the cooling water to pass freely therethrough and to give ample strength and stiffness to the basket. It has reinforcing straps 10 secured exteriorly to it and has a slip piece 20 provided to lock it in the frame. The legs 13 are arranged as shown with edges cut away from the front and rear to provide ample spaces for the circulation of water around the frame basket and bottles contained therein. The basket is set in the frame on the shelves 5 that keep it off the floor of the box

and permits under-circulation. The frame is so formed as to hold the basket securely. The basket is also provided with cross-wire partitions 18 that are sufficient to hold each bottle 21 individually in the compartments so formed. These compartments serve to position the bottles in any suitable manner and to keep each by itself. The bottles can be removed from the compartments easily and no other bottle is disturbed, other than the one removed.

When the basket is filled with bottles, it is placed in the frame in the box readily, and may also be removed at any time. This permits the bottles to be placed in the basket while outside of the box, in preference to performing the same task while the basket is in the cooling box with its cooling water. This prevents a lot of splashing and inconvenience that present methods entail. The frame is removable also and may be inspected and cleaned at any time with facility. The cooling water line 30 comes approximately to a line situated just above the upper rods of the basket. The handle openings 22, formed by punching a hole in each leg 2, are rolled so their edges will not cut the user.

In the modified form, the bottles are positioned at an angle in the basket 8 to permit the depth of the cooling box to be reduced, and the labels or markings on the bottles to be seen without removing them from the cooling waters or cooling box. The basket is made with its wires or rods 28 formed at an angle for positioning the bottles in the manner desired.

It is desirable in these devices to have means for adjusting them for various size ice and cooling boxes, which are met with in daily practice. This is provided for in this application by having the back panel 1, separable and a tongue member 31 arranged to fit slots 32 provided as indicated. This permits the back to be adjusted to suit the length of box used for cooling purposes, and does not materially affect the strength of the frame. Similarly the basket is provided with supplementary rods 33 inserted in slots 34, that permit the basket to be extended and adjust itself to fit the extended frame, as may be required. These rods and tongue are preferably provided near the central portion of the frame and basket, so as to make them more accessible. The parts 31, 32, 33 and 34 that permit the extension longitudinally of the frame and basket, are simple structurally, consisting generally of telescoping members fitted to each other, in the form of rods of smaller diameter on one section of the basket and extending out therefrom aligned and sliding into tubular formations made in the other section of the basket adjacent to the first section, similar to that use for adjustable curtain rods of conventional construction, while the rear wall or back panel is provided with a tongue 31 attached to one section of the rear wall of the frame aligned with slots 32 and extending from its section sufficiently to permit its insertion and adjustment in the latter cooperatively with the movement of the parts 33 and 34 in the basket 4, for the latter's adjustment. This adjustment is relatively small as a rule and does not affect the functional characteristics of the frame and bas-

ket. Its general operation appears to be obvious from this description and the dotted outline indicated in Figure 1.

A feature of value in connection with this device is that the user of the frame and basket have a very clear visual knowledge of the basket and can tell immediately how many are empty and how many are filled. This enables inventories of bottles used during a definite predetermined period to be made readily and without book work, which store keepers like to avoid. This makes the device give an automatic register of the use of the bottles in a certain time.

While but two forms of this invention are shown in the drawing and described in the specification, it is not desired to limit this application for patent to these particular forms, otherwise than limited by the prior art, as it is appreciated that other constructions might be used that would employ the same principles and come within the scope of the appended claims.

Having thus described the invention, what is claimed is:

1. In combination with a cooling box of the class described, a bottle crate comprising a frame of flat material formed into a three-sided shape having a rear wall and two side walls extending perpendicularly therefrom horizontally and having a vertical T-form shape with the enlarged head portions joining and aligning with the said rear wall at the upper portion of the frame, ledge pieces on the upper edge portions of the walls extending externally therefrom for engagement on the cooling box to position the frame therein, handle means in the side walls, stops on the front portions of the side walls, formed to extend in front of the frame, shelves mounted on the lower leg portions of the side walls and internally directed therefrom, a basket having an open-work cell construction and rectangular form adapted to fit within the space between the side walls and loosely hold and position bottles therein, and to be held by said stops and shelves, the position of the basket being below the normal water line of the said box, slip pieces on the basket for holding the basket to the frame, and means on the frame and basket enabling the basket and frame to be longitudinally adjusted together.

2. In combination with a cooling box of the class described, a bottle crate comprising a frame of flat material formed into a three-sided shape having a rear wall and two side walls extending therefrom horizontally and having a T-form shape with the enlarged head portions joining and aligning with the said rear wall at the upper portion of the frame, ledge pieces on the upper edge portions of the walls extending therefrom for engagement on the cooling box, stops on the front portions of the side walls formed in the frame, shelves mounted on the lower portions of the side walls, a basket having an openwork cell construction adapted to fit within the space between the side walls and hold and position the bottles therein, and to be held by said stops and shelves, the position of the basket being below the normal water line of the said box, slip pieces on the basket for holding the basket to the frame.

ALVA EAGON GREGORY.