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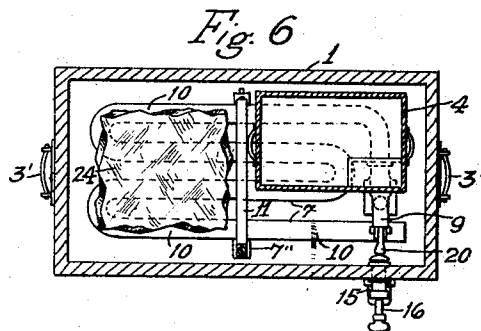
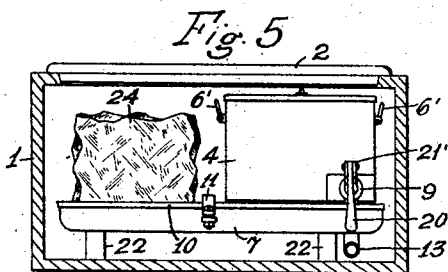
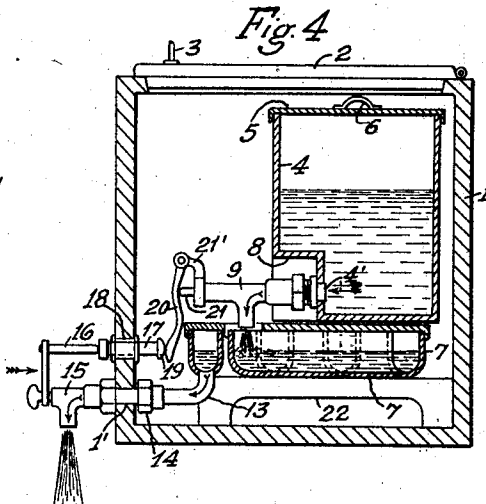
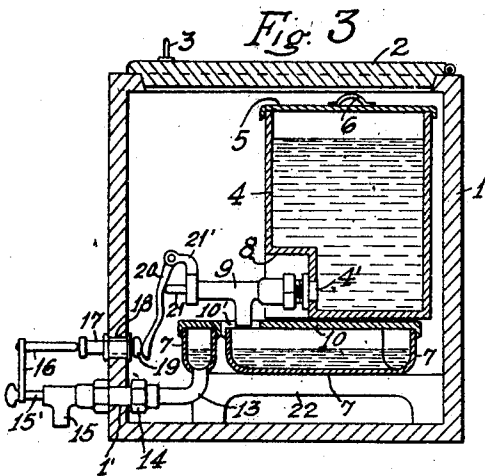
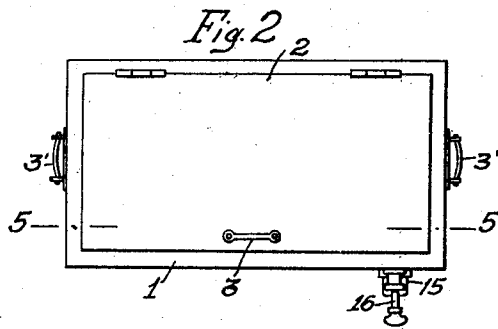
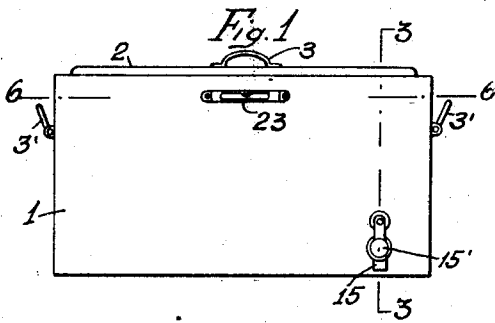
J. V. BOSQUE

1,776,307

WATER COOLER

Filed Dec. 10, 1928

2 Sheets-Sheet 1



J. V. Bosque
INVENTOR

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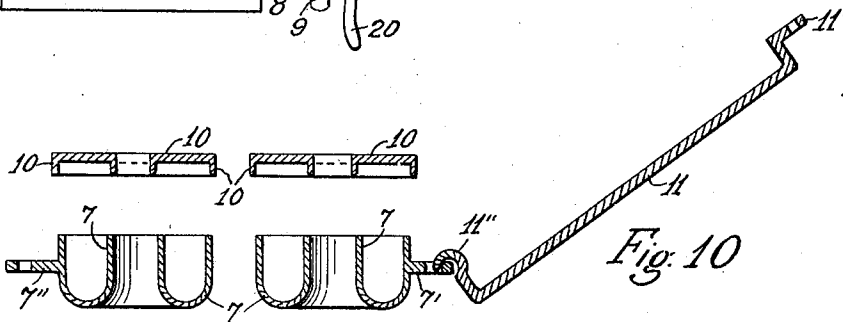
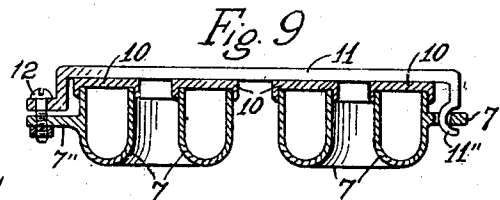
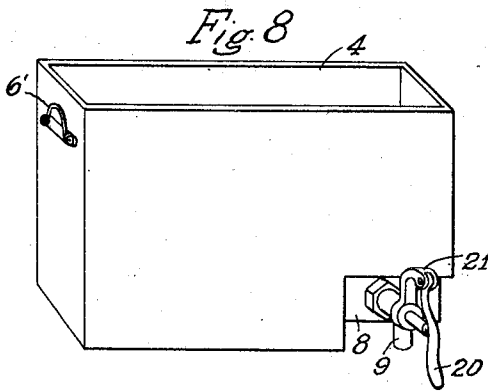
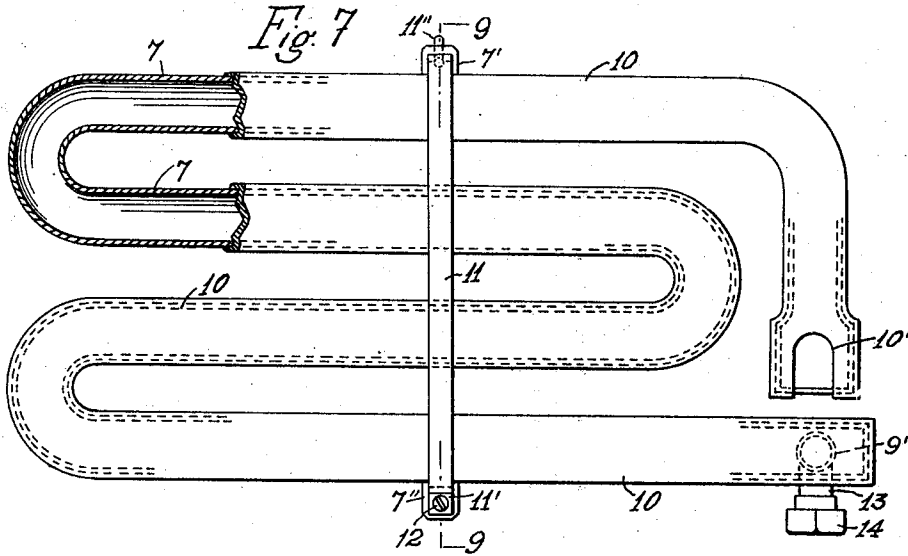
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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

JOSÉ VIDAL BOSQUE, OF SANTIAGO DE CUBA, CUBA

WATER COOLER

Application filed December 10, 1928, Serial No. 325,026, and in Cuba November 30, 1928.

This invention refers to refrigerators, and has for its main object, the provision of a new construction in devices of this kind, for the purpose of facilitating, in the first place, the efficient cleaning of the cooling coil, a cleaning which in my invention, may be done as often as wished, and by anyone, although not an expert in mechanics.

A further object of the invention is to provide, in combination with a cooling coil which is easily cleaned, a mechanism which simultaneously draws the cold water, and allows the cold water from the reservoir to circulate through the coil.

In the drawings:

Figure 1 is a front elevation of the refrigerator.

Figure 2 is an upper plan view of same.

Figure 3, is a vertical transverse section, on line 3—3 of Figure 1.

Figure 4 shows an operative position in the same section shown in Figure 3.

Figure 5 is a vertical, longitudinal section on line 5—5 of Figure 2.

Figure 6 is a horizontal section on line 6—6 of Figure 1.

Figure 7 is an upper plan view, on an enlarged scale, and partly in section part of the coil used in this kind of refrigerator.

Figure 8 is a perspective view of the tank for containing the liquid to be cooled.

Figure 9 is a vertical transverse section, on line 9—9 of Figure 7, and

Figure 10 shows an operative position in the same section, shown in Figure 9.

Referring now, more particularly, to the accompanying drawings in which similar reference characters designate corresponding parts throughout the several views there is provided a cabinet 1 having a cover 2 hinged thereto to form a hermetical closure. The cabinet is provided with a top handle 3 and side handles 3' to facilitate opening and moving the device from place to place respectively. Within the cabinet 1 is removably arranged a reservoir 4, for water, or the liquid to be cooled and this reservoir which is shown in detail in Figure 8, is covered by a cover 5, with its side handle 6, and having handles for its manipulations. This

reservoir 4 is provided on one face with a recess 8, and in the front wall of said recess, is an opening 4' on which is mounted the nipple of an outlet cock 9, the operation of which will be later explained and which drains into a coil 7, bearing upon a standard 22 which rests on the bottom of the cabinet 1, the reservoir 4 in turn bearing upon the coil 7. Said coil, as detailed in Figures 7-9 and 10 consists of tortuous passageways 8, as in the usual form of coil, closed on its ends, and a joint cover 10, which presents in the end corresponding with the mouth of the cock 9, an opening 10', through which the water passes, as it flows from the cock 9, and circulates through the branches of the coil 7. The cover 10, as may be clearly seen in the figures referred to, has the same shape as the coil 7, and presents hanging flanges 10'', which permits of a perfect adjustment in the sides of the branches of said coil, being held securely to the body of same by one or more braces 11, ending in a hooked end 11'', which engages in a slot provided in an ear 7' integral with the coil, and its other end terminating in a flange 11', which presents an opening registering with an opening existing in another ear 7'', which extends in alignment with the opposite ear 7' being fastened thereto by means of a screw and nut 12.

Under the end of the coil, opposite that which has the slot 10' is an outlet opening 9', and to the same is connected the elbow 13, to which is connected the union 14, and on which is fastened the nipple of an outlet cock 15, which passes through a hole 1' provided in the front wall of the cabinet 1. To the stem 15' of the cock 15 is secured an angular arm 16, and in contact with the loose branch of same is a stem 17, slidably mounted through a bushing 18, through the same front wall of the cabinet 1, and which stem ends in a head 19, which engages the hanging end of a lever 20, pivoted to an upright 21', secured to the cock 9, and this lever in turn engages the stem 21 of said cock 9 to operate the latter.

An air level 23 is secured to the front wall of the cabinet 1, but said level may be in-

stalled in any other place in the refrigerator, which may be though more suitable.

Assuming the reservoir 4 to be filled with water which is to be cooled, and all the parts are in the position shown in Figure 3, a piece of ice 24 is placed in position over the coil 7, next to the reservoir 4, as shown in Figures 5 and 6. Normally there always will be water in the coil 7 as a result of the last dispensing of water from the reservoir 4 as will be seen in the following.

If the angular arm 16 is pushed in the direction indicated by the arrow in Figure 4, when the stem 15' of the cock 15, which is of the usual construction, is pressed the same will be opened, and at the same time the loose branch of the angular arm will force inwardly the slideable stem 17 and the head 19 of same will act upon the lever 20, pressing it against the stem 21 of the cock 9, which when pressed will in turn open the last named cock, permitting the outlet of the water from the reservoir 4, which has been previously cooled by the contact with the ice 24. In this way a circulation of cool water will be established through the turns of the coil 7 towards the open cock 15, when the water from the cock 9 drips, through the slot 10' into the coil 7, while the inward manual pressure is maintained, upon the angular arm 16, and when this pressure is released, both cocks 15 and 9 will be closed by the stress of its inner springs, the coil 7 remaining filled with very cold water for the next dispensing.

When cleaning of the coil is desired, it is only necessary to lift the cover 2 of the cabinet, and take out the reservoir 4 together with the cock 9. The brace or braces 11 are removed by unscrewing the corresponding screw 11' and by turning said brace or braces inwardly as shown in Fig. 10 after which it is only necessary to remove the cover 10 from the coil and effect the complete cleaning of the same. Subsequently all of the parts are returned to their former positions.

Claims:

1. In a refrigerator, the combination, a main refrigerating casing, a combined cooling coil and ice support mounted in the casing, valve controlled dispensing means mounted through the casing and detachably connected to the ice support, a reservoir removably mounted on the ice support, valve controlled dispensing means connected to the reservoir and positioned so that liquid will be dispensed into the coil, and an operable connection carried by the dispensing means on the casing and slidably mounted through the casing and in contacting engagement with the valve controlled dispensing means on the reservoir so that the dispensing means will operate together upon the operation of the dispensing means on the casing.

2. In a refrigerator, the combination, a main casing, a combined ice support and

cooling coil in the bottom thereof and adapted to contain a limited supply of cold drinking liquid and having an inlet opening, a cold drink reservoir removably mounted on the support and within the casing, a valved conduit carried by the reservoir and having its outlet end arranged in registration with the inlet opening of the coil, a valved outlet conduit leading from the coil and projecting outwardly from the casing, an operable connection on the last mentioned conduit and slidably arranged through the casing and in contacting engagement with the first mentioned valved conduit whereby when the outlet conduit is operated to dispense liquid from the coil the other valved conduit is opened to allow a replenishing of the coil with the liquid from the reservoir.

In testimony whereof I affix my signature.

JOSÉ VIDAL BOSQUE.