

Sept. 2, 1924.

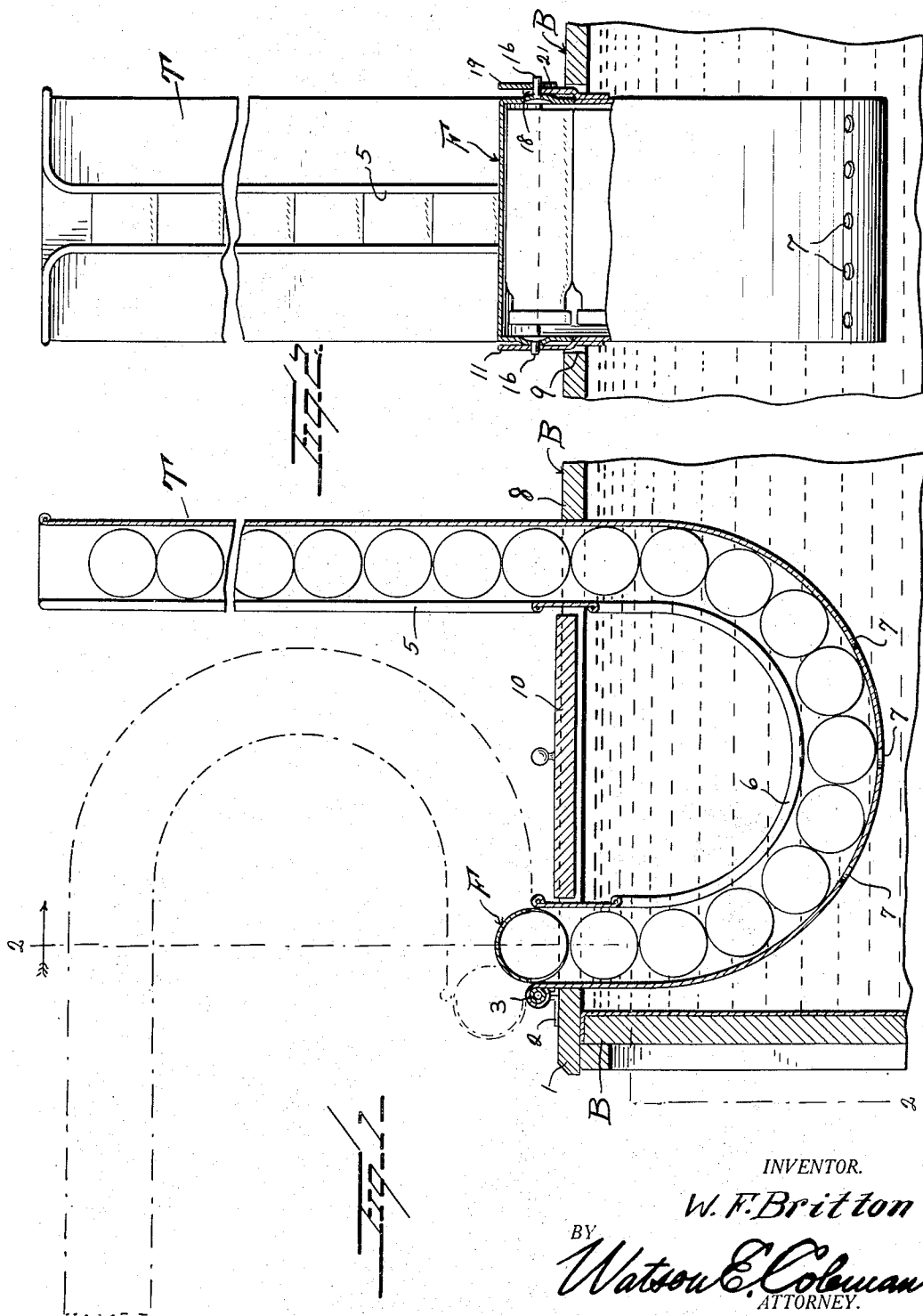
1,507,366

W. F. BRITTON

REFRIGERATOR

Filed Sept. 29 . 1923

2 Sheets-Sheet 1



Sept. 2, 1924.

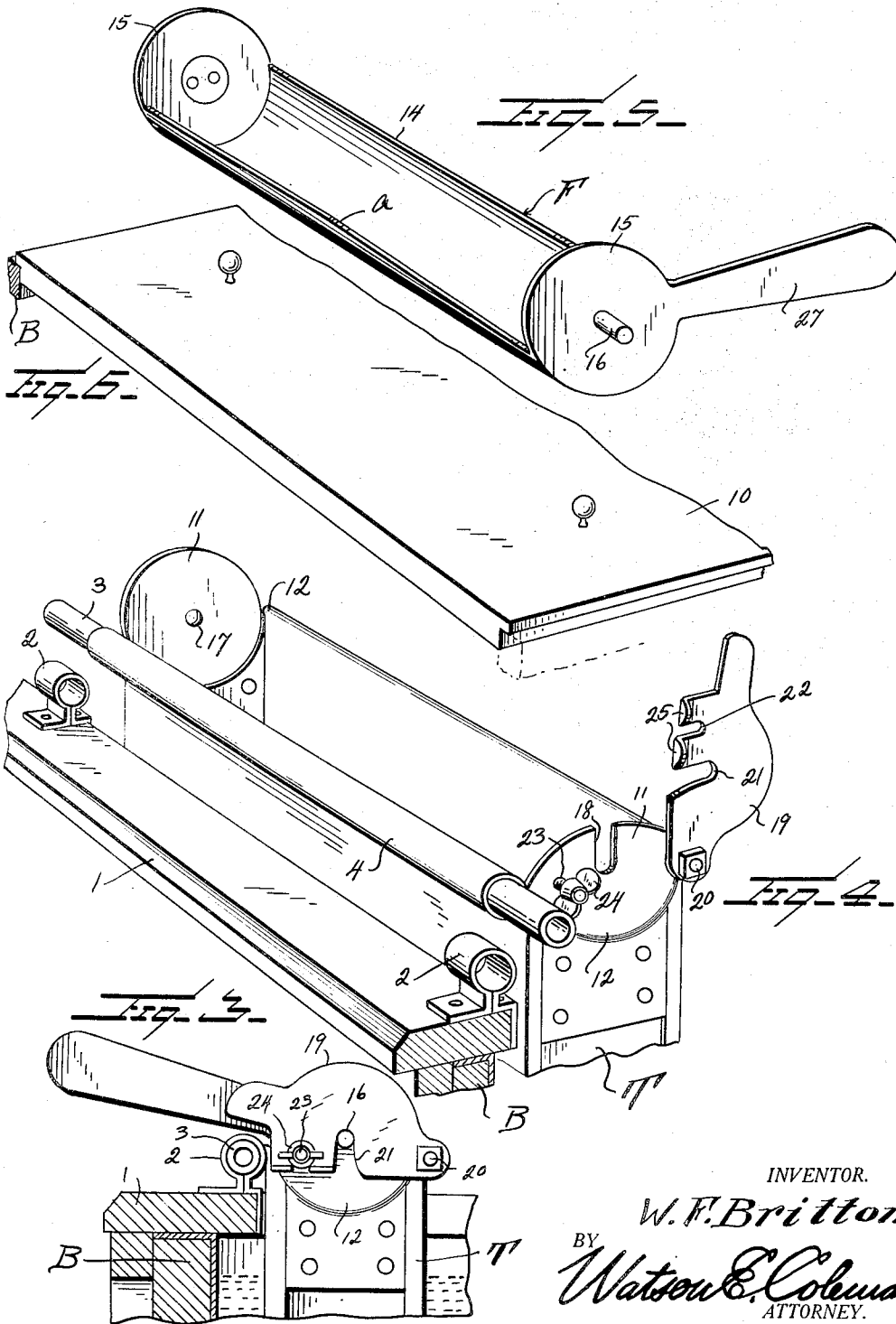
1,507,366

W. F. BRITTON

REFRIGERATOR

Filed Sept. 29, 1923

2 Sheets-Sheet 2



INVENTOR.

W. F. Britton

BY

Watson E. Colman

ATTORNEY.

Patented Sept. 2, 1924.

1,507,366

UNITED STATES PATENT OFFICE.

WALTER F. BRITTON, OF ANNISTON, ALABAMA.

REFRIGERATOR.

Application filed September 29, 1923. Serial No. 665,583.

To all whom it may concern:

Be it known that I, WALTER FRANK BRITTON, a citizen of the United States, residing at Anniston, in the county of Calhoun and State of Alabama, have invented certain new and useful Improvements in Refrigerators, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in refrigerators and has relation more particularly to a device of this general character especially designed and adapted for use in delivering and dispensing bottles containing beverages and it is an object of the invention to provide a device of this general character having novel and improved means whereby a single delivery of a bottle is obtained after such bottle has been caused to pass through a cooling medium.

It is also an object of the invention to provide a novel and improved device of this general character comprising a chamber adapted to contain a suitable cooling medium together with a conveyor tube extending within said chamber, the delivery end of the tube being provided with means to regulate the discharge of a bottle therefrom and wherein the entrance end of the tube terminates exteriorly of the cooling chamber so that the bottles to be cooled may be readily applied within the tube as desired.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved refrigerator whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:—

Figure 1 is a sectional view illustrating a refrigerator constructed in accordance with an embodiment of my invention, a second position of the tube being indicated by broken lines;

Figure 2 is a view partly in section and partly in front elevation of the structure as illustrated in Figure 1;

Figure 3 is a fragmentary view partly in

section and partly in side elevation illustrating the means to provide for a single delivery;

Figure 4 is a fragmentary view in perspective illustrating the delivery end of the tube and the manner in which it is supported;

Figure 5 is a view in perspective of the delivery member herein employed;

Figure 6 is a view partly in perspective and partly in section illustrating a removable lid for the cooling chamber as herein employed.

As disclosed in the accompanying drawings, B denotes a box of suitable dimensions and configuration which provides a cooling chamber and in which is adapted to be arranged any suitable cooling medium, preferably ice water. The upper portion of the box at its forward portion is provided with a transversely disposed strip 1 provided at spaced points therealong with the upstanding bearings 2 adapted to receive and support the rod or pintle part 3.

The bottles to be cooled are carried by a tube T of requisite dimensions and configuration and which has its major portion straight while one end portion is disposed on a lateral curvature of approximately 180°. The curved portion of the tube T is adapted to be disposed within the box B and the outer end of said curved portion has its forward wall provided therealong with the barrel 4 through which the rod or pintle 3 is disposed whereby the tube T is supported by the box B for swinging movement.

The major portion of the vertical part of the tube T is provided in its forward or face wall with the elongated slot 5 to provide means whereby visual access may be had within such part of the tube. The arcuate or curved portion of the tube T is also provided in its convex concave face with the slot 6 whereby the cooling medium may enter said portion of the tube for direct contact with the bottles. The opposite face of said curved portion of the tube T is provided at spaced points therealong with the openings 7, said openings 7 being arranged in series disposed transversely of the tube. These openings 7 provide further means to assure the proper action of the cooling medium upon the bottles.

Normally, the straight portion of the tube T is vertically disposed and which position

is maintained by the rear strip 8 carried by the upper portion of the box B and with which the tube contacts as is clearly illustrated in Figure 1.

5 The upper wall of the box B is provided with an opening 9 of a size and configuration to readily permit the curved portion of the tube T to have proper entrance within the box B. The portion of the opening 9 intermediate the hinged extremity of the tube T and the portion of the tube opposed thereto, when the tube is in its normal position, is adapted to be closed by the removable cover 10.

15 The free end of the tube T has its side walls provided with the upstanding ears 11 the lower portion of which is defined by the arcuate guides or trackways 12.

F denotes a feed member comprising an elongated body or member 14, said feed member being substantially semi-circular in cross section with one longitudinal edge disposed in outward divergence towards its longitudinal center α . The ends of the body or plate 14 are closed by the circular plates or discs 15, the radii of which being the same as the guides or trackways 12 and with which the end portions of the body or plate 14 and the plates or discs 15 are adapted to engage whereby the feed member F is capable of rotary movement.

The plates or discs 15 at their axial centers are provided with the outstanding trunnions 16, one of which being insertible through an opening 17 provided at the axial center of an ear 11, while the second trunnion is adapted to be received within a radially disposed open slot 18 provided in the second ear 11. The slot 18 is vertically disposed.

After the feed member F has been applied, the same is locked against displacement by the swinging latch 19 having one end portion pivotally connected, as at 20, to a side portion of the ear 11 provided with the slot 18. The inner marginal portion of the latch 19 is provided with an open slot 21 adapted to engage over the adjacent trunnion 16 when the feed member F is in applied position. The same marginal portion of the latch 19 outwardly of the slot 21 is provided with a second slot 22 adapted to engage over an outstanding shank 23 carried by the associated ear 11. Threaded upon the shank 23 is a wing nut 24 adapted to have clamping action upon the latch 19 when in closed or working position. When the nut 24 is in holding position, outstanding lugs 25 carried by the latch 19 at opposite ends of the slot 22 engage with the nut 24 whereby further means are provided to effectively maintain the latch 19 against outward swinging movement.

The bottles are applied within the tube T from its outer open end and the weight of

such bottles serve to constantly urge the inner bottles toward the hinged or discharge end of the tube T and against the feed member F when turned into its closed position as particularly illustrated in Figure 1. When it is desired to deliver a bottle requisite rotation is imparted to the member F causing the same to pass under the bottle in contact therewith and over the bottle immediately adjacent thereto. After this operation a bottle may be readily removed. The feed member F is then returned to its closed position and the weight of the bottles within the tube will cause the bottles to advance sufficient to bring the succeeding bottle into proper position within the closed feed member F.

In the event the bottles are of a number to provide insufficient weight to effect the desired delivery of a bottle, the cover 10 may be removed and the tube T swung upwardly and outwardly to a position indicated by broken lines in Figure 1. With the tube T in this second position it is also possible to clean out the chamber of the box B or to apply ice, water and the like within the box.

In order that the requisite rocking or rotation may be imparted to the feed member F one of the discs 15 is provided with an outwardly and laterally disposed operating handle or lever 27 of a length to be readily grasped by the hand of the operator.

From the foregoing description it is thought to be obvious that a refrigerator constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:—

1. A device of the class described comprising a box providing a cooling chamber having an opening in its top wall, a tube having an arcuate end portion for insertion within the cooling chamber through the opening in the top wall, and means for hingedly connecting the free extremity of the arcuate portion of the tube to the box to permit the tube to have swinging movement.

2. A device of the class described comprising a box providing a cooling chamber having an opening in its top wall, a tube having an arcuate end portion for insertion within the cooling chamber through the opening in the top wall, means for hingedly connecting the free extremity of the arcuate portion

of the tube to the box to permit the tube to have swinging movement, and a closure member for discharge end of the tube.

5 3. A device of the class described comprising a box providing a cooling chamber having an opening in its top wall, a tube having an arcuate end portion for insertion within the cooling chamber through the opening in the top wall, means for hingedly connecting
10 the free extremity of the arcuate portion of the tube to the box to permit the tube to have swinging movement, and a single delivery means associated with discharge end of the tube.

15 4. A device of the class described comprising a box providing a cooling chamber having an opening in its top wall, a tube having an arcuate end portion for insertion within the cooling chamber through the opening in
20 the top wall, and means for hingedly connecting the free extremity of the arcuate

portion of the tube to the box to permit the tube to have swinging movement, a wall of the arcuate portion of the tube being provided with openings.

25 5. A device of the class described comprising a box providing a cooling chamber having an opening in its top wall, a tube having an arcuate end portion for insertion within the cooling chamber through the opening in
30 the top wall, means for hingedly connecting the free extremity of the arcuate portion of the tube to the box to permit the tube to have swinging movement, and a plate rotatably supported by discharge end portion
35 of the tube, said plate being substantially semi-circular in cross section and provided with means for rotating the same.

In testimony whereof I hereunto affix my signature.

WALTER F. BRITTON.