May 31, 1932. W. F. CRAWFORD 1,861,431

CARRIER FOR ICE

Filed May 12, 1931 2 Sheets-Sheet 1

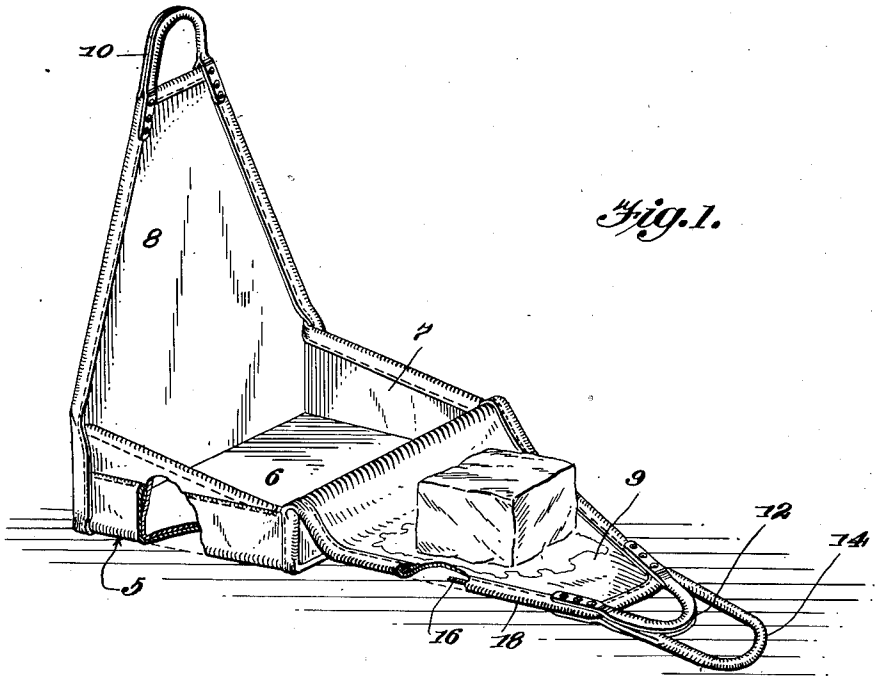


Fig. 1.

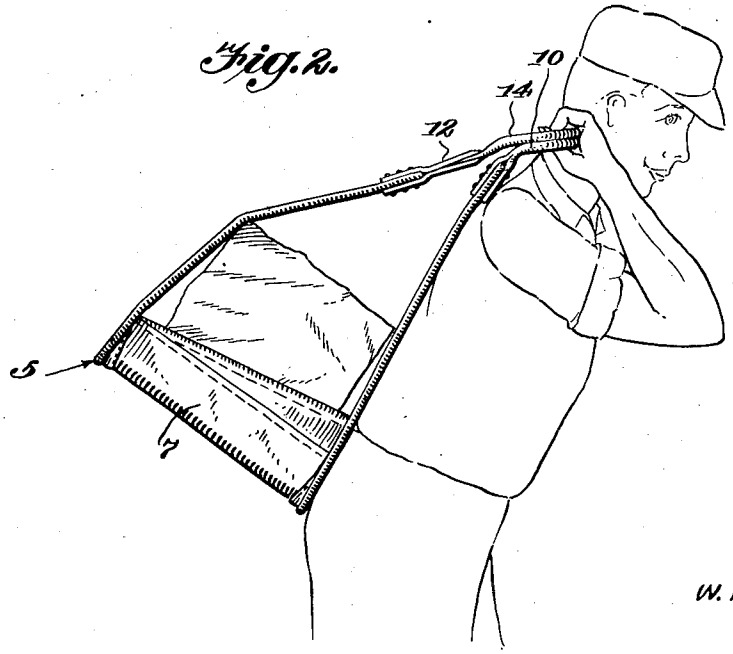


Fig. 2.

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Fig. 3.

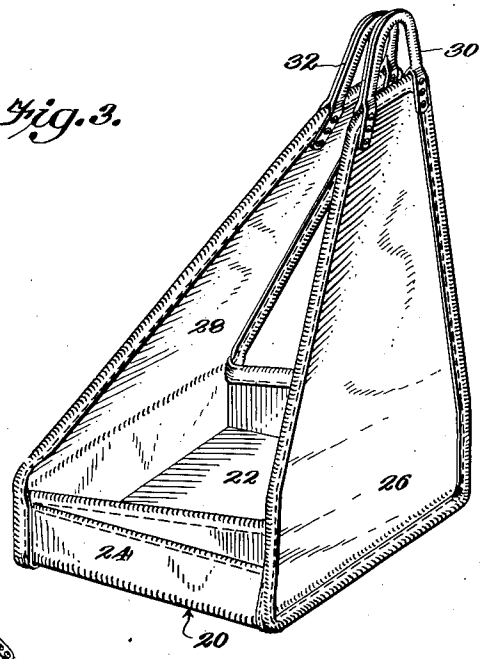


Fig. 4.

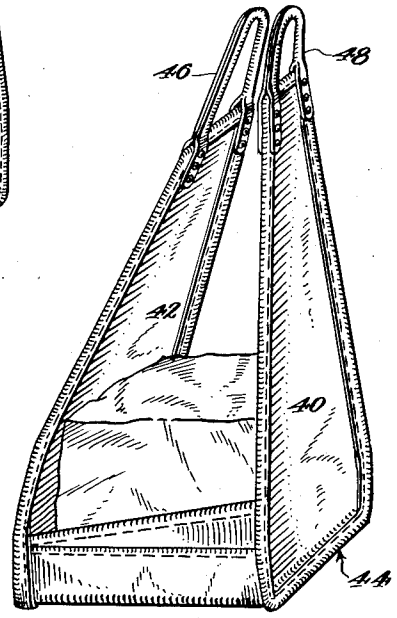


Fig. 5.

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UNITED STATES PATENT OFFICE

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CARRIER FOR ICE

Application filed May 12, 1931. Serial No. 536,872.

This invention relates to material handling devices, especially adapted for use in connection with ice.

More specifically, the invention is in the nature of a flexible carrier especially adapted for use in the delivery of ice from an ice wagon to an ice box and to provide for the convenient carrying of the ice on the back of the delivery man, the outer flexible side of the carrier will be found to be provided with means such as a supplemental handle to compensate for the greater curve the outer side of the bag is caused to describe, as compared to the inner side of the bag, when the loaded carrier is balanced on the back of the delivery man with the result that the delivery man is enabled to maintain a secure grip on the handles without manual discomfort or strain on the carrier.

Also, the relatively greater length of the outer side of the carrier allows the ice loaded carrier to be balanced on the back of the delivery man with one side of the block of ice presented flatly against the back of the delivery man for personal ease and comfort while making deliveries, this being in contrast to the use of a carrier having co-extensive sides which when brought together over the shoulder of the delivery man cause one edge of the block of ice to dig into the back, at substantially the same point on each delivery thereby causing material discomfort and soreness.

Further, the invention contemplates an ice carrier in which one of the sides thereof is provided with a marginal stiffening beading terminating immediately above the ends of the carrier to allow the said side to be swung down onto the floor to form a temporary supporting tray for the relatively small cake of ice that is removed from the box preparatory to the insertion of the newly delivered ice; and, of course, the ice that is placed on the supporting tray may be returned to the box and in this connection it is noted that the said reinforcing beading not only functions as such, but acts as a retainer for water that drips from the ice so that after the box has been iced, the combination side wall and tray of the carrier may be swung up to direct the drippings from the ice into the body of the carrier for subsequent disposal.

A carrier constructed in accordance with this invention will also be found to have the end walls thereof increased in height toward one of the sides of the carrier to assist in holding that side of the carrier normally in an upright position while the side of the carrier that is located at the lower terminals of the end walls is not so held in an upright position and may, therefore, be conveniently swung down onto the floor to form a temporary resting place for ice as previously described.

Another object of the invention is to provide an ice carrier of the character suggested which is durable in use, of highly simplified construction and cheap to manufacture.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application and in which like numerals are employed to designate like parts throughout the same—

Figure 1 is a perspective of the improved carrier with one of the sides thereof in the lower position.

Figure 2 is a side elevation illustrating the manner in which the handles of the carrier may be conveniently and securely gripped, while the carrier and its load of ice is balanced on the back.

Figure 3 is a perspective illustrating an ice carrier in which the outer flexible side thereof is greater in length than the inner or back contacting side of the carrier.

Figure 4 is a perspective illustrating another modification of the invention.

Figure 5 is a perspective of a carrier having one side thereof equipped with separate handles adapted to be selectively brought into line with the single handle of the other side of the carrier.

In the drawings, the numeral 5 designates the improved ice carrier which may be formed principally from canvas or other suitable material.

The bottom 6 has the end portions thereof

extended upward to form oppositely located end walls 7. At this point, it might be noted that the bottom 6 may be formed of two or more layers of material to provide increased strength and one or more of the layers may be extended beyond the other layers as shown in Figure 1, or all the layers may be of the same length.

Figure 1 also illustrates that oppositely located sides 8 and 9 are secured to the edge portions of the bottom 6 and to the terminal portions of the end walls 7 to provide a compartment for the reception of a block of ice.

The side walls 8 and 9 are shown to be tapered or decreased in width toward the upper or outer portions thereof and the side 8 is equipped at the reduced portion thereof with a U-shaped handle 10 of leather or other suitable material which, when the carrier is suspended from the hand of the person carrying the ice, is in line with the U-shaped handle 12 of the side 9. In other words, the handles 10 and 12 are adapted to be brought together for manual engagement when it is desired to suspend the carrier from the hand, it being noted in this connection that the side walls 8 and 9 are of the same length or height to locate the handles 10 and 12 close to each other for convenient manual engagement.

When the loaded carrier is balanced on the back of a delivery man in the manner suggested in Figure 2, the presence of the ice in the carrier prevents the handles 10 and 12 from being brought conveniently together and thus, the extension or supplemental handle 14 extended outwardly beyond the handle 12 will be found to be located for convenient manual engagement along with the handle 10.

When the handles 10 and 14 are brought together the same may be gripped without discomfort to the delivery man and without strain on the carrier itself. Figure 2 illustrates that the arrangement 12—14 constitutes what might be said to be a compound handle having spaced grips adapted to be selectively positioned for engagement along with the grip 10. When the carrier is balanced on the back of the delivery man only slight manual force is necessary to hold the handles 10 and 14 together, this being true because the sides of the handle 14 are sufficiently great in length to locate the bite portion of this handle close to the bite portion of the handle 10.

The presence of the extension 14 does not lessen the ease with which the handles 10 and 12 may be gripped together when it is desired to suspend the carrier from the hand. The use of the improved ice carrier in the manner suggested in Figure 2 avoids the necessity of the delivery man wearing a separate back pad since, as previously described, the side 8 is of a waterproof material and will therefore protect the delivery man.

When the ice loaded carrier is brought into the house or other place where an ice-box is located, it is placed on the floor and the side 9 is swung down onto the floor to form a convenient resting place for the small block of ice that may be removed from the ice-box to allow of the convenient placing of the new supply of ice in its proper place in the box. Of course, after the new supply of ice has been placed in the box, the ice formerly in the box is returned thereto and it will be observed that the water that dripped from the ice while on the lowered side 9 is retained by the marginal beading 16 in the form of a length of rope or the like.

The beading 16 and the surrounding hem 18 thereof cooperate with the side 9 in the formation of a shallow collector or basin for the reception of the water that drips from the cake of ice placed temporarily on the side 9. After the cake of ice is returned to the box, the side 9 is swung upward so that the water thereon is directed into the ice compartment of the carrier for subsequent disposal.

Figure 1 illustrates that the beading 16 terminates immediately above the end walls 7 to allow the combination side wall and tray 9 to be conveniently swung down to the lowered position shown in Figure 1. The beading 16 and the hem 18 not only function as a liquid retainer, but as a stiffening and strengthening means for the combination side wall and tray 9 and since the beading 16 terminates in spaced relation to the end walls 7 the beading will not in any way interfere with the hinge movement by which the side 9 is swung from one position to another.

In the form of invention illustrated in Figure 3, the bag is generally designated by the numeral 20 and is provided with a bottom 22 having the end portions thereof extended upward to form end walls 24.

The inner and outer side walls 26 and 28 respectively, are extended substantial distances above the end walls 24 and have the upper terminal portions thereof provided with handles 30 and 32 respectively, these handles being more or less of U-shaped formation and having connection by rivets or other suitable means with the edge portions of the side walls.

From Figure 3 it will be seen that the outer side wall is greater in length or height than the length or height of the inner side wall 26 so that when the loaded carrier is mounted on the back of an ice delivery man, the handles 30 and 32 may be conveniently brought together for manual engagement.

That is to say, the increased length or height of the outer side wall 28 as compared with the length or height of the inner side wall 26 compensates for the greater curve the outer side wall is caused to describe when

the loaded carrier is mounted on the back of a delivery man.

In the form of invention shown in Figure 4 the inner and outer side walls 40 and 42 respectively of the carrier 44 are of approximately the same length or height. However, it will be found that the U-shaped handle 46 attached to the upper end of the outer wall 42 is substantially longer or is elongated with respect to the U-shaped handle 48 of the inner side wall 40. By this arrangement when the loaded carrier is mounted on the back of the ice delivery man, the handles 46 and 48 may be conveniently brought together for manual engagement.

The carrier shown in Figures 3 and 4 may be handled with the greatest ease when mounted on the back of a delivery man, this being true because of the provision of but a single handle on each side. It will be seen that when a loaded carrier constructed as shown in Figures 3 and 4 is carried suspended from the hand of the delivery man or other person, the bottom of such carrier will dip somewhat toward the outer side. This unbalances the load and makes it less convenient to carry although, it will be recognized that the carriers shown in Figures 3 and 4 are especially designed for handling ice on the back of a delivery man.

In the form of invention shown in Figure 5, the carrier 50 is provided with inner and outer side walls 52 and 54 respectively, these side walls being provided with similarly shaped and proportioned handles 56 and 58. The inner and outer sides 52 and 54 respectively, are of substantially the same length or height so that when a load of ice or the like is placed in the carrier the handles 56 and 58 may be brought together for manual gripping so that the load may be carried suspended from the hand in contrast to the balancing of the load on the back of the delivery man.

The outer side wall 54 is provided with a second U-shaped handle directly attached thereto and having a grip spaced beyond the grip of the handle 58. The handles 58 and 60 are normally in the plane of the side wall 54 and the grips thereof are adapted to be selectively brought into position for manual engagement along with the handle 56, depending on whether the loaded carrier is suspended from the hand of the delivery man or balanced on his back.

In summarizing, it will be seen that an ice carrier constructed in accordance with this invention is essentially in the nature of a basket-like structure having flexible inner and outer sides provided with suitable gripping means, the over-all length of the outer side being greater than the over-all length of the inner side to compensate for the greater curve the outer side is caused to describe when the loaded carrier is balanced on the back of an ice delivery man and at the same time to allow the block of ice to be carried with one side thereof presented flatly to the back of the delivery man.

In addition to allowing the handles of the carrier to be brought conveniently together over the shoulder of a delivery man, the greater length of the outer side of the carrier also permits the cake of the ice to be presented flatly against the back of the delivery man as distinguished from the use of a carrier having co-extensive sides which when brought together over the shoulder of the delivery man cause the upper inner edge of the block of ice to dig into the back of the delivery man thereby causing material discomfort and soreness.

It will be seen in each form of invention illustrated, the end walls are increased in height toward the inner wall of the carrier and are joined for the full height thereof with such inner wall to assist in holding the inner wall in an approximately upright position while the reduced height of the other end portions of the end walls allows the tray-forming outer wall to be lowered to a point where the major portion of the same rests flatly on the floor or other supporting surface. As might be otherwise expressed, the carrier has the end walls thereof reduced in height toward the tray-forming side wall so that the major portion of the tray-forming side wall may be lowered for the major portion of its length into contact with the floor or other supporting surface while the end walls are increased in height toward the inner side wall of the carrier to assist in holding this inner side wall in a substantially upright position for convenient manual engagement when it is desired to remove the carrier.

The foregoing illustrates that the invention forming the subject of this application is capable of a wide variety of mechanical expressions and it is therefore to be understood that the forms of invention herewith shown and described are to be taken as mere preferred embodiments of the same and that such minor changes in arrangement and construction of parts may be made as will remain within the spirit of the invention and the scope of what is claimed.

Having thus described the invention, what is claimed is:—

1. In an ice carrier, a bottom, side and end walls extended upward from the bottom to form an ice compartment, said side walls being extended substantial distances above the upper edges of the end walls, said end walls being increased in height toward one of said side walls and being stiffened to assist in holding that side wall in an upright position.

2. In an ice carrier, a bottom, side and end walls extended upward from said bottom, said side walls being extended substantial

distances above said end walls and being provided with handles, the end walls being increased in height toward one of said side walls and being secured thereto to brace that side wall and assist in holding the upper portion thereof against tilting, the other side wall being movable downward to form an ice supporting tray.

3. In an ice carrier, a body having a bottom wall and side walls, a handle secured to one of said side walls and having a grip for manual engagement and a compound handle secured to the other side wall and having grips spaced different distances from said bottom wall and adapted to be selectively associated with the grip of said first named handle for manual engagement.

4. In an ice carrier of the type adapted to be carried on the back of a delivery man, a body adapted for the reception of ice and having a bottom wall and flexible side walls, a handle secured to the upper portion of one of said side walls and having a grip for manual engagement, and a second handle secured to the other side wall and embodying a pair of connected U-shaped members having grips spaced different distances from said bottom wall and adapted to be selectively located contiguous to the grip of said first named handle when the loaded carrier is on the back of a delivery man so that the two handles may be conveniently held together.

5. In an ice carrier of the type adapted to be carried on the back of a delivery man and to be suspended from the hand of a person, a body having ice supporting means and being provided with flexible inner and outer sides, a handle secured to the inner side, and a second handle secured to the outer side and being provided with connected U-shaped members having spaced grips spaced different distances from said ice supporting means adapted to be selectively located contiguous to said first named handle depending on whether the carrier is mounted on the back of a delivery man or suspended from a hand of a person.

6. In an ice carrier, a bottom, inner and outer flexible side walls extending upward from said bottom and being provided with handles having grips for manual engagement, the distance between said bottom and the grip of said outer side wall being greater than the distance between said bottom and the grip of the inner side wall to allow the said grips to be brought conveniently together when the loaded carrier is mounted on the back of a delivery man with the inner wall of said carrier flat against the back of the delivery man.

7. In an ice carrier of the type adapted to be either suspended from the hand of an ice delivery man or mounted on his back, a body having flexible inner and outer side walls, and handles attached to the terminal portions of said side walls, the outer side wall being greater in height than the height of the inner side wall to allow said handles to be brought conveniently together for manual engagement when the carrier is mounted on the back of a delivery man.

8. In an ice carrier of the type adapted to be either mounted on the back of an ice delivery man or suspended from his hand, a body having substantially co-extensive inner and outer side walls, handles secured to said side walls and being provided with grips, the handle of the outer side wall being longer than the other handle to compensate for the greater curve the outer wall is caused to describe when the carrier is mounted on the back of a delivery man.

9. In an ice carrier of the type adapted to be either mounted on the back of an ice delivery man or suspended from his hand, a body having a bottom wall and inner and outer flexible side walls of approximately the same height, U-shaped handles secured to said side walls and a handle secured directly to the outer side wall, the handles of the outer side wall being provided with grips spaced different distances from said bottom wall.

10. In an ice carrier of the type adapted to be mounted on the back of a person or suspended from the hand, a body having a bottom wall and flexible inner and outer sides, a handle secured to the inner side, and a second handle secured to the outer side and provided with grips spaced different distances from the bottom wall and adapted to be selectively located contiguous to the first named handle depending on whether the carrier is mounted on the back of a person or suspended from the hand of a person.

11. In an article carrier of the type adapted to be mounted on the back of a person or suspended from the hand of a person, a body having flexible inner and outer walls provided with reduced upper terminal portions, a handle attached to the upper terminal portion of the inner wall and having a grip, a second handle attached to the upper terminal portion of the outer wall and having a grip adapted to be located contiguous to the grip of the first named handle for suspending the carrier from a hand of a person, and a third handle attached to the second named handle and having a grip adapted to be located contiguous to the grip of the first named handle when the carrier is mounted on the back of a delivery man, the grip of the third named handle being extended beyond the grip of the second named handle to compensate for the greater curve the outer side wall is caused to describe with reference to the inner wall when the carrier is mounted on the back of a person.

In testimony whereof I affix my signature.

WILBUR F. CRAWFORD.