R. C. LAFFERTY.

ICE TOOL.

APPLICATION FILED MAY 22, 1915.

1,267,233. Patented May 21, 1918.

Fig. 5.

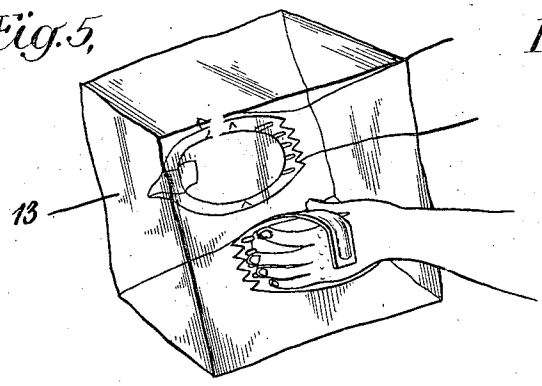


Fig. 6.

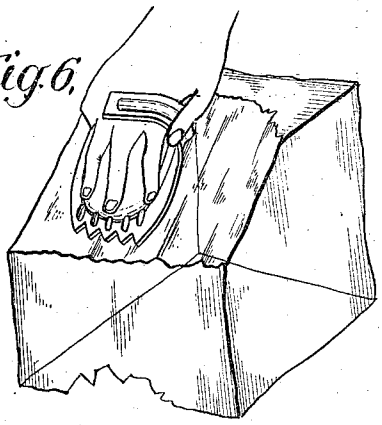


Fig. 1.

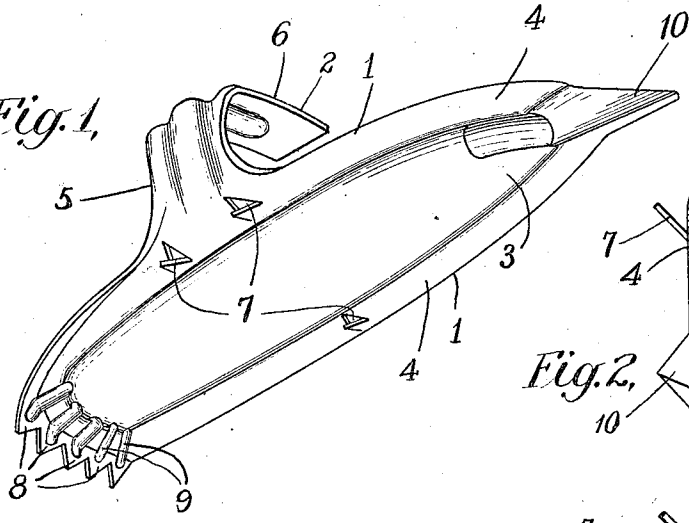


Fig. 2.

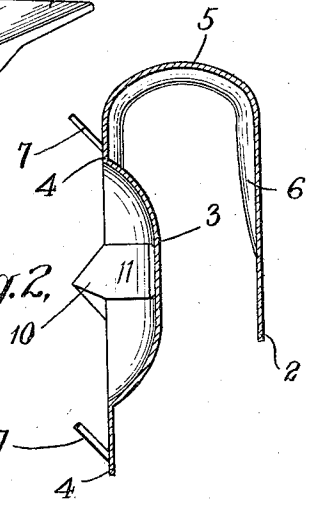


Fig. 3.

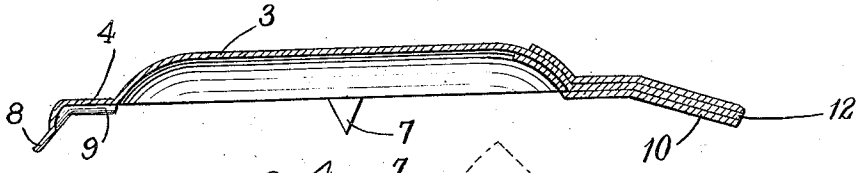
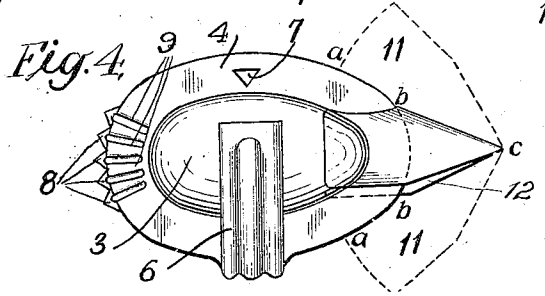


Fig. 4.



INVENTOR

Robert C. Lafferty,

BY

Kenyon & Kenyon,

HIS ATTORNEYS.

UNITED STATES PATENT OFFICE.

ROBERT C. LAFFERTY, OF NEW YORK, N. Y., ASSIGNOR TO ASA M. JENKINS, OF NEW YORK, N. Y.

ICE-TOOL.

1,267,233. Specification of Letters Patent. Patented May 21, 1918.

Application filed May 22, 1915. Serial No. 29,723.

To all whom it may concern:

Be it known that I, ROBERT C. LAFFERTY, a citizen of the United States, and a resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Ice-Tools, of which the following is a specification.

My invention relates to tools, and particularly to a tool to be employed in connection with ice to facilitate its handling and preparation for domestic or other ordinary uses.

One object of my invention is to provide a device whereby a firm, sure grip upon a cake of ice may be secured without contact of the person using the same with the ice.

Another object is to provide an ice tool having means for gripping a cake of ice wherein certain of the means directly cooperating with the ice to perform the gripping action may be used to comminute the ice.

Another object is to provide an ice tool having ice gripping members, which tool may be held in either hand, said tool being so formed that when one tool is held in each hand the members thereon are on opposite faces and are pointed in substantially the same directions respectively.

Another object of my invention is to provide a compound tool for gripping, comminuting and breaking up a cake of ice.

Other and further objects of my invention will appear from the following description taken in connection with the accompanying drawing forming a part of this specification, and will be pointed out in the claims.

In the accompanying drawings, in which like reference characters indicate similar parts in the different figures,

Figure 1 is a perspective view of an ice tool embodying a preferred form of my invention;

Fig. 2 is a cross-sectional view of the device shown in Fig. 1;

Fig. 3 is a longitudinal sectional view of the device shown in Fig. 1;

Fig. 4 is a top plan view of the device shown in Fig. 1;

Fig. 5 illustrates the manner in which two ice tools are used in transporting a cake of ice; and

Fig. 6 shows the manner in which one of the tools is used to comminute ice.

For the purpose of disclosing my invention, an ice tool made of sheet metal and embodying my invention is illustrated in the various figures of the drawings, which comprises a body member 1 and a handle member 2. The center portion of the body member 1 is pressed up from the plane of the body member to form a bulging projection 3, which is adapted to fit into the hollow of the hand when the tool is being used. This bulging projection does not necessarily have to be in the form illustrated, but may be in any form which will fit the hand and prevent relative movement of the hand and tool when the hand is pressed against the upper face of the body member. Surrounding the bulging projection is a preferably flat border 4 comprising the edge of the body member. Attached to, and preferably integral with, that part of the border of the body of the tool which comprises one edge of the tool is a handle member, which is in the form of device illustrated a part of the same sheet of metal from which the body member of the tool is made. This handle member 2 comprises a projecting portion 5 extending perpendicularly from the plane of the body member and having attached to its end the tongue member 6, which extends parallel to the plane of the body member, so that when the hand is placed over the bulging projection on the body member it is held thereagainst by the tongue member 6 of the handle member 2.

On the border of the body member, adjacent to the point to which the handle member is attached, are one or more ice gripping projections 7. These projections are formed by cutting V-shaped slots in the sheet metal and pressing outward the pointed tongue formed by the V-shaped slot, and so long as it is impracticable to grip a piece of ice with a metallic body without penetrating the surface thereof these projections are adapted to dig into and penetrate the surface of the ice. These projections are pointed toward that side of the body member to which the handle member is attached. One or more similar projections may be formed on the diametrically opposite portion of the border and be pointed in the same direction.

At one end of the tool, the border is formed with a plurality of teeth 8, which are pointed in a direction substantially at right angles to the direction in which the ice gripping teeth 7 are pointed. These teeth also are positioned at an angle to the plane of the body member, and they are stiffened by forming corrugations 9 in the material from which they are formed.

It may also be noted at this time that the handle member 2 is stiffened by forming corrugations extending throughout the length of the projecting portion 5 and the tongue member 6.

The opposite end of the body portion is formed to provide the ordinary ice pick 10. This is done by cutting the material along the lines *a*, *b*, in Fig. 4, and then bending one of the projections 11 along the line *bc* so that it lies on top of the pointed portion 12 formed on the end of the body member. The other portion 11 is bent along the line *bc* so that it lies on the under side of the pointed portion formed on the end of the body member of the tool. The portions 11 are bent so that they are in close contact, respectively, with the upper and lower faces of the portion 12, which is integral with the body member, and the ice pick point 10 is completed by sharpening the projection thus formed on the body member.

When it is desired to transport a cake of ice, one of these tools is held in each hand, as shown in Fig. 5, and the tools are pressed against opposite sides of the cake of ice 13. The ice gripping members 7 directly cooperate with the cake of ice, and, as the hands are raised to lift the cake, they are forced into its surface. The bulging projection which fits the hollow of the hand provides for inequalities in the surface of the ice, but it is hardly possible to grasp the cake so that it will be balanced exactly on the ice gripping members 7, and the teeth 8 and the pick 10, or either of them, are forced against the surface of the ice to prevent its rotating about an axis passing through the teeth 7 on the tools pressed against opposite faces of the ice. It will thus be seen that the teeth 7 primarily cooperate with the cake of ice, but that the teeth 8 and the pick 10 also coöperate with the cake of ice and tend to assist in lifting it and at the same time prevent the ice from swinging about an axis passing through the two ice tools.

In order to comminute a cake of ice, one of the tools is held in the ordinary way in the hand, and the teeth 8 are pushed across the surface of the ice and, digging into it, grind the ice into small chips.

The pick member 10 may be used in the ordinary way to break a cake of ice into small pieces.

While I have described an ice tool embodying my invention with great detail, I do not intend that my invention shall be limited to the specific features described, but intend that the drawings and description shall be merely interpretive of my invention, and that my invention shall only be defined by the hereunto appended claims.

As examples of some of the modifications which I contemplate as being within the scope of my claims, the ice gripping or penetrating projections might be separate from and attached to the body portion of the member, and the hand-engaging member might be made of any desired shape, and secured to the body member in any desired way so long as it enables the user to exert the desired force on the ice tool. However, these specific features form no part of my invention and do not therefore appear in the drawings.

What I claim and desire to secure by Letters Patent of the United States is the following:—

1. As an article of manufacture, an ice tool comprising a body having pointed members thereon, certain of said members acting to grip the ice to prevent relative motion of the tool and ice in one direction, and certain of said members acting to steady the ice relatively to the tool and to comminute the ice when moved relatively thereto in a direction substantially at right angles to the first-named direction.

2. As an article of manufacture, an ice tool comprising a body having one face thereof formed to provide a hand grip and another face thereof being provided with members for coöperating with the ice to grip the ice when a force is applied to the tool tending to move it in one direction and for comminuting the ice when a force is applied to the tool tending to move it in a direction substantially at right angles to the first-named direction.

3. As an article of manufacture, an ice tool comprising a body having ice penetrating members on one face thereof pointed toward one edge thereof and a hand-engaging member attached to that edge and projecting from the opposite face thereof, said tool being adapted to be used in coöperation with a similar tool to raise a piece of ice by pressing said tools against opposite sides thereof.

4. As an article of manufacture, an ice tool comprising a body having ice penetrating members on one face thereof, and a hand-engaging member projecting from the opposite face thereof, the said tool being adapted to be used in coöperation with a similar tool to raise a piece of ice by pressing said tool against opposite sides thereof.

5. As an article of manufacture, an ice tool comprising a body having ice penetrating members on one face thereof pointed

toward one edge thereof, another face being formed to fit the hand, and having a hand-engaging member to prevent movement of the hand relatively to the body in the direction of said edge.

6. As an article of manufacture, an ice tool comprising a body having ice penetrating projections on one face thereof and ice penetrating and steadying projections on one edge thereof.

7. As an article of manufacture, an ice tool comprising a substantially flat body member having ice penetrating projections on one face thereof and ice penetrating and steadying projections substantially at one edge thereof, said last-named projections comprising means to comminute the ice, and one edge of said body member being bent back to form a hand-engaging member.

8. As an article of manufacture, an ice tool comprising a substantially flat body member having ice penetrating projections on one face thereof and pointed toward one edge thereof and a portion of said edge being bent back across the other face forming a portion engaging the hand to prevent it from slipping from said last named face.

9. As an article of manufacture, an ice tool comprising a substantially flat body member having ice penetrating projections extending from one face thereof and having the other face thereof adapted to accommodate the hand of the user when pressing said projections into the ice, and being provided with a projecting member at one edge of said last-named face to prevent the hand of the user from sliding therefrom.

10. As an article of manufacture, an ice tool comprising a body member of sheet metal, one end of said body member comprising an ice tool comprising a pointed portion having reinforcing parts lying adjacent one or more of its faces and attached respectively to the edges of said pointed portion.

11. As an article of manufacture, a compound ice tool comprising a substantially flat body portion having ice gripping projections on one face thereof and a handle on the opposite face thereof, one end of said member being provided with ice comminuting means and the other end being provided with an ice pick whereby ice gripped by said gripping projections may be held against rotation by said comminuting means and said pick member.

12. As an article of manufacture, an ice tool comprising a substantially flat body member having a depression in one face to accommodate inequalities of the surface of a piece of ice to be handled and having ice-penetrating projections on said face and being provided on its opposite face with a hand-engaging member to prevent the hand of the user from slipping therefrom, said tool being adapted to be used in coöperation with a similar tool to raise a piece of ice by pressing said tools against opposite sides thereof.

13. As an article of manufacture, an ice tool comprising a substantially flat body member having ice-penetrating projections on one face thereof and being provided on its opposite face with a hand-engaging member to prevent the hand of the user from slipping therefrom, said tool being adapted to be used in coöperation with a similar tool to raise a piece of ice by pressing said tools against opposite sides thereof.

14. An ice grip comprising two members wholly independent of each other, which are in the form of bodies with teeth extending therefrom, whereby when each member is gripped in a hand of the operator the ice may be held by and between the teeth of said members.

In testimony whereof, I have signed my name to this specification.

ROBERT C. LAFFERTY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."