Dec. 3, 1940. C. W. JONES 2,223,422

ICE PICK

Filed Feb. 5, 1940

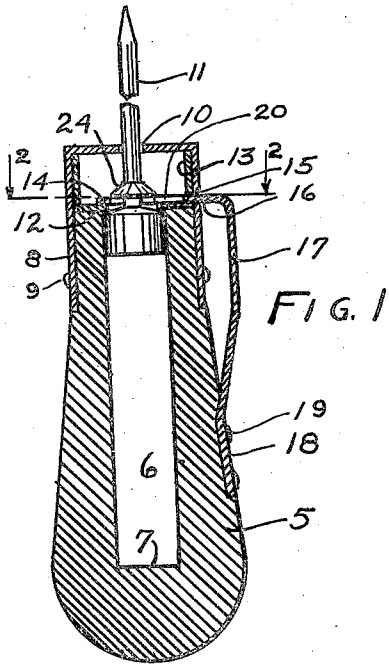


FIG. 1

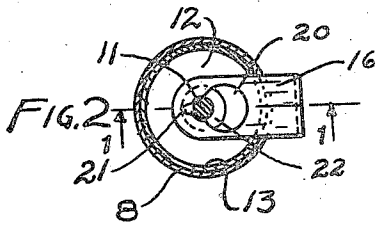


FIG. 2

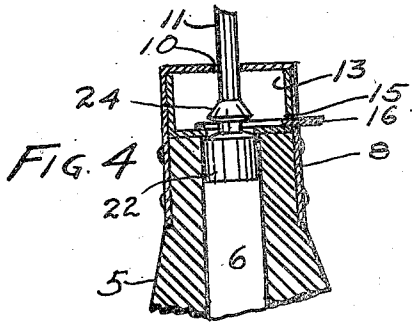


FIG. 4

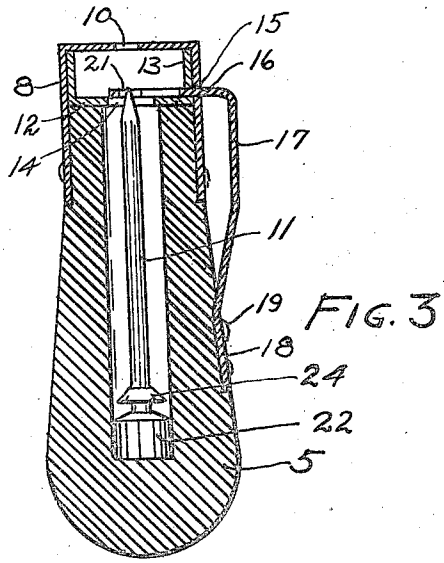


FIG. 3

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ICE PICK

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Application February 5, 1940, Serial No. 317,262

4 Claims. (Cl. 83—62)

This invention relates to improvements in ice picks of the type shown in United States Patents Nos. 1,008,734, dated November 13, 1911; No. 1,701,771, granted February 12, 1939, and 1,763,035 granted June 24, 1930.

It is well known that waiters in dining cars and porters on trains are often required to prepare drinks containing ice and for this purpose it is necessary for them to be equipped with ice picks to enable them to break ice into properly shaped pieces.

An ice pick must be of quite strong and rugged construction and must have a sharp point in order to penetrate the ice and produce the desired cleavage.

Waiters and porters on trains and in other places find it a great convenience to carry an ice pick so that it can be available whenever needed. If the pick is of the ordinary construction in which the handle is firmly secured to one end of the pick, such an instrument is dangerous to carry and frequently causes injury and damage.

The above mentioned difficulties have been recognized by others as evidenced by the patents above identified, and in order to overcome such difficulties, these patentees have shown pick constructions in which the pick point is reciprocable with respect to the handle so that it may be withdrawn into the latter a sufficient distance to cover the sharp point, and thereby make the ice pick harmless and suitable for carrying in the pocket.

It is the object of this invention to produce a new and improved construction of ice pick which shall make it especially well adapted for the purpose under consideration and which results in a substantial and dependable tool that can be manufactured at a reasonable cost and designed in such a way as to make it especially well adapted for carrying in the pocket as above pointed out.

The construction in which the present invention resides has been illustrated in the accompanying drawing to which reference will now be made, and in which:

Figure 1 is a longitudinal section through an ice pick construction in accordance with the present invention and shows the ice pick extended in operative position;

Figure 2 is a section taken on line 2—2, Figure 1, and shows the relationship of the latching member to the other parts of the device;

Figure 3 shows the ice pick in collapsed position; and

Figure 4 is a fragmentary section showing a slightly modified construction.

In the drawing reference numeral 5 designates a handle which may be made of wood or any other suitable material and this is provided with an axially extending bore 6 of circular cross section. This bore terminates within the handle and the bottom has been designated by reference numeral 7. Secured to the end of the handle through which the bore opens is a cap or ferrule 8. This cap has cylindrical sides that project over the end of the handle and is secured thereto by screws or nails 9. The closed end of the cap is provided with an opening 10 which is in axial alignment with the bore 6. In Figure 1 the ice pick 11 has been shown as extending through the opening 10. Resting against the outer end of the handle and held in position by the end of the cap 8 is a dish shaped partition 12 that is provided with a cylindrical flange 13 and with a central opening 14. The partition is of such size that it fits the inside of the ferrule 8 quite snugly and the flange 13 spaces the two parts so as to provide a chamber, the purpose of which will hereinafter appear. The ferrule 8 and the flange 13 are both provided with circumferentially extending openings 15 for the reception of a latching member 16. This latching member is preferably made from resilient materials, such as spring brass or steel and has a straight portion projecting through the openings 15 and extending inwardly in close proximity to the outer surface of the partition. The latching member has a straight portion 17 that is accessible from the outside and which terminates in an end 18 which is provided with openings for the reception of securing screws or pins 19. The latching member has a circular opening 20 of the same diameter as opening 14. The inner portion of opening 20 has a narrow notch 21 that tapers inwardly in the manner shown in Figure 2. The inner end of the ice pick 11 is provided with a cylindrical head 22 of substantially the same diameter as the bore 6, being slightly smaller than the latter so as to permit the parts to slide in the bore. The outer end of the cylindrical member may be flat or may be somewhat conical as indicated by reference numeral 24. The diameter of the head 22 is larger than opening 14 with the result that it limits the outward movement of the pick. Attached to or formed integral with the pick is a collar 24 that is preferably circular and of such diameter that it can pass through the opening 14. The space between the collar and the end of the head 22 is such that when the pick is in extended position the latching member 16 can be moved into position between the inner end of the collar and the partition so

as to latch the ice pick in extended position, all in a manner shown quite clearly in Figure 1.

When the parts are in latched position, they occupy the position shown in Figures 1 and 2, from which it can be seen that a portion of the latching member is positioned in the groove between the head 22 and the collar 24. With the parts as shown in Figure 1, the ice pick is ready for use and can be used as an ordinary tool of this kind. After the pick has been used, the operator can press inwardly on the handle 17, thereby moving the latching member inwardly until the collar 24 passes through the opening 20, after which it will pass through opening 14 and the parts will then occupy the position shown in Figure 3. The pick is made of such length that when the parts are collapsed the tapered point of the pick will engage in the tapered notch 21 and this will hold the pick from accidental outward movement.

In Figure 4 a slightly modified form has been shown in which the inner surface of the collar 24 is tapered as well as the outer end of the head 22. This makes it possible to obtain a slight clamping action, if this should be deemed advisable.

From the above description it will be evident that I have produced a simple ice pick of substantial construction that can be easily collapsed into such a position that it will be suitable for carrying in the pocket and which can be readily extended by a simple inward movement of the latching member and a corresponding outward movement of the pick member 11.

The cap and the partition are of such design that they can be formed quickly and cheaply by any suitable tool and the latching member can also be formed by a suitable forming tool wherefore the cost of manufacture can be reduced to a minimum.

The latch 16 has been shown as provided with a notch 21 which engages the point of the pick when the latter is in retracted position; this prevents the pick from being accidentally projected and holds it from sidewise movement. It is evident, however, that the pick can be made slightly shorter and the notch 21 omitted; with this construction the point of the pick would engage the inner surface of the latch and the latter would prevent the pick from moving outwardly.

Having described the invention what is claimed as new is:

1. A collapsible ice pick comprising in combination, a handle having a longitudinal bore extending inwardly from one end thereof, a cap attached to the end of the handle having the bore opening, the closed end of the cap having an opening in axial alignment with the bore, a transverse partition positioned between the end of the cap and the end of the handle, means for spacing the partition from the inner surface of the cap to form a chamber, said partition having an opening in axial alignment with the bore, said opening being of smaller diameter than the bore, an ice pick having one end provided with a cylindrical enlargement which is slidable in the bore, the pick having an annular flange on the front of the cylindrical enlargement and spaced from the latter a distance greater than the thickness of the partition to form a groove, and a latch device carried by the handle for movement into and out of the groove, said latching device being positioned on the outside of the partition.

2. A collapsible pick comprising in combination, a handle having a longitudinal cylindrical bore extending inwardly from one end, a cap secured to the end having the opening, the end of the cap having a hole concentric with the bore, a transverse partition positioned between the end of the handle and the end of the cap and spaced from the latter to form a chamber, the partition having an opening concentric with the bore, the opening in the partition being of smaller diameter than the bore and of larger diameter than the hole in the cap, an ice pick positioned in the bore said pick having a cylindrical head at its inner end, said head being of smaller diameter than the bore and larger than the opening in the partition, a collar attached to the pick, in front of the head and spaced a short distance from the latter to form a groove, and a latch device comprising a slide carried by the handle adjacent the front surface of the partition, said slide being movable into the groove when the pick is in extended position.

3. A collapsible ice pick comprising in combination, an elongated handle having a longitudinal bore extending inwardly from one end thereof, a cap attached to the end of the handle having the bore opening, the cap having an opening concentric with the bore but of smaller diameter than the bore, the side wall of the cap having a slot extending circumferentially thereof, a pick slidable in the bore, one end of the pick having a cylindrical head of slightly less diameter than the bore and freely slidable therein, the combined length of the pick and the head being less than the depth of the bore whereby the point of the pick will be protected by the cap when in retracted position, a collar carried by the pick and spaced from the outer end of the head to form a groove, the diameter of the collar being less than that of the head, a partition positioned in the handle and spaced from the inside of the cap a distance at least equal to the thickness of the collar plus the width of the groove, and a latching means carried by the handle and having a portion thereof projecting through the slot in the cap and into the groove between the abutment plate and the inner surface of the collar to resist inward movement of the pick when it is in use.

4. A collapsible ice pick comprising in combination, a handle having an axial bore extending inwardly from one end thereof, a cap attached to the end of the handle having the bore opening, the cap having an opening concentric with the bore, a partition member positioned between the cap and the end of the handle, said member having a cylindrical flange projecting forwardly into engagement with the end of the cap to space the partition therefrom and form a chamber, the partition having an opening concentric with the bore end of smaller diameter, an ice pick positioned in the bore, the inner end thereof having a cylindrical head whose diameter is slightly smaller than that of the bore and larger than the opening in the partition, a collar on the pick, the collar being of slightly smaller diameter than the opening in the partition and spaced from the head so as to form a groove, the wall of the cap and the flange of the partition having circumferentially extending slots, and a latching device extending through the slots, said member having means for engaging in the groove between the collar and the head to hold the pick in projected position.

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