Aug. 19, 1924. 1,505,448

W. S. VAN SANT

ICE SCRAPER

Filed Sept. 5, 1923

Fig. 1.

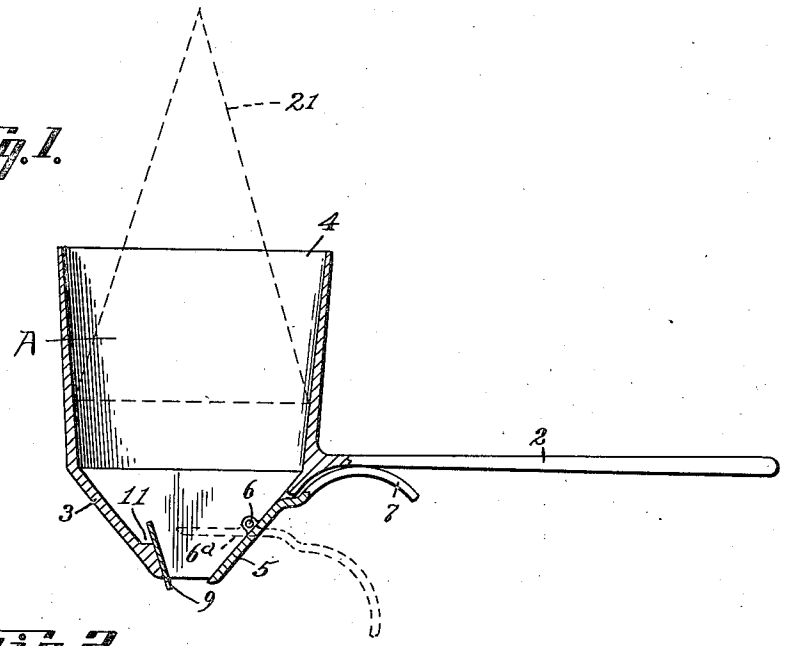


Fig. 2.

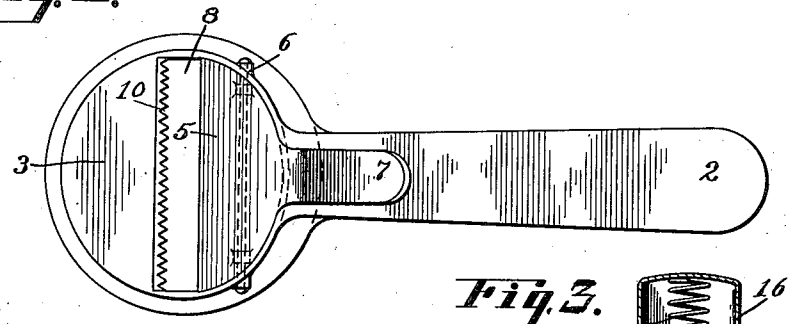


Fig. 3.

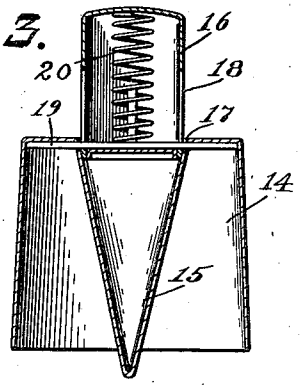
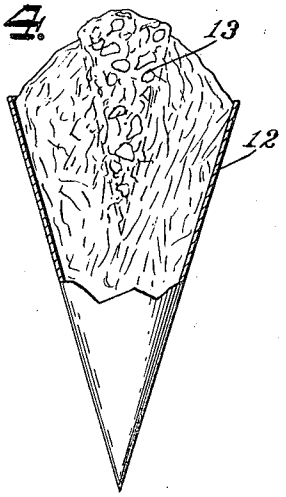


Fig. 4.



Inventor
WILLIAM S. VAN SANT.
Dewey, Strong,
By Townsend & Lofties.
Attys.

Patented Aug. 19, 1924. 1,505,448

UNITED STATES PATENT OFFICE.

WILLIAM S. VAN SANT, OF OAKLAND, CALIFORNIA.

ICE SCRAPER.

Application filed September 5, 1923. Serial No. 660,981.

To all whom it may concern:

Be it known that I, WILLIAM S. VAN SANT, a citizen of the United States, residing at Oakland, county of Alameda, and State of California, have invented new and useful Improvements in Ice Scrapers, of which the following is a specification.

This invention relates to an ice scraper and especially to improvements on the scraper shown in my former patent entitled "Ice scraper," issued Oct. 10th, 1922, and bearing the No. 1,431,344.

The object of the present invention is to generally improve and simplify devices of the character described, to provide a device whereby ice may be readily reduced by a scraping action to a snow-like consistency, to provide a mold into which the scraped or disintegrated ice is delivered and whereby a cone shaped cored snow cone may be formed, to provide means for closing the mold during the scraping operation and in conjunction therewith means for ejecting the snow cone when completed, and further to provide a scraper which will not clog or permit frozen particles to adhere thereto. Other objects will hereinafter appear.

One form which the present invention may assume is exemplified in the following description and illustrated in the accompanying drawings, in which:—

Fig. 1 is a side elevation of the ice scraper partially in section.

Fig. 2 is a bottom view of the ice scraper.

Fig. 3 is a central, vertical section of the core forming device.

Fig. 4 is a section of a cornucopia showing it filled with a snow cone which is cored and filled with fruit or a like edible.

Referring to the drawings in detail, A indicates a cone shaped molding member to which is suitably secured a handle such as indicated at 2. The mold is provided with a tapering bottom section 3 at the lower end, and the upper end is open as shown at 4. The bottom section 3 forms a closure for one-half thereof and the opposite side is closed by a movable bottom section 5 which will hereinafter be referred to as an ejecting plate. This ejecting plate is half round in shape as illustrated in the bottom view (see Fig. 2), and it is pivotally mounted as indicated at 6. It is furthermore provided with a handle extension 7 by which the ejecting plate may be swung about to the dotted line position shown at 6^a. The ejecting plate 5 is spaced with relation to the lower end of the bottom section 3, and an elongated slot or bottom opening 8 is thus formed.

Secured to the bottom section 3 is a scraper plate 9. This plate is provided with serrations or teeth 10 at its lower end and the plate is disposed on an angle as shown in Fig. 1 to give the best scraping effect when the device is in use. The plate is disposed on a slight angle as shown in Fig. 1, and its upper end extends above the lower end of the bottom section 6, thus forming a rear pocket or recess 11, the function of which will hereinafter be described.

The device, as previously stated, is intended for the purpose of reducing ice by a scraping or shaving action to snow-like consistency and for simultaneously molding the shaved or disintegrated material to form a cone shaped snow cone, the cone when completed being forced into a cornucopia or other suitable container such as indicated at 12, where it is flavored by pouring syrup or the like over the disintegrated material. The cone may be served in this condition, or a central opening or core may be formed therein which may be filled with crushed fruit, nuts, or any other edible desired, as indicated at 13.

For the purpose of coring the snow cone the device disclosed in Fig. 3 is employed. This device consists of a cone shaped cup 14 which may be inserted in the upper end of the mold A. This cup is provided with a cone shaped coring member 15 which is supported by a plunger 16. This plunger is hollow and extends through an opening 17 formed in the upper end of the cup; that is, the cup is normally inverted so that the bottom end forms the top thereof while the open end forms the bottom thereof. The plunger 16 is hollow and the sides are slotted as indicated at 18. A bar secured to the bottom section is indicated at 19 and extends through the plunger and a spring 20 is disposed between the bar and the upper end of the plunger to normally hold the coring member 15 in contact with the bar 19 as shown in Fig. 3.

In actual operation, an ordinary block of ice is employed. If an ordinary snow cone is desired, it is merely necessary to insert the cone 12 in an inverted position in the upper end of the mold as indicated by dotted lines at 21. The mold is pulled toward

the operator with the teeth 10 in engagement with the ice. The ice is in this manner shaved or disintegrated, and as the plate 9 assumes an angular position the disintegrated material will enter the mold through the slot 8. The snow or disintegrated material will here pile up until the mold and the cone have been completely filled. The device is then inverted and the arm 7 is swung to the dotted line position shown at 6^a. This movement forces the ejecting plate 5 inwardly and thus packs the snow and at the same time forces the snow together with the cone outwardly, thus freeing it with relation to the cup or mold A.

The cornucopia or cone 12 is then inverted as shown in Fig. 4 and syrup or the like may be poured on the snow for flavoring the same. If it is desired to form a snow cone, the central portion of which is cored as shown at 13 in Fig. 4, it is only necessary to insert the cup 14 in the upper end of the cone A and to fill the cup 14 and the cone A with disintegrated ice by shaving the ice as previously stated. When the mold or cone A and the cup 14 have been completely filled, the mold is inverted and the ejecting plate operated thus forcing the snow upwardly and packing the snow contents in the cup 14 and in the mold A, and at the same time permitting removal of the cup 14. The contents of the cup are then forced into a cornucopia such as shown at 12 in Fig. 4, and a cored space will thus be formed in the snow cone and may be filled with crushed fruit, nuts, or any edible desired, and then finally filled with syrup as previously stated. A delicious dessert may in this manner be formed which may be served as desired.

The ice scraper and coring device here shown are exceedingly simple and easy to operate and may be handled by any person, as comparatively little skill or knowledge is required to operate the same. Any danger of the scraper plate 9 becoming clogged by frozen or adhering particles of snow is eliminated by extending the scraping plate as shown in Fig. 1; that is, extending it to such an extent that a pocket 11 is formed behind the upper edge of the plate. This pocket causes adhering particles to readily break off as they will be unsupported and clogging or freezing up of the scraper plate is in this manner prevented. The depth of the cored portion of the cone as shown in Fig. 4 may be increased or decreased as desired by depressing the plunger 16. The quantity of crushed fruit or like edible added to the snow cone may be thus increased or decreased as desired.

While the device here shown is more or less specifically illustrated, I wish it understood that changes in design, proportions and construction may be resorted to within the scope of the appended claims, and similarly that the materials and finish of the various parts employed may be changed to suit varying conditions and the dictates of the manufacturer.

When filling a cornucopia such as shown by dotted line at 21 in Fig. 1, I wish it understood that the cornucopia starts to rise the moment it becomes filled, thus automatically indicating to the operator when the cornucopia has been filled. Furthermore, I wish it understood that as the open end of the cornucopia extends a considerable distance downwardly in the mold A, it is possible to bury the contents of the cornucopia; that is, after the cornucopia starts to rise, it is possible to continue the scraping operation, thus increasing the quantity or the amount forced into the same. Large or small cornucopias may thus be obtained.

Having thus described my invention, what I claim and desire to secure by Letters Patent is—

1. A device of the character described comprising a cup shaped mold open at the upper end and having a slotted bottom portion, a scraper disposed in one side of the slot, an ejector plate disposed on the other side of the slot, and a core forming member insertible in the open end of the mold.

2. A device of the character described comprising a cup shaped mold open at the upper end and having a slotted bottom portion, a scraper disposed in one side of the slot, an ejector plate disposed on the other side of the slot, a cup shaped member insertible in the mold and adapted to form a closure therefor, and a core forming member carried by the cup.

3. A device of the character described comprising a cup shaped mold open at the upper end and having a slotted bottom portion, a scraper disposed in one side of the slot, an ejector plate disposed on the other side of the slot, a cup shaped member insertible in the mold and adapted to form a closure therefor, and a depressible core forming member carried by the cup.

4. A device of the character described comprising a cup shaped mold open at the upper end and having a slotted bottom portion, a scraper disposed in one side of the slot, an ejector plate disposed on the other side of the slot, a cup shaped member insertible in the mold and adapted to form a closure therefor, a plunger carried by the cup and extending through one end thereof, a spring engageable with the plunger and normally maintaining it in an extended position, and a cone shaped core forming member carried by the plunger and disposed interior of the cup.

5. In a device of the character described, a mold, a bottom member in the mold having

an elongated slot formed therein, one side of the slot being tapered, and a scraper blade secured to the tapered side of the slot, said blade having its upper end extended above the slotted bottom portion to form a recess behind the upper edge of the blade.

6. In a device of the character described, a mold, a bottom member in the mold having an elongated slot formed therein, one side of the slot being tapered, a scraper blade secured to the tapered side of the slot, said blade having its upper end extended above the slotted bottom portion to form a recess behind the upper edge of the blade, and a series of saw like teeth formed on the lower edge of the blade.

7. In a device of the character described, a mold, a tapering bottom member in the mold forming a closure for one-half thereof, an ejector plate pivotally mounted on the other side and forming the opposite bottom section of the mold, means for swinging the ejector plate about its pivotal mounting, said ejector plate being spaced with relation to the opposite bottom section to form an elongated slot, and an angularly disposed scraper blade secured to the first named bottom section and having teeth formed thereon projecting below the bottom section and below the ejector plate.

8. In a device of the character described, a mold, a scraper blade carried thereby and adapted to deliver disintegrated or shaved ice into the mold, a cup shaped member insertible in the mold adapted to form a closure therefor, a cone shaped core forming member carried by the cup, and means for imparting a reciprocal movement thereto to increase or decrease the size of the core.

WILLIAM S. VAN SANT.