

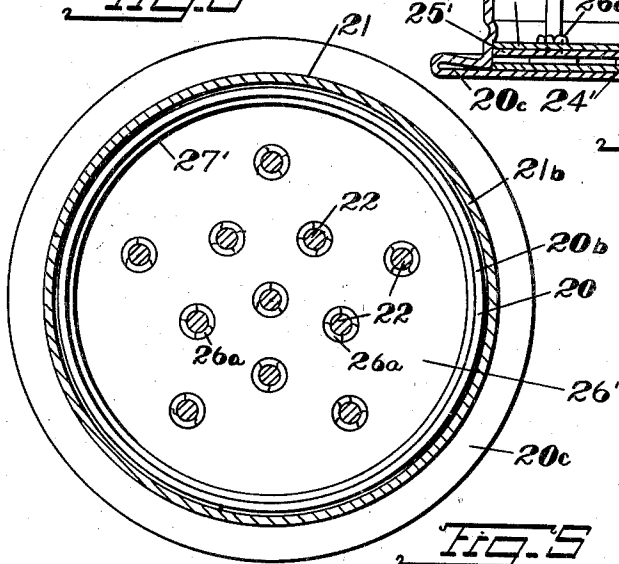
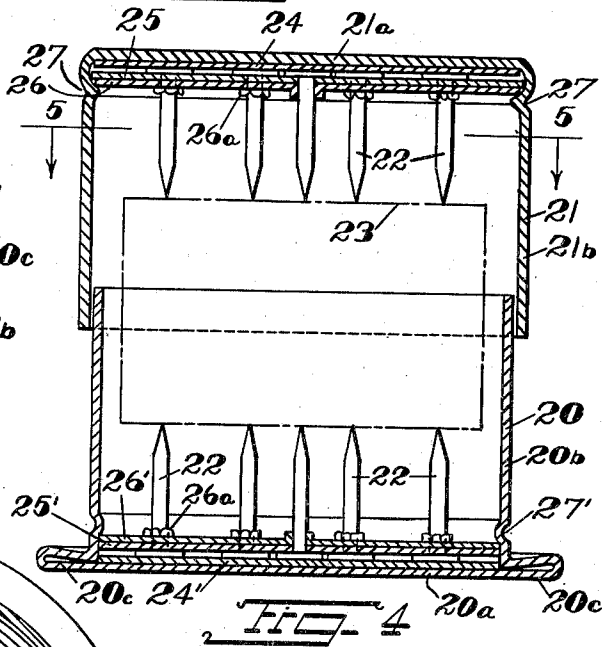
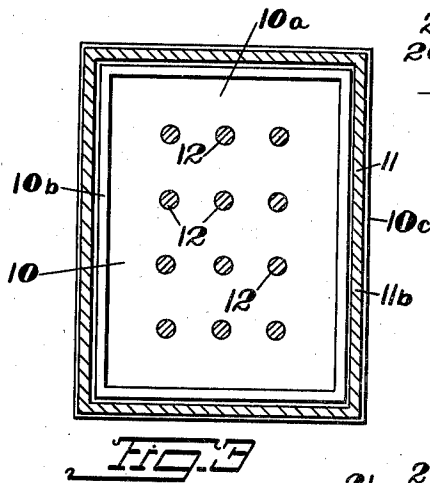
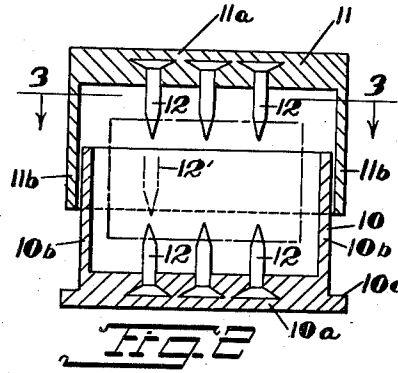
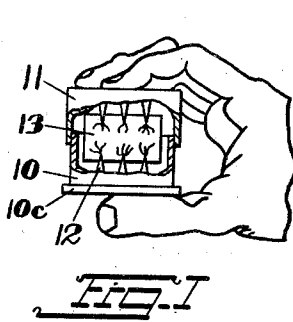
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ICE CRUSHER

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ICE CRUSHER

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3 Claims. (Cl. 83—63)

This invention relates to new and useful improvements in an ice cube crusher.

The invention has for an object the construction of a simple crushing device which is characterized by a bottom container and a top container arranged in a manner so as to catch all of the broken ice particles.

More specifically, it is proposed to arrange the containers telescopically relative to each other and to provide a plurality of pointed elements mounted on the top and base wall of the containers and directed towards each other for cracking a piece of ice placed within the containers when they are forced together.

Still further the invention proposes to so design the ice cube crusher that it may be of various shapes, as for example, square, rectangular, round, etc.

Another one of the objects of this invention is to so construct the ice cube crusher that it may be made from molded plastic materials or similar materials, or sheet metal and the like.

Another object of this invention is the construction of a device as described which is simple and durable, and which may be manufactured and sold at a reasonable cost.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawing, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawing forming a material part of this disclosure:—

Fig. 1 is a schematic view showing an ice cube crusher being operated by one's hand, the side walls of the crusher being broken away to show interior construction.

Fig. 2 is a vertical sectional view of the ice cube crusher drawn on a larger scale than that shown in Fig. 1 so that it may be readily viewed.

Fig. 3 is a horizontal sectional view taken on the line 3—3 of Fig. 2.

Fig. 4 is a vertical sectional view of an ice cube crusher constructed according to a modification of this invention.

Fig. 5 is a horizontal sectional view taken on the line 5—5 of Fig. 4.

The ice cube crusher, according to this invention, includes a bottom container 10 having a base wall 10a and an upwardly extending skirt wall 10b. A top container 11 has a top wall 11a and a downwardly extending skirt wall 11b telescopically engaging the skirt wall 10b. A plurality of pointed elements 12 is mounted upon

the said top and base walls and are directed towards each other for cracking a cube of ice 13 placed within said containers when the containers are forced together. A feature of the invention resides in the fact that the containers will catch and hold the broken pieces of ice.

The inner container 10 is formed at its outer end with a projecting flange 10c by which it may readily be grasped to assist in separating the containers. Of course, the other container may be readily gripped upon its outer face. Preferably, the containers 10 and 11 should be constructed of plastic material molded into the desired shape and molded to support the pointed elements 12. These pointed elements comprise tacks having their pointed shanks extended. The heads of the tacks are embedded or molded into the plastic material forming the containers.

The containers 10 and 11 are of a certain height with respect to each other and with respect to the projecting distances of the pointed elements 12. The relation between these parts is such that when the container is completely closed the skirt wall 10b of the container will strike the top wall 11a of the outer container, and the pointed elements 12 of each of the containers will have their pointed ends separated by a very small distance. The dot and dash lines 12' in Fig. 2 indicate the relative positions of the pointed elements when the containers are closed. It will thus be noted that it is impossible to injure the pointed elements by having them engage each other.

With respect to the shape of the ice cube crusher it is pointed out that while an oblong form is illustrated, this is merely a matter of design. An oblong form would be desirable in that it closely resembles the shape of an ice cube. The shape of the container may be varied, and such shapes as square, round, etc., may be employed. There is a large choice of plastic materials which may be used, but the one preferred for this invention is beetleware.

In Figs. 4 and 5 a modified form of the invention has been illustrated which distinguishes from the preferred form in showing a construction utilizing soft sheet material in the construction of the device. A desirable sheet metal would be aluminum. According to this form of the invention the ice cube crusher includes a bottom container 20 having a base wall 20a and an upwardly extending skirt wall 20b. The skirt wall 20b is telescopically arranged in relation to a skirt wall 21b of a top container 21 which also has a top wall 21a. The bottom container 20 is

arranged as the inner container. It is provided with a projecting flange 20c at its outer end formed by shaping the material of the container. A plurality of pointed elements 22 is mounted

on the top and base walls of the containers and are directed towards each other for cracking a piece of ice 23 placed within the containers when the containers are forced together so that the containers will catch and hold the crushed ice. The pointed elements 22 are held in position in a novel manner. The top container 21 is provided with a rigid strong sheet member 24 immediately adjacent its inner face. This sheet member may be a sheet of steel. The pointed elements 22 comprise tacks, and the heads of these tacks are rested against the sheet 24. A pair of sheets 25 and 26 are formed with perforations and are engaged over the shank portions of the tacks so that the inner sheet 25 is immediately adjacent the heads of the tacks. The skirt wall 21b of the top container is formed with a recess 27 about its perimeter which clamps in and holds the various discs 24, 25 and 26 fixed as a stationary unit. The disc 25 is of strong material such as sheet steel. The disc 26 is of aluminum material similar to the material from which the container 21 is constructed. The purpose of the steel sheet 25 is to firmly hold the tacks 22 with their shanks extended so that there will be no tendency of breaking away laterally when a piece of ice is being crushed.

The bottom container is constructed very similar in respect to the supporting of the pointed elements 22. There is a steel sheet 24' immediately adjacent the top face of the base wall of the container 20. The heads of the tacks 22 rest against this steel sheet. Superimposed above this steel sheet 24' and over the heads of the tacks there is a steel sheet 25' adjacent which there is an aluminum sheet 26'. These sheets 24', 25' and 26' are rigidly held in position by a pressed in area 27' formed in the material which forms the container 20.

The soft sheets 26 and 26' are shown formed with frusto-conical portions 26a surrounding the shanks of each of the pointed elements 22. These frusto-conical portions are formed when the pointed elements or similar elements are stamped and forced through the sheets 26 and 26', respectively. They serve to form a neat base construction at the junction between the shanks and the sheet metal materials.

The form of the ice cube crusher shown in Fig. 4 is circular in transverse cross section. This is merely one possible form and it should be clear that other forms may also be used.

While we have illustrated and described our invention with some degree of particularity, we realize that in practice various alterations therein may be made. We therefore reserve the right and privilege of changing the form of the details of construction or otherwise altering the ar-

range of the correlated parts without departing from the spirit or the scope of the appended claims.

Having thus described our invention, what we claim as new and desire to secure by United States Letters Patent is:—

1. An ice cube crusher comprising a bottom container having a base wall and an upwardly extending skirt wall, a top container having a top wall and a downwardly extending skirt wall telescopically engaging said first skirt wall, a disc adjacent the end wall of each container, a plurality of tacks having their heads rested against said discs and their pointed ends directed towards each other, a perforated disc adjacent each of said discs and having the pointed ends of the tacks passing through the perforations thereof and engaging the heads of the tacks for holding same down, and the skirt walls of said containers having inwardly projecting portions engaging said discs for holding them fixed in position.

2. An ice cube crusher comprising a bottom container having a base wall and an upwardly extending skirt wall, a top container having a top wall and a downwardly extending skirt wall telescopically engaging said first skirt wall, a disc adjacent the end wall of each container, a plurality of tacks having their heads rested against said discs and their pointed ends directed towards each other, a perforated disc adjacent each of said discs and having the pointed ends of the tacks passing through the perforations thereof and engaging the heads of the tacks for holding same down, and the skirt walls of said containers having inwardly projecting portions engaging said discs for holding them fixed in position, and the innermost container being provided with a projecting flange at its outer end for ease in gripping the same.

3. An ice cube crusher comprising a bottom container having a base wall and an upwardly extending skirt wall, a top container having a top wall and a downwardly extending skirt wall telescopically engaging said first skirt wall, a disc adjacent the end wall of each container, a plurality of tacks having their heads rested against said discs and their pointed ends directed towards each other, a perforated disc adjacent each of said discs and having the pointed ends of the tacks passing through the perforations thereof and engaging the heads of the tacks for holding same down, and the skirt walls of said containers having inwardly projecting portions engaging said discs for holding them fixed in position, and the innermost container being provided with a projecting flange at its outer end for ease in gripping the same, said projecting flange being formed by bending outwardly the material of the container.

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