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(54) **CASCADING ICE LUGE, APPARATUS, AND METHODS THEREFORE**

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(76) **Inventor: Stephen John Luther, Terryville, CT (US)**

Correspondence Address:
Ingenium Patents LLC
7 High Street
Terryville, CT 06786 (US)

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(57) **ABSTRACT**

Embodiments of cascading ice luges and embodiments of apparatuses and methods for making cascading ice luges are disclosed. One apparatus embodying the principles of the invention features shelves and attached brackets in stepwise configuration. The shelves are affixed to a scaffold. Ice blocks can be frozen in trays such that pre-formed lanes are formed in the ice blocks. The trays can be of convenient size that can be placed in a conventional household freezer. Ice blocks can be arranged on the shelves in stepwise configuration and oriented so that a liquid or beverage placed on the uppermost ice block will flow in the pre-formed lanes in a cascading manner thereby rapidly cooling the beverage with minimal dilution.

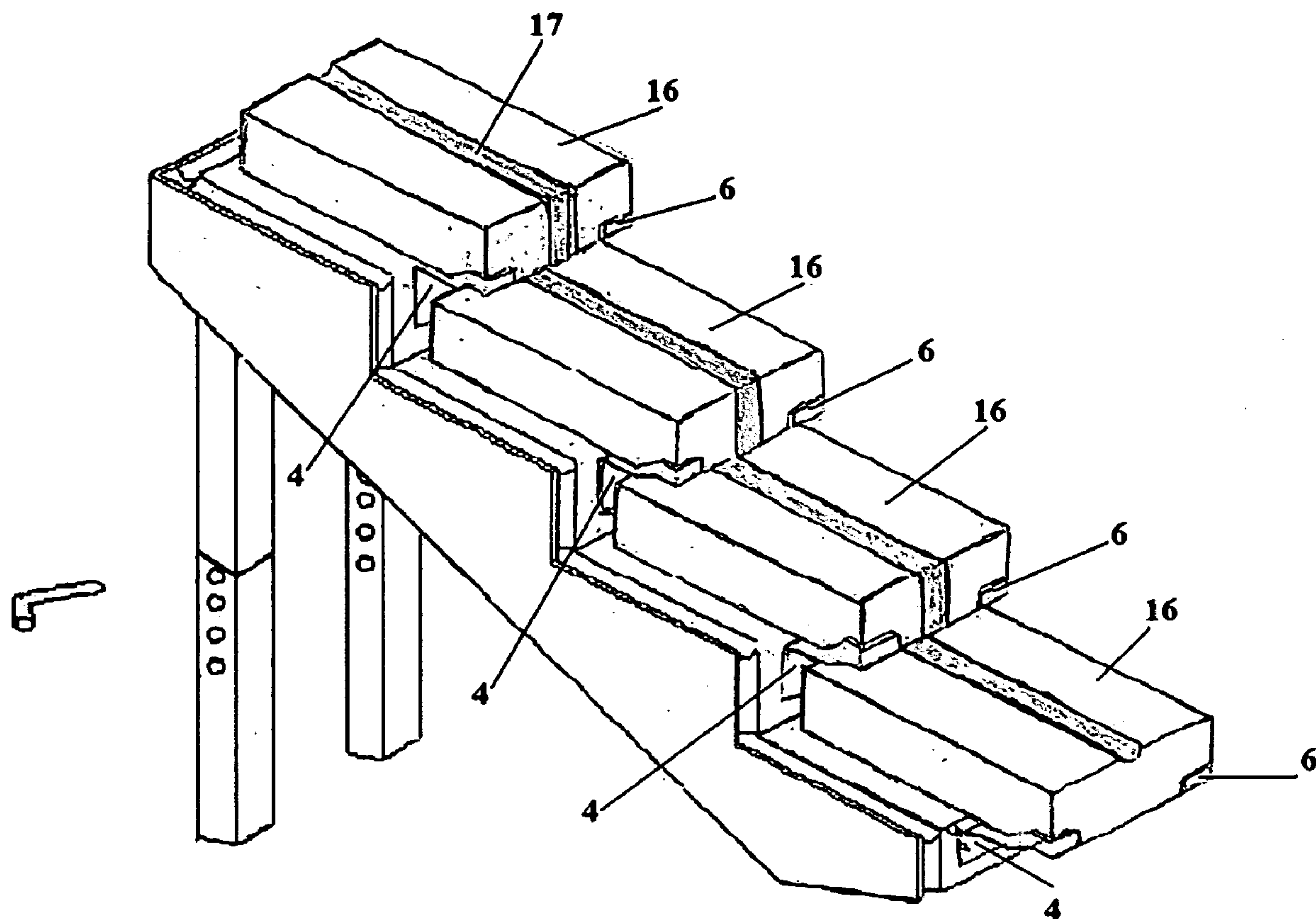


FIG. 1

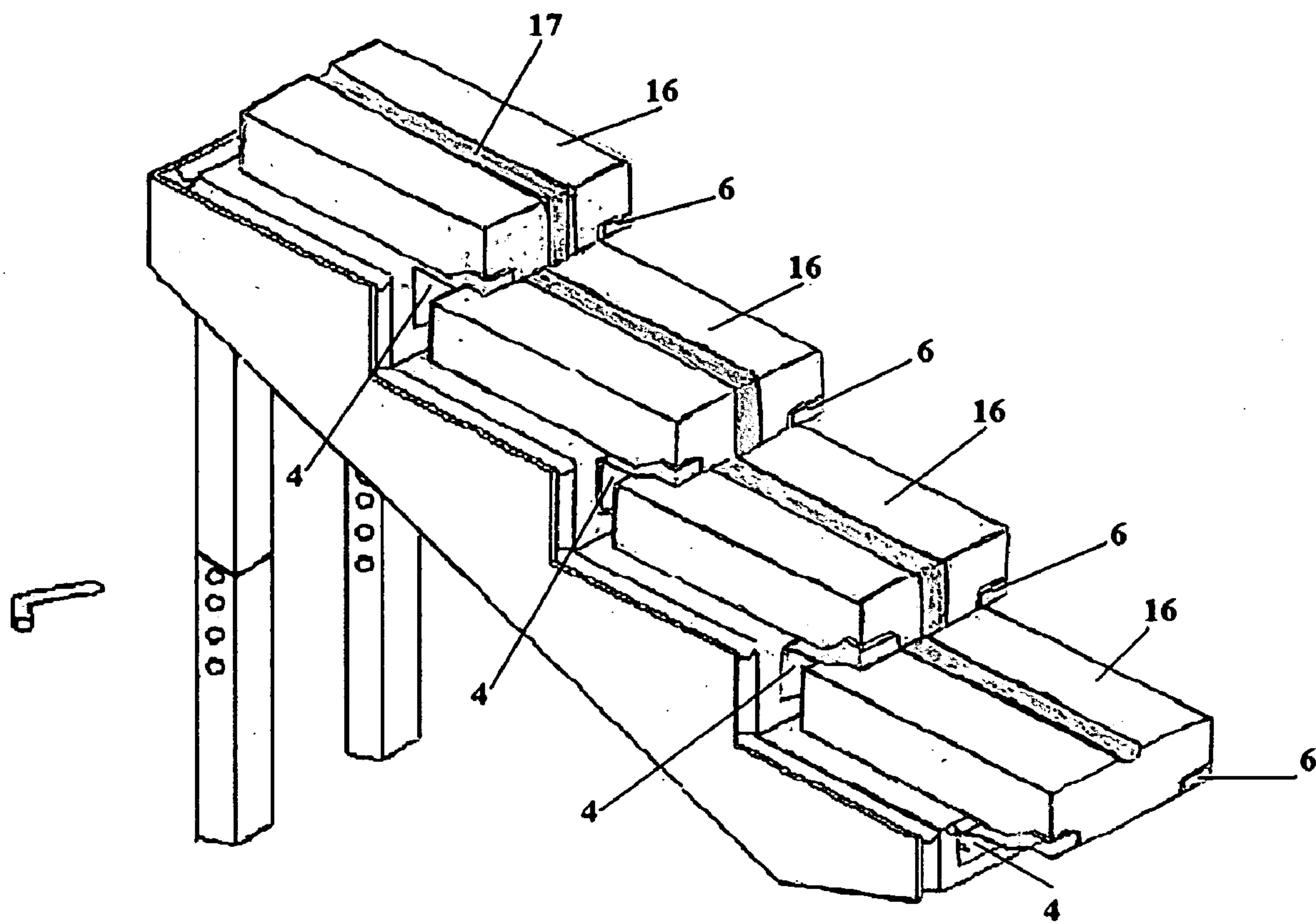


FIG. 2

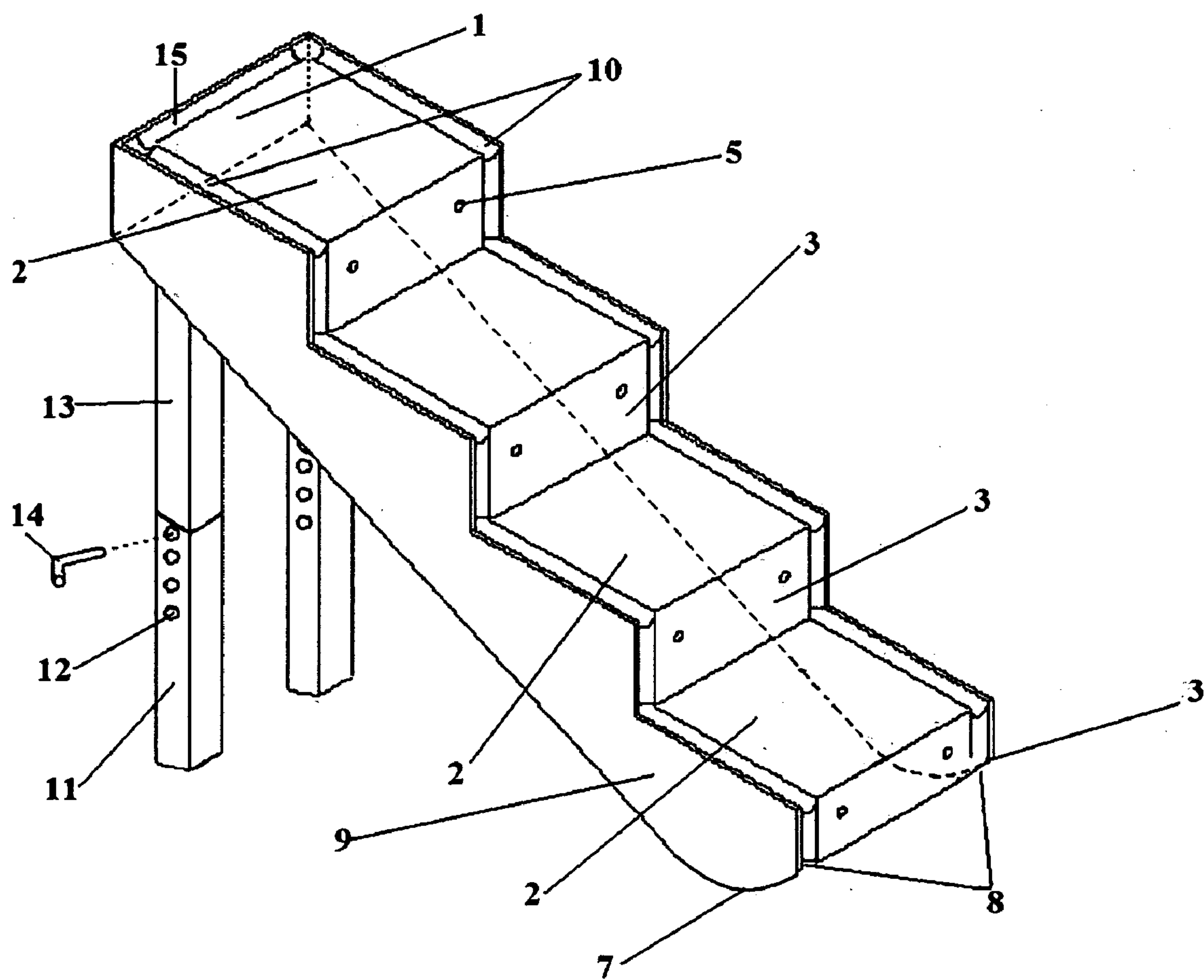


FIG. 3

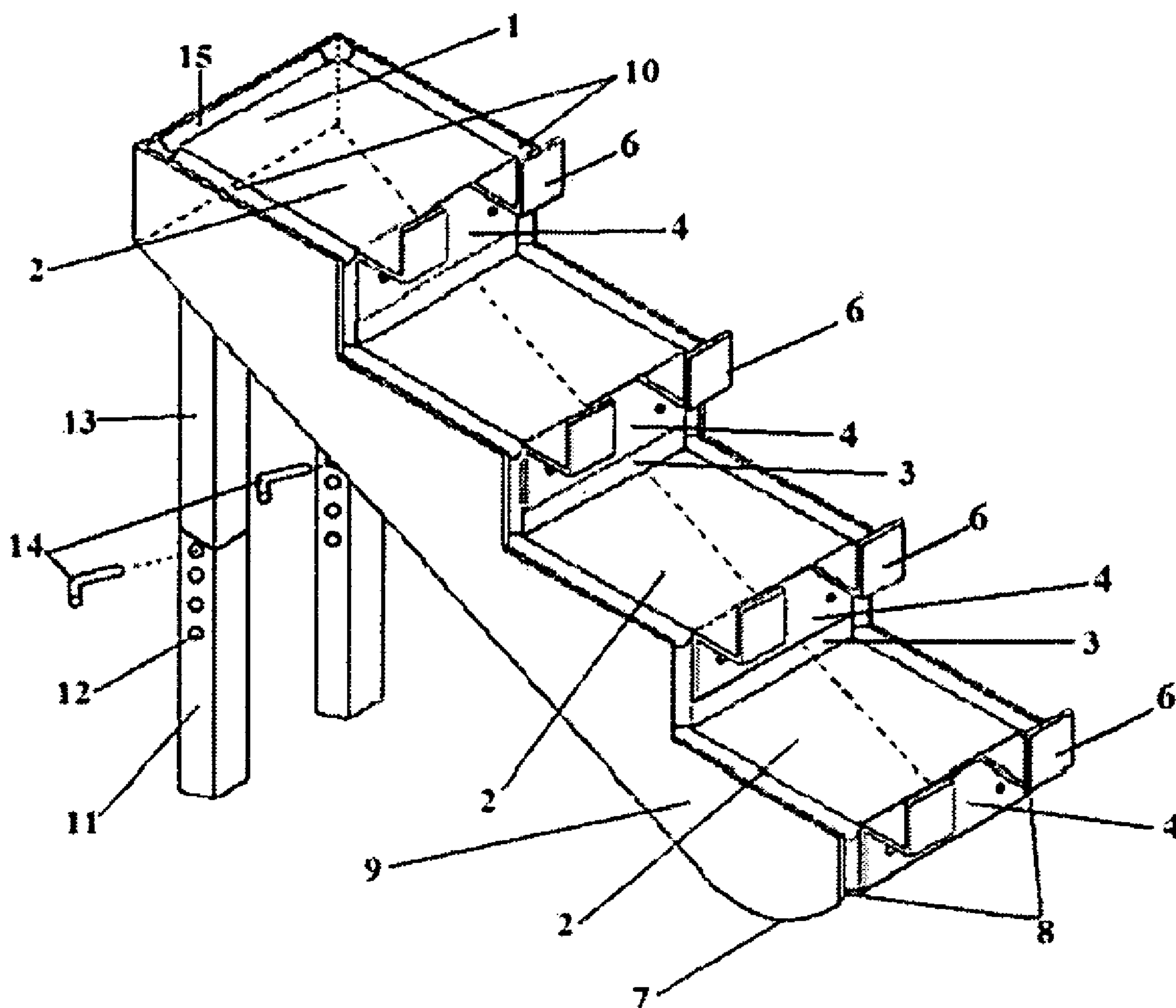


FIG. 4

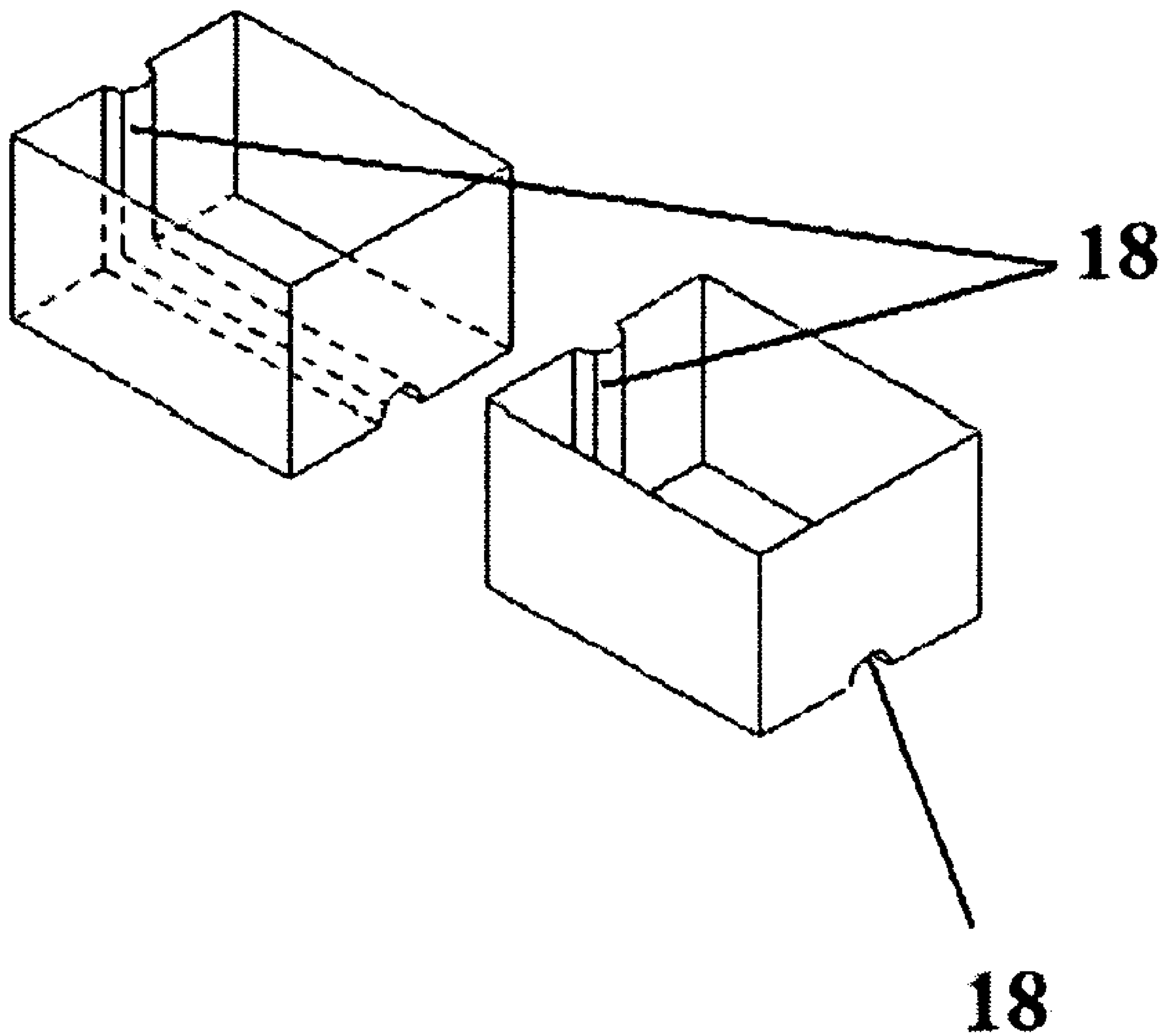
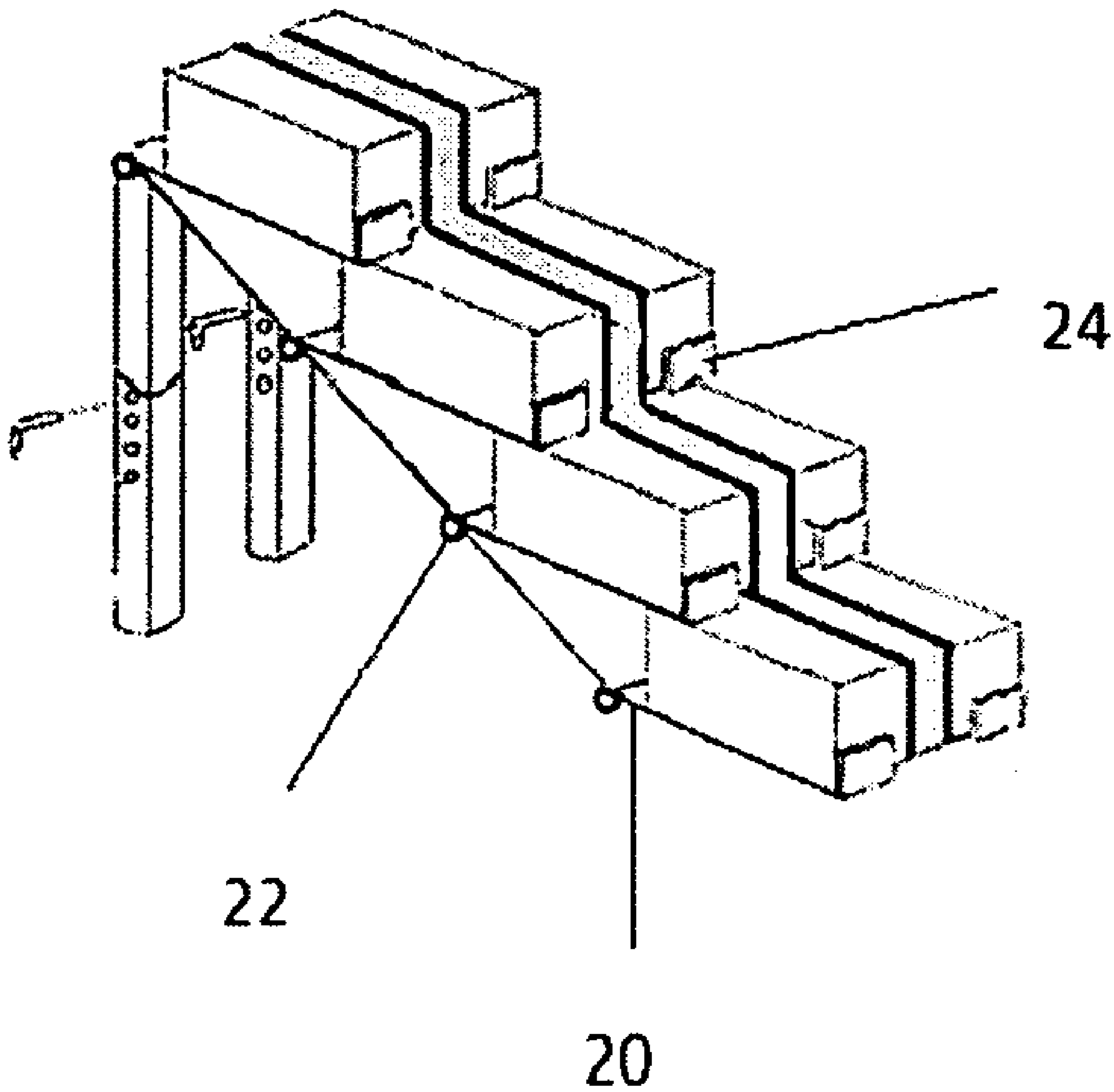


FIG. 5



**CASCADING ICE LUGE, APPARATUS, AND
METHODS THEREFORE**

CROSS-REFERENCE TO RELATED
APPLICATIONS

[0001] Not Applicable

STATEMENT REGARDING FEDERALLY
SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not Applicable

THE NAMES OF THE PARTIES TO A JOINT
RESEARCH AGREEMENT

[0003] Not Applicable

INCORPORATION-BY-REFERENCE OF
MATERIAL SUBMITTED ON A COMPACT DISC

[0004] Not Applicable

BACKGROUND OF THE INVENTION

[0005] 1. Field of the Invention

[0006] The subject matter of this application pertains to ice luges, particularly ice luges used for cooling and serving beverages.

[0007] 2. Description of Related Art Including Information Disclosed Under 37 CFR 1.97 and 1.98.

[0008] Ice luges have been in popular use for rapid chilling of beverages at parties and gatherings of people where beverages, typically containing alcohol, are served. Two types of ice luges, large sculpted ice blocks and small molded ice blocks, have been in use for serving rapidly chilled beverages. The first type of ice luge consists of a large block of ice several feet long sculpted so that the luge contains channels or lanes. The upper surface of the ice luge slopes downward. A drink is poured at the elevated end of the luge, and the liquid travels through its lane and emerges from the lower end of the luge thereby dispensing the liquid into a glass or other receptacle that is placed to receive the chilled beverage. This type of ice luge features a long transit path. Fabricating a large block of ice requires freezing in a commercial walk-in freezer which most individuals do not have access to. Long transit path ice luges also require skill to sculpt the ice block and significant labor costs can be incurred. Furthermore transporting large ice luges is inconvenient because of cumbersome size and heavy mass of the objects. Some advantages of long transit path ice luges are that they add ambiance to a party and produce drinks with superior quality.

[0009] Ice luges prepared from a single plastic mold, small enough to be accommodated by a typical household freezer, have also been used. An advantage of fabricating ice luges from a small mold is that a walk-in freezer is not required. The ice luges produced from this type of apparatus are characterized by a short transit path. Since the degree of cooling depends upon the amount of time that the beverage is in contact with the ice surface, slower transit speed is required with a short path ice luge. Slower transit speeds are achieved by reducing the angle of incline. A disadvantage of shorter

transit speed is increased dilution of the drink, which adversely affects the quality of the drink that is dispensed.

BRIEF SUMMARY OF THE INVENTION

[0010] In accordance with the subject matter of this application the inventive concept of the invention includes ice luges, methods, and apparatuses and variations thereof for preparing ice blocks with preformed lanes or channels, and which provide for stable placement of the ice blocks in stepwise configuration on a supporting scaffold. The ice blocks so arranged forming a cascading ice luge which can be used for cooling of drinks, inter alia, under optimal conditions for serving.

BRIEF DESCRIPTION OF THE SEVERAL
VIEWS OF THE DRAWING(S)

[0011] FIG. 1 Depicts an embodiment of a scaffold and ice luge of the current invention. Ice trays not shown.

[0012] FIG. 2 Depicts an embodiment of the scaffold of the current invention. Brackets are not shown.

[0013] FIG. 3 Depicts an embodiment of the scaffold of current invention. The trays are not shown.

[0014] FIG. 4 Depicts ice trays according to an embodiment of the invention.

[0015] FIG. 5 Depicts an embodiment of a scaffold and ice luge of the current invention. Ice trays not shown.

DETAILED DESCRIPTION OF THE INVENTION

[0016] The ice luges known in the related art fall into two categories. Prior ice luges had lanes that were either preformed or sculpted. Large ice luges feature a long transit path and are fabricated from a large block of ice which is subsequently sculpted to form a frozen declined plane with lanes for serving beverages. The Ice luges with pre-formed lanes have been made with an apparatus which is a moderately small grooved tray in which water is frozen. Ice blocks thereby produced have pre-formed lanes to accommodate a flow of beverage or liquid. The tray can be inverted and used to support the ice block for use in chilling and dispensing drinks. Luges produced from smaller trays, although more convenient to fabricate than long transit path luges, have a shorter transit path and consequently produce chilled drinks of inferior quality. As noted above, long transit path ice luges require a walk-in freezer to prepare large and very heavy blocks of ice, which subsequently must be laboriously sculpted. It remained for the present inventor to recognize that an apparatus for making a cascading ice luge would provide ice luges possessing the benefits of a long transit path ice luge and the convenience of preparing smaller ice luges from small freezer trays.

[0017] FIGS. 1 and 3 depict an apparatus embodying the principles of the present invention. The apparatus comprises a stepwise configured scaffold, FIGS. 2 and 3, with one end elevated and supported by elongated support members. The apparatus may be constructed from metal, plastic or other suitable sturdy materials. The lower end rests on rounded supports (7), 'feet', fashioned from the side panels (9). The support members (hereinafter "legs") are affixed to the elevated end of the scaffold, are shown with two-piece construction with upper (13) and lower (11) members. The lower member which has a smaller cross sectional area can be slidably fitted into the upper member. Holes (12) are positioned so that pins (14) can be inserted in order to adjust the

height of the elevated end of the scaffold. The scaffold further comprises a series of shelves (2) configured in stepwise configuration. Vertical members (3) connect each shelf and have holes (5) to which brackets (4) can be affixed with screws and nuts. Alternatively, brackets can be glued in place with an adhesive. The brackets so affixed project forward from the front of each step and have an upturned tab (6) at the fore end. It should be appreciated that such flat members with upturned tabs, i.e., 'retaining members', with the functionality of shelves and affixed brackets can be achieved by construction of flat panels with integral tabs. Channels are positioned on the periphery of the apparatus as shown. A rear channel (15) is formed on the upper surface of the rear panel (1). Two side channels (10) are formed on the upper surface of each of two side panels (9). Together the rear and side channels comprise a peripheral channel, which terminates at the efflux ports (8). The apparatus further comprises a set of trays, see FIG. 4 which depicts two trays of a set, with each tray bearing a groove (18) or multiple grooves. The dimensions of the trays are such that the ice blocks formed therefrom (16) FIG. 1, can be placed on each shelf of the scaffold and are bounded with clearance by the peripheral channel. The uppermost ice block is bounded on three sides, i.e., by the rear channel and two side channels; the remaining blocks are bounded by the parallel side channels each on two sides as shown. Ice blocks (16) bearing pre-formed lanes (17) are positioned on the scaffold shelves with one ice block being placed on each shelf to form a cascading ice luge.

[0018] Ice blocks are prepared by filling the trays with water. Subsequently the trays are placed in a freezer until solid ice is formed. After freezing, the ice blocks are placed on the scaffold shelves as shown in FIG. 2 with preformed lanes (17) facing upward. The bracket tabs (6) secure the ice blocks in place on their respective shelves. Water accumulating from melting ice enters the peripheral channel, which is formed from the rear and side channels (15) and (10), respectively, and is discharged at the efflux ports (8). The height of the elevated end of the luge can be adjusted by placing the pins (14) in the appropriate holes (12). Drinks are poured into lanes (17) at the elevated end of the ice luge, and are rapidly cooled during transit along their lanes, and are collected as each liquid drink emerges from the lower end of the ice luge from their respective lanes.

[0019] The foregoing merely illustrates the principles of the invention. For example a cascading ice luge can be manufactured with a spiral cascading ice bed. Additionally spiral ice luges can be fabricated that are stackable thereby increasing the length of the luge.

[0020] In another embodiment, a housing or scaffold holds a series of ice-block holders or retaining members (20) that are affixed to the scaffold. Retaining members are affixed in a descending stepwise arrangement. Each retaining member is affixed to a dowel or cross-member (22) such that it can pivot about the axis defined by each cross-member. The free end of each retaining member has an upturned tab (24). Ice blocks can be placed on each retaining member. The lower end of each retaining member rests on each successive ice block, with the exception of the lowest retaining member. The retaining members are oriented with a decline angle relative to horizontal so that applied liquid will flow from uppermost ice blocks to the lower ice blocks.

[0021] It thus will be appreciated that those skilled in the art will be able to devise numerous alternative arrangements that,

while not shown or described herein, embody the principles of the invention and thus are within its spirit and scope.

I claim:

1. An ice luge comprising, blocks of ice arranged in stepwise configuration, said ice blocks having one or more grooved lanes whereby applied liquids flowing due to the force of gravity can be channeled for dispensing.
2. An apparatus for making ice luges comprising, a scaffold having shelves arranged in stepwise configuration.
3. The apparatus according to claim 2 further comprising, means for fastening ice blocks on the shelves.
4. The apparatus according to claim 3 further comprising, freezing trays shaped to produce blocks of ice with pre-formed lanes or channels.
5. The apparatus according to claim 3 further comprising, at least one adjustable length support member affixed near one end of the scaffold, rear and side panels, and rounded supports near an end of the scaffold, said rounded supports located near the end of said scaffold opposite to said end that is near said adjustable length support member.
6. The apparatus according to claim 2 further comprising, at least one adjustable length support member affixed near one end of the scaffold, rear and side panels, and non-adjustable supports near an end of the scaffold, said non-adjustable supports located near the end of said scaffold opposite to said end that is near said adjustable length support member.
7. The apparatus according to claim 6 further comprising, means for securing the position of ice blocks relative to the position of respective said shelves, and a peripheral channel (15).
8. An apparatus for making ice luges comprising, a scaffold, and means for arranging ice blocks in stepwise configuration.
9. The apparatus according to claim 8 further comprising, said means for arranging ice blocks is stepwise configuration such that ice blocks are arranged in overlapping stepwise configuration.
10. The apparatus according to claim 8 further comprising, means for securely fastening said ice blocks to said apparatus.
11. A method for making ice luges comprising, freezing water in trays to make multiple ice blocks, arranging said ice blocks in stepwise configuration to form cascading ice luges.
12. The method according to claim 11 further comprising, arranging ice blocks by placing each block on respective retaining members affixed to a scaffold, said retaining members in stepwise configuration, and positioning each block such that it is securely in place.
13. The method according to claim 12 further comprising, freezing water in said trays, said trays shaped such that said ice blocks have pre-formed lanes to channel an applied liquid flow.
14. The method according to claim 13 further comprising, adjusting the level of the retaining members relative to horizontal direction such that a liquid applied to the upper end would flow to the lower end due to the force of gravity.

15. An apparatus comprising,
a scaffold having shelves arranged in stepwise configuration,
vertical members connecting said shelves,
brackets affixed to vertical support
side panels,
a rear panel,
one or more support members affixed near one end of said
scaffold.

16. The apparatus according to claim **15** wherein,
said brackets are affixed to said shelves.

17. The apparatus according to claim **15** further comprising,
a peripheral channel said peripheral channel formed from a
rear channel and one or more side channels, said channels
located at the top of respective said rear and side
panels.

18. The apparatus according to claim **17** further comprising,
freezing trays shaped to produce blocks of ice with pre-
formed lanes or channels.

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