

A Food Box

Cross-Reference to Related Applications

[0001] The present application claims the benefit of Singapore Patent Application No. 10202250621F filed July 28, 2022, which is incorporated by reference herein.

Technical Field

[0002] The present invention relates to a food box for containing food. For example, a pizza box for containing a pizza.

Background

[0003] Food box, e.g. a pizza box, is used for takeaways and for transporting food during delivery. Typically, the food box is placed into plastic bags so that they can be carried singlehandedly from the top of the box for convenience. However, the use of plastic bags causes environmental issues.

[0004] To reduce the use of plastic bags, there is food box that has a handle at the top to enable the box to be carried singlehandedly from the top of the box. However, the handle prevents the boxes from being stacked onto each other. Hence, it is difficult for a person to deliver or takeaway more than two boxes at a time unless a plastic bag is used.

[0005] Therefore, it is beneficial to come up with a solution to overcome the above issues.

Summary

[0006] According to various embodiments, a food box is provided. Food box includes a tray including a base and a perimeter wall extending from the base, the perimeter wall includes a front wall portion and a rear wall portion opposite thereof, a cover adapted to cover the tray, the cover including a proximal cover panel pivotally connected to the front wall portion and a distal cover panel pivotally connected to the rear wall portion such that the proximal cover

panel and the distal cover panel are rotatable to cover the tray in a covering position, a securing mechanism adapted to secure the proximal cover panel to the tray, such that in the covering position, the proximal cover panel retains the distal cover panel in the covering position and is secured to the tray by the securing mechanism, and a handle pivotally connected to the cover, such that the handle is rotatable between an upright position perpendicular to the cover and a flat position onto and parallel to the cover.

[0007] According to various embodiments, the perimeter wall may further include a left wall portion and a right wall portion opposite thereof, such that the left wall portion and the right wall portion are disposed between the front wall portion and the rear wall portion, such that the securing mechanism includes a left securing mechanism and a right securing mechanism, such that the left securing mechanism is adapted to secure the proximal cover panel to the left wall portion and the right securing mechanism is adapted to secure the proximal cover panel to the right wall portion.

[0008] According to various embodiments, the proximal cover panel may include a left proximal cover edge and a right proximal cover edge opposite thereof, the left securing mechanism includes a left securing portion extending from the left proximal cover edge and a left engaging portion disposed on the left wall portion and adapted to engage the left securing portion, the right securing mechanism includes a right securing portion extending from the right proximal cover edge and a right engaging portion disposed on the right wall portion and adapted to engage the right securing portion.

[0009] According to various embodiments, the handle may include a front handle pivotally connected to the proximal cover panel and a rear handle pivotally connected to the distal cover panel, such that the front handle and the rear handle meet each other to form the handle in the covering position or are rotatable away from each other onto the cover to flush with the cover.

[0010] According to various embodiments, the food box may include a centreline extending parallel to and equidistance from the front wall panel and the rear wall panel, such that the securing mechanism and the handle are disposed along the centreline.

[0011] According to various embodiments, the food box may further include a proximal connector formed as part of the proximal cover panel and pivotally connected to the front wall portion, a distal connector formed as part of the distal cover panel and pivotally connected to the rear wall portion, a proximal receiving portion disposed on the front wall panel and a distal receiving portion disposed on the rear wall panel, such that the proximal connector is detachable from the proximal cover panel and connectable to the proximal receiving portion of another food box and the distal connector is detachable from the distal cover panel and connectable to the distal receiving portion of the another food box to attached the food box to the another food box.

[0012] According to various embodiments, the proximal connector may include a proximal flap and the proximal receiving portion may include a proximal slot, the distal connector may include a distal flap and the distal receiving portion may include a distal slot such that the proximal flap is slotted into the proximal slot of the another food box and the distal flap is slotted into the distal slot of the another food box to attach the food box to the another food box.

[0013] According to various embodiments, the cover may include folding lines adapted to allow the cover to fold along the folding lines when the food box is lifted at the handle.

Brief Description of Drawings

[0014] Fig. 1 shows a perspective view of an exemplary embodiment of a food box.

[0015] Fig. 2 shows a blank cutout of the food box.

[0016] Fig. 3A to Fig. 3N shows the steps to fold the blank cutout in Fig 2 into the food box.

[0017] Fig. 4 shows an exemplary embodiment of the blank cutout of the food box.

[0018] Fig. 5A to Fig. 5E shows the steps to fold the blank cutout in Fig. 4 into the food box.

[0019] Fig. 6A shows a perspective view of an exemplary embodiment of the food box.

[0020] Fig. 6B shows the food box in Fig. 6A in an attaching configuration.

[0021] Fig. 6C shows another food box stacked onto the food box in Fig. 6B.

[0022] Fig. 6D shows the food box connected to the another food box stacked thereon.

[0023] Fig. 7 shows a blank cutout of the food box in Fig. 6.

[0024] Fig. 8A shows a perspective view of an exemplary embodiment of a food box.

[0025] Fig. 8B shows a front elevation view of the food box in Fig. 8A.

[0026] Fig. 8C shows a side elevation view of the food box in Fig. 8A.

[0027] Fig. 9 shows a blank cutout of the food box in Fig. 8.

Detailed Description

[0028] In the following examples, reference will be made to the figures, in which identical features are designated with like numerals.

[0029] Fig. 1 shows a perspective view of an exemplary embodiment of a food box. Pizza box 100 has a tray 102 including a base (not shown in Fig. 1) and a perimeter wall 110 extending from the base, the perimeter wall 110 includes a front wall portion 112 and a rear wall portion (not shown in Fig. 1) opposite thereof, a cover 120 adapted to cover the tray 102 and the cover 120 includes a proximal cover panel 122 pivotally connected to the front wall portion 112 and a distal cover panel 124 pivotally connected to the rear wall portion wherein the proximal cover panel 122 and the distal cover panel 124 are rotatable to cover the tray 102 in a covering position, a securing mechanism 140 adapted to secure the proximal cover

panel 122 to the tray 102, such that in the covering position, the proximal cover panel 122 retains the distal cover panel 124 in the covering position and is secured to the tray 102 by the securing mechanism 140 and a handle 130 pivotally connected to the cover 120, such that the handle 130 is rotatable between an upright position perpendicular to the cover 120 and a flat position onto and parallel to the cover 120. As shown in Fig. 1, the distal cover panel 124 is without a securing mechanism. Distal cover panel 124 may include a securing mechanism to secure it to the perimeter wall 110. Proximal cover panel 122 and distal cover panel 124 may be substantially of the same length. Proximal cover panel 122 and distal cover panel 124 may be of different lengths, e.g. proximal cover panel 122 may be longer than the distal cover panel 124.

[0030] As shown in Fig. 1, the perimeter wall 110 may include a left wall portion 116 and a right wall portion (not shown in Fig. 1) opposite thereof, such that the left wall portion 116 and the right wall portion are disposed between the front wall portion 112 and the rear wall portion. Left wall portion 116 and the right wall portion may be connected to the front wall portion 112 and the rear wall portion to form a space within the perimeter wall 110 for containing the food. Securing mechanism 140 includes a left securing mechanism 140A and a right securing mechanism (not shown in Fig. 1), such that the left securing mechanism 140A is adapted to secure the proximal cover panel 122 to the left wall portion 116 and the right securing mechanism is adapted to secure the proximal cover panel 122 to the right wall portion. While it is shown in Fig. 1 that the food box 100 has a quadrilateral shape, the food box 100 may have other shapes, e.g. hexagonal, octagonal, etc.

[0031] Proximal cover panel 122 includes a left proximal cover edge 122L and a right proximal cover edge 122G opposite thereof. Left proximal cover edge 122L and the right proximal cover edge 122G may be perpendicular to the front wall portion 112. Left securing mechanism 140A includes a left securing portion 142 extending from the left proximal cover edge 122L and a left engaging portion 116N disposed on the left wall portion 116 and adapted to engage the left securing portion 142, the right securing mechanism comprises a right securing portion extending from the right proximal cover edge 122G and a right engaging portion disposed on the right wall portion and adapted to engage the right securing portion. Instead of the above configuration, it is possible that the left securing portion 142 is

extended from the left wall portion 116 and the left engaging portion is disposed on the proximal cover panel 122 while the right securing portion is extended from the right wall portion and the right engaging portion is disposed on the proximal cover panel 122. Left securing portion 142 and right securing portion may be a flap as shown in Fig. 1, a strap, a band, a string, etc. Left engaging portion 116N and right engaging portion may include an opening as shown in Fig. 1, a clip, a hook, etc.

[0032] Handle 130 includes a front handle 130F pivotally connected to the proximal cover panel 122 and a rear handle (not shown in Fig. 1) pivotally connected to the distal cover panel 124, such that the front handle 130F and the rear handle meet each other in the covering position to form the handle 130 or are rotatable away from each other onto the cover to flush with the cover 130. Food box 100 includes a centreline 200C extending parallel to and equidistance from the front wall panel 112 and the rear wall panel, such that the securing mechanism 140 and the handle 130 are disposed along the centreline 200C so that the handle 130 is aligned to the centre of gravity of the food box 100 to maintain balance of the food box 100 when carried by the handle 130.

[0033] As the handle 130 is foldable to lay flat against the cover 120, the food box 100 is stackable onto each other. As shown below, the securing mechanism 140 may be tamper-proof so as to provide a tamper-proof food box 100 so that the customer is assured that the pizza delivered has not been tampered with. Food box 100 may be suitable for various types of food, e.g. pizza, sushi, cupcakes.

[0034] Food box 100 may be formed from a single piece of blank cutout. As shown below, the blank cutout 200 may be folded into the food box 100. Blank cutout 200 may be made from cardboard.

[0035] Fig. 2 shows a blank cutout 200 of the food box 100 in Fig. 1. Food box 100 includes a base panel 250 having a perimeter edge 250P. Base panel 250 forms the base in the food box 100 in Fig. 1. Perimeter edge 250P includes a front edge 250PF, a rear edge 250PR opposite the front edge 250PF, a left edge 250PL and a right edge 250PG opposite the left edge 250PL, and a centreline 200C between the front edge 250PF and the rear edge 250PR.

Food box 100 further includes a front panel portion 212 extending from the front edge 250PF, such that the front panel portion 212 includes a front bottom edge 212B connected to the front edge 250PF and a front top edge 212T opposite the front bottom edge 212B, a rear panel portion 214 extending from the rear edge 250PR, such that the rear panel portion 214 includes a rear bottom edge 214B connected to the rear edge 250PR and a rear top edge 214T opposite the rear bottom edge 214B, a left panel portion 216 extending from the left edge 250PL, such that the left panel portion 216 includes a left bottom edge 216B connected to the left edge 250PL and a left top edge 216T opposite the left bottom edge 216B, a right panel 218 extending from the right edge 250PG, such that the right panel 218 includes a right bottom edge 218B connected to the right edge 250PG and a right top edge 218T opposite the right bottom edge 218B, a proximal cover panel 222 extending from the front top edge 212T, such that the proximal cover panel 222 includes a proximal front end 222F, a proximal rear end 222R opposite the proximal front end 222F and connected to the front top edge 212T, a left proximal cover edge 222L, a right proximal cover edge 224G opposite the left proximal cover edge 222L, such that the left proximal cover edge 222L and the right proximal cover edge 224G extends from the proximal front end 222F to the proximal rear end 222R, a left securing portion 242 extending from the left proximal cover edge 222L and a right securing portion 244 extending from right proximal cover edge 222G, the left securing portion 242 and the right securing portion 244 adapted to secure the proximal cover panel 222 to the tray 102 and a front handle 230F disposed at the proximal front end 222F, a distal cover panel 224 extending from the rear top edge 214T, such that the distal cover panel 224 includes a distal front end 224F, a distal rear end 224R opposite the distal front end 224F and connected to the rear top edge 214T, a left distal cover edge 224L, a right distal cover edge 224G opposite the left distal cover edge 224L, such that the left distal cover edge 224L and the right distal cover edge 224G extends from the distal front end 224F to the distal rear end 224R, and a rear handle 230R disposed at the distal front end 224F. Proximal cover panel 222 may include a proximal line 222C such that the front handle 230F is foldable along the proximal line 222C. Similarly, the distal cover panel 224 may include a distal line 224C such that the rear handle 230R is foldable along the distal line 224C. Each of the left securing portion 242 and the right securing portion 244 may include a T-shaped protrusion with a narrower first end 2422,2442 and a wider second end 2421,2441 opposite the first end, such that the first end 2422,2442 of the T-shaped protrusions is connected to the left panel portion 216 and the right panel portion 218. Second end 2421,2441 has a pair of wings that form the T-shaped protrusion. Front

handle 230F may include a handle securing portion 230S connected to the front handle 230F. Handle securing portion 230S may be formed within the front handle 230F and is adapted to secure the front handle 230F to the rear handle 230R. Front panel portion 212, rear panel portion 214, left panel portion 216 and right panel portion 218 form the perimeter wall 110 of the food box in Fig. 1 and are the front wall portion 112, the rear wall portion, the left wall portion 116 and the right wall portion respectively.

[0036] Securing mechanism 240 may include a securing portion and an engaging portion to engage the securing portion. Securing portion may include a left securing portion 242 and a right securing portion 244 extending from the proximal cover panel 222. Left securing portion 242 may extend from the left proximal cover edge 222L and the right securing portion 244 may extend from the right proximal cover edge 222G. Left securing portion 242 and the right securing portion 244 may be disposed along the proximal line 222C to be in line with the folding line of the front handle. Engaging portion may include a left engaging portion 216N and a right engaging portion 218N disposed on the left panel portion 216 and the right panel 218 respectively. Left engaging portion 216N and the right engaging portion 218N may be disposed along the centreline 200C. Left engaging portion 216N and the right engaging portion 218N may be a through hole and may include a cutout flap adapted to cover the through hole such that the through hole is formed when the cutout flap is pushed out of the through hole. Each of the left engaging portion 216N and right engaging portion 218N may include a restrictor 216E, 218E adapted to restrict the left securing portion 242 and right securing portion 244 respectively from disengaging from the left engaging portion 216N and right engaging portion 218N after being inserted therein. Restrictor 216E, 218E may include a protrusion extending from one side of the through hole and about one quarter of the height of the through hole. Left securing portion 242 and the left engaging portion 216N form the left securing mechanism. Right securing portion 244 and the right engaging portion 218N form the right securing mechanism.

[0037] Blank cutout 200 may include connecting flaps extending from the left panel portion 216 and right panel portion 218 or the front panel portion 212 and rear panel portion 214 to connect the left panel portion 216 and the right panel portion 218 and front panel portion 212 and rear panel portion 214 together. Blank cutout 200 may include a proximal left connecting flap 216P and a distal left connecting flap 216D extending from opposite ends of the left

panel portion 216 and a proximal right connecting flap 218P and a distal right connecting flap 218D extending from the opposite ends of the right panel 218. Each of the connecting flaps 216P, 216D, 216P, 218P may include a locking portion adapted to lock the connecting flap to the front panel portion 212 or rear panel portion 214. Front panel portion 212 and the rear panel portion 214 may each include a receiving portion to receive the locking portion. Proximal left connecting flap 216P includes a first end 216P1 connected to the left panel portion 216 and a second end 216P2 opposite the first end 216P1 and a proximal left locking portion 216PK extending from the second end 216P2. Proximal right connecting flap 218P includes a first end 218P1 connected to the right panel 218 and a second end 218P2 opposite the first end 218P1 and a proximal right locking portion 218PK extending from the second end 218P2. Distal left connecting flap 216D includes a first end 216D1 connected to the left panel portion 216 and a second end 216D2 opposite the first end 216D1 and a distal left locking portion 216DK extending from the second end 216D2. Distal right connecting flap 218D includes a first end 218D1 connected to the right panel portion 218 and a second end 218D2 opposite the first end 218D1 and a distal right locking portion 218DK extending from the second end 218D2. Each of the front panel portion 212 and the rear panel portion 214 may include a pair of through holes adapted to receive the locking portions. For example, the front panel portion 212 may include a left front through hole 2121 for receiving the proximal left locking portion 216PK and a right front through hole 2122 for receiving the proximal right locking portion 218PK and the rear panel portion 214 may include a left rear through hole 2141 for receiving the distal left locking portion 216DK and a right rear through hole 2142 for receiving the distal right locking portion 218DK. Each of the through holes 2121, 2122, 2141, 2142 may be covered by a cutout flap such that the through holes 2121, 2122, 2141, 2142 are formed when the cutout flaps are pushed out of the through holes. Each of the through holes 2121, 2122, 2141, 2142 may be slots.

[0038] Left securing portion 242 and the right securing portion 244 may be disposed at the front end 222F. Proximal cover panel 222 may include proximal side panels 222S extending from the left proximal cover edge 222L and the right proximal cover edge 222G. Left securing portion 242 and the right securing portion 244 may be formed as part of the proximal side panels 222S. Proximal cover panel 222 may include overlapping panels 222V extending from its front end 222F. Distal cover panel 224 may include distal side panels 224S

extending from the left distal cover edge 224L and the right distal cover edge 224G. Distal cover panel 224 may include overlapping panels 224V extending from its front end 224F.

[0039] Fig. 3A to Fig. 3N shows the steps to fold the blank cutout 200 in Fig. 2 into the food box 100. Blank cutout 200 is designed to be folded in a natural sequence. Referring to Fig. 3A, the distal side panels 224S may be folded along the left distal cover edge 224L and the right distal cover edge 224G. By folding the distal side panels 224S, the rigidity of the distal cover panel 224 is improved. Referring to Fig. 3B, the rear panel portion 214 may be folded along the rear bottom edge 214B and the distal cover panel 224 may be folded along the rear top edge 214T. Left panel 216 and right panel 218 may be folded along the left bottom edge 216B and right bottom edge (not shown in Fig. 3B) respectively. The folding in Fig. 3B may be performed concurrently using both hands. Referring to Fig. 3C, the distal cover panel 224 is in the covering position where the overlapping panels 224V overlaps the centreline 200C. Referring to Fig. 3D, the distal left connecting flap 216D and the distal right connecting flap 218D may be folded onto the rear panel portion 214. Referring to Fig. 3E, the distal left locking portion 216DK and the distal right locking portion 218DK may be pushed into the left rear through hole 2141 and the right rear through hole 2142 respectively to lock the distal left connecting flap 216D and the distal right connecting flap 218D to the rear panel portion 214. After this step, the left panel portion 216 and the right panel 218 are secured onto the rear panel portion 214 forming the rear wall portion 114, left wall portion 116 and right wall portion 118 of the food box 100 in Fig. 1. Referring to Fig. 3F, the rear handle 230R may be folded along the distal line 224C to be in the upright position. Distal line 224C may be in the same plane as the centreline 220C. The steps in Fig. 3D to Fig. 3E may be performed in a consecutive action using both hands.

[0040] Referring to Fig. 3G, the proximal side panels 222S may be folded along the left proximal cover edge 222L and the right proximal cover edge 222G. By folding the proximal side panels 222S, the rigidity of the proximal cover panel 222 is improved. Left securing portion 242 and the right securing portion 244 may be punched out from the proximal side panels 222S and left unfolded. Referring to Fig. 3H, the front panel portion 212 may be folded along the front bottom edge 212B and the proximal cover panel 222 may be folded along the front top edge 212T. At the same time, the front handle 230F may be folded along

the proximal line 222C into an upright position or substantially perpendicular to the proximal cover panel 222. Handle securing portion 230S may be folded together with the front handle 230F at the same time. Referring to Fig. 3I, the proximal cover panel 222 is in the covering position where the front handle 230F meets with the rear handle 230R to form the handle 130. Overlapping panels 222V may overlap the centreline 200C and onto the overlapping panels 224V (not shown in Fig. 3I) of the distal cover panel 224 to cover gaps between the proximal cover panel 222 and the distal cover panel 224 to prevent unwanted material from entering the food box 100. Referring to Fig. 3J, the proximal left connecting flap 216P and the proximal right connecting flap 218P may be folded onto the front panel portion 212. Proximal left locking portion 216PK and the proximal right locking portion 218PK may be pushed into the left front through hole 2121 and the right front through hole 2122 respectively to lock the proximal left connecting flap 216P and the proximal right connecting flap 218P to the front panel portion 212. After this step, the left panel portion 216 and the right panel 218 are secured onto the front panel portion 212 forming front wall portion 112 of the food box 100. Referring to Fig. 3K and Fig. 3L, the left securing portion 242 and the right securing portion 244 may be secured onto the left panel portion 216 and the right panel portion (not shown in Fig. 3K and Fig. 3L) respectively. Referring to Fig. 3K, the left engaging portion 218 may engage the left securing portion 242 and the right engaging portion (not shown in Fig. 3K) may engage the right securing portion 244. Both pairs of wings 240W of the left securing portion 242 and the right securing portion 244 may be folded downwardly before inserting the pair of wings 240W into the left engaging portion 216N and the right engaging portion (not shown in Fig. 3K). Referring to Fig. 3L, once the left securing portion 242 and the right securing portion (not shown in Fig. 3L) are inserted into the left engaging portion (not shown in Fig. 3L) and the right engaging portion (not shown in Fig. 3L), both pair of wings (not shown in Fig. 3L) may spread apart within the left engaging portion and the right engaging portion to be engaged therein. Left securing portion 242 and the right securing portion may be pushed past the left restrictor 216E and the right restrictor (not shown in Fig. 3L) and are restricted from disengaging from the left engaging portion and the right engaging portion respectively. Referring to Fig. 3M, the handle securing portion 230S may be folded from the front handle 230F onto the rear handle 230R to secure the front handle 230F to the rear handle 230R to form the handle 230. Fig. 3N shows the assembled food box 100 as shown in Fig. 1. The restricted engaged securing portions 242,244 may be a tamper-proof securing mechanism. As the securing portions 242,244 are not able to be

disengaged easily from the engaging portions 216N,218N, in order to open the food box 100, the securing portions 242,244 would have to be damaged. Hence, it would be obvious that the food box 100 has been opened or tampered with before if the securing portions 242,244 are damaged when it is delivered to the customer's location.

[0041] Fig. 4 shows an exemplary embodiment of the blank cutout 400 of the food box 100. Blank cutout 400 in Fig. 4 is the same as the blank cutout 200 in Fig. 2 except that the proximal left connecting flap 416P and the proximal right connecting flap 418P extend from opposite ends of the front panel 412 and the distal left connecting flap 416D and the distal right connecting flap 418D extend from opposite ends of the rear panel 414 and the left panel 416 further includes a left securing panel 416S extending therefrom and the right panel 418 further includes a right securing panel 418S extending therefrom. As shown in Fig.4, the embodiment does not include a locking portion adapted to lock the connecting flap to the front panel 412 or rear panel 414 or a receiving portion to receive the locking portion. Each of the left securing panel 416S and the right securing panel 418S includes a securing protrusion 416U for securing the left securing panel 416S and the right securing panel 418S to the base panel 450. Base panel 450 may include two slots 450S adapted to receive the securing protrusions 416U therein.

[0042] Fig. 5A to Fig. 5E shows the steps to fold the blank cutout 400 in Fig. 3 into the food box 100. Referring to Fig. 5A, the proximal left connecting flap 416P, the proximal right connecting flap 418P, the distal left connecting flap 416D and the distal right connecting flap 418D are folded upwards from the front panel 412 and the rear panel 414. Referring to Fig. 5B, the front panel 412 is folded along the front bottom edge 412B and the rear panel 414 is folded along the rear bottom edge 414B. At the same time, the proximal cover panel 422 is folded along the front top edge 412T and the distal cover panel 424 is folded along the rear top edge 414T. As the front panel 412 and the rear panel 414 are folded into a vertical position, the proximal left connecting flap (not shown in Fig. 5B), the proximal right connecting flap 418P, the distal left connecting flap (not shown in Fig. 5B) and the distal right connecting flap 418D are disposed along the left bottom edge (not shown in Fig. 5B) and the right bottom edge 418B respectively. Referring to Fig. 5C, the left panel portion (not shown in Fig. 5C) and the right panel portion 418 are folded along the left bottom edge (not shown in Fig. 5C) and the right bottom edge 418B. Referring to Fig. 5D, the left securing

panel (not shown in Fig. 5D) and the right securing panel (not shown in Fig. 5D) may be folded along the left top edge (not shown in Fig. 5D) and the right top edge 418T toward the inner sides of the left panel portion (not shown in Fig. 5D) and the right panel portion 418 to sandwich the proximal left connecting flap (not shown in Fig. 5B), the proximal right connecting flap (not shown in Fig. 5B), the distal left connecting flap (not shown in Fig. 5B) and the distal right connecting flap (not shown in Fig. 5B) to connect the front panel 412 and rear panel 414 to the left panel (not shown in Fig. 5B) and the right panel 418 to form the perimeter wall 110. The remaining steps to arrive at the folded food box 400 as shown in Fig. 5E are described in the steps as shown in Fig. 3.

[0043] Fig. 6A shows a perspective view of an exemplary embodiment of the food box 600. Food box 600 is identical to the food box 100 in Fig. 1 except the following features. Food box 600 may include a proximal connector 660 formed as part of the proximal cover panel 622 and pivotally connected to the front wall portion (not shown in Fig. 6A). Food box 600 may include a distal connector 670 formed as part of the distal cover panel 624 and pivotally connected to the rear wall portion 614. Food box 600 may include a proximal receiving portion (not shown in Fig. 6A) disposed on the front wall panel and a distal receiving portion 674 disposed on the rear wall panel 614. Proximal connector 660 may be detachable from the proximal cover panel 622 and connectable to the proximal receiving portion of another food box (not shown in Fig. 6A) as shown in Fig. 6C and Fig. 6D and the distal connector 670 may be detachable from the distal cover panel 624 and connectable to the distal receiving portion 674 of the another food box to attached the food box to the another food box as shown in Fig. 6C and Fig. 6D. Proximal connector 660 may be directly opposite the distal connector 670. Proximal receiving portion may be directly opposite the distal receiving portion 674. Proximal receiving portion may be disposed within the proximal connector 660 and the distal receiving portion 674 may be disposed within the distal connector 670. Proximal receiving portion may be disposed along a rear top edge 614T of the rear wall portion 614 and the distal receiving portion 674 may be disposed along a front top edge 612T of the front wall portion.

[0044] As shown in Fig. 6A, the proximal connector 660 is formed as part of the proximal cover panel 622. Proximal connector 660 may be formed by a perforated line 662 on the proximal cover panel 622 such that the proximal connector 660 may be detached from the

proximal cover panel 622 by tearing the proximal connector 660 along the perforated line. Similarly, the distal connector 670 is formed as part of the distal cover panel 624 and may be formed by a perforated line on the distal cover panel 624. As shown in Fig. 6A, the distal connector 670 has been detached from the distal cover panel 624 by tearing the distal connector 670 along the perforated line.

[0045] Proximal connector 660 may include a proximal flap and the proximal receiving portion may include a proximal slot. Distal connector 670 may include a distal flap and the distal receiving portion may include a distal slot. Proximal flap may be slotted into the proximal slot of the another food box and the distal flap may be slotted into the distal slot of another food box to attach the food box 600 to the another food box.

[0046] Fig. 6B shows the food box 600 in Fig. 6A in an attaching configuration. In the attaching configuration, the proximal connector 660 and the distal connector 670 are detached from the proximal cover panel 622 and the distal cover panel 624 respectively and pivoted into a substantially upright position. As shown in Fig. 6B, the proximal connector 660 may include a proximal connecting portion 660C pivotally connected to the front wall portion (not shown in Fig. 6B) and a proximal engaging portion 660E pivotally connected to the proximal connecting portion 660C and adapted to be received by the proximal receiving portion 664 of another food box. Distal connector 670 may include a distal connecting portion 670C pivotally connected to the rear wall portion 614 and a distal engaging portion 670E pivotally connected to the distal connecting portion 670C and adapted to be received by the distal receiving portion 674 of another food box. Proximal connecting portion 660C may be part of the proximal flap and the proximal engaging portion 660E may be a foldable section of the proximal flap. Distal connecting portion 670C may be part of the distal flap and the distal engaging portion 670E may be a foldable section of the distal flap. In the attaching configuration, the handle 630 may be flat and flushed against the cover 620.

[0047] Fig. 6C shows an another food box 600A stacked onto the food box 600 in Fig. 6B. When the another food box 600A is stacked onto the food box 600 and aligned to each other, the proximal connector 660 of the food box 600 is aligned to the proximal receiving portion 664 of the another food box 600A and the distal connector 670 of the food box 600 is aligned

to the distal receiving portion (not shown in Fig. 6C) of the another food box 600A. Handle 630A of the another food box 600A is positioned upright to be used to lift the another food box 600A and the food box 600 when attached.

[0048] Fig. 6D shows the food box 600 connected to the another food box 600A stacked thereon. When the proximal receiving portion 664 and the distal receiving portion (not shown in Fig. 6D) of the another food box 600A receives the proximal connector 660 and the distal connector (not shown in Fig. 6D) of the food box 600 respectively, the food box 600 is connected to the another food box 600A. In the connected configuration, the proximal connecting portion 660C of the food box 600 is disposed against the front wall portion 612 of the another food box 600A and the proximal engaging portion (not shown in Fig. 6D) of the food box 600 is received by the proximal receiving portion 664 of the another food box 600A. Similarly, the distal connecting portion (not shown in Fig. 6D) of the food box 600 is disposed against the rear wall portion (not shown in Fig. 6D) of the another food box 600A and the distal engaging portion (not shown in Fig. 6D) of the food box 600 is received by the distal receiving portion (not shown in Fig. 6D) of the another food box 600A. As shown in Fig. 6D, the proximal flap of the food box 600 is disposed against the front wall portion 612 of the another food box 600A and its foldable section is inserted into the proximal slot of the another food box 600A. Distal flap of the food box 600 is disposed against the rear wall portion of the another food box 600A and its foldable section is inserted into the distal slot of the another food box 600A. Proximal connecting portion 660C and the distal connecting portion 670C may be of the same height as the front wall portion 612 and the rear wall portion of the food box 600 respectively. It is conceivable that the proximal connector 660A and the distal connector 670A may be detached from the proximal cover panel 622A and the distal cover panel 624A respectively and connectable to the proximal receiving portion and distal receiving portion of a third food box (not shown in Fig. 6D) to connect the another food box 600A to the third food box. Depending on the weight of the food, it is possible to connect as many food boxes as possible while the plurality of food boxes may be carried by the handle of the top food box with the other food boxes attached thereto. When the another food box 600A is stacked onto the food box 600, the handle (not shown in Fig. 6D) of the food box 600 is flat against the cover (not shown in Fig. 6D) of the food box 600 thus allowing the another food box 600A to be stacked onto it.

[0049] Fig. 7 shows a blank cutout 700 of the food box 600 in Fig. 6. Blank cutout 700 is identical to the blank cutout 200 in Fig. 2 except the following features. Food box 600 may include the perforated line 762 demarcating the proximal connector 760 on the proximal cover panel 722 and the perforated line 772 demarcating the distal connector 770 on the distal cover panel 724. Perforated line 762 extends from the front top edge 712T of the front panel portion 712 and perforated line 772 extends from the rear top edge 714T of the rear panel portion 714. Proximal connector 760 includes the proximal connecting portion 760C and the proximal engaging portion 760E. Distal connector 770 includes the distal connecting portion 770C and the distal engaging portion 770E. Proximal connector 760 and distal connector 770 may be tapered. Proximal connector 760 may include a tab 760T protruding from the proximal engaging portion 760E and formed within the proximal connecting portion 760C. Distal connector 770 may include a tab 770T protruding from the distal engaging portion 770E and formed within the distal connecting portion 770C. When the proximal engaging portion 760E and the distal engaging portion 770E are folded, the tabs 760T, 770T protrude outwardly from the cover (refer to 660T in Fig. 6D) so that the user may pull the tabs 760T, 770T to enable the proximal connector 760 and the distal connector 770 to be disengaged from the proximal receiving portion 764 and the distal receiving portion 774 easily. Food box 600 may include a proximal receiving portion 764 disposed along the front top edge 712T. Alternatively, the proximal receiving portion 764 may be disposed on the front wall portion 712 or proximal cover panel 722. Food box 600 may include a distal receiving portion 774 disposed along the rear top edge 714T. Alternatively, the distal receiving portion 774 may be disposed on the rear wall portion 714 or distal cover panel 724. Preferably, the front handle 730F, the proximal connector 760, the proximal receiving portion 764, the distal receiving portion 774, the distal connector 770 and the rear handle 730R are aligned along a longitudinal centreline 700C so that the food box 600 is balanced when being carried and when attached to another food box.

[0050] Fig. 8A shows a perspective view of an exemplary embodiment of a food box 800. Food box 800 is identical to the food box 100 in Fig. 1 except the following features. Cover 820 may include folding lines 820H adapted to allow the cover 820 to fold along the folding lines 820H when the food box 800 is lifted by the handle 830. When the food box 800 is lifted by the handle 830, the central portion 820C of the cover 820, which is around the handle 830, is raised and displaced away from the tray 802. As the cover 820 is foldable

along the folding lines 822H, the cover 820 folds as the central portion 820C rises. As the rear end 822R of the proximal cover panel 822 is connected to the front wall portion 812, the left proximal cover edge 822L is secured to the left wall portion 816 and the right proximal cover edge 822G is secured to the right wall portion (not shown in Fig. 8A), and the rear end 824R of the distal cover panel 824 is connected to the rear wall portion (not shown in Fig. 8A), the left distal cover edge 824L and the right distal cover edge 824G is retained by the front cover panel 822, only the front end 822F of the proximal cover panel 822 and the front end 824F of the distal cover panel 824, which are at about the central portion 820C of the cover 820 is raised when the food box 800 is lifted by the handle 830.

[0051] Fig. 8B shows a front elevation view of the food box 800 in Fig. 8A and Fig. 8C shows a side elevation view of the food box 800 in Fig. 8A. As shown in Fig. 8B and Fig. 8C, the central portion 820C of the cover 820 is raised as the edges of the cover 820 are connected to the perimeter wall 810 or retained by the front cover panel 822 when the food box 800 is lifted by the handle 830. The folding lines 820H of the cover 820 help to guide the folding of the cover 820 as the cover 820 folds under the weight of the food box 800 or boxes with food therein.

[0052] Fig. 9 shows a blank cutout 900 of the food box 800 in Fig. 8. Blank cutout 900 is identical to the blank cutout 700 in Fig. 7 except the following features, which is also applicable to the blank cutout 200 in Fig. 2. Food box 800 may include the folding lines 920H. Folding lines 920H include a left proximal folding line 922Y extending from the left proximal cover edge 922L at about the rear end 922R of the proximal cover panel 922 diagonally to the front handle 930F and a proximal right folding line 922X extending from the right proximal cover edge 922G at about the rear end 922R of the proximal cover panel 922 diagonally to the front handle 930F. Folding lines 920H include a left distal folding line 924Y extending from the left distal cover edge 924L at about the rear end 924R of the distal cover panel 924 diagonally to the rear handle 930R and a right distal folding line 924X extending from the right distal cover edge 924G at about the rear end 924R of the distal cover panel 924 diagonally to the rear handle 930R.

[0053] A skilled person would appreciate that the features described in one example may not be restricted to that example and may be combined with any one of the other examples.

[0054] The present invention relates to a food box generally as herein described, with reference to and/or illustrated in the accompanying drawings.

Claim

1. A food box comprising:
 - a tray comprising a base and a perimeter wall extending from the base, the perimeter wall comprises a front wall portion and a rear wall portion opposite thereof,
 - a cover adapted to cover the tray, the cover comprising a proximal cover panel pivotally connected to the front wall portion and a distal cover panel pivotally connected to the rear wall portion wherein the proximal cover panel and the distal cover panel are rotatable to cover the tray in a covering position,
 - a securing mechanism adapted to secure the proximal cover panel to the tray, wherein in the covering position, the proximal cover panel retains the distal cover panel in the covering position and is secured to the tray by the securing mechanism, and
 - a handle pivotally connected to the cover, wherein the handle is rotatable between an upright position perpendicular to the cover and a flat position onto and parallel to the cover.
2. The food box according to claim 1, wherein the perimeter wall further comprises a left wall portion and a right wall portion opposite thereof, wherein the left wall portion and the right wall portion are disposed between the front wall portion and the rear wall portion, wherein the securing mechanism comprises a left securing mechanism and a right securing mechanism, wherein the left securing mechanism is adapted to secure the proximal cover panel to the left wall portion and the right securing mechanism is adapted to secure the proximal cover panel to the right wall portion.
3. The food box according to claim 2, wherein the proximal cover panel comprises a left proximal cover edge and a right proximal cover edge opposite thereof, the left securing mechanism comprises a left securing portion extending from the left proximal cover edge and a left engaging portion disposed on the left wall portion and adapted to engage the left securing portion, the right securing mechanism comprises a right securing portion extending from the right proximal cover edge and a right engaging portion disposed on the right wall portion and adapted to engage the right securing portion.

4. The food box according to any one of claims 1 to 3, wherein the handle comprises a front handle pivotally connected to the proximal cover panel and a rear handle pivotally connected to the distal cover panel, wherein the front handle and the rear handle meet each other to form the handle in the covering position or are rotatable away from each other onto the cover to flush with the cover.
5. The food box according to any one of claims 1 to 4, wherein the food box comprises a centreline extending parallel to and equidistance from the front wall panel and the rear wall panel, wherein the securing mechanism and the handle are disposed along the centreline.
6. The food box according to any one of claims 1 to 5, further comprising a proximal connector formed as part of the proximal cover panel and pivotally connected to the front wall portion, a distal connector formed as part of the distal cover panel and pivotally connected to the rear wall portion, a proximal receiving portion disposed on the front wall panel and a distal receiving portion disposed on the rear wall panel, wherein the proximal connector is detachable from the proximal cover panel and connectable to the proximal receiving portion of another food box and the distal connector is detachable from the distal cover panel and connectable to the distal receiving portion of the another food box to attached the food box to the another food box.
7. The food box according to claim 6, wherein the proximal connector comprises a proximal flap and the proximal receiving portion comprises a proximal slot, the distal connector comprises a distal flap and the distal receiving portion comprises a distal slot wherein the proximal flap is slotted into the proximal slot of the another food box and the distal flap is slotted into the distal slot of the another food box to attach the food box to the another food box.
8. The food box according to any one of claims 1 to 7, wherein the cover comprises folding lines adapted to allow the cover to fold along the folding lines when the food box is lifted at the handle.