



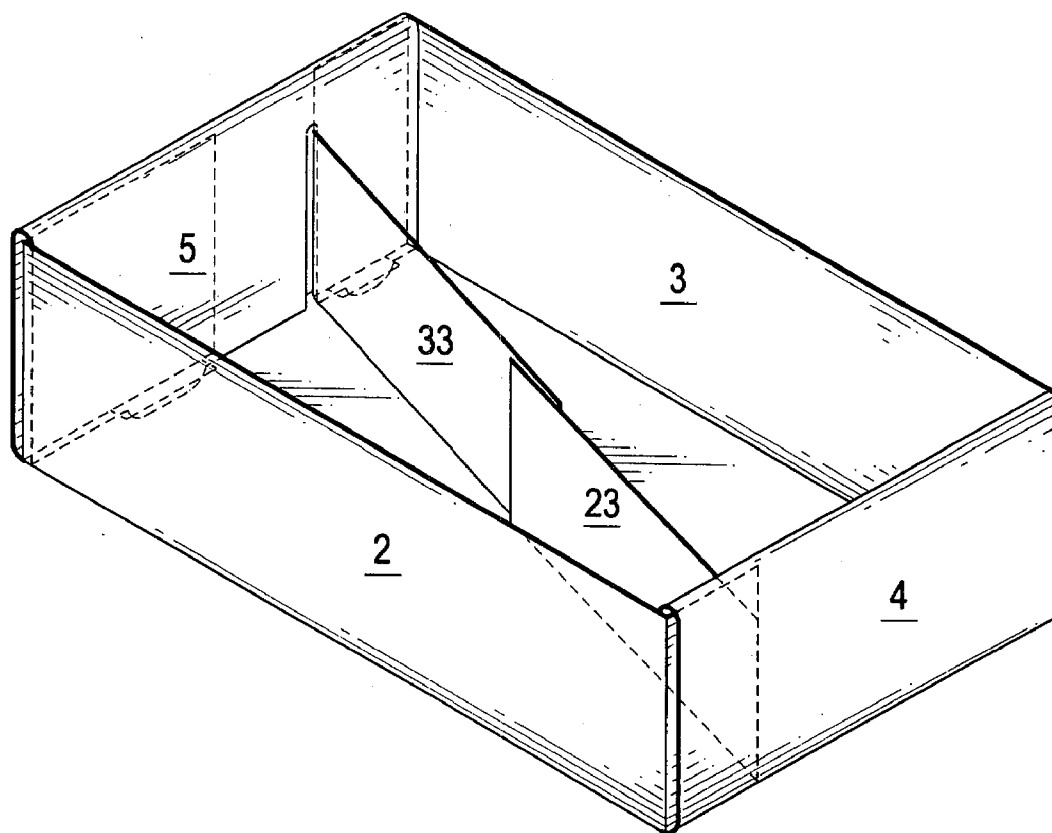
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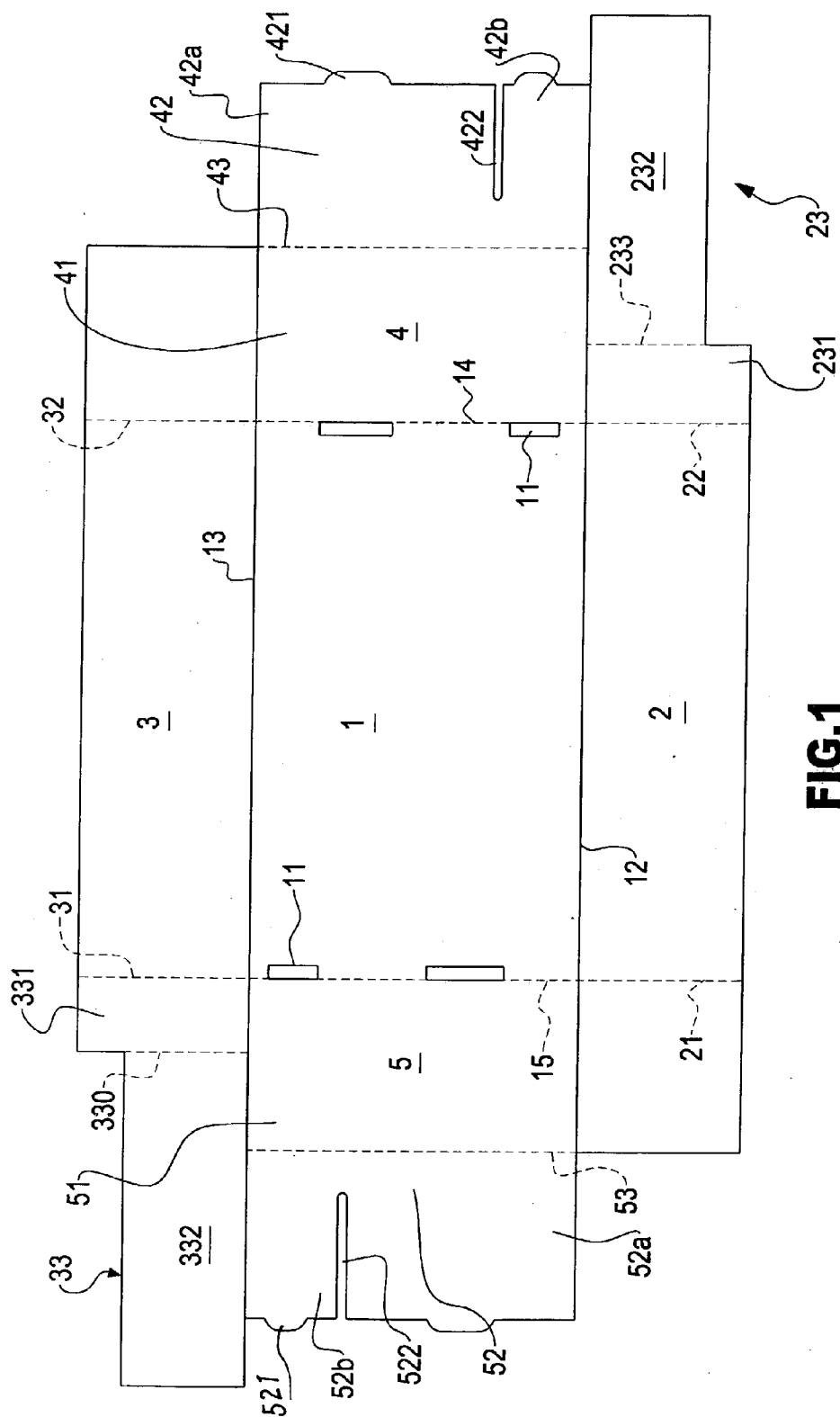
(19) **United States**(12) **Patent Application Publication**  
**Lin**(10) **Pub. No.: US 2004/0211822 A1**(43) **Pub. Date: Oct. 28, 2004**(54) **SHOE BOX**(52) **U.S. Cl. .... 229/120.12; 229/120.18; 206/299**(76) **Inventor: Mao-Chia Lin, Shulin City (TW)**(57) **ABSTRACT**

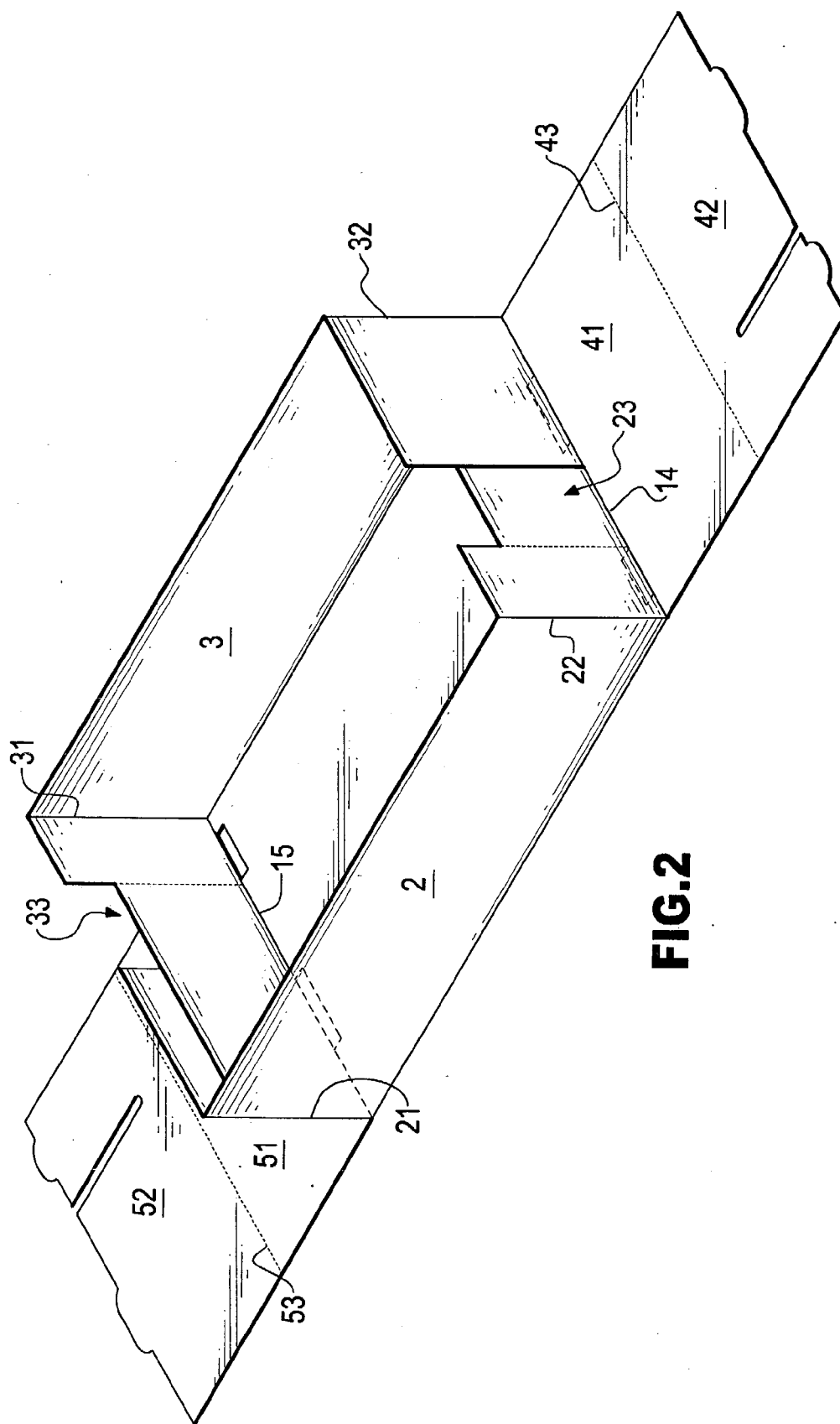
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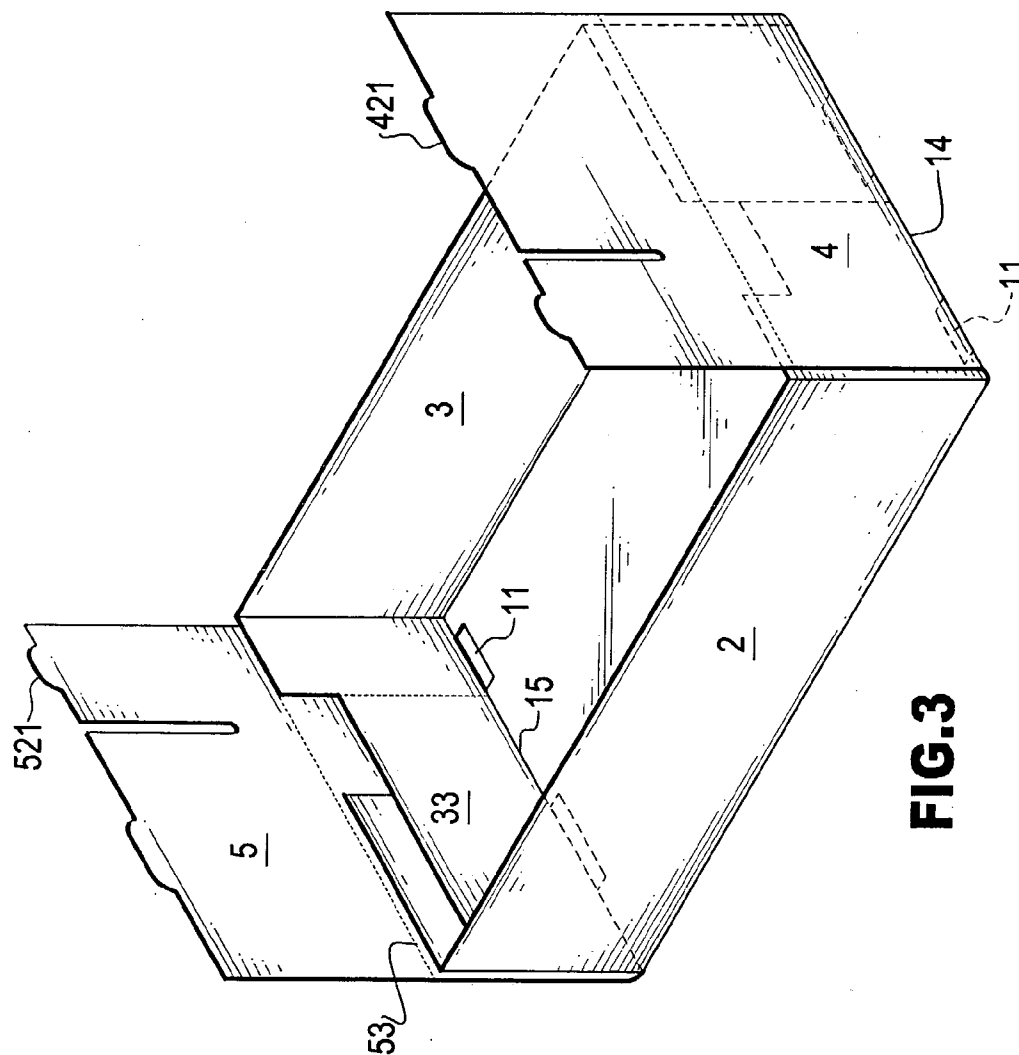
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A shoe box includes a base, a first side wall formed adjacent to the base and being perpendicular to the base, a second side wall formed adjacent to the base and opposite to the first side wall, the second side wall being perpendicular to the base. A third side wall is formed with the base and sandwiched between the first and second side walls and has a first extension extending out therefrom. A fourth side wall is formed with the base and sandwiched between the first and second side walls. The fourth side wall has a second extension extending out therefrom, wherein a free end of the first extension is securely connected to a free end of the second extension to form a baffle across a long side of the shoe box to separate a pair of shoes to be received in the shoe box.

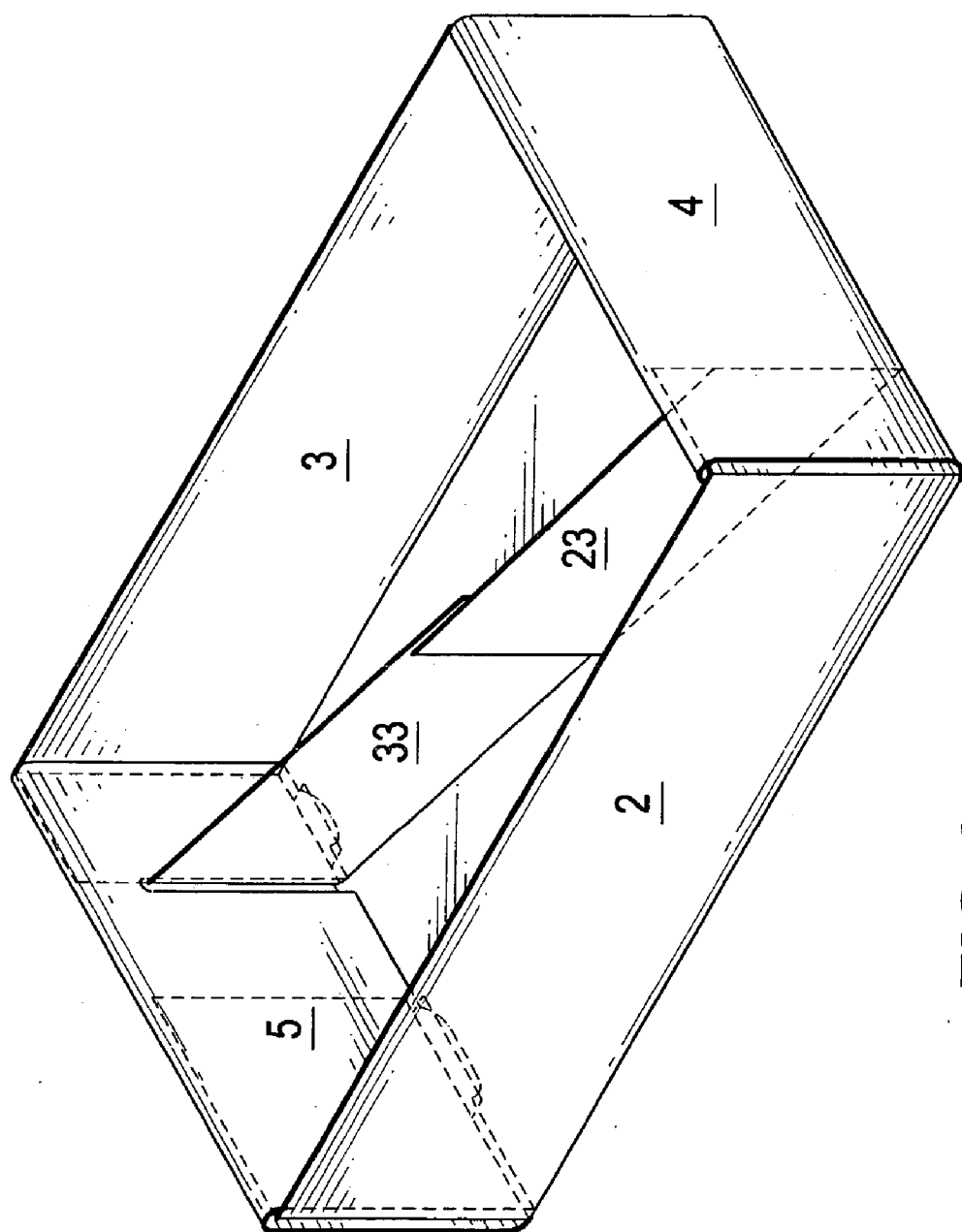
(21) **Appl. No.: 10/420,600**(22) **Filed: Apr. 22, 2003****Publication Classification**(51) **Int. Cl.<sup>7</sup> ..... B65D 25/04**



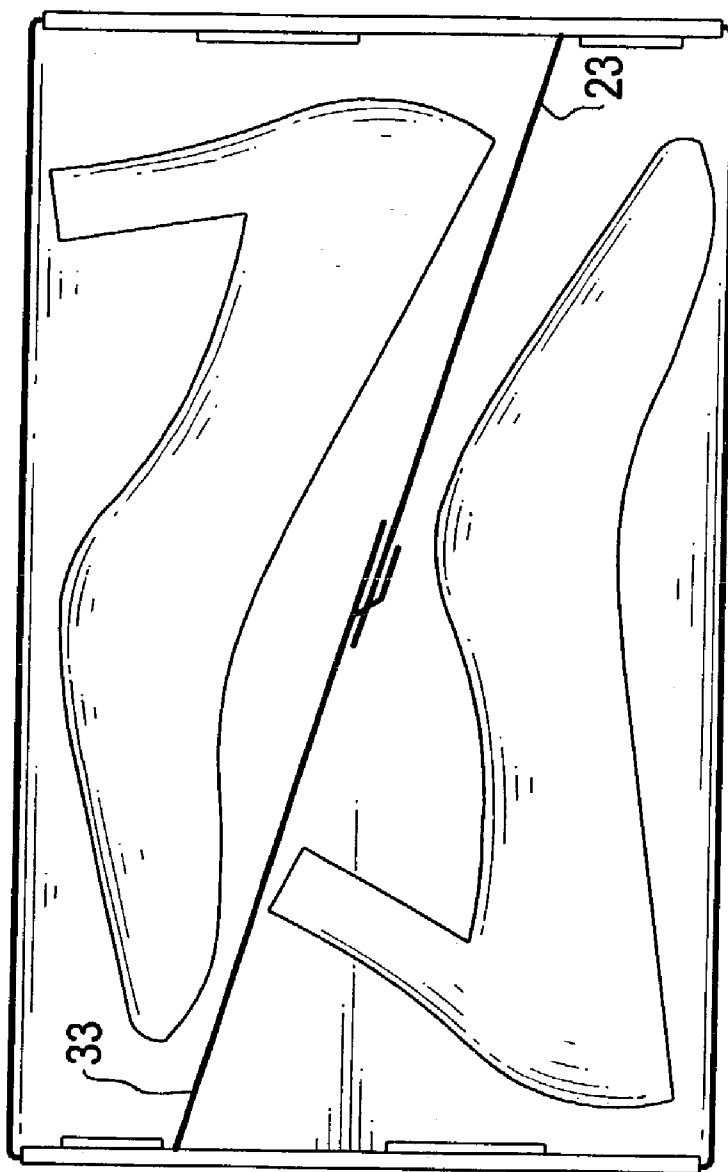




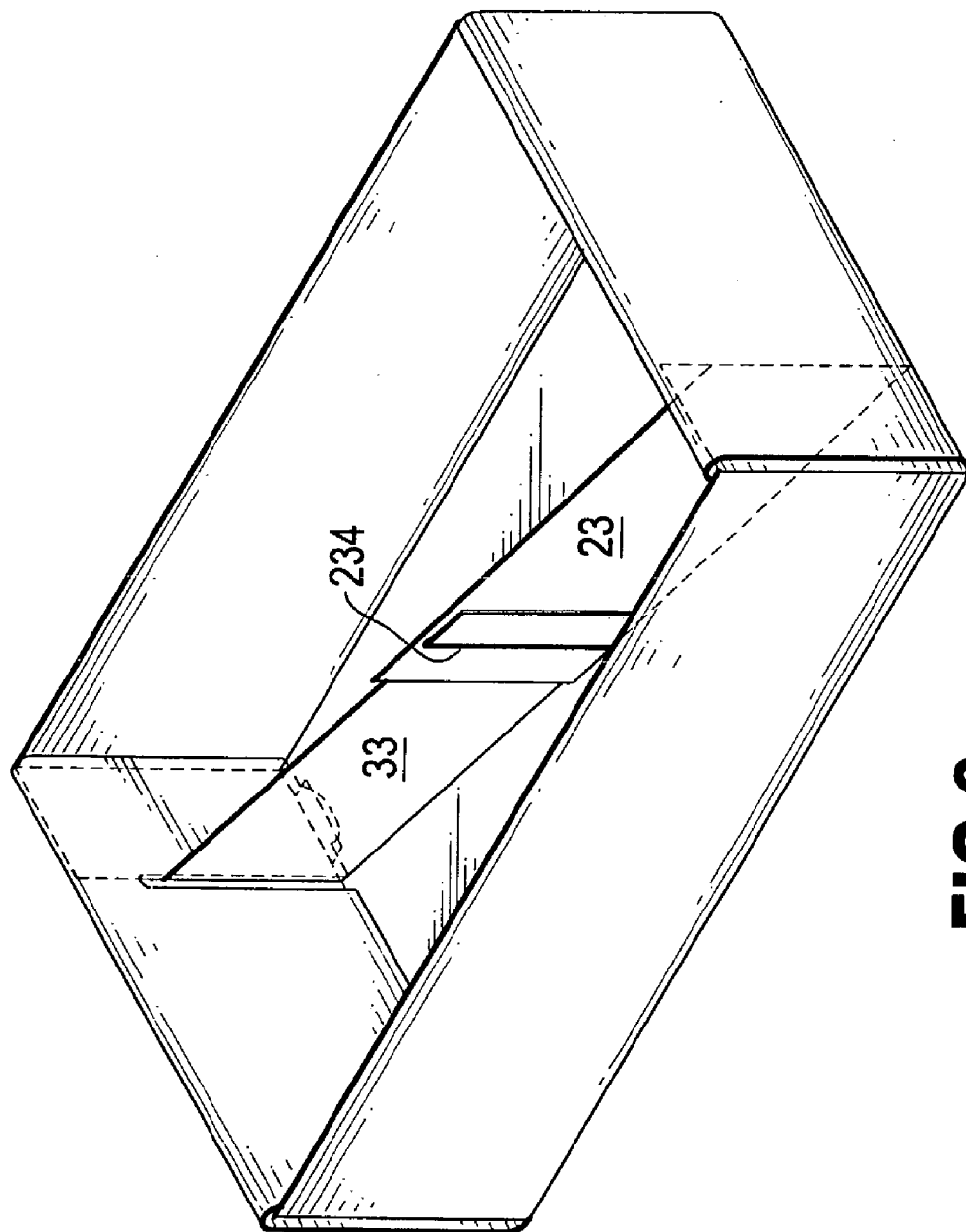
**FIG.3**



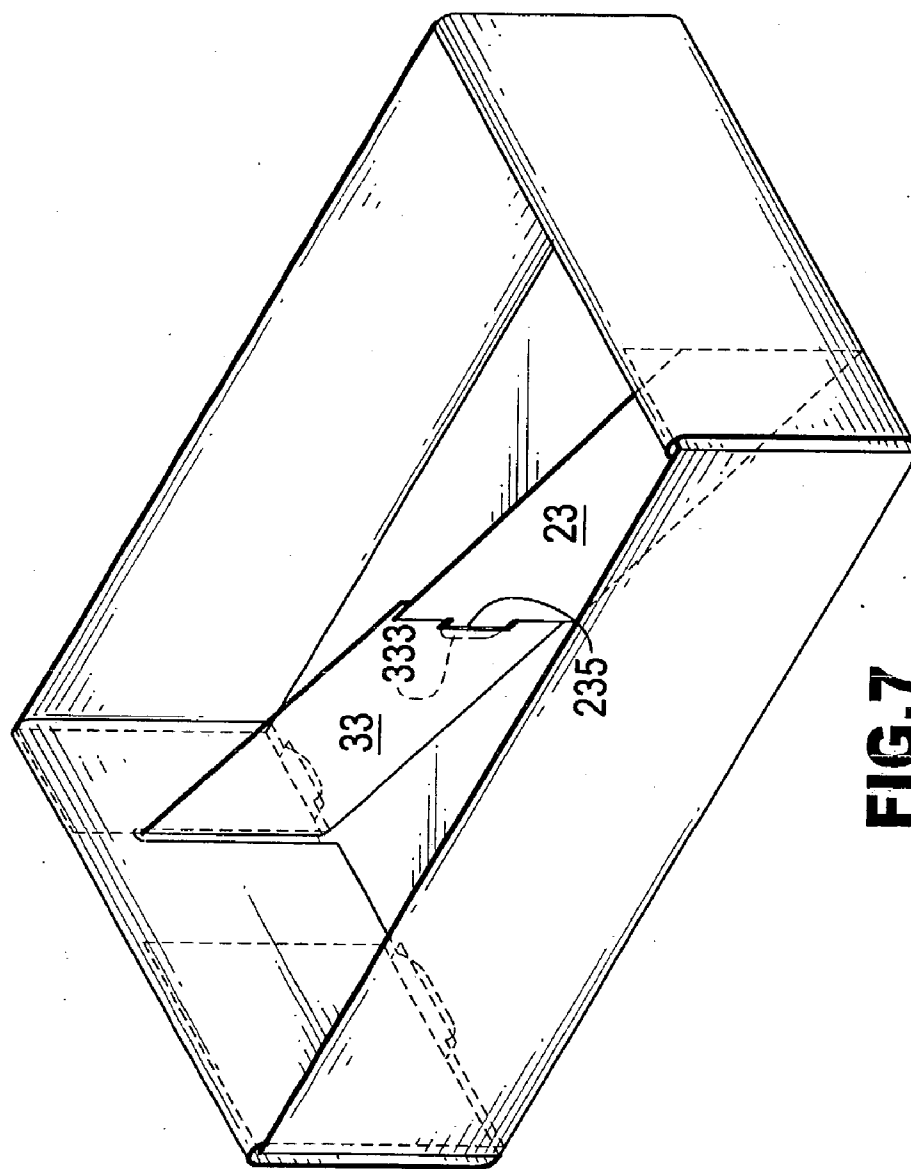
**FIG. 4**



**FIG.5**

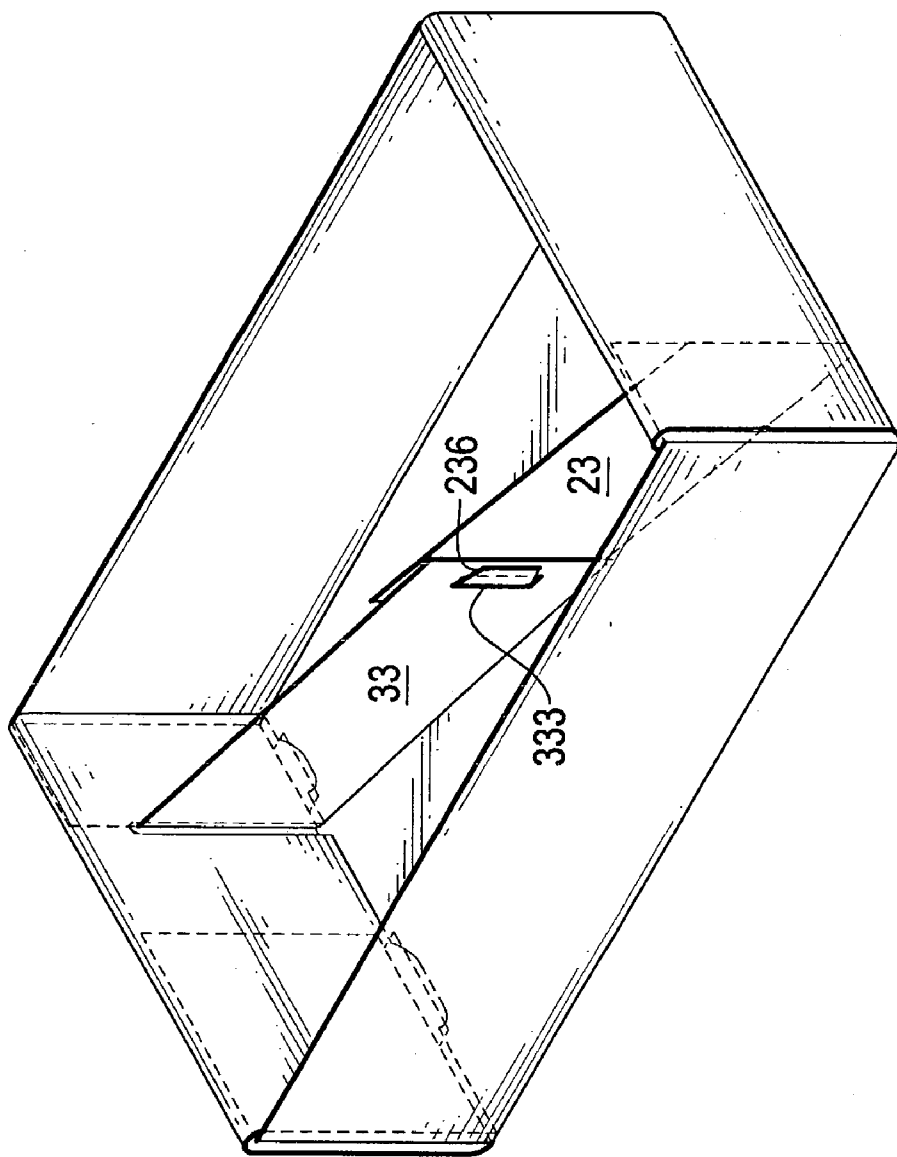


**FIG. 6**

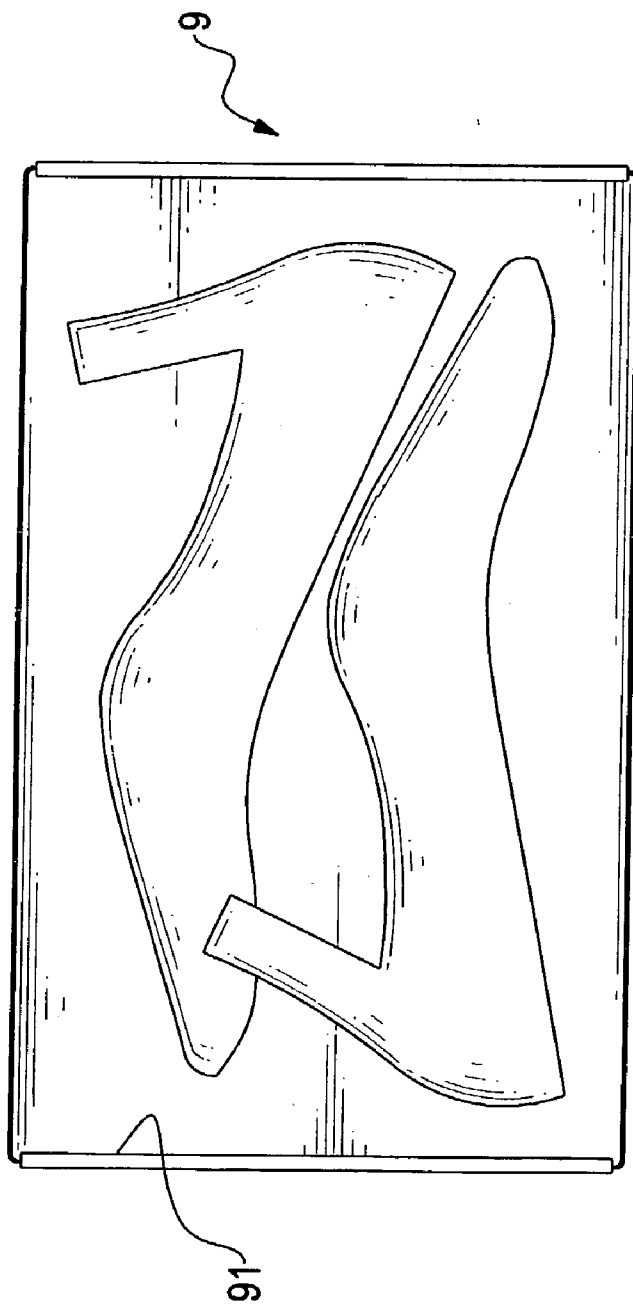


**FIG. 7**





**FIG. 8**



**FIG. 9**  
PRIOR ART

## SHOE BOX

### BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates to a shoe box, and more particularly to a shoe box with a baffle non-diagonally and non-symmetrically formed in the box so as to separate two shoes received in the box.

[0003] 2. Description of Related Art

[0004] After purchasing a pair of shoes, the clerk or the salesperson normally will provide a shoe box (9) shown in FIG. 9 for the customer to carry the pair of shoes home. The conventional shoe box (9) defines therein a receiving space (91) so that the pair of shoes is able to be received in the receiving space and thus the customer is able to carry the shoe box easily instead of carrying the shoes themselves. The plain design of the conventional shoe box (9) simply provides the receiving space (91) for temporarily receiving the pair of shoes, which can only provide primitive protection from articles outside the shoe box. However, the collision between the two shoes within the shoe box also damages the shoes. That is, when the pair of shoes is being transported from one place to another, the pair of shoes may collide with each other, which sometimes leaves abrasions on the skin of the shoes. This is especially irritating when the shoes are brand new. In order to prevent this situation from happening, a new kind of shoe box with a baffle inside the shoe box is introduced to the market. The baffle is diagonally formed inside the shoe box so that the pair of shoes are separated from collision with each other. However, because the baffle is diagonally formed inside the shoe box, there is no provision to accommodate different sizes of shoes to be received in the shoe box. Therefore, large shoes and small shoes may have different situations inside the shoe box. That is, the shoes may still collide with the side faces of the shoe box especially when the shoe size is small. Therefore, the shoe box still suffers the drawback of not maintaining the shoes in a pristine state.

[0005] To overcome the shortcomings, the present invention tends to provide an improved shoe box to mitigate the aforementioned problems.

### SUMMARY OF THE INVENTION

[0006] The primary objective of the present invention is to provide an improved shoe box with a baffle non-diagonally and non-symmetrically formed inside the shoe box to separate the pair of shoes inside the shoe box.

[0007] Another objective of the present invention is that the baffle is formed from two extensions connected with one another.

[0008] Still another objective of the present invention is that the connection between the two extensions is based on a cut defined in either one of the extensions to correspond to the other one of the extensions such that when one of the extensions is received in the cut of the other extension, the connection between the two extensions is secured.

[0009] Yet another objective of the present invention is that the connection between the two extensions is based on an opening defined in one of the extensions to correspond to a ledge formed on the other one of the extensions such that

when the ledge is received in the cut, the connection between the two extensions is secured.

[0010] Other objects, advantages and novel features of the invention will become more apparent from the following detailed description when taken in conjunction with the accompanying drawings.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1 is a plan view of the shoe box when expanded;

[0012] FIGS. 2 and 3 are perspective views showing the formation processes of the shoe box of the present invention;

[0013] FIG. 4 is a perspective view of the shoe box of the present invention;

[0014] FIG. 5 is a plan view showing a pair of shoes is received in the shoe box of the present invention;

[0015] FIG. 6 is a perspective view of another embodiment of the present invention;

[0016] FIG. 7 is a perspective view showing still another embodiment of the shoe box of the present invention;

[0017] FIG. 8 is a perspective view of another embodiment of the present invention; and

[0018] FIG. 9 is a plan view of a conventional shoe box.

### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0019] With reference to FIG. 1, the shoe box (1) of the present invention before assembly has a base (1), a first side wall (2), a second side wall (3) opposite to the first side wall (2), a third side wall (4) sandwiched between ends of the first and second side walls (2,3) and a fourth side wall (5) opposite to the third side wall (4). The base (1) is rectangular and has a pair of notches (11) defined along an edge of the base (1). A first base crimple (12) is formed along a joint between the base (1) and the first side wall (2). A second base crimple (13) is formed along a joint between the base (1) and the second side wall (3). A third base crimple (14) is formed along a joint between the base (1) and the third side wall (4) and a fourth base crimple (15) is formed along a joint between the base (1) and the fourth side wall (5).

[0020] The first side wall (2) has a first first side wall crimple (21) and a second first side wall crimple (22) corresponding to the third base crimple (14). A first extension (23) is formed with and extended from the second first side wall crimple (22) of the first side wall (2). The first extension (23) has a first portion (231) with a width the same as that of the first side wall (2) and a second portion (232) with a width thinner than the width of the first side wall (2). The first portion (231) and the second portion (232) are separated from each other by a first extension crimple (233).

[0021] The second side wall (3) has a first second side wall crimple (31) corresponding to the fourth base crimple (15), a second second side wall crimple (32) corresponding to the third base crimple (14) and a second extension (33) extending from the first second side wall crimple (31). The second extension (33) has a first part (331) securely formed with the second side wall (3) and a second part (332) separated from

the first part (331) via a second extension crimple (330). It is to be noted that the second side wall (3) connects to the base (1) only via the second base crimple (13).

[0022] The third side wall (4) is formed on one side of the base (1) and has a first section (41) securely formed with the base (1) via the third base crimple (14) and a second section (42) securely connected to the first section (41) via a first auxiliary crimple (43) sandwiched between the first and second sections (41,42). The second section (42) has two first ears (421) extending out from a free edge of the second section (42) to correspond to two notches (11) in the base (1) and a slit (422) defined between the two first ears (421). Because of the slit (422), the second section (42) is divided into two areas, the first area (42a) and the second area (42b). The second area (42b) has a width the same as that of the first portion (231) of the first extension (23) of the first side wall (2).

[0023] The fourth side wall (5) is formed on the other side of the base (1) and has a first section (51) securely formed with the base (1) via the fourth base crimple (15) and a second section (52) securely connected to the first section (51) via a second auxiliary crimple (53) sandwiched between the first and second sections (51,52). The second section (52) has two second ears (521) extending out from a free edge of the second section (52) to correspond to two notches (11) in the base (1) and a slit (522) defined between the two second ears (521). Because of the slit (522), the second section (52) is divided into two areas, the first area (52a) and the second area (52b). The second area (52b) has a width the same as that of the first part (331) of the second extension (33) of the second side wall (3).

[0024] With reference to FIG. 2, when the shoe box of the present invention is to be assembled, the first side wall (2) and the second side wall (3) are first erected or folded relative to the base (1). After the first side wall (2) and the second side wall (3) are erected (folded), the first side wall (2) is folded along the first first side wall crimple (21) and the first extension (23) is folded along the second first side wall crimple (22). Then the second side wall (3) is folded along the first second side wall crimple (31) and the second second side wall crimple (32). After the first side wall and the second side wall (2,3) are folded along the second first side wall crimple (22) and the first second side wall crimple (31), the first extension (23) and the second extension (33) are perpendicular to the first side wall (2) and the second side wall (3) respectively.

[0025] With reference to FIG. 3 and taking FIG. 2 for reference, thereafter, the third side wall (4) and the fourth side wall (5) are folded respectively along the third base crimple (14) and the fourth base crimple (15). The third side wall (4) is again folded along the first auxiliary crimple (43) to sandwich the first extension (23) between the third side wall (4). The fourth side wall (5) is then folded along the second auxiliary crimple (53) to sandwich the second extension (33) within the fourth side wall (5). After the third and fourth side walls (4,5) are folded along the first and second auxiliary crimples (43,53) respectively, the first ears (421) are inserted into one pair of the notches (11) of the base (1) and the second ears (521) are inserted into the other pair of notches (11) of the base (1) as shown in FIG. 4. Because the shoe box of the present invention is made of card board, each piece of the shoe box has a certain degree of resilience such

that the second portion (232) of the first extension (23) is able to extend out of the slit (422) of the third side wall (4) and the second part (332) of the second extension (33) is able to extend out of the slit (522) of the fourth side wall (5). After the second portion (232) of the first extension (23) extends out from the slit (422) and the second part (332) of the second extension (33) extends out from the slit (522), the first extension (23) engages with the second extension (33). The connection between the first extension (23) and the second extension (33) is secured via bonding, which completes the construction of the shoe box of the present invention.

[0026] With reference to FIG. 5, it is noted that the connection between the first extension (23) and the second extension (33) forms a baffle across the shoe box. The baffle is non-symmetrically extending from the third side wall (4) to the fourth side wall (5) to divide the interior of the shoe box into two compartments for respectively receiving therein one of two shoes.

[0027] Due to the formation of the baffle, the shoes are separated from each other so that abrasions etc resulting from mutual collision are avoided.

[0028] With reference to FIG. 6, the connection between the first extension (23) and the second extension (33) may be completed via a cut (234) defined in the first extension (23). After the cut (234) is defined, the second extension (33) is inserted into the cut (234) so as to complete the connection between the first extension (23) and the second extension (33).

[0029] With reference to FIG. 7, the connection between the first extension (23) and the second extension (33) may be completed via a ledge (235) formed on a distal edge of the first extension (23) and an opening (333) defined in the second extension (33). The insertion of the ledge (235) into the opening (333) is able to complete the connection between the first extension (23) and the second extension (33).

[0030] With reference to FIG. 8, the connection between the first extension (23) and the second extension (33) may be completed via a tongue (236) formed on a side face of the first extension (23) and the opening (333) defined in the second extension (33). The insertion of the tongue (236) into the opening (333) is able to complete the connection between the first extension (23) and the second extension (33).

[0031] In summary, with the provision of the baffle composed of the first extension (23) and the second extension (33), the shoe box of the present invention is able to prevent damage to the pair of shoes received in the shoe box as they cannot collide with each other or the side walls of the shoe box. It is to be understood, however, that even though numerous characteristics and advantages of the present invention have been set forth in the foregoing description, together with details of the structure and function of the invention, the disclosure is illustrative only, and changes may be made in detail, especially in matters of shape, size, and arrangement of parts within the principles of the invention to the full extent indicated by the broad general meaning of the terms in which the appended claims are expressed.

What is claimed is:

1. A shoe box comprising:
  - a base;
  - a first side wall formed adjacent to a side of the base and being perpendicular to the base;
  - a second side wall formed adjacent to the base and opposite to the first side wall, the second side wall being perpendicular to the base;
  - a third side wall formed with the base and sandwiched between ends of the first and second side walls and having a first extension extending out therefrom; and
  - a fourth side wall formed with the base and sandwiched between ends of the first and second side walls and having a second extension extending out therefrom, wherein the third side wall is opposite to the fourth side wall and a free end of the first extension is securely connected to a free end of the second extension to form a baffle inside and across a long side of the shoe box so as to separate a pair of shoes to be received in the shoe box.
2. The shoe box as claimed in claim 1, wherein the baffle is non-diagonally formed inside the shoe box.
3. The shoe box as claimed in claim 1, wherein a connection between the first extension and the second extension is completed via a cut defined in the first extension so that a distal end portion of the second extension is able to be inserted into the cut to complete the connection between the first extension and the second extension.
4. The shoe box as claimed in claim 1, wherein a connection between the first extension and the second extension is completed via a ledge formed on a distal edge of the first extension and an opening defined in the second extension such that insertion of the ledge into the opening is able to complete the connection between the first extension and the second extension.
5. The shoe box as claimed in claim 1, wherein a connection between the first extension and the second extension is completed via a tongue formed on a side face of the first extension and an opening defined in the second extension such that insertion of the tongue into the opening is able to complete the connection between the first extension and the second extension.
6. The shoe box as claimed in claim 2, wherein a connection between the first extension and the second extension is completed via a cut defined in the first extension so that a distal end portion of the second extension is able to be inserted into the cut to complete the connection between the first extension and the second extension.
7. The shoe box as claimed in claim 2, wherein a connection between the first extension and the second extension is completed via a ledge formed on a distal edge of the first extension and an opening defined in the second extension such that insertion of the ledge into the opening is able to complete the connection between the first extension and the second extension.
8. The shoe box as claimed in claim 2, wherein a connection between the first extension and the second extension is completed via a tongue formed on a side face of the first extension and an opening defined in the second extension such that insertion of the tongue into the opening is able to complete the connection between the first extension and the second extension.
9. A shoe box comprising:
  - a rectangular base having two pairs of notches each defined in opposite edges of the base;
  - a first side wall connected to the base along a first base crimple and having a first first side wall crimple, a second first side wall crimple and a first extension formed with and extended from the second first side wall crimple of the first side wall, the first extension having a first portion and a second portion separated from the first portion by a first extension crimple;
  - a second side wall opposite to the first side wall and connected to the base via a second base crimple, the second side wall having a first second side wall crimple corresponding to the first first side wall crimple of the first side wall, a second second side wall crimple corresponding to the second first side wall crimple and a second extension extending from the first second side wall crimple, the second extension having a first part securely formed with the second side wall and a second part separated from the first part via a second extension crimple;
  - a third side wall connected to the base via a third base crimple and having a first section securely extending from the third base crimple and a second section securely connected to the first section via a first auxiliary crimple sandwiched between the first and second sections, the second section having two first ears extending out from a free edge of the second section to correspond to a first pair of the notches in the base and a slit defined between the two first ears to divide the second section into a first area and a second area,
  - a fourth side wall opposite to the third side wall and securely connected to the base via a fourth base crimple, the fourth side wall having a first section securely formed with the base via the fourth base crimple and a second section securely connected to the first section via a second auxiliary crimple sandwiched between the first and second sections, the second section having two second ears extending out from a free edge of the second section to correspond to a second of the pair of notches in the base and a slit defined between the two second ears to divide the fourth side wall into a first area and a second area,
 whereby after the first, second, third and fourth side walls are perpendicular relative to the base, the first portion of the first extension superposes the second area of the third side wall, the second area of the fourth side wall superposes the first part of the second extension, the second portion of the first extension extends out from the slit of the third side wall and the second part of the second extension extends out from the slit of the fourth side wall to securely connect to the second portion of the first extension so as to form a baffle across a long side of the shoe box.
10. The shoe box as claimed in claim 9, wherein the first portion of the first extension has a width the same as that of the second area of the third side wall.
11. The shoe box as claimed in claim 9, wherein the second area of the fourth side wall has a width the same as that of the first part of the second extension.

12. The shoe box as claimed in claim 10, wherein the second area of the fourth side wall has a width the same as that of the first part of the second extension.

13. The shoe box as claimed in claim 9, wherein a connection between the first extension and the second extension is completed via a cut defined in the first extension so that a distal end portion of the second extension is able to be inserted into the cut to complete the connection between the first extension and the second extension.

14. The shoe box as claimed in claim 9, wherein a connection between the first extension and the second extension is completed via a ledge formed on a distal edge of the first extension and an opening defined in the second extension such that insertion of the ledge into the opening is able to complete the connection between the first extension and the second extension.

15. The shoe box as claimed in claim 9, wherein a connection between the first extension and the second extension is completed via a tongue formed on a side face of the first extension and an opening defined in the second extension such that insertion of the tongue into the opening is able to complete the connection between the first extension and the second extension.

16. The shoe box as claimed in claim 12, wherein a connection between the first extension and the second extension is completed via a cut defined in the first extension so that a distal end portion of the second extension is able to be inserted into the cut to complete the connection between the first extension and the second extension.

17. The shoe box as claimed in claim 12, wherein a connection between the first extension and the second extension is completed via a ledge formed on a distal edge of the first extension and an opening defined in the second extension such that insertion of the ledge into the opening is able to complete the connection between the first extension and the second extension.

18. The shoe box as claimed in claim 12, wherein a connection between the first extension and the second extension is completed via a tongue formed on a side face of the first extension and an opening defined in the second extension such that insertion of the tongue into the opening is able to complete the connection between the first extension and the second extension.

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