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(54) **EXTENSIBLE TABLE**

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(57) **ABSTRACT**

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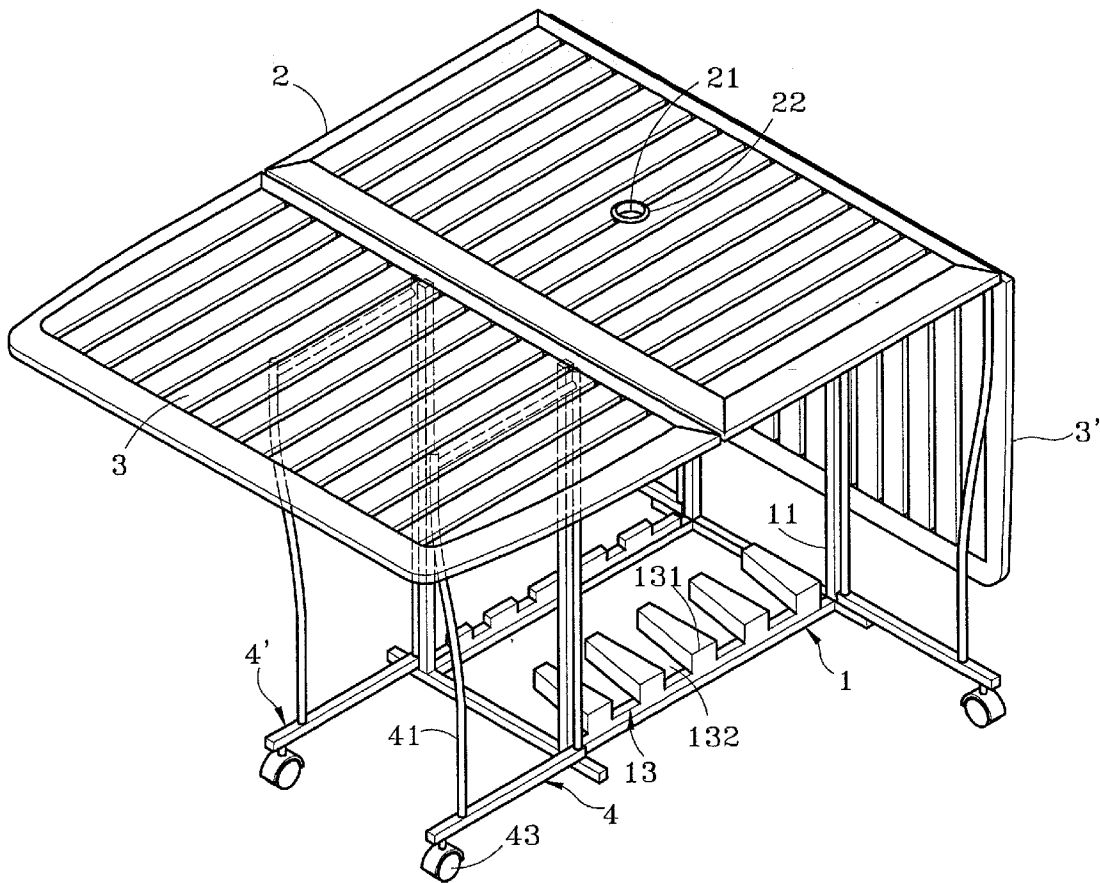
An extensible table includes a first support frame consisting of a plurality of rods for supporting a first carrier member, and a second support frame pivotally engaged with the first support frame at a pivotal axis which serves a fulcrum to allow the second support frame moving a selected displacement to support a second carrier member. The second carrier member is pivotally engaged with the first carrier member at one side through a pivotal element. The second carrier member may be extended about the pivotal element and supported by the second support frame to couple with the first carrier member to form an extended table with a larger area for holding goods.

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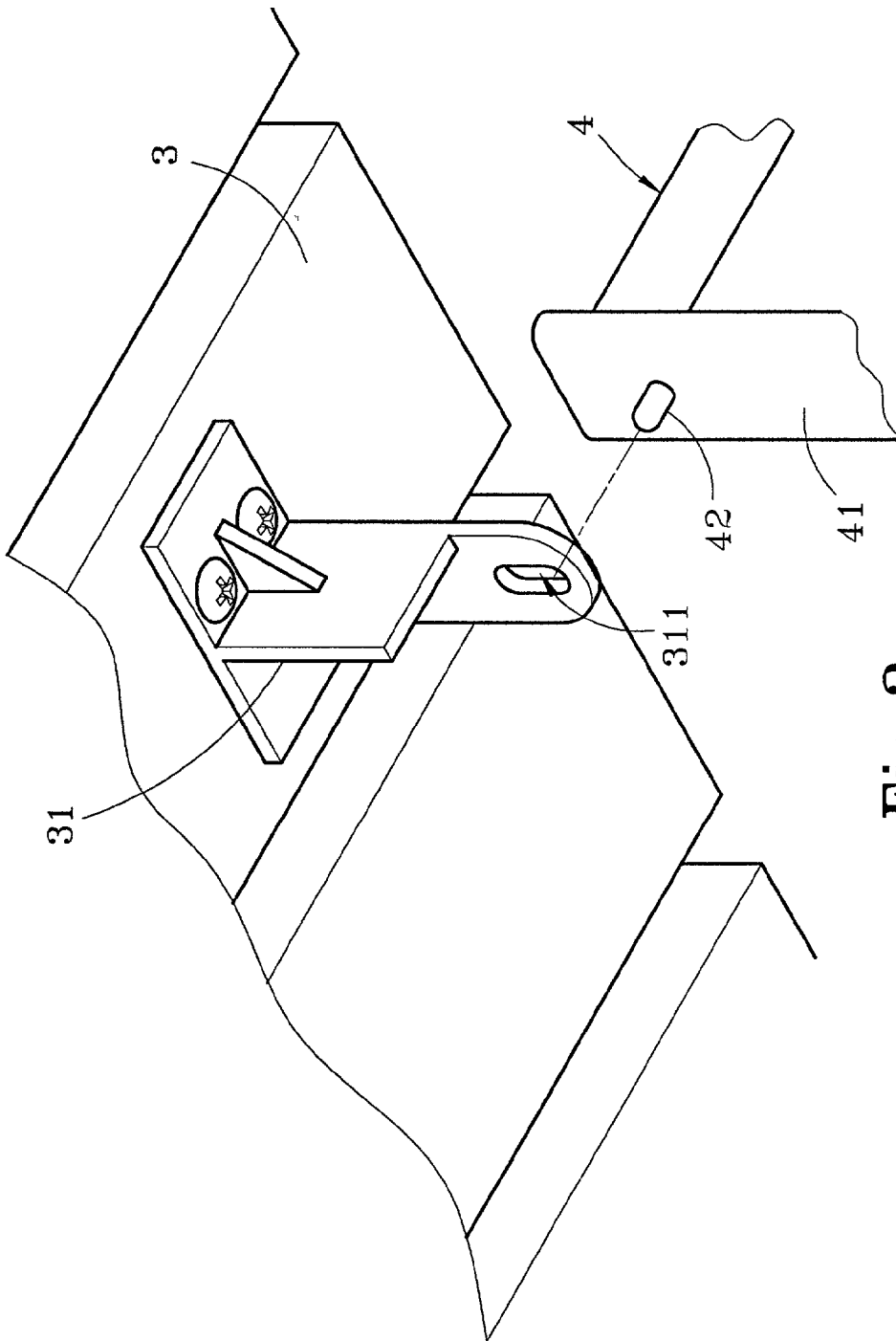


Fig. 2

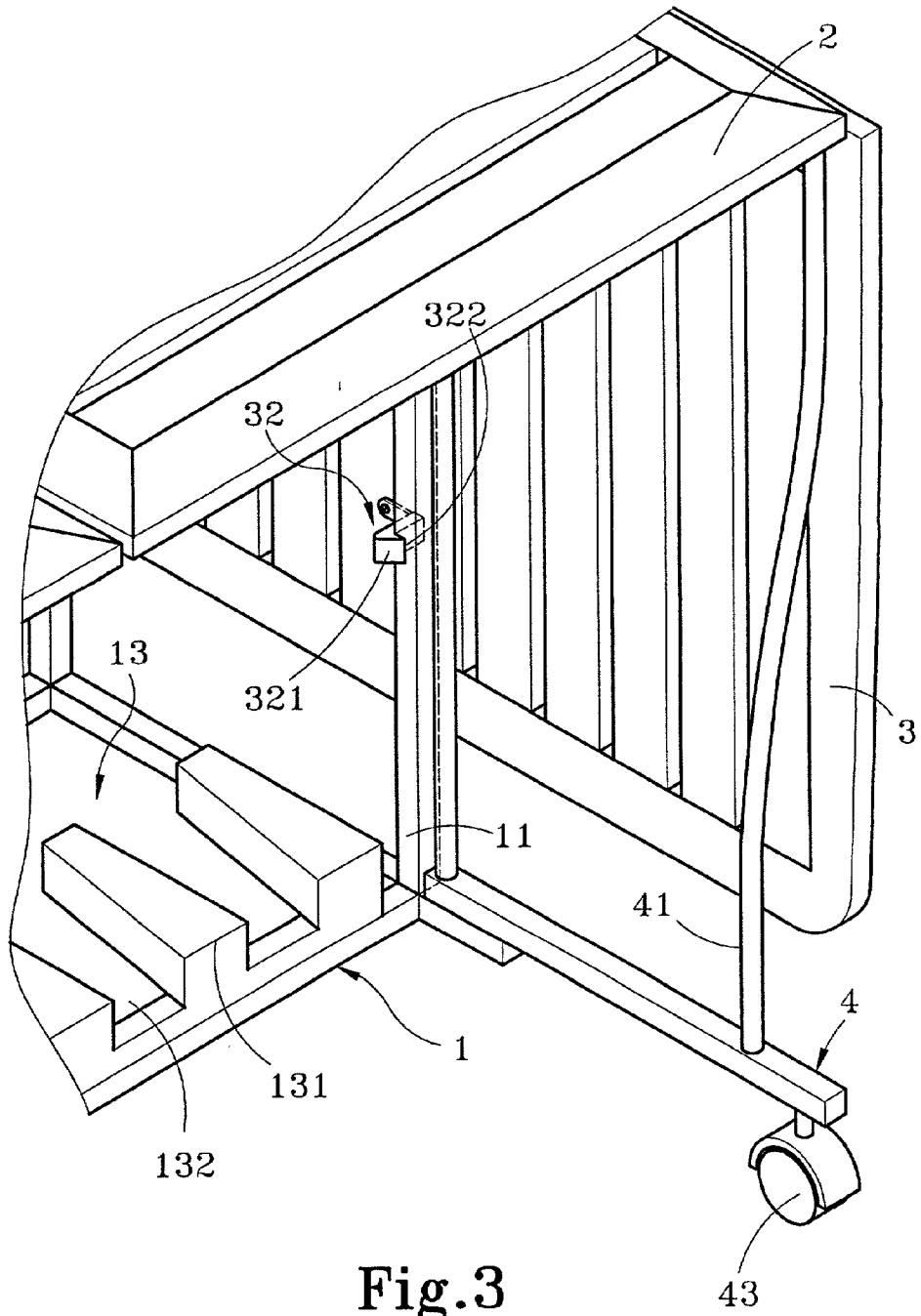


Fig.3

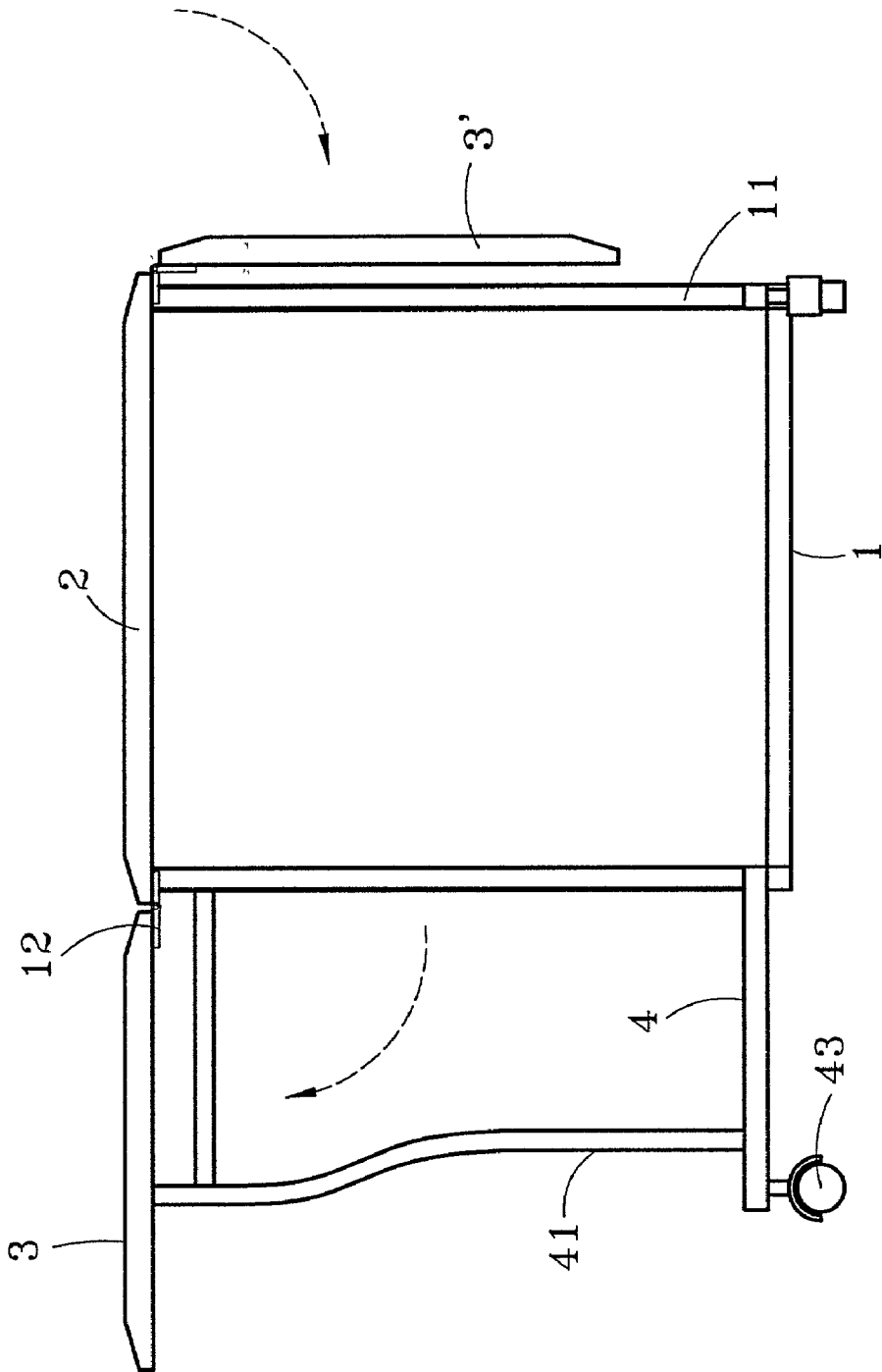


Fig.4

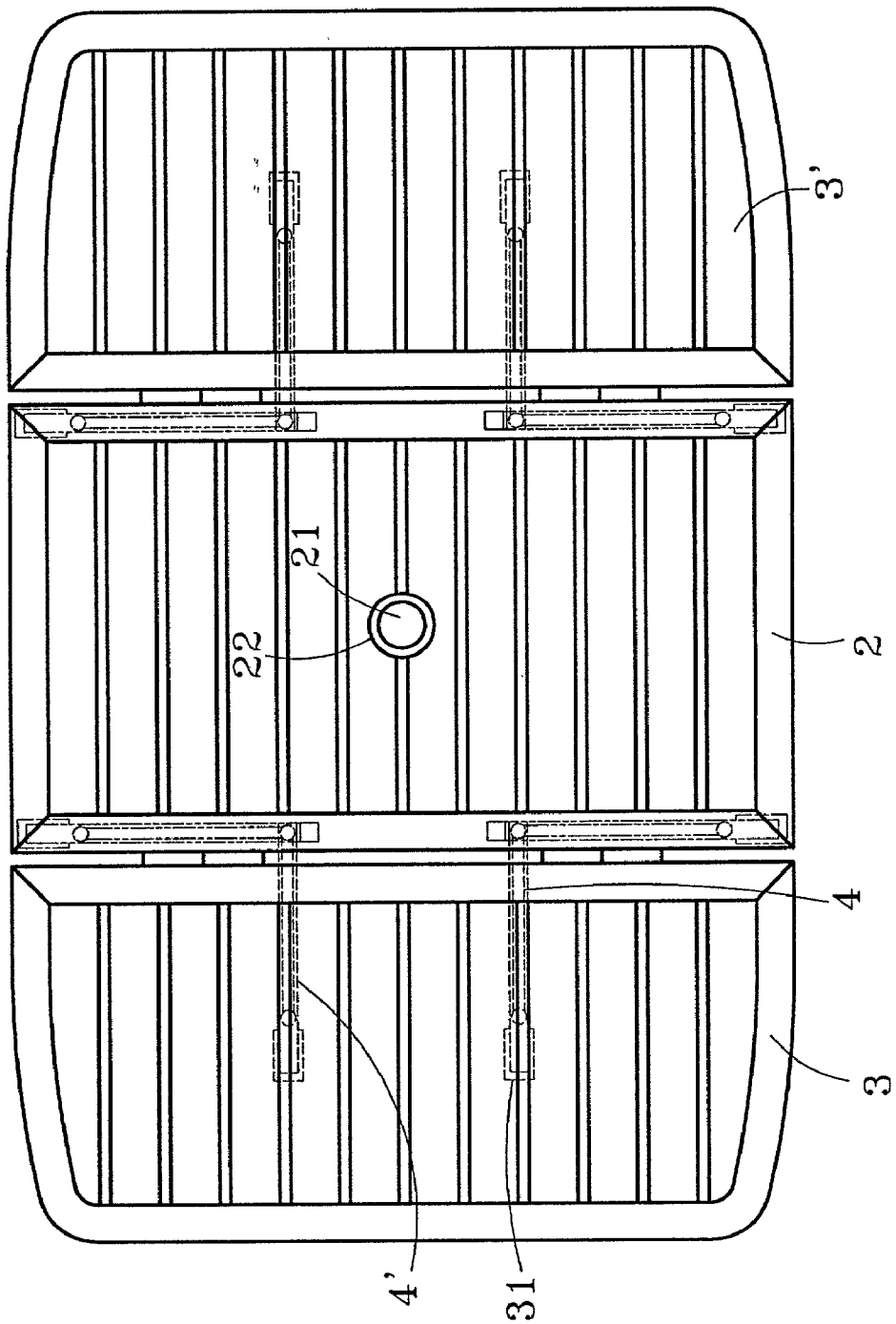


Fig. 5

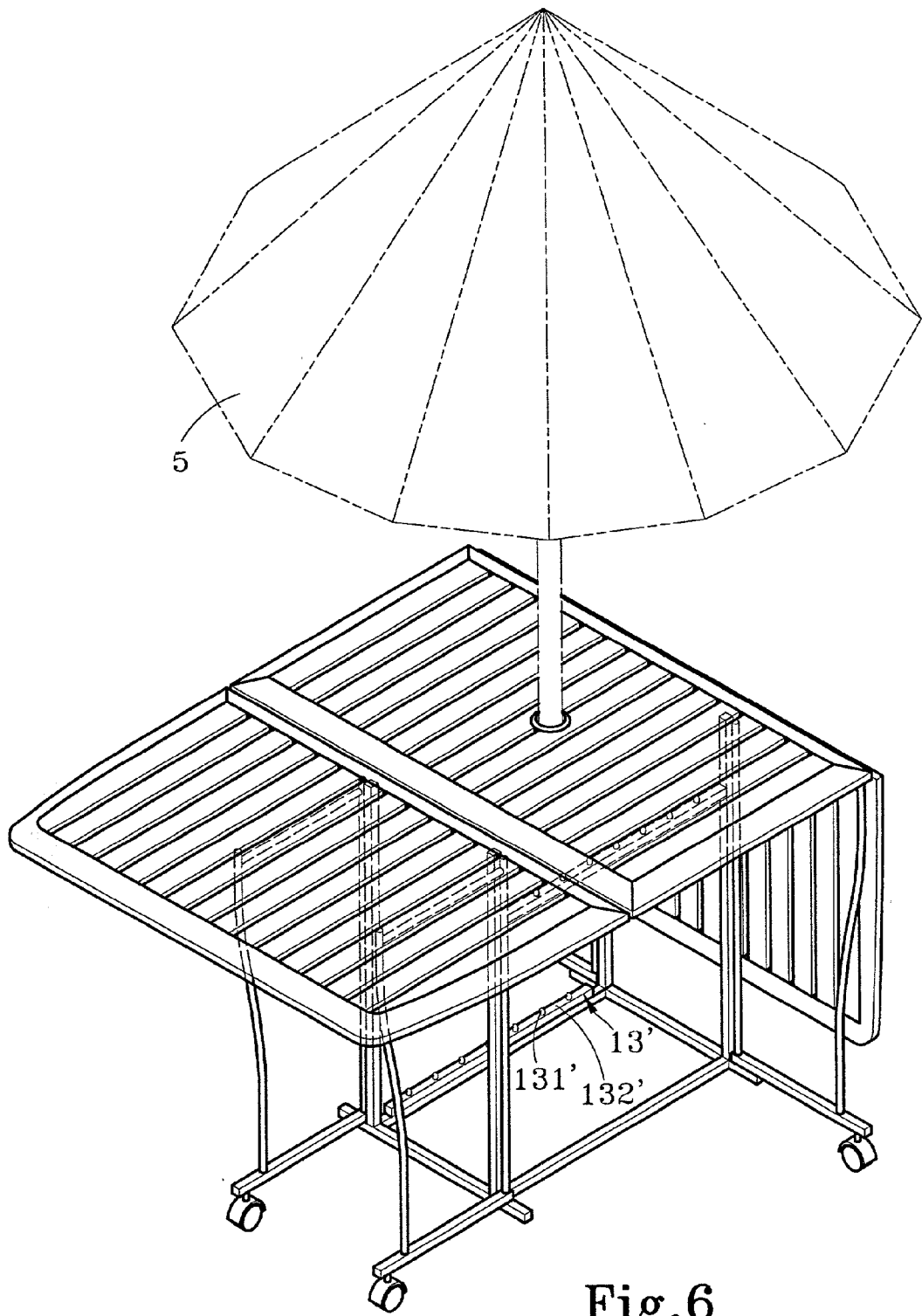


Fig. 6

EXTENSIBLE TABLE

BACKGROUND OF THE INVENTION

[0001] The present invention relates to an extensible table and particularly an improved extensible table that has extensible and folding carrier members capable of changing loading area according to different loading requirements.

[0002] Outdoor leisured and recreational activities are very popular these days. As many people live and work in highly competitive environments, and have accumulated a lot of tension and stress, to participate some outdoor activities such as field trip, camping, or Bar-B-Q help people to release the tension and stress, and can improve quality of life. It often happens that some recreational sites do not have all the facilities required. In order to better enjoy the outdoor activities, people have to carry some outdoor articles and goods with them, especially tables and chairs. Hence to shrink the size of the tables and chairs so that they can be carried and stored conveniently but still can provide sufficient function when in use has become an important issue to the furniture producers.

[0003] To meet the market demands, folding chairs are well developed and widely available now. However table is not so well developed, and there are still a lot of problems remain unresolved. When a family or more than one family have outdoor trip or travel, they usually carry a lot of goods and foods. The tables also should have enough space and supporting power to hold those goods and foods. Whereas most tables now available on the market have fixed table top. Even if the table legs are detachable and foldable, total size of the table is still relatively large. It is not convenient to carry and store. Moreover, outdoor environments vary greatly. And locations suitable for placing tables could be very limited. This could add troubles or annoyances to the outdoors activities.

SUMMARY OF THE INVENTION

[0004] The primary object of the invention is to resolve the foregoing disadvantages. The invention provides an extensible table that is capable of changing the carrier space to suit users' requirements. The table may be packed to a smaller sized before being extended to facilitate transportation or storing. The table includes a first support frame for supporting a first carrier member and a second support frame for supporting a second carrier member. The second support frame is pivotally engaged with the first support frame at an axis which serves as the fulcrum of turning of the second support frame relative to the first support frame. The second carrier member is hinged to the first carrier member and may be extended and supported by the second support frame to couple with the first carrier member to form a larger supporting area for holding goods.

[0005] The foregoing, as well as additional objects, features and advantages of the invention will be more readily apparent from the following detailed description, which proceeds with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] FIG. 1 is a perspective view of the invention.

[0007] FIG. 2 is a fragmentary perspective view of a second support frame to engage with a second carrier member.

[0008] FIG. 3 is a fragmentary perspective view of a second carrier member latched to a first support frame.

[0009] FIG. 4 is a schematic view of the invention at a fully extended state.

[0010] FIG. 5 is a schematic view of the invention under movement.

[0011] FIG. 6 is a pictorial view of an embodiment of the invention in use.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0012] Referring to FIG. 1, the present invention includes a first support frame 1 which consists of a plurality of rods 11 for supporting a first carrier member 2 thereon. There is at least one second carrier member 3, 3' located above the first support frame 1 and pivotally coupled to one side of the first carrier member 2 through a pivotal element 12. There is at least one second support frame 4, 4' consisting of a plurality of rods 41. The second support frame 4, 4' is pivotally engaged with the first support frame 1 at a pivotal axis which serves a fulcrum to allow the second support frame 4, 4' moving a selected displacement to support the second carrier member 3, 3' when turning about the pivotal element 12. Thereby the second carrier member 3, 3' will join the first carrier member 2 to form an extended table with a larger area for holding goods.

[0013] Referring to FIGS. 2 and 4, the bottom side of the second carrier member 3, 3' and the second support frame 4, 4' have respectively a first and a second latch element 31 and 42. One of the latch elements 31 and 42 has a latch opening 311, and another latch element has a latch finger. When the second carrier member 3, 3' is pivotally extended about the pivotal element 12 and moved upward to the same plane level of the first carrier member 2, the second support frame 4, 4' may be moved about the pivotal axis relative to the first support frame 1 for a selected displacement under the second carrier member 3, 3', then the first and second latch element 31 and 42 may be latched together to allow the second carrier members 3, 3' securely resting on the second supporting frame 4, 4'. Likewise, other second support frame 4, 4' and second carrier member 3, 3' may also be moved to a fully extending position to form an extending table of a larger loading area as shown in FIG. 5.

[0014] Referring to FIGS. 3 and 4, the second carrier member 3, 3' has a snap latch 32 mounted at a location matching one of the rods 11 of the first support frame 1. The snap latch 32 has a chamfer plane 321 and a hook 322 formed at the front end to engage with the rod 11. When to fold the second carrier member 3, 3', move the second carrier member 3, 3' toward the first support frame 1 to latch the hook 322 on the rod 11 so that the second carrier member 3, 3' will engage the first support frame 1 securely without breaking away.

[0015] Referring to FIGS. 1 and 6, when the invention is adopted for use, some more features may be added to increase its usefulness. For instance, the rods 11 of the first support frame 1 may surround to form a housing space. In the housing space, a holding section 13 may be provided with a plurality of holding slots 132 divided by separators 131 for holding folding chairs (not shown in the drawings). (FIG. 6 shows another embodiment which also has holding

slots 132' divided by separators 131' for holding folding chairs). Hence the invention may also combine the function of holding folding chairs. Moreover, the second support frame 4, 4' may have casters 43 mounted to the bottom ends thereof to facilitate the extension of the table displacement and serve as auxiliary support. Furthermore, the first carrier member 2 may have an opening 21 formed thereon to couple with a bushing 22 for holding a parasol 5 for outdoor use.

What is claimed is:

1. An extensible table, comprising:

a first support frame consisting of a plurality of rods for supporting a first carrier member, the first carrier member having one side engaged with at least one second carrier member through a pivotal element; and

at least one second support frame consisting of a plurality of rods and being pivotally engaged with the first support frame at a pivotal axis which serves a fulcrum to allow the second support frame moving a selected displacement to support the second carrier member extending about the pivotal element to couple with the first carrier member to form an extended table with a larger area for holding goods.

2. The extensible table of claim 1, wherein the bottom side of the second carrier member and the second support frame have respectively a first and a second latch element located thereon matching each other.

3. The extensible table of claim 2, wherein either of the first latch element or the second latch element has a latch opening, and another latch element is a latch finger.

4. The extensible table of claim 1, wherein the second carrier member has a snap latch mounted at a location matching one of the rods of the first support frame to allow the second carrier member engaging with the first support frame.

5. The extensible table of claim 4, wherein the snap latch is located on the second carrier member matching the rods of the second support frame.

6. The extensible table of claim 4, wherein the snap latch has a chamfer plane and a hook formed at the front end thereof.

7. The extensible table of claim 1, wherein the rods of the first support frame surround a housing space which contains a holding section which has a plurality of holding slots divided by separators.

8. The extensible table of claim 1, wherein the second support frame has casters mounted to the bottom ends thereof to facilitate displacement moving and supporting of the table.

9. The extensible table of claim 1, wherein the first carrier member has an opening formed thereon to couple with a bushing for holding a parasol.

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