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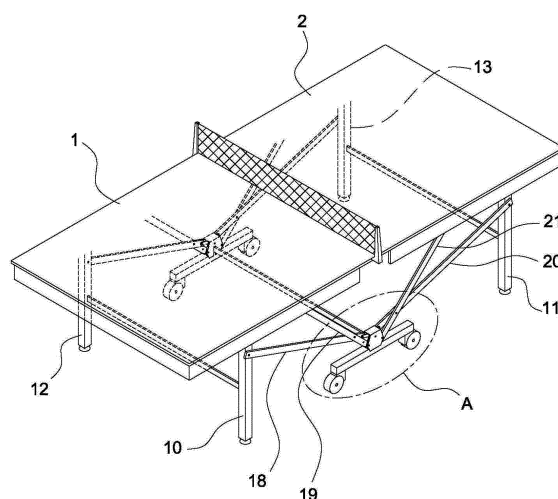
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(54) **INTEGRATED FOLDING PING-PONG TABLE**

(57) Disclosed is an integrated foldable table tennis table which is capable of being easily stored with a minimized storage space. The integrated foldable table tennis table includes hinge units mounted on horizontal legs which are disposed below both table tennis tables with being separated therefrom; and link units pivotally installed between the hinge units and lower surfaces of both table tennis tables to fold or unfold the both table tennis tables. The hinge units include first and second brackets installed to face each other. The link units include first links of which one ends are pivotally attached to vertical legs and the other ends are pivotally attached to the hinge units, and second links of which one ends are pivotally attached to the lower surfaces of the both table tennis tables and the other ends are pivotally attached to the hinge units. The first link and the second link are pivotally connected to each other by a connecting pin which is inserted in holes formed at specific positions thereof.

[FIG. 2]



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Description

[Technical Field]

[0001] The present invention relates to an integrated foldable table tennis table, and more specifically, to an integrated foldable table tennis table which may be easily used and stored.

[Background Art]

[0002] A table tennis table refers to a device installed in an outdoor or indoor to enjoy table tennis.

[0003] However, a conventional table tennis table includes two separated tables, and will be separately assembled during folding and unfolding, which is inconvenient for use. In addition, it is difficult to lift and put down the heavy tables during an operation of folding and unfolding.

[0004] Therefore, a foldable table tennis table as illustrated in FIG. 1 has appeared in the art.

[0005] Herein, when folding the foldable table tennis table, both table tennis tables do not come into close contact with each other to generate a small interval L therebetween. In addition, legs (in particular, vertical legs) f1, f2, f3 and f4 attached to a lower portion of the table tennis tables are maintained with being extended outward at a predetermined angle, rather than coming into close contact with lower surfaces of the corresponding table tennis table. Thereby, when storing the foldable table tennis table, it is generally stored with the legs in a folded state. In this case, the table tennis table takes up much space. In particular, when storing a plurality of foldable table tennis tables, it is not possible to store in close contact with each other, and thereby a lot of space is required.

[Disclosure]

[Technical Problem]

[0006] In consideration of the above-mentioned circumstances, it is an object of the present invention to provide an integrated foldable table tennis table which is capable of being easily stored with a minimized storage space.

[Technical Solution]

[0007] In order to accomplish the above object, there is provided an integrated foldable table tennis table including: hinge units mounted on horizontal legs which are disposed below both table tennis tables with being separated therefrom; and link units pivotally installed between the hinge units and lower surfaces of both table tennis tables to fold or unfold the both table tennis tables, wherein the hinge units comprise first and second brackets

installed to face each other, the link units comprise first links of which one ends are pivotally attached to vertical legs and the other ends are pivotally attached to the hinge units, and second links of which one ends are pivotally attached to the lower surfaces of the both table tennis tables and the other ends are pivotally attached to the hinge units, and the first link and the second link are pivotally connected to each other by a connecting pin which is inserted in holes formed at specific positions thereof.

[0008] The first bracket may be fixed to a center of the horizontal leg on one side of an upper surface thereof, and the second bracket may be fixed to the center of the horizontal leg on the other side of the upper surface thereof.

[0009] The other end of the first link may be pivotally installed to an upper portion of the second bracket through a connecting link.

[0010] The other end of the first link may be pivotally connected to one end of the connecting link by a first pin, and the other end of the connecting link may be pivotally connected to the upper portion of the second bracket.

[0011] The first link and the connecting line link may be a linear shape.

[0012] The other end of the second link may be pivotally connected to a lower portion of the first bracket by a third pin.

[0013] The second link may be a linear shape.

[0014] The first link may have a U-shaped groove formed in the other end thereof, and the one end of the connecting link connected to the hinge unit is pivotally coupled to the first link in the U-shaped groove.

[0015] The integrated foldable table tennis table may further include dampers which are mounted between the first link and the horizontal leg.

[0016] The dampers may include a hydraulic damper.

[Advantageous Effects]

[0017] According to the present invention having the above-described configuration, both table tennis tables are folded in close contact with each other during folding the same, and the legs (in particular, vertical legs) attached to the lower portion of the table tennis tables are folded in close contact to the lower surface thereof, and thereby the storage area may be minimized.

[0018] In addition, when storing a plurality of integrated foldable table tennis tables, it is possible to store in close contact with each other, and very simply perform the folding operation.

[0019] Further, when folding or unfolding the both table tennis tables, it is possible to easily fold or unfold with a reduced force by the damper, and thereby, it is more convenient for using the same. In particular, when folding the both table tennis tables, there is no risk that fingers, or the like are caught in the both table tennis tables.

[Description of Drawings]

[0020]

FIG. 1 is a perspective view illustrating an example of a conventional foldable table tennis table in the related art.

FIG. 2 is a perspective view illustrating a configuration of an integrated foldable table tennis table according to an embodiment of the present invention. FIG. 3 is an enlarged perspective illustrating a portion A of FIG. 2.

FIG. 4 is a view illustrating a hinge unit and links with being combined with each other in FIG. 2.

FIG. 5 is a perspective view illustrating the integrated foldable table tennis table according to the embodiment of the present invention when both table tennis tables are completely folded.

FIG. 6 is a perspective view illustrating the integrated foldable table tennis table according to the embodiment of the present invention when only one table tennis table is folded.

FIG. 7 is a view illustrating the hinge unit and the links with being combined with each other in FIG. 6.

FIG. 8 is a view illustrating the links of the integrated foldable table tennis table according to the embodiment of the present invention with being completely folded.

FIG. 9 is a view illustrating the links of the integrated foldable table tennis table according to the embodiment of the present invention with being unfolded to an extent.

FIG. 10 is a view illustrating the links of the integrated foldable table tennis table according to the embodiment of the present invention with being completely unfolded.

FIG. 11 is a plan view more specifically illustrating the hinge unit and the links with being combined with each other in FIG. 2.

FIG. 12 is a graph illustrating a difference in an angle between a first link and a second link illustrated in FIG. 2.

FIG. 13 is a view illustrating a configuration in which dampers are added to the integrated foldable table tennis table according to the embodiment of the present invention.

[Best Mode]

[0021] In order to accomplish the above object, according to a preferred embodiment of the present invention, there is provided an integrated foldable table tennis table including: hinge units mounted on horizontal legs which are disposed below both table tennis tables with being separated therefrom; and link units pivotally installed between the hinge units and lower surfaces of both table tennis tables to fold or unfold the both table tennis tables,

wherein the hinge units comprise first and second brackets installed to face each other, the link units comprise first links of which one ends are pivotally attached to vertical legs and the other ends are pivotally attached to the hinge units, and second links of which one ends are pivotally attached to the lower surfaces of the both table tennis tables and the other ends are pivotally attached to the hinge units, and the first link and the second link are pivotally connected to each other by a connecting pin which is inserted in holes formed at specific positions thereof.

[Mode for Invention]

[0022] The present invention may be altered in various ways and have various embodiments, and will be described with reference to the drawings for illustrating specific embodiments.

[0023] However, the present invention is not limited to the specific embodiments, and it will be understood by those skilled in the art that the invention is to cover all modifications, equivalents, and alternatives falling within the spirit and scope of the invention.

[0024] Terms used herein are for the purpose of describing specific embodiments only, but are not intended to limit the present invention. A singular form includes a plural form unless the context clearly indicates otherwise. Throughout this specification, it will be understood that the term "comprise" and variations thereof, such as "comprising" and "having", specify the presence of features, numbers, steps, operations, components, parts, or combinations thereof, described in the specification, but do not preclude the presence or addition of one or more other features, numbers, steps, operations, components, parts, or combinations thereof.

[0025] Unless otherwise defined, all terms including technical and scientific terms used herein have the same meaning as commonly understood by one of ordinary skill in the art to which this invention belongs. It will be further understood that terms, such as those defined in commonly used dictionaries, will be interpreted as having a meaning that is consistent with their meaning in the context of the relevant art and will not be interpreted in an idealized or overly formal sense unless expressly so defined herein.

[0026] Hereinafter, preferable embodiments of the present invention will be described with reference to the accompanying drawings. Referring to the drawings, wherein like reference characters designate like or corresponding parts throughout the several views, and the same corresponding parts will not be described.

[0027] FIG. 2 is a perspective view illustrating a configuration of an integrated foldable table tennis table according to an embodiment of the present invention, FIG. 3 is an enlarged perspective illustrating a portion A of FIG. 2, FIG. 4 is a view illustrating a hinge unit and links with being combined with each other in FIG. 2, FIG. 5 is a perspective view illustrating the integrated foldable ta-

ble tennis table according to the embodiment of the present invention when both table tennis tables are completely folded, FIG. 6 is a perspective view illustrating the integrated foldable table tennis table according to the embodiment of the present invention when only one table tennis table is folded, and FIG. 7 is a view illustrating the hinge unit and the links with being combined with each other in FIG. 6.

[0028] An integrated foldable table tennis table according to an embodiment of the present invention includes hinge units mounted on horizontal legs 14 and 15 disposed below both table tennis tables 1 and 2, and link units pivotally installed between the hinge units and lower surfaces of both table tennis tables 1 and 2 to fold or unfold the lower portions of both table tennis tables 1 and 2.

[0029] The hinge unit is mounted on a center of the horizontal legs 14 and 15. Herein, when unfolding the lower portions of both table tennis tables 1 and 2 to form one table tennis table, the horizontal legs 14 and 15 are positioned in the center in a longitudinal direction thereof downwardly separated from both side portions, respectively. That is, the horizontal leg 14 is positioned between a vertical leg 10 and a vertical leg 11, and the horizontal leg 15 is positioned between a vertical leg 12 and a vertical leg 13. The vertical legs 10, 11, 12 and 13, and the horizontal legs 14 and 15 support both table tennis tables 1 and 2 at their own positions.

[0030] Each of the hinge units includes first and second brackets 16 and 17 mounted on the horizontal leg to face each other at an interval. Herein, the first bracket 16 is fixed to a center of the horizontal leg 14 on one side of an upper surface thereof, and the second bracket 17 is fixed to the center of the horizontal leg 14 on the other side of the upper surface thereof. The brackets 16 and 17 may be formed in a U shape as a single body.

[0031] In FIGS. 2 to 4, only the brackets 16 and 17 of the hinge unit mounted on the horizontal leg 14 are denoted by reference characters. However, since the hinge unit having the same structure is mounted on the horizontal leg 15, it will be understood to be the mounting structure of the horizontal leg 15 even if the reference characters are not denoted. FIG. 4 shows the hinge unit and the links so as to easily understand a coupled state therebetween, and a more specific coupled state will be more correctly understood through FIG. 11 to be described below.

[0032] The link unit may include six links 18, 19, 20, 21, 30 and 31. The six links 18, 19, 20, 21, 30 and 31 have a linear shape.

[0033] One end of a first link 18 is pivotally attached to the vertical leg 10 which is pivotally installed to the lower surface of one table tennis table (for example, a left table tennis table 1), and the other end of the first link 18 is pivotally installed to an upper portion of the second bracket 17 through a first connecting link 30. Herein, those skilled in the art will understand that a structure for pivotally connecting one end of the first link 18 may be easily

implemented by a technique well known in the art.

[0034] The other end of the first link 18 is pivotally connected to one end of the first connecting link 30 by a pin 47. The other end of the first connecting link 30 is pivotally connected to the upper portion of the second bracket 17 by a pin 46.

[0035] One end of a second link 19 is pivotally attached to the lower surface of the one table tennis table 1. Those skilled in the art will understand that a structure for pivotally connecting one end of the second link 19 may be easily implemented by a technique well known in the art. The other end of the second link 19 is pivotally attached to a lower portion of the first bracket 16 by a pin 42. In addition, the first link 18 and the second link 19 are connected to each other by a pin 41. The pin 41 connects the first link 18 and the second link 19 with each other, such that it may be referred to as a connecting pin. That is, the pin 41 is inserted in holes formed at a position of extending from the other end of the first link 18 to the one end thereof and a position of extending from the other end of the first link 19 to the one end thereof. Herein, the positions in which the pins 41, 42, 46 and 47 are located may be a pivot point that the second link 19 and the first connecting link 30 can pivot.

[0036] Meanwhile, one end of a third link 20 is pivotally attached to the vertical leg 11 which is pivotally installed to the lower surface of the other table tennis table (for example, a right table tennis table 2), and the other end of the third link 20 is pivotally installed to an upper portion of the second bracket 17 through a second connecting link 31. Herein, those skilled in the art will understand that a structure for pivotally connecting one end of the third link 20 may be easily implemented by a technique well known in the art. The other end of the third link 20 is pivotally connected to one end of the second connecting link 31 by a pin 45. The other end of the second connecting link 31 is pivotally connected to the upper portion of the second bracket 17 by the pin 46. One end of a fourth link 21 is pivotally attached to the lower surface of the other table tennis table 2. Those skilled in the art will understand that a structure for pivotally connecting one end of the fourth link 21 may be easily implemented by a technique well known in the art. The other end of the fourth link 21 is pivotally attached to the lower portion of the first bracket 16 by a pin 43. In addition, the third link 20 and the fourth link 21 are connected to each other by a pin 44. The pin 44 connects the third link 20 and the fourth link 21 with each other, such that it may be referred to as the connecting pin. That is, the pin 44 is inserted in holes formed at a position of extending from the other end of the third link 20 to the one end thereof and a position of extending from the other end of the fourth link 21 to the one end thereof. Herein, the positions in which the pins 43, 44, 45 and 46 are located may be a pivot point that the fourth link 21 and the second connecting link 31 can pivot.

[0037] As illustrated in FIG. 3, a plurality of rollers 14a, 14b, 15a and 15b are mounted on the lower portion of

the horizontal legs. FIG. 4 illustrates the link unit by removing the first bracket 16 for showing a connection relation thereof.

[0038] When completely folding the integrated foldable table tennis table according to the present invention, it becomes the state as illustrated in FIG. 5. That is, compared to the related art, in the conventional foldable table tennis table (see FIG. 1), both table tennis tables do not come into close contact with each other, but in the integrated foldable table tennis table according to the present invention, both table tennis tables completely come into close contact with each other. Further, in the conventional foldable table tennis table, the vertical legs do not come into close contact with the lower surface of the table tennis table with being completely folded, but in the integrated foldable table tennis table according to the embodiment of the present invention, the vertical legs come into close contact with the lower surface of the table tennis table. Thereby, the integrated foldable table tennis table according to the embodiment of the present invention takes up a smaller space than the conventional foldable table tennis table, thereby it is possible to easily store, and since the vertical legs do not protrude in the folded state, it is possible to decrease safety accidents.

[0039] Meanwhile, the integrated foldable table tennis table according to the embodiment of the present invention may fold only one table tennis table, as illustrated in FIG. 6. FIG. 6 illustrates a state in which the table tennis table 1 is unfolded, and only the table tennis table 2 is folded. When folding any one table tennis table (i.e., right table tennis table 2) as illustrated in FIG. 6, the links 18, 19, 20 and 21 of the link unit become the state as illustrated in FIG. 7.

[0040] FIG. 8 is a view illustrating the links of the integrated foldable table tennis table according to the embodiment of the present invention with being completely folded. FIG. 8 illustrates the links 18, 19 and 30 which are connected to the left table tennis table 1 of both table tennis tables 1 and 2. The links connected to the right table tennis table 2 are also positioned as illustrated in FIG. 8 in the completely folded state.

[0041] When completely folding the integrated foldable table tennis table according to the embodiment of the present invention, the first link 18 and the second link 19 are positioned vertical to the horizontal leg 14, and the one end of the first connecting link 30 connected to the other end of the first link 18 faces downward.

[0042] FIG. 9 is a view illustrating the links of the integrated foldable table tennis table according to the embodiment of the present invention with being unfolded to an extent. FIG. 9 illustrates the links 18, 19 and 30 which are connected to the left table tennis table 1 of both table tennis tables 1 and 2. The links connected to the right table tennis table 2 are also positioned as illustrated in FIG. 9 in the folded state to an extent.

[0043] When folding or unfolding the integrated foldable table tennis table according to the embodiment of the present invention to an extent of 30 to 40 degrees, the

first link 18 and the second link 19 are inclined to a predetermined angle compared to the state of FIG. 8, and the first connecting link 30 connected to the other end of the first link 18 is positioned substantially parallel to the horizontal leg 14.

[0044] FIG. 10 is a view illustrating the links of the integrated foldable table tennis table according to the embodiment of the present invention with being completely unfolded. FIG. 10 illustrates the links 18, 19 and 30 which are connected to the left table tennis table 1 of both table tennis tables 1 and 2. The links connected to the right table tennis table 2 are also positioned as illustrated in FIG. 10 in the completely unfolded state.

[0045] When completely unfolding the integrated foldable table tennis table according to the embodiment of the present invention, the first link 18 and the second link 19 are further inclined by pivoting than the state of FIG. 9, and the first connecting link 30 connected to the other end of the first link 18 is aligned in line with the first link 18.

[0046] FIG. 11 is a plan view more specifically illustrating the hinge unit and the links with being combined with each other in FIG. 2.

[0047] In FIG. 11, it can be seen that the first link 18 and the second link 19 are pivotally coupled to each other by the pin 41 as the pivot point. Also, it can be seen that the second link 19 is pivotally coupled to the brackets 16 and 17 by the pin 42 as the pivot point.

[0048] Further, the first link 18 and the first connecting link 30 are pivotally coupled to each other by the pin 47 as the pivot point. In more detail, the other end (i.e., a portion coupled to the first connecting link 30) of the first link 18 has a U-shaped groove formed therein. The one end (i.e., a portion coupled to the first link 18) of the first connecting link 30 is inserted in the U-shaped groove of the first link 18. In this case, the pin 47 is inserted in a penetrating manner into holes formed at a portion in which the first link 18 and the first connecting link 30 are coupled to each other.

[0049] Meanwhile, it can be seen that the first connecting link 30 is pivotally coupled to the brackets 16 and 17 by the pin 46 as the pivot point.

[0050] In addition, the third link 20 and the fourth link 21 are pivotally coupled to each other by the pin 44 as the pivot point. Also, the fourth link 21 is pivotally coupled to the brackets 16 and 17 by the pin 43 as the pivot point.

[0051] Further, the third link 20 and the second connecting link 31 are pivotally coupled to each other by the pin 45 as the pivot point. In more detail, the other end (i.e., a portion coupled to the second connecting link 31) of the third link 20 has a U-shaped groove formed therein. The one end (i.e., a portion coupled to the third link 20) of the second connecting link 31 is inserted in the U-shaped groove of the third link 20. In this case, the pin 45 is inserted in a penetrating manner into holes formed at a portion in which the third link 20 and the second connecting link 31 are coupled to each other.

[0052] Meanwhile, it can be seen that the second connecting link 31 is pivotally coupled to the brackets 16 and

17 by the pin 46 as the pivot point.

[0053] FIG. 12 is a graph illustrating a difference in an angle between the first link and the second link illustrated in FIG. 2.

[0054] For example, when the both table tennis tables are completely folded, the first link 18 and the second link 19 are aligned orthogonal to the horizontal leg 14, such that there is no difference in the angle therebetween with being maintained in the state as illustrated in FIG. 8.

[0055] Meanwhile, when folding or unfolding the both table tennis tables to an extent, the first link 18 and the second link 19 are pivoted by the 41, 42, 46 and 47 as the pivot point, respectively. In this case, there is a difference in a pivot angle between the first link 18 and the second link 19 according to the pivoting thereof at a constant position in which both table tennis tables are folded to an extent. That is, during folding or unfolding the both table tennis tables, as illustrated in FIG. 11, there are slight differences in the pivot angle between the first link 18 and the second link 19 for each position.

[0056] Then, when the both table tennis tables are completely unfolded, there is a largest difference in the angle between the first link 18 and the second link 19.

[0057] Although the difference in the angle between the first link 18 and the second link 19 has been described in the above FIG. 12, those skilled in the art will easily understand that a difference in the angle between the third link 20 and the fourth link 21 occurs as much as the difference in the angle between the first link 18 and the second link 19.

[0058] FIG. 13 is a view illustrating a configuration in which dampers are added to the integrated foldable table tennis table according to the embodiment of the present invention.

[0059] When comparing to the above-described integrated foldable table tennis table according to the embodiment of the present invention, there is a difference in terms of the configuration of dampers 50 and 51 added to the table tennis table illustrated in FIG. 13.

[0060] That is, in the configuration illustrated in FIG. 13, the damper 50 is additionally mounted between the first link 18 and the horizontal leg 14, and the damper 51 is additionally mounted between the third link 20 and the horizontal leg 14. Meanwhile, the damper 50 may be mounted between the link corresponding to the first link 18 and the horizontal leg 14, and the damper 51 may be mounted between the link corresponding to the third link 20 and the horizontal leg 14, among the links on a side opposite to the links 18, 19, 20 and 21, which cannot be seen in FIG. 13 due to these links.

[0061] Herein the dampers 50 and 51 may include a hydraulic damper, for example.

[0062] By the configuration of the above-described FIG. 13, when users slightly pivot the table by grasping end portions of the table tennis tables so as to unfold the same, the extended dampers 50 and 51 start to be compressed. As the dampers 50 and 51 are compressed, the folded table tennis tables are gradually unfolded, and

when these tables are completely unfolded, the compression operation of the dampers 50 and 51 is ended.

[0063] Then, when the users slightly lift up the end portions of the unfolded table tennis tables, the compressed dampers 50 and 51 start to extend (expand). As the dampers 50 and 51 extend, the unfolded table tennis tables are gradually folded, and when these tables are completely folded, the extension operation of the dampers 50 and 51 is ended.

[0064] As such, by using the additionally added dampers 50 and 51, when folding or unfolding the table tennis table, the user may easily operate the table tennis table with a relatively small force. In particular, there is no risk that fingers, or the like are caught between the both table tennis tables during folding the both table tennis tables.

[0065] As described above, optimum embodiments have been disclosed in the drawings and the specification. Herein, specific terms are used, but these are used for the purpose of describing the present invention only, but are not intended to limit the meaning thereof or the scope of the present invention described in the appended claims. Therefore, it will be understood by those skilled in the related art that various modified and equivalent embodiments may be made therefrom. Accordingly, the true technical protection scope should be defined by the technical spirit of the appended claims.

[0066] According to the present invention having the above-described configuration, both table tennis tables are folded in close contact with each other during folding the same, and the legs (in particular, vertical legs) attached to the lower portion of the table tennis tables are folded in close contact to the lower surface thereof, and thereby the storage area may be minimized.

[0067] In addition, when storing a plurality of integrated foldable table tennis tables, it is possible to store in close contact with each other, and very simply perform the folding operation.

[0068] Further, when folding or unfolding the both table tennis tables, it is possible to easily fold or unfold with a reduced force by the damper, and thereby, it is more convenient for using the same. In particular, when folding the both table tennis tables, there is no risk that fingers, or the like are caught in the both table tennis.

Claims

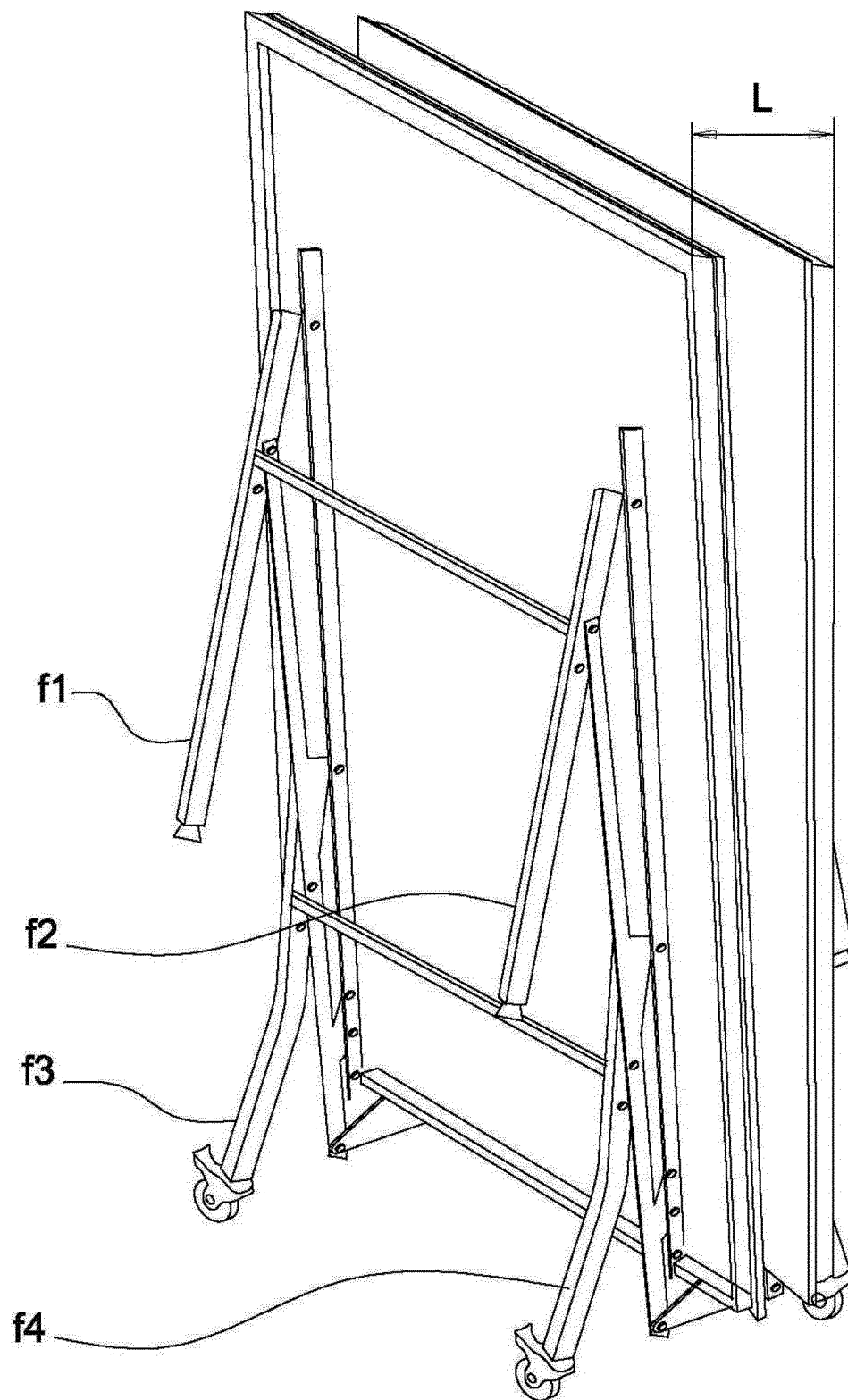
1. An integrated foldable table tennis table comprising:

hinge units mounted on horizontal legs which are disposed below both table tennis tables with being separated therefrom; and
link units pivotally installed between the hinge units and lower surfaces of both table tennis tables to fold or unfold the both table tennis tables, wherein the hinge units comprise first and second brackets installed to face each other, the link units comprise first links of which one ends

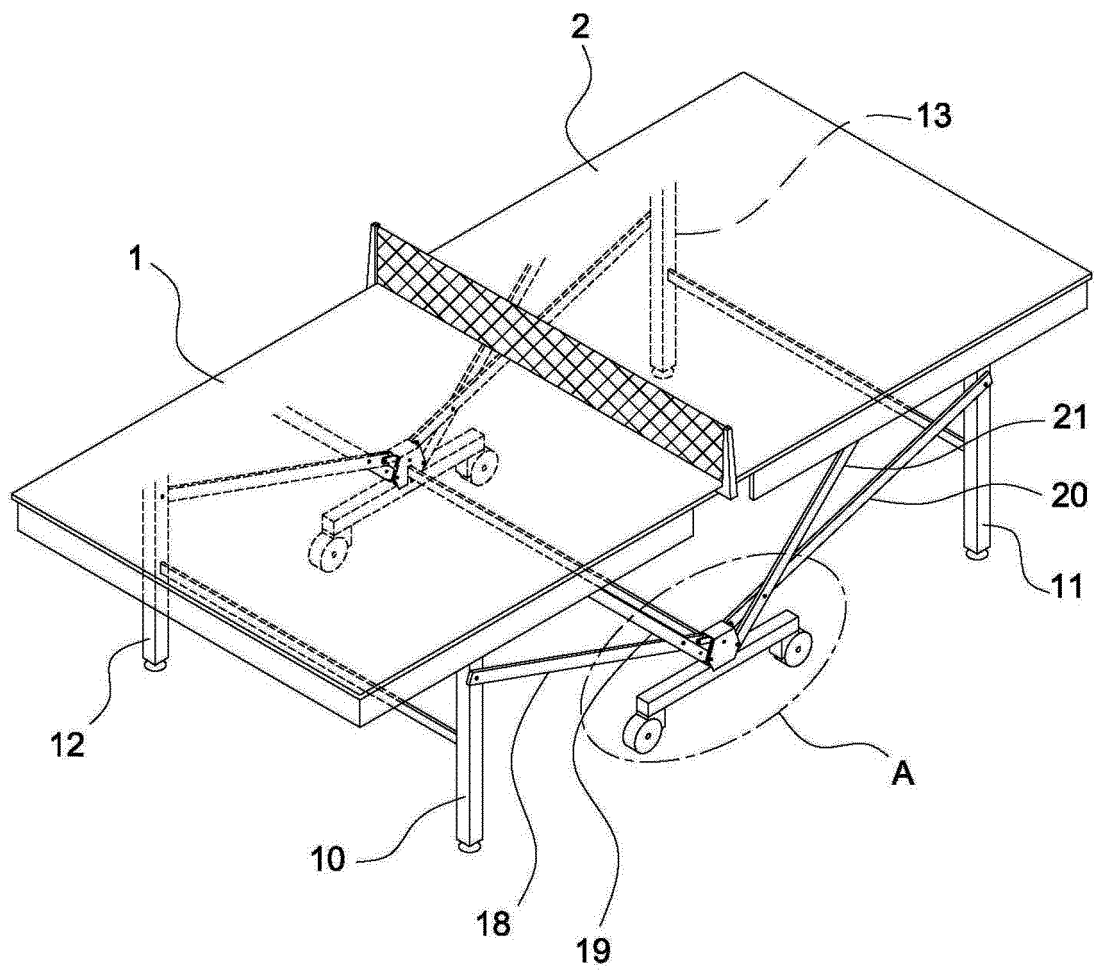
are pivotally attached to vertical legs and the other ends are pivotally attached to the hinge units, and second links of which one ends are pivotally attached to the lower surfaces of the both table tennis tables and the other ends are pivotally attached to the hinge units, and the first link and the second link are pivotally connected to each other by a connecting pin which is inserted in holes formed at specific positions thereof.

2. The integrated foldable table tennis table according to claim 1, wherein the first bracket is fixed to a center of the horizontal leg on one side of an upper surface thereof, and the second bracket is fixed to the center of the horizontal leg on the other side of the upper surface thereof.
3. The integrated foldable table tennis table according to claim 2, wherein the other end of the first link is pivotally installed to an upper portion of the second bracket through a connecting link.
4. The integrated foldable table tennis table according to claim 3, wherein the other end of the first link is pivotally connected to one end of the connecting link by a first pin, and the other end of the connecting link is pivotally connected to the upper portion of the second bracket.
5. The integrated foldable table tennis table according to claim 4, wherein the first link and the connecting link are a linear shape.
6. The integrated foldable table tennis table according to claim 2, wherein the other end of the second link is pivotally connected to a lower portion of the first bracket by a third pin.
7. The integrated foldable table tennis table according to claim 6, wherein the second link is a linear shape.
8. The integrated foldable table tennis table according to claim 1, wherein the first link has a U-shaped groove formed in the other end thereof, and the one end of the connecting link connected to the hinge unit is pivotally coupled to the first link in the U-shaped groove.
9. The integrated foldable table tennis table according to claim 1, further comprising dampers which are mounted between the first link and the horizontal leg.
10. The integrated foldable table tennis table according to claim 9, wherein the dampers include a hydraulic damper.

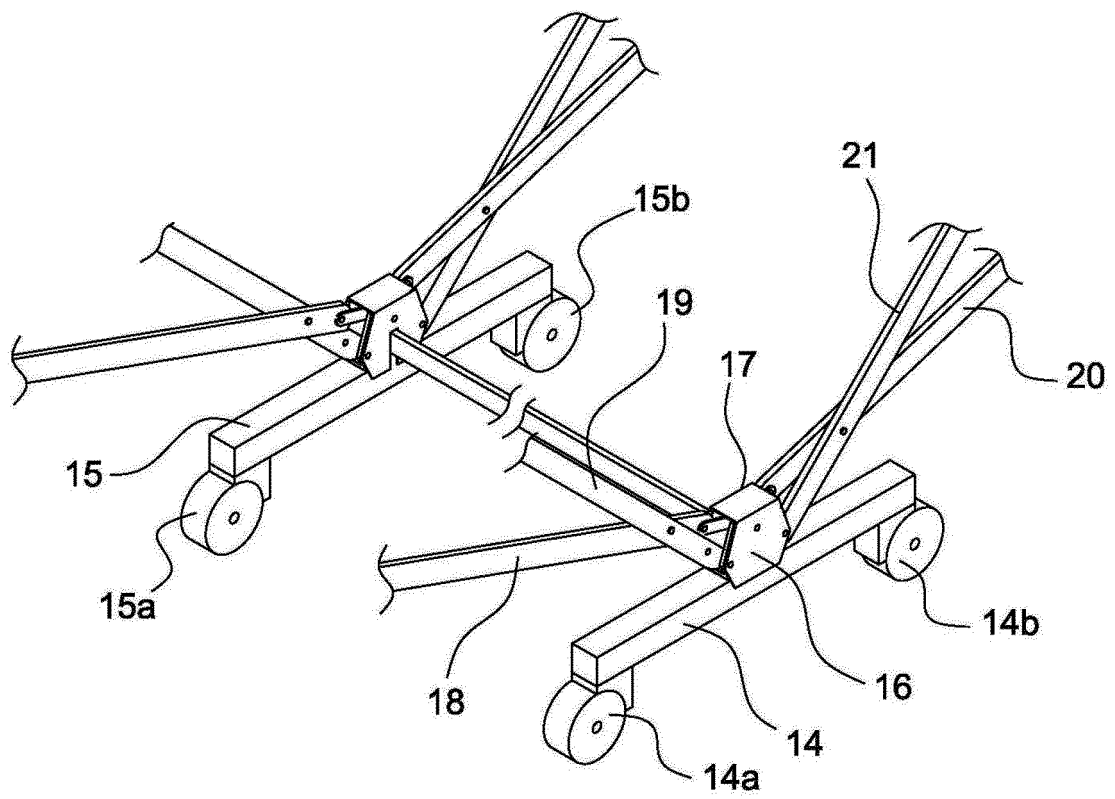
[FIG. 1]



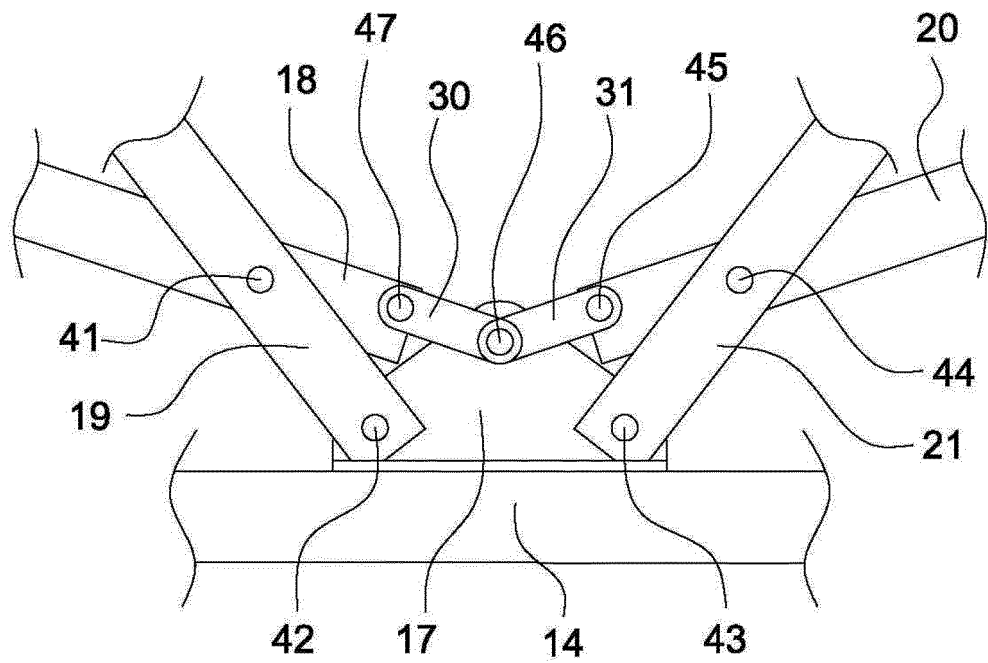
[FIG. 2]



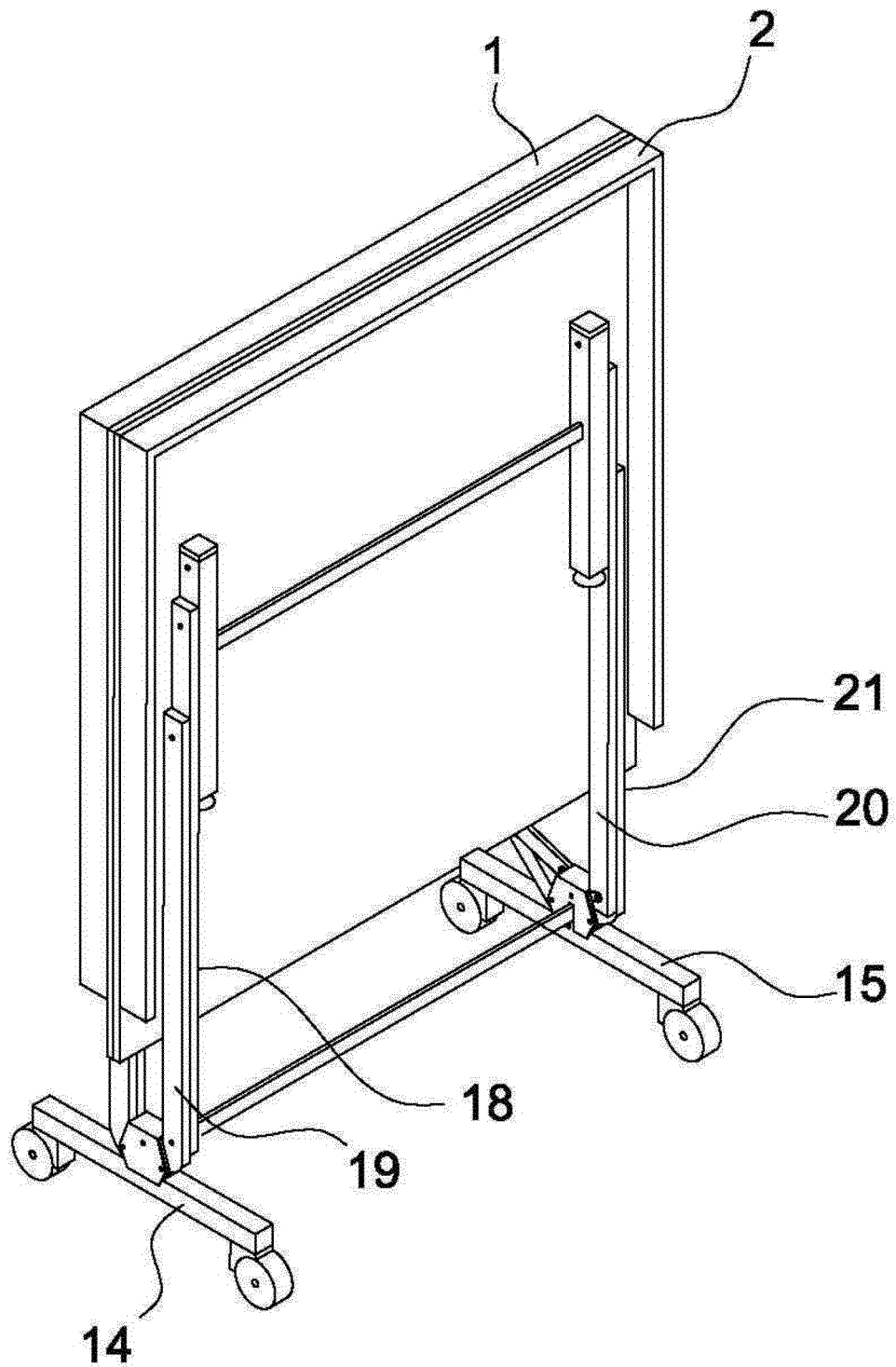
[FIG. 3]



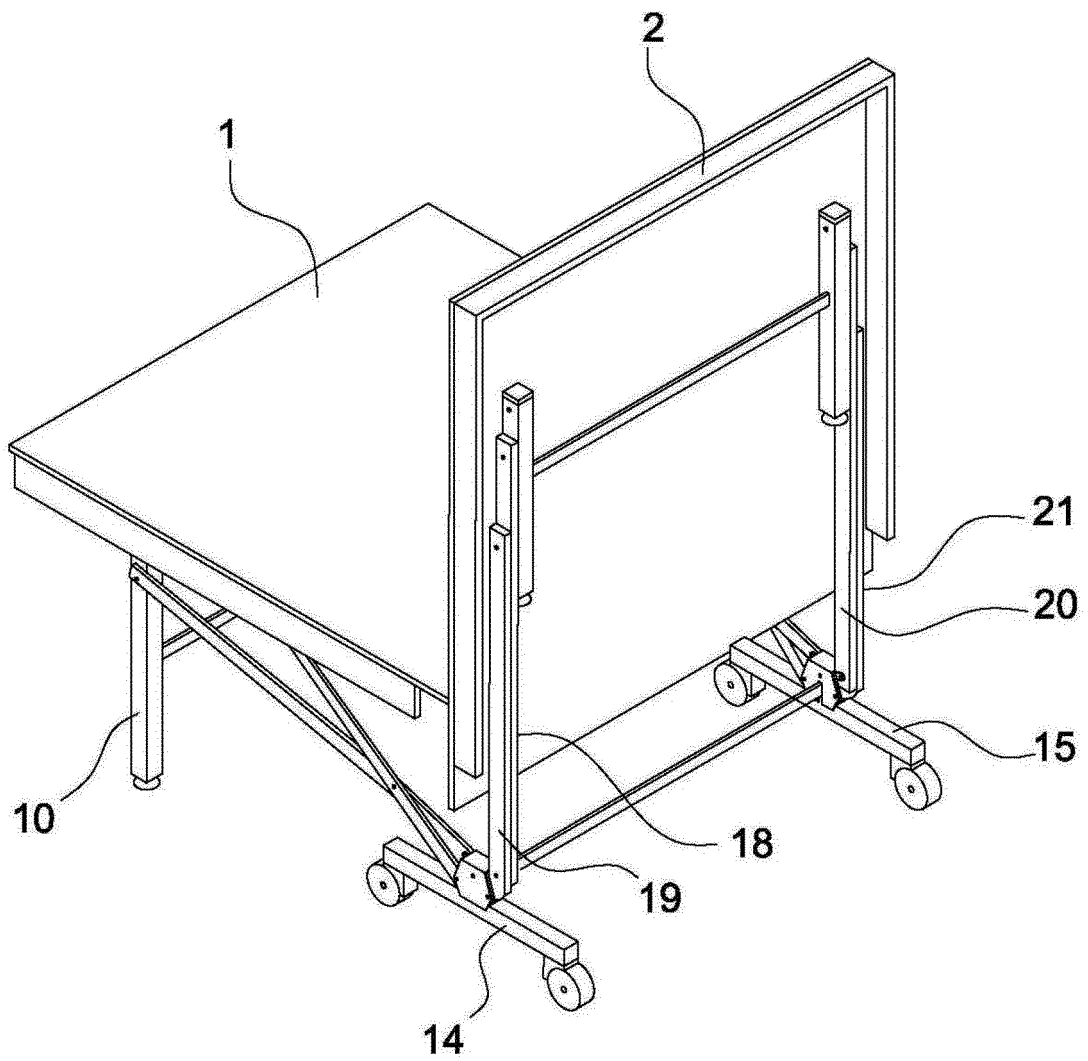
[FIG. 4]



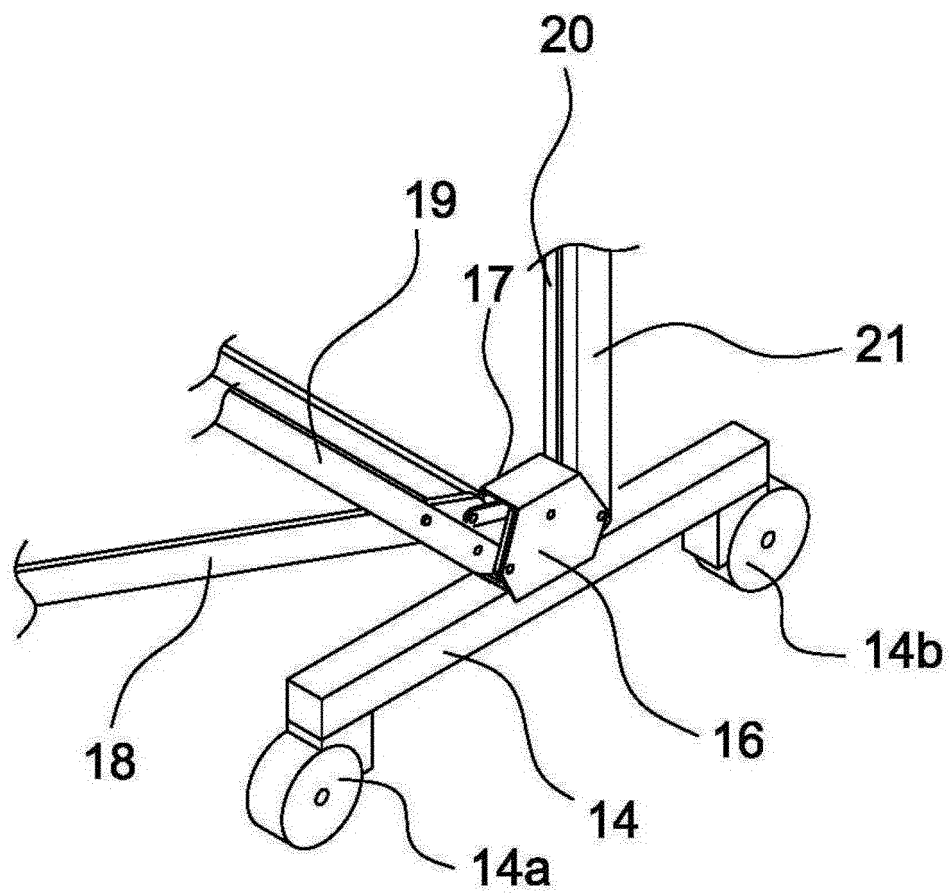
[FIG. 5]



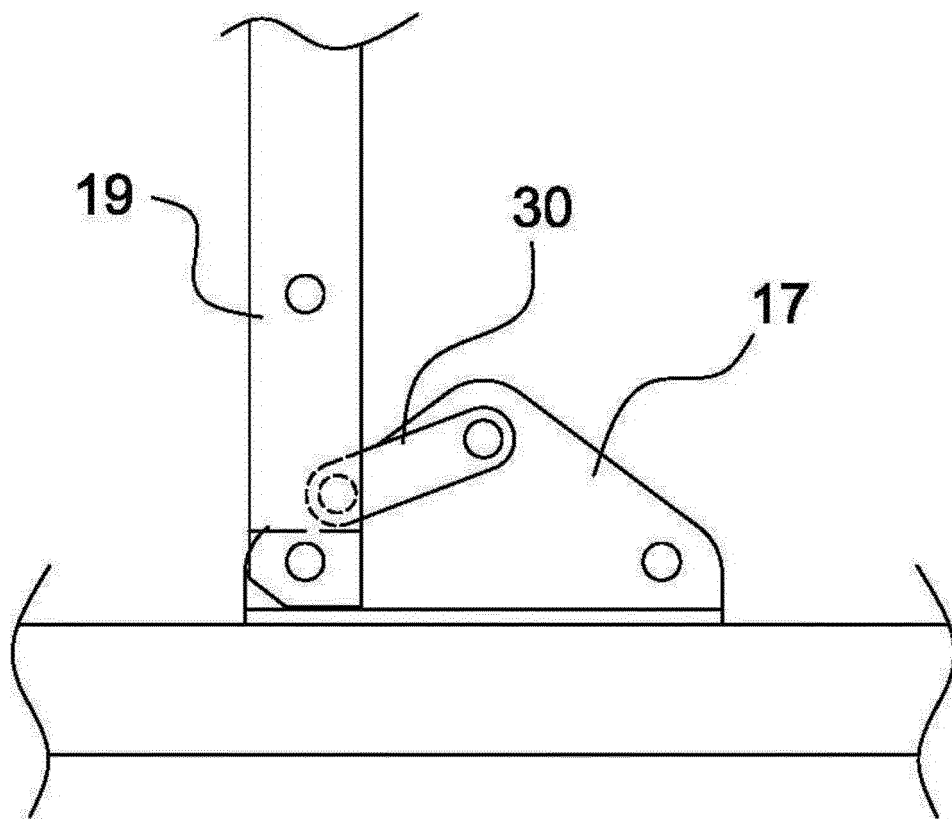
[FIG. 6]



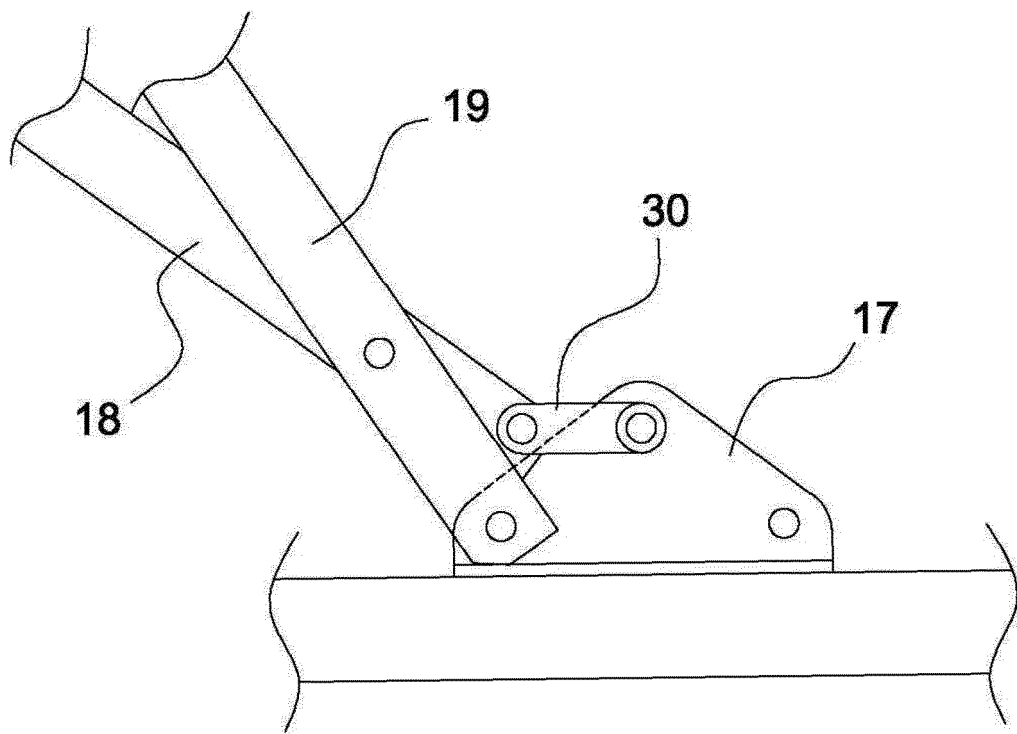
[FIG. 7]



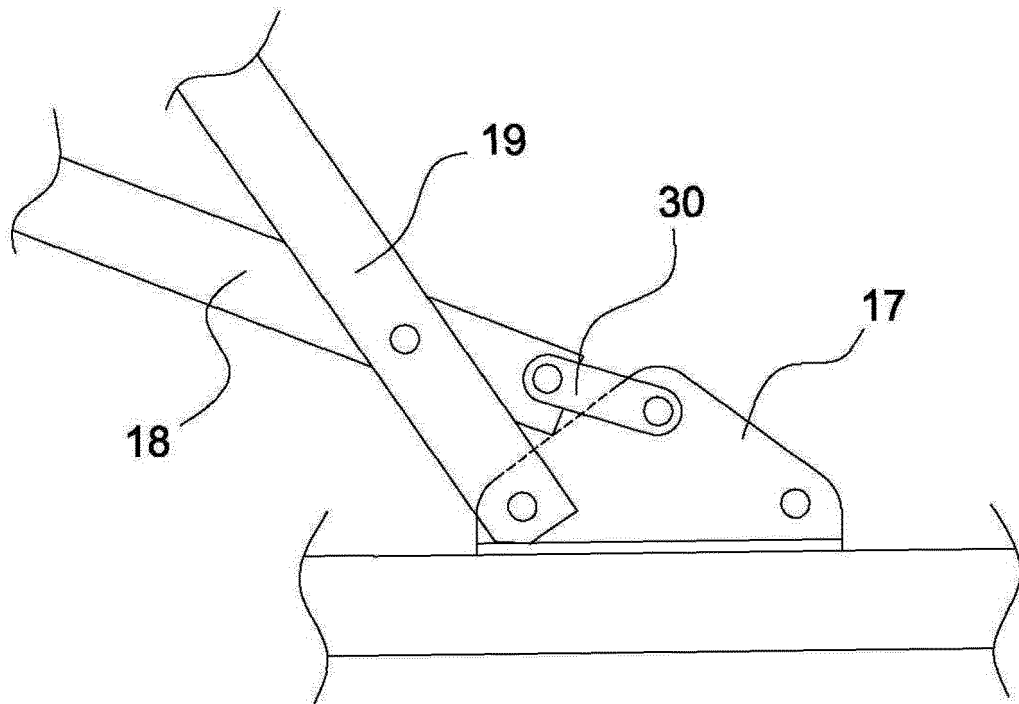
[FIG. 8]



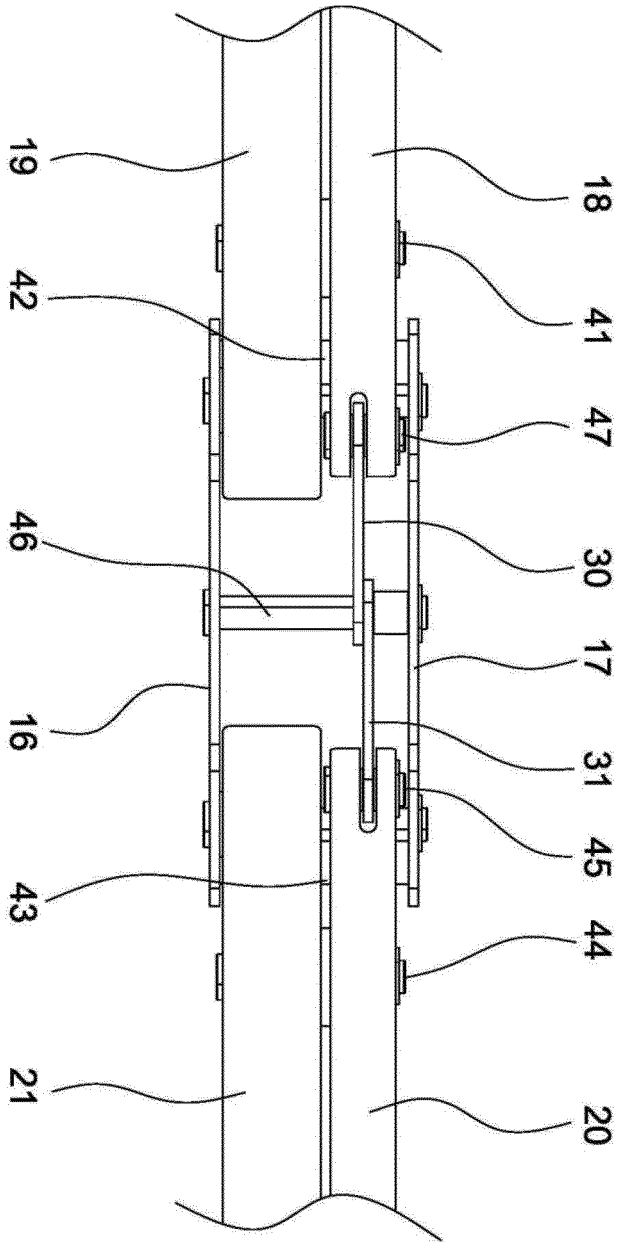
[FIG. 9]



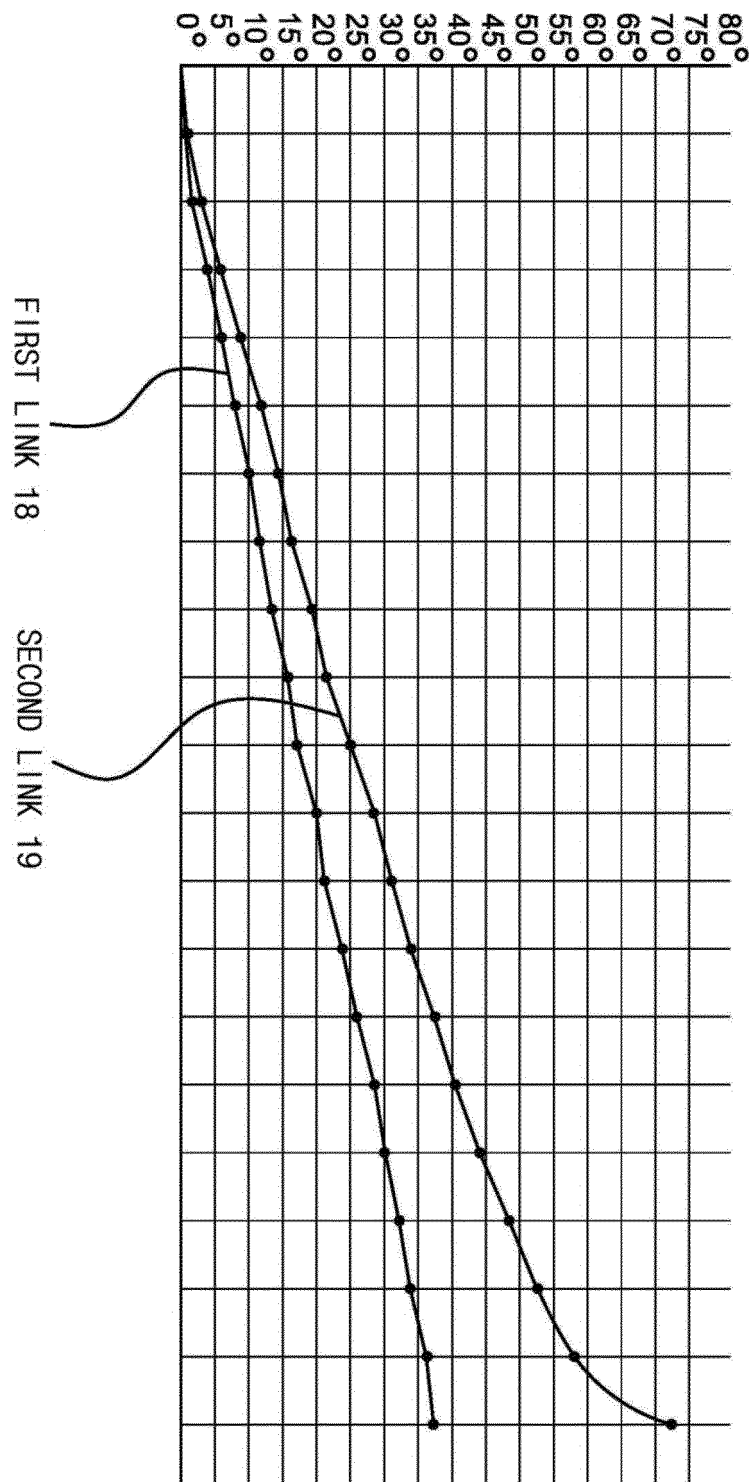
[FIG. 10]



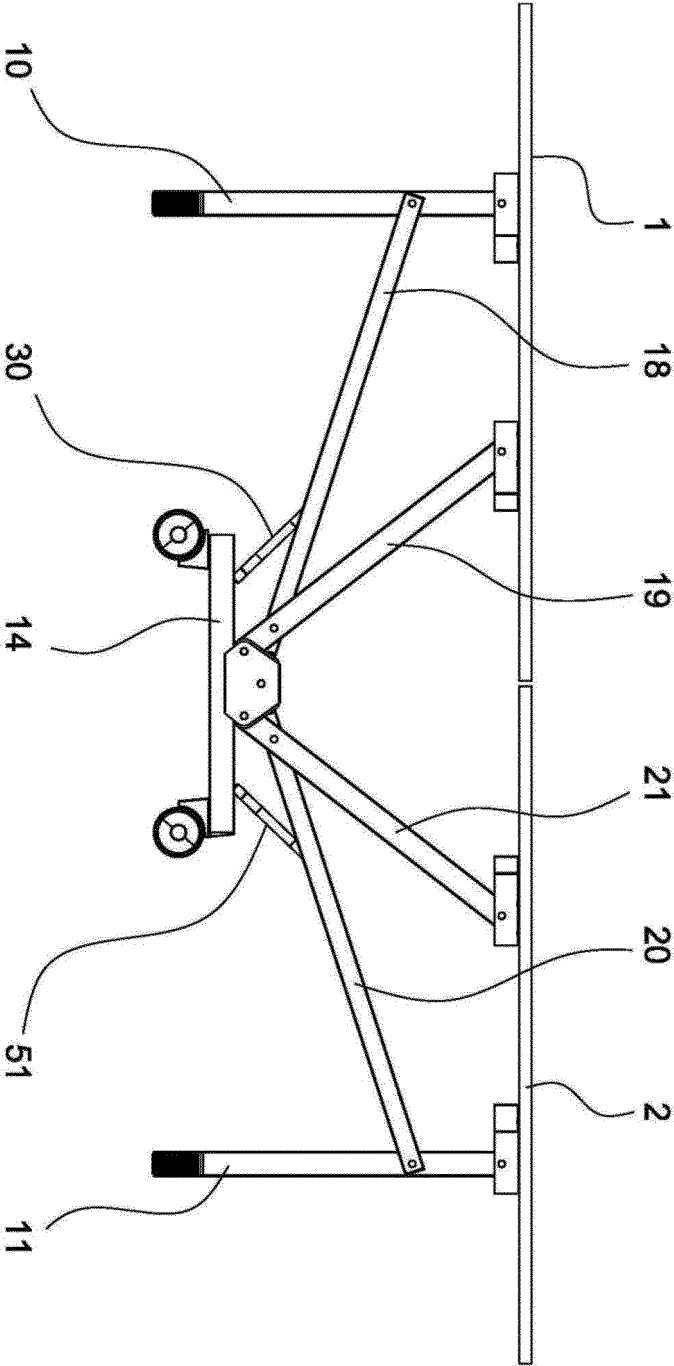
[FIG. 11]



[FIG. 12]



[FIG. 13]



INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2016/004504

A. CLASSIFICATION OF SUBJECT MATTER

A47B 25/00(2006.01)i, A47B 3/083(2006.01)i, A47B 13/00(2006.01)i, A47B 13/02(2006.01)i, A47B 13/08(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A47B 25/00; A63B 67/04; A47B 3/083; A63B 71/04; A47B 13/00; A47B 13/02; A47B 13/08

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Utility models and applications for Utility models: IPC as above

Japanese Utility models and applications for Utility models: IPC as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS (KIPO internal) & Keywords: ping pong table, hinge part, link part, bracket, horizontal leg, vertical leg, pin, pivot and folding

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 09-140846 A (TSUKAMOTO KOGYO K.K.) 03 June 1997 See paragraphs [0002]-[0005], [0008]-[0013] and figures 1-7.	1-10
A	JP 3443577 B2 (NIPPON TAKKYU K.K. et al.) 02 September 2003 See paragraphs [0014]-[0033] and figures 1-13.	1-10
A	KR 10-0636416 B1 (CHAMPION CO., LTD.) 19 October 2006 See paragraphs [0016]-[0030] and figures 1-6.	1-10
A	JP 2001-137049 A (KSK K.K.) 22 May 2001 See paragraphs [0011]-[0040] and figures 1-5.	1-10
A	KR 10-1439960 B1 (XIOM CORPORATION) 12 September 2014 See paragraphs [0018]-[0066] and figures 1-24.	1-10

☐ Further documents are listed in the continuation of Box C.
 ☒ See patent family annex.

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Date of the actual completion of the international search

18 OCTOBER 2016 (18.10.2016)

Date of mailing of the international search report

18 OCTOBER 2016 (18.10.2016)

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/KR2016/004504

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		KR 10-1439959 B1	12/09/2014
		KR 10-1439961 B1	12/09/2014
		KR 10-1439962 B1	12/09/2014
		WO 2014-196671 A1	11/12/2014

Form PCT/ISA/210 (patent family annex) (January 2015)