



US 20030178381A1

(19) **United States**

(12) **Patent Application Publication**
Liang

(10) **Pub. No.: US 2003/0178381 A1**

(43) **Pub. Date: Sep. 25, 2003**

(54) **COLLAPSIBLE ARTICLE HOLDER**

(57)

ABSTRACT

(76) Inventor: **Linda Liang**, Shenzhen City (CN)

Correspondence Address:
BACON & THOMAS, PLLC
625 SLATERS LANE
FOURTH FLOOR
ALEXANDRIA, VA 22314

(21) Appl. No.: **10/103,291**

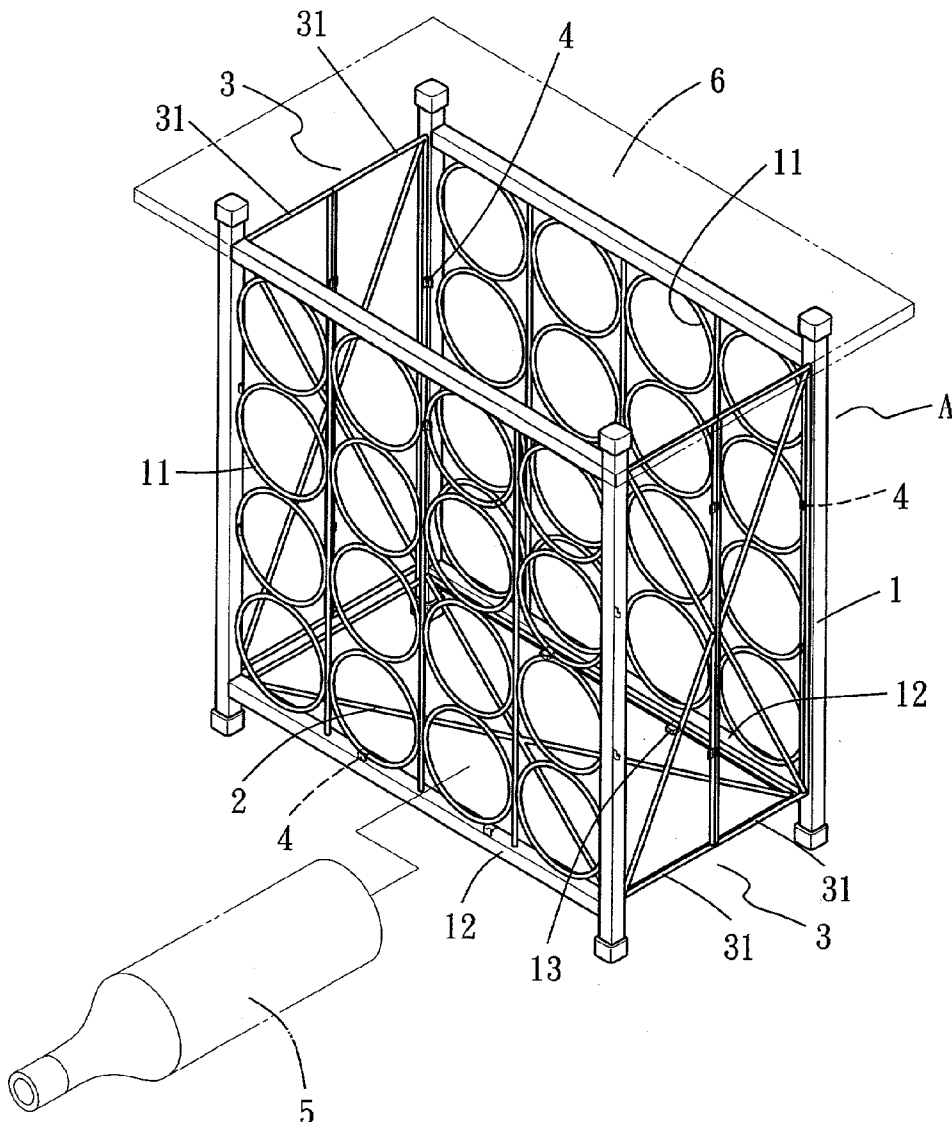
(22) Filed: **Mar. 22, 2002**

Publication Classification

(51) **Int. Cl.⁷** **A47B 73/00**

(52) **U.S. Cl.** **211/74; 211/201**

A collapsible article holder includes a pair of main frames, a bottom plate and a pair of side frames. The main frames are positioned in a front side and rear side, having both ends respectively combined by hinges with a side frame. The bottom plate has one end pivotally connected by hinges with the inner side of the bottom lateral rod of one of the main frames, and the other end resting on the projections on the inner side of the bottom lateral rod of the other of the main frames. When the bottom plate is slightly lifted up, and the side frames are respectively collapsed inward, the main frames will synchronously be forced to move inward and position outside the side frames and the bottom plate. The whole article holder can be collapsed in a flat shape, having effects of facilitating packaging, storing, moving around and transporting.



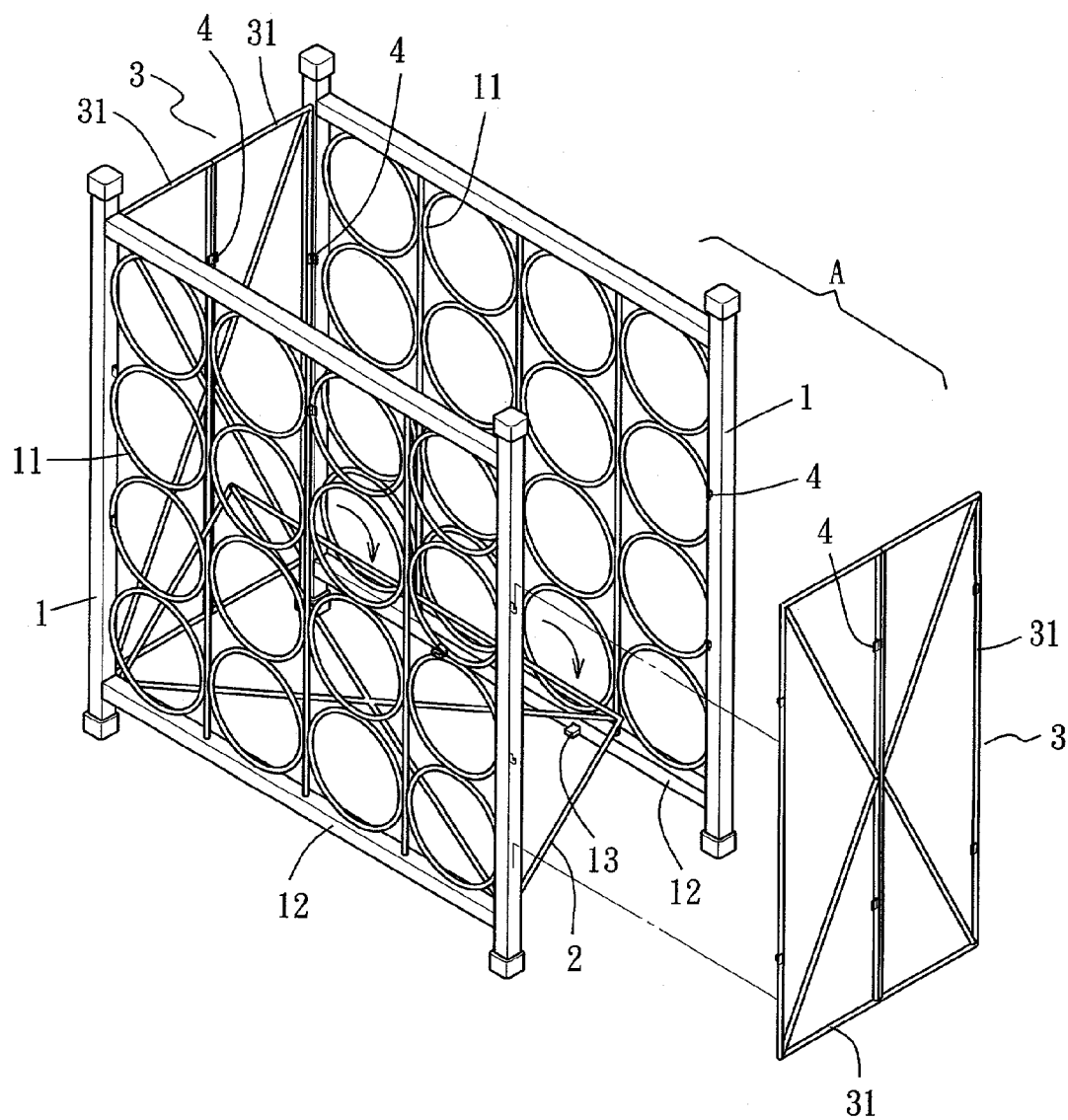


FIG. 1

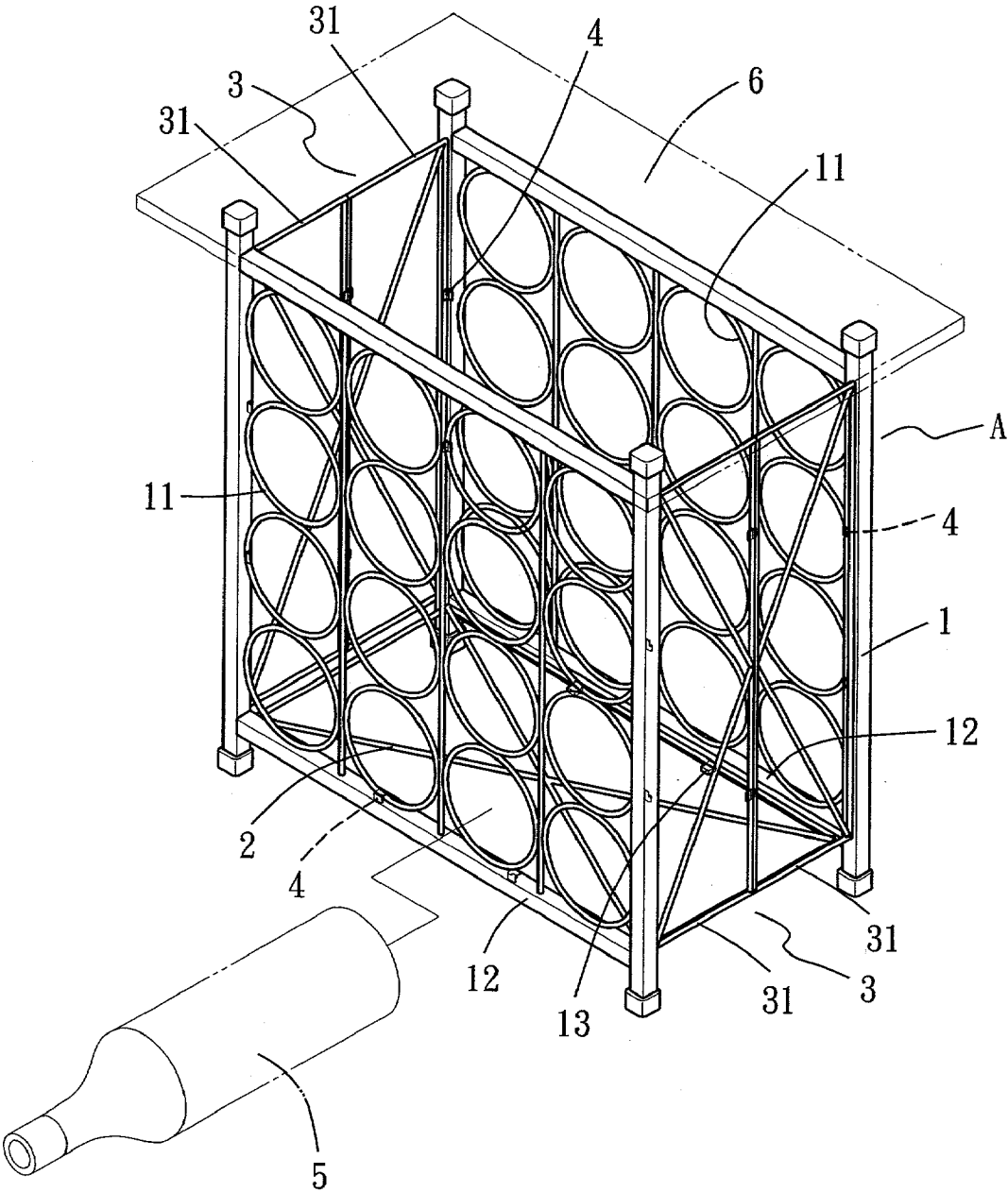


FIG. 2

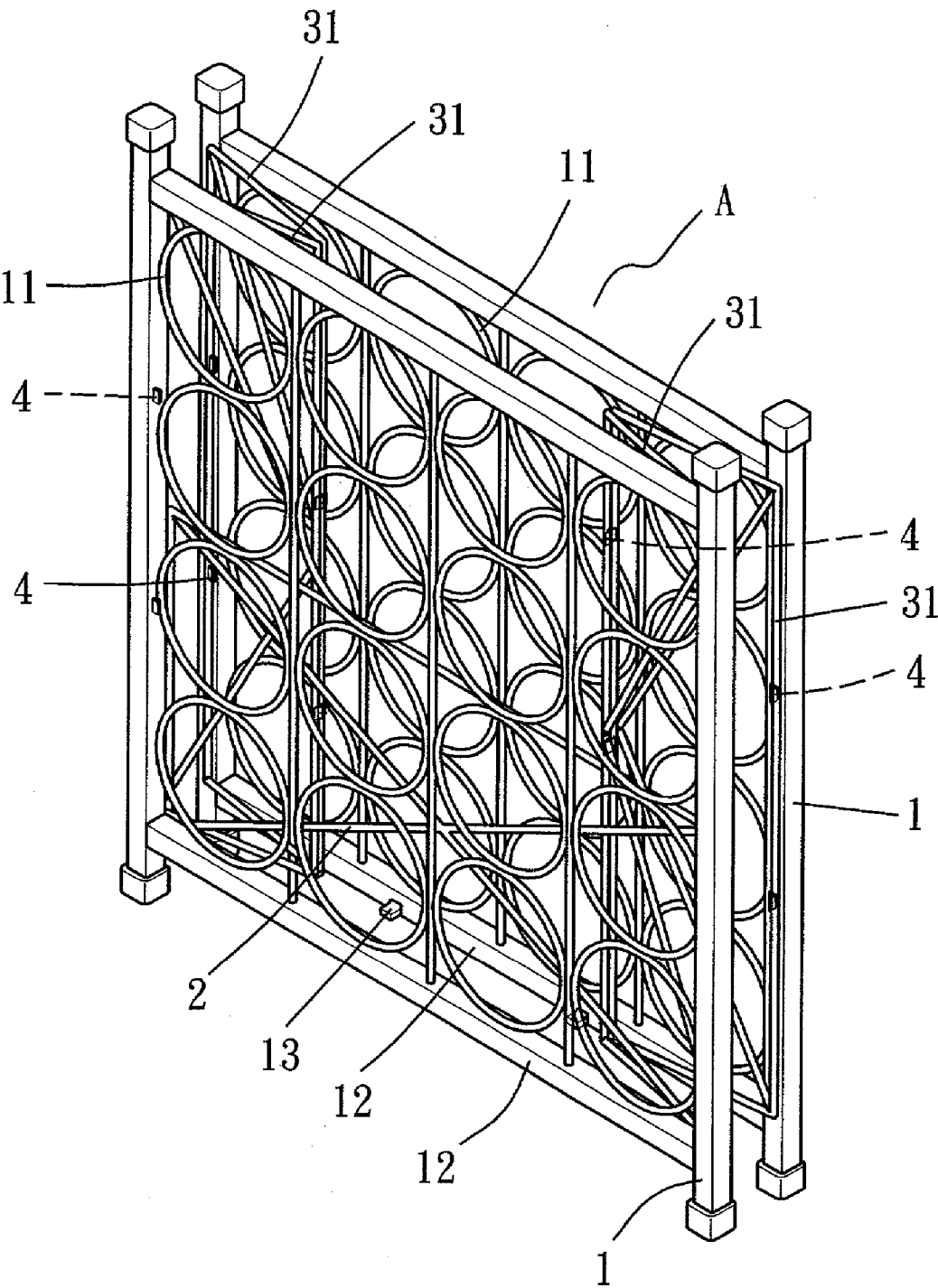


FIG. 3

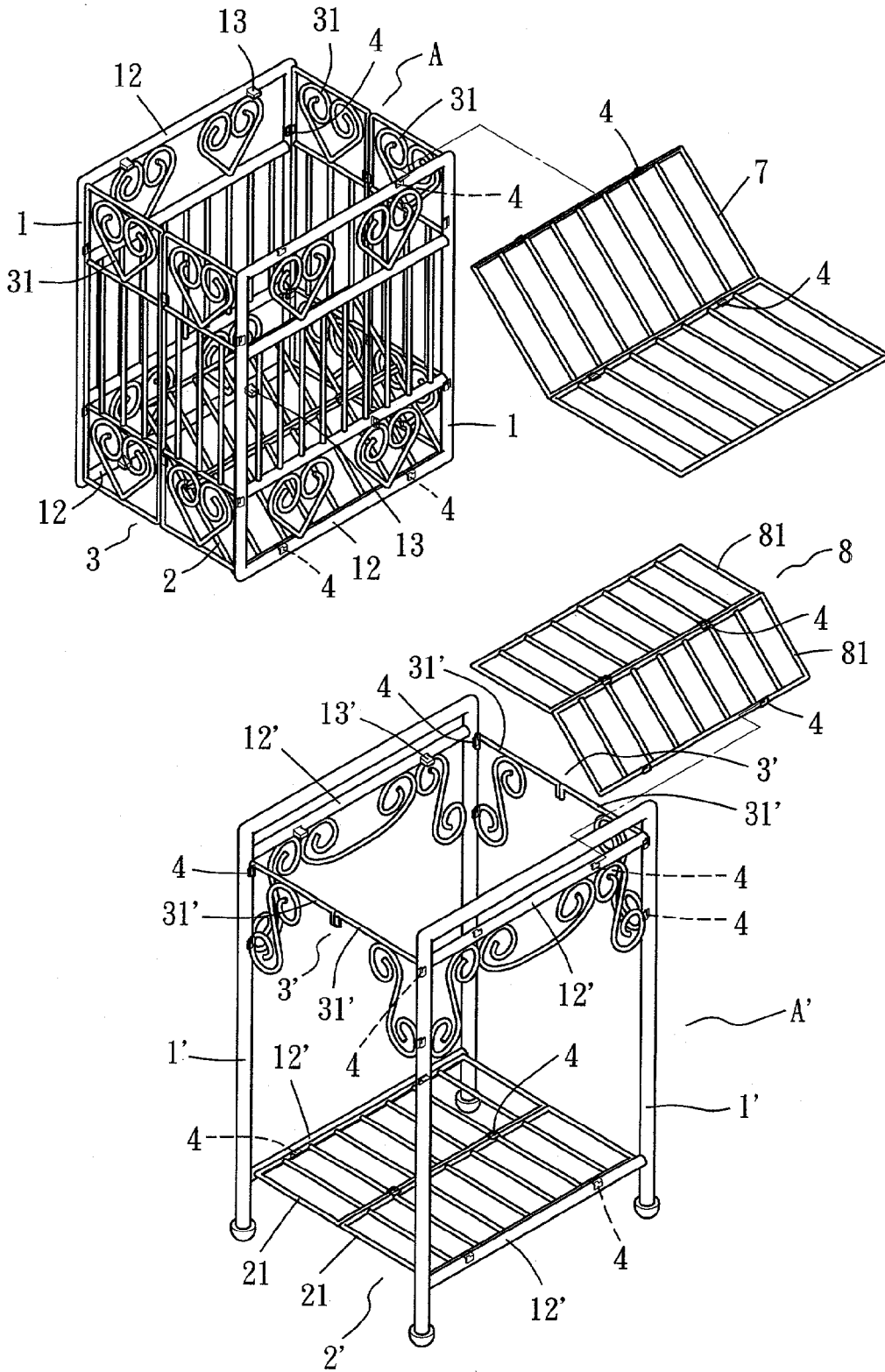


FIG. 4

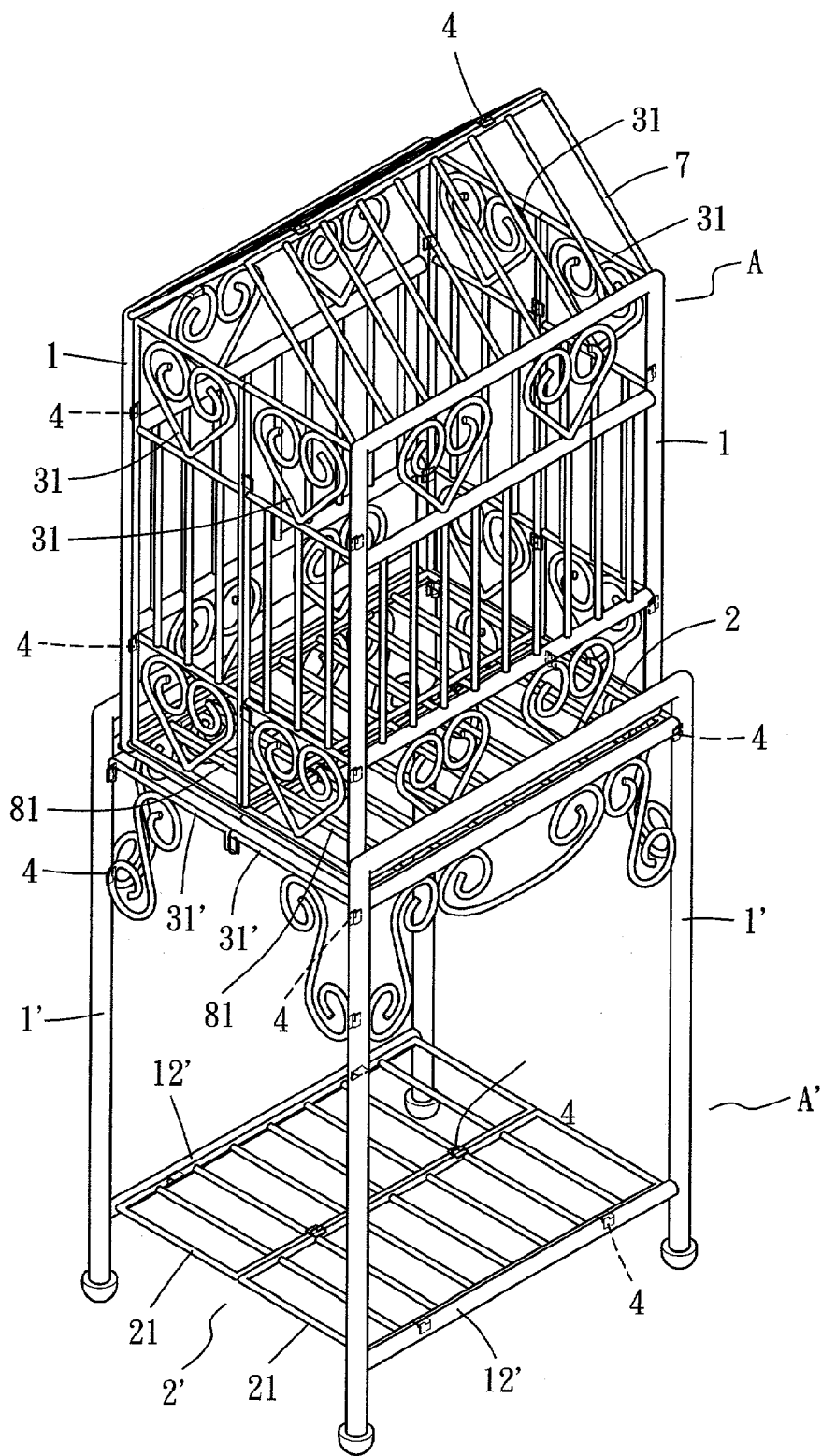


FIG. 5

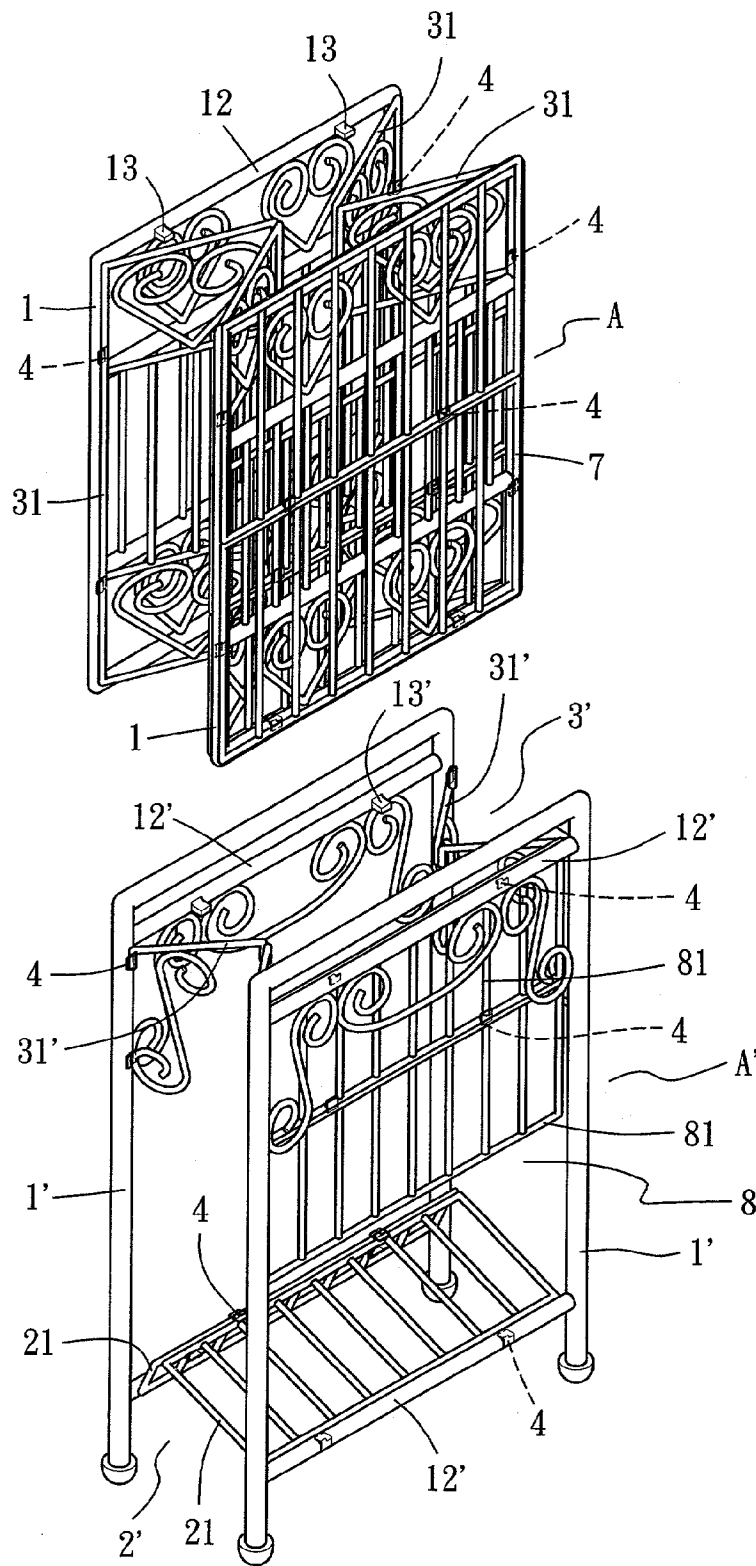


FIG. 6

COLLAPSIBLE ARTICLE HOLDER

BACKGROUND OF THE INVENTION

[0001] This invention relates to a collapsible article holder, particularly to one able to be collapsed for facilitating packaging, storing, moving around and transporting.

[0002] Generally, a conventional article holder is fixed in structure and impossible to be collapsed freely, so it needs to take much space for storing due to its large size, and it also causes much trouble to a manufacturer in packaging and transporting such a conventional article holder.

SUMMARY OF THE INVENTION

[0003] This invention has been devised to offer a collapsible article holder able to be collapsed in a flat shape for convenience of packaging, storing, moving around and transporting.

[0004] The collapsible article holder in this invention chiefly includes a pair of rectangular main frames and a bottom plate. The feature of the invention is that the pair of main frames are oppositely located in a front side and a rear side, with two collapsible side frames respectively and pivotally connected with the opposite ends of the main frames, and the bottom plate has one end pivotally combined with the inner side of the bottom lateral rod of one of the main frames and the other end lean on the projections on the inner side of the bottom lateral rod of the other main frame.

BRIEF DESCRIPTION OF DRAWINGS

[0005] This invention will be better understood by referring to the accompanying drawings, wherein:

[0006] **FIG. 1** is an exploded perspective view of a first embodiment of a collapsible article holder in the present invention:

[0007] **FIG. 2** is a perspective view of the first embodiment of the collapsible article holder assembled in the present invention:

[0008] **FIG. 3** is a perspective view of the first embodiment of the collapsible article holder in a collapsed condition in the present invention:

[0009] **FIG. 4** is an exploded perspective view of a second embodiment of a collapsible article holder in the present invention:

[0010] **FIG. 5** is a perspective view of the second embodiment of the collapsible article holder assembled in the present invention:

[0011] **FIG. 6** is a perspective view of the second embodiment of the collapsible article holder in a collapsed condition in the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0012] A first preferred embodiment of a collapsible article holder in the present invention, as shown in **FIG. 1**, includes a pair of rectangular main frames **1**, a bottom plate **2** and a pair of side frames **3** as main components combined together.

[0013] The pair of main frames **1** are oppositely positioned in a front side and a rear side and respectively provided with lots of circular support rings **11** corresponding on opposite sides for bottles to be inserted through and placed therein. Besides, a plurality of projections **13** are fixed on the inner side of a bottom lateral rod **12** of one of the main frames **1**. Each side frame **3** has a pair of frames **31** pivotally connected together by hinges **4**.

[0014] In assembling, as shown in **FIG. 2**, firstly, each side frame **3** has its both vertical sides respectively lean against the opposite vertical ends of each main frame **1** and then pivotally combined together by means of hinges **4**. Next, the bottom plate **2** has one end pivotally combined by hinges **4** with the inner side of the bottom lateral rod **12** of the main frame **1** which has no projections.

[0015] In using, when the front and the rear main frames **1** in a collapsed condition are pulled outward, the frames **31** of the side frames **3** will synchronously be extended outward, and at this time the bottom plate **2** has the hinges **4** on one end serving as fulcrums and the other end resting on the projections **13** of the bottom lateral rod **12** of the main frame **1** to finish assembling a collapsible article holder **A**, as shown in **FIG. 2**. Thus, bottles **5** can laterally be inserted through and placed on the circular support rings **11** of the front and the rear main frames **1**. In addition, a table faceplate **6** made of glass or other materials can be deposited on the extended article holder **A** to serve as a table.

[0016] To collapse the article holder **A** in an extended condition, as shown in **FIG. 3**, the bottom plate **2** is slightly lifted up first, and then the left and the right side frames **3** are collapsed inward, and in the meanwhile the front and the rear main frames **1** are actuated to move inward closely and lean against the outer sides of the side frames **3** and the bottom plate **2**, with the whole article holder folded up in a flat shape shown in **FIG. 3**, to diminish its size for facilitating packaging, storing, moving around and transporting.

[0017] A second preferred embodiment of a collapsible article holder in the present invention, as shown in **FIG. 4**, includes an article holder **A** and a lower base **A'** combined together, with the article holder **A** used as a stand for flowerpots, and the lower base **A'** positioned under the article holder **A**.

[0018] The article holder **A** consists of a pair of main frames **1**, a bottom plate **2**, a pair of side frames **3** and a top cover **7**. The pair of main frames **1** is oppositely positioned in a front side and a rear side, having both sides respectively and pivotally combined with a collapsible side frame **3** by means of hinges **4**. The bottom plate **2** has one side pivotally connected with the inner side of the lateral rod **12** under one of the main frame **1**, and the other side resting on the projections **13** on the inner side of the bottom lateral rod **12** of the other main frame **1**. The top cover **7** is possible to be bent and shaped as a roof, having one side pivotally combined by hinges **4** with the top lateral rod **12** of one of the main frames **1**, and the other side resting on the projections **13** of the top lateral rod **12** of the other main frame **1**.

[0019] The lower base **A'** contains a pair of main frames **1'**, a bottom plate **2'**, a pair of side frames **3'** and a top plate **8** combined together. The pair of main frames **1'** is oppositely located in a front side and a rear side, having two collapsible side frames **3'** respectively and pivotally combined on oppo-

site sides. The bottom plate **2'** is composed of a pair of frames **21** pivotally connected together by hinges **4**. The frames **21** have their outer edges respectively and pivotally connected by hinges **4** with opposite lateral rods **12'** in a lower portion of the main frames **1'**. The top plate **8** is made of a pair of frames **81** pivotally combined together by hinges **4**, and has one outer end pivotally connected by hinges **4** with the top lateral rod **12'** of one of the main frames **1'** and the other outer end directly lean on the projections **13'** on the top lateral rod **12'** of the other main frame **1'**.

[0020] In assembling, as shown in **FIG. 5**, firstly, the main frames **1'** of the lower base **A'** are respectively pulled outward to let the side frames **3'** and the frames **31'**, **21** of the bottom plate **2'** extended outward synchronously. Then, the top plate **8** is lifted up and make the non-pivoted edge lean on the projections **13'** of the main frame **1'** to finish assembling of the lower rest **A'**.

[0021] Next, the main frames **1** of the article holder **A** are pulled outward to make the frames **31** of the side frames **3** extended outward, and then lift up the bottom plate **2** and lean it on the projections **13** of the top lateral rod **12** of the main frame **1**. Lastly, lift up the top cover **7** and make it rest on the projections **13** of the top lateral rod **12** of the main frame **1** to finish assembling of the article holder **A** having a roof, and able to be directly placed on the lower base **A'** and used as a greenhouse or a stand for flowerpots.

[0022] Additionally, the way of collapsing the article holder of the second embodiment in this invention is the same as that of the first embodiment, as shown in **FIG. 6**. Firstly, the article holder **A** is removed from the lower rest **A'**. Then, the bottom plate **2** and the top cover **7** of the article holder **A** are respectively lifted up, and the side frames **3** are collapsed inward and closed together to make the main frames **1** collapsed and positioned outside the side frames **3** and the bottom plate **2**.

[0023] Next, the top plate **8** of the lower base **A'** is lifted up, and at the same time the side frames **3'** and the bottom plate **2'** are respectively bent inward to activate the main

frames **1** collapsed. Thus, the article holder **A** and the lower base **A'** are respectively collapsed in a flat shape, equally having effects of facilitating packaging, storing, moving around and transporting.

[0024] While the preferred embodiments of the invention have been described above, it will be recognized and understood that various modifications may be made therein and the appended claims are intended to cover all such modifications that may fall within the spirit and scope of the invention.

I claim:

1. A collapsible article holder comprising a pair of rectangular main frames and a bottom plate provided under an inner side of said main frames: and,

Characterized by said main frames oppositely positioned in a front side and a rear side, said main frames having both ends respectively and pivotally combined by hinges with a collapsible side frame, said bottom plate having one side pivotally connected by hinges with a bottom lateral rod of one of said main frames, said bottom plate having the other side resting on the projections on the inner side of the bottom lateral rod of the other of said main frames.

2. The collapsible article holder as claimed in claim 1, wherein two said main frames are respectively provided with a plurality of circular support rings corresponding with each other for bottles to be inserted through and placed therein.

3. The collapsible article holder as claimed in claim 1, wherein a collapsible top plate is pivotally combined by hinges with said top lateral rod of one of said main frames at one end, and rests on the projections fixed on the inner side of the top lateral rod of the other of said main frames at the other end.

4. The collapsible article holder as claimed in claim 3, wherein said top plate is mounted on said main frames and is shaped as a roof.

* * * * *