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(54) **Modular hut provided with a space below the roof**

Modularhütte mit Unterdachraum

Cabane modulaire munie d'un espace au dessous de la toiture

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## Description

The present invention concerns huts which can be used for multiple uses, for example on beaches, by swimming pools or as wardrobes.

Various types of hut-shaped structures are known, having different size and use. These usually consist of real buildings or structures permanently assembled in the place where they are utilized. It is therefore difficult both to move them from one place to another, and to produce important modifications to the arrangement of their internal elements (such as shelves, etc.). Moreover, owing to the typical small size of conventional huts, it is often a problem to put the objects presently not used in such a position as not to hamper the movements of the user inside.

Several types of collapsible hut-shaped structures are also known, these usually being very simple and without internal elements to be used for housing and arranging the user's objects. An example of such a structure is the box-shaped collapsible hunting blind disclosed in US-A-4.067.346 which merely consists of four corner posts, two top bars and a flexible covering with various openings. This type of structure, too, does not overcome the above-mentioned drawbacks except that it is easily movable.

The object of the present invention is therefore to provide a modular hut, with a quickly rearrangeable internal structure and provided with a separate inner space which functions as a closet.

The advantages of the present invention will become apparent from the following detailed description of a preferred embodiment thereof, referring to the annexed drawings, wherein:

Fig. 1 is a perspective view of the frame of a modular hut according to the present invention; and  
Fig. 2 is a perspective view of a complete version of the hut of fig. 1.

Referring to fig. 1, it is shown that the supporting framework of a modular hut according to the present invention consists of an assembly of elements which can be differently assembled, interconnected to form a frame. In particular, said frame includes base elements 1 whereon the real base of the hut abuts, and elements 2 which mutually connect the said base elements 1. Peripheral posts 3 and inner posts 3' are inserted on said base elements, which posts are part of the hut vertical framework. Said posts 3, 3' are connected on their upper part to peripheral elements 4 and inner elements 4', horizontally arranged and suitable to strengthen the hut structure. Peripheral upper posts 5 and inner posts 5' are inserted on the upper part of the elements 4, 4', said posts in turn being connected on their upper part to upper horizontal peripheral elements 6 and inner upper elements 6'. The frame is completed in its upper part by bent roof elements 7, sloping or arc-shaped, intended

to support the covering element described later on. The elements 7 connect opposite sides of the roof base defined by the upper peripheral elements 6. Finally, the elements 7 are preferably connected on their tops by further stiffening roof elements 8.

The above-mentioned inner elements cooperate to form the hut internal arrangement, in particular, the horizontal elements are suitable to support shelves. Any plane inside the hut can also be supported by props 9 fixed on both said peripheral and inner elements.

All the above-mentioned elements may be arranged in any way suitable to the purpose, and are preferably lap-jointed, but they may be connected in any known way suitable to the purpose.

Obviously, the greater the number of posts and horizontal peripheral elements used the firmer is the structure.

Referring now to fig. 2, a complete hut is shown which is essentially obtained by inserting on the above-described structure a base 21 and a top plane 22 first, then a covering 23 made of a flexible material shaped so as to fit perfectly the frame. Said covering 23 is provided with an entrance opening which can be closed with a part 24 of the covering itself which can be rolled up, and possibly one or two zips.

In a similar way, a part 25 of the roof of the covering can be opened and rolled up to get within reach of the space M included between the top plane 22 and the two inclined parts of the covering 23. Said space M advantageously functions as a closet for the objects presently not used and it may be accessible also from inside the hut in case a top plane 22 is used which does not cover the whole roof base.

The flexible covering 23 may be made of canvas or plastic or, else, of waterproof fabric, or any other flexible material suitable to the purpose. The covering itself is fixed on the frame by means of strings, velcro bands or other suitable means, and may be provided with closable openings, possibly provided with mosquito nets, for the internal ventilation.

As shown in fig. 2, the hut may also be equipped with internal shelves abutting on the seats prearranged during the frame assembly phase, as well as, for example, with further holders hung to the horizontal elements of the frame.

In this way, the internal arrangement of the structural elements may be varied to fit the user's requirements, which user, for example, may arrange the above-described hut to use it as a wardrobe and, in this case too, the advantage of the space M which allows to utilize the room in the upper part of the modular hut is clear.

Finally, it is clear that this modular hut is easily movable, thanks to its lightness, as well as easily transportable, thanks to its small bulk when it is disassembled.

**Claims**

1. A collapsible modular hut provided with a collapsible frame including peripheral frame elements (1, 2, 3, 4, 5, 6, 7, 8) covered by a flexible covering (23) having at least one opening, characterized in that said frame further includes inner frame elements (3', 4', 5', 6') which can be connected to said peripheral frame elements in a plurality of different arrangements. 5
2. A hut according to claim 1, characterized in that it includes an inner top plate (22) supported by the upper inner elements (6') so as to define a space (M) included between the roof peripheral elements (7, 8) and the upper peripheral elements (6) forming the base of the roof. 15
3. A hut according to claim 2, characterized in that a part (25) of the roof can be opened to get within reach of said space (M) from outside. 20
4. A hut according to claim 2 or 3, characterized in that the top plane (22) does not entirely cover the roof base thus making the space (M) accessible from inside the hut. 25

**Patentansprüche**

1. Zusammenlegbare modular aufgebaute Hütte, die mit einem zusammenlegbaren Rahmen ausgestattet ist, der äußere Rahmenelemente (1,2,3,4,5,6,7,8) aufweist, die von einem flexiblen Überzug (23) bedeckt sind, der wenigstens eine Öffnung besitzt, **dadurch gekennzeichnet**, daß der Rahmen weiterhin innere Rahmenelemente (3', 4', 5', 6') aufweist, die mit den äußeren Rahmenelementen in einer Vielzahl von verschiedenen Anordnungen verbunden werden können. 35 40
2. Hütte nach Anspruch 1, **dadurch gekennzeichnet**, daß sie eine innere obere Platte (22) aufweist, die von dem inneren oberen Element (6') getragen ist, so daß ein Raum (M) gebildet wird, der zwischen den äußeren Dachelementen (7,8) und den äußeren, oberen Elementen (6) enthalten ist, welche die Basis des Daches bilden. 45 50
3. Hütte nach Anspruch 2, **dadurch gekennzeichnet**, daß ein Teil (25) des Daches geöffnet werden kann, um von außen in den Bereich des Raumes (M) zu gelangen. 55
4. Hütte nach Anspruch 2 oder 3,

**dadurch gekennzeichnet**, daß

die obere Fläche (22) die Basis des Daches nicht vollständig abdeckt, so daß der Raum (M) von der Innenseite der Hütte erreichbar ist.

**Revendications**

1. Cabine pliante modulaire munie d'un châssi pliant comprenant des éléments périphériques de châssi (1, 2, 3, 4, 5, 6, 7, 8) couverts par une couverture souple (23) ayant au moins une ouverture, caractérisée en ce que ledit châssi comprend encore des éléments intérieurs de châssi (3', 4', 5', 6') qui peuvent être reliés auxdits éléments périphériques de châssi en une pluralité de dispositions différentes. 10
2. Cabine selon la revendication 1, caractérisée en ce qu'elle comprend une plaque supérieure interne (22) supportée par les éléments supérieurs internes (6') de sorte à délimiter un coffre (M) compris entre les éléments périphériques de plafond (7, 8) et les éléments périphériques supérieurs (6) qui forment la base du plafond. 15
3. Cabine selon la revendication 2, caractérisée en ce qu'une partie (25) du plafond peut être ouverte de sorte à avoir accès de l'extérieur audit coffre (M). 20
4. Cabine selon la revendication 2 ou 3, caractérisée en ce que le plan supérieur (22) ne couvre pas entièrement la base du plafond de sorte à rendre accessible ledit coffre (M) de l'intérieur de la cabine. 25 30 35 40

Fig. 1

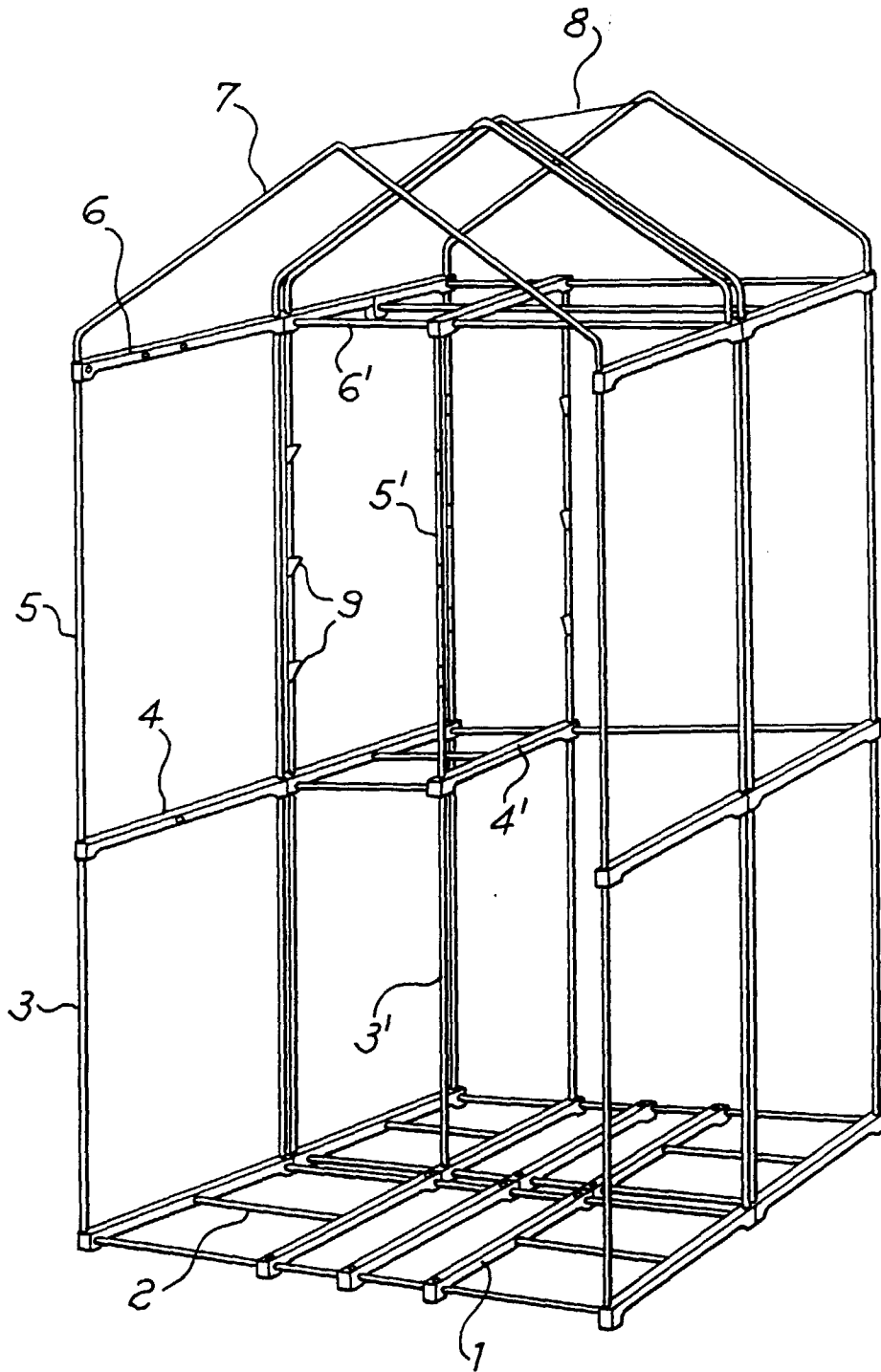


Fig. 2

