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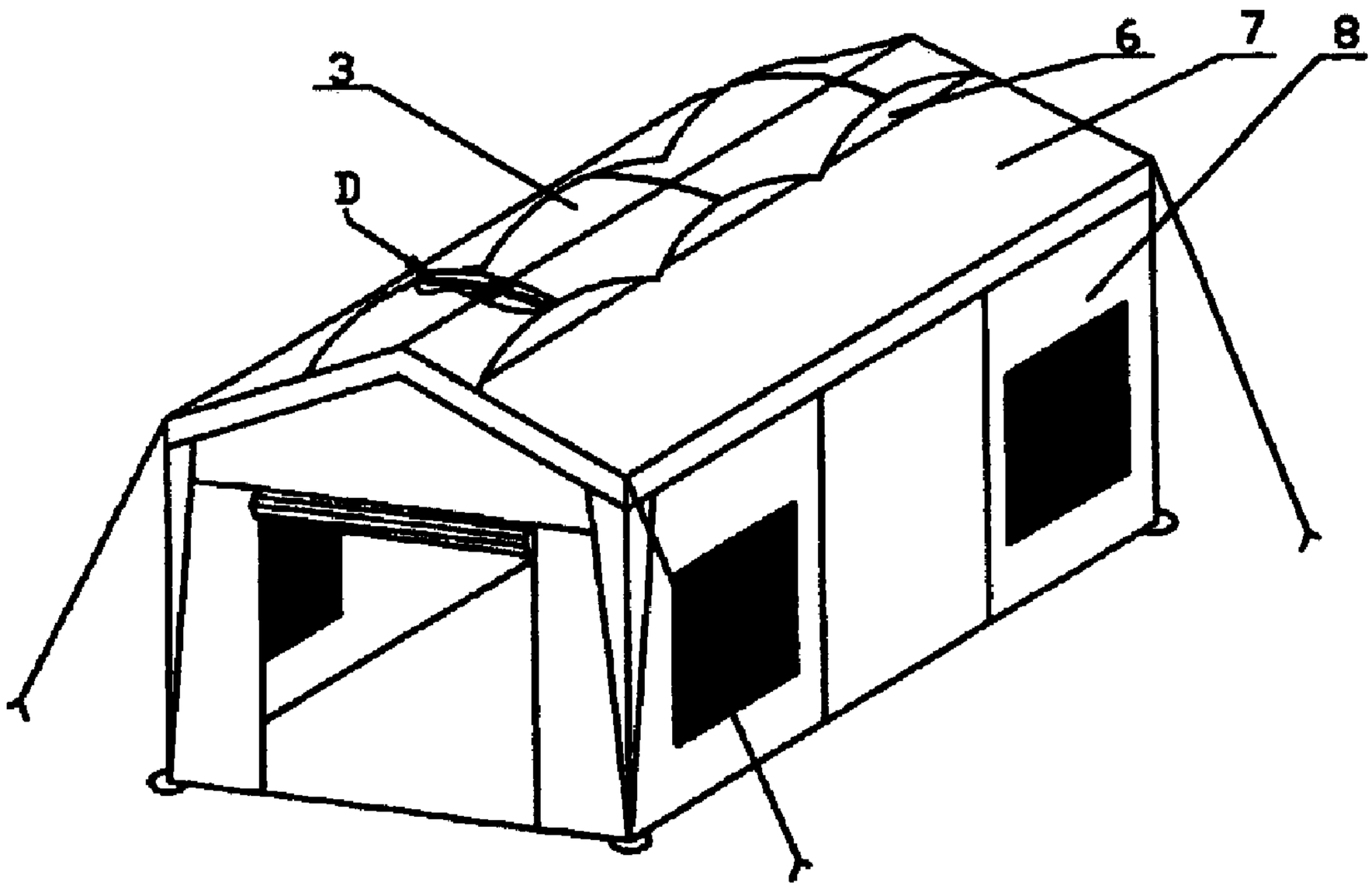
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(71) Demandeur/Applicant:
NENGSEN, CHEN, CN

(72) Inventeur/Inventor:
NENGSEN, CHEN, CN

(74) Agent: SMART & BIGGAR

(54) Titre : REMISE OU BATISSE STRUCTURALE LEGERE AVEC JOUR DE TOITURE
(54) Title: LIGHT-DUTY STRUCTURAL SHED OR HOUSE WITH SKYLIGHTS




(57) Abrégé/Abstract:
The present utility model relates to a light-duty structural shed or house with skylights, comprising walls ( 8 ), a roof and beam ( 1 ), wherein on walls ( 8 ) there are openings for doors and/or windows, the roof is constituted of ridge ( 3 ) and two top-inclines ( 7 ), each of top-inclines ( 7 ) has a width smaller than that of the inclined roof-face of the shed or house, ridge ( 3 ) made of flexible material is fixedly connected to top-inclines ( 7 ) at the spaced joining positions, several propping poles ( 2 ) are sheathed across ridge ( 3 ) laterally with respect to beam ( 1 ) at the positions staggered to said spaced joining positions, and supported over beam ( 1 ), so that a portion of ridge ( 3 ) propped by each of propping poles ( 2 ) together with the portions on both sides where they are connected to top-inclines ( 7 ) constitute skylight ( 6 ) in the shape of substantial triangle. In the present utility model, the roof of the

CA 2587970 A1 2008/06/14

(21) 2 587 970

(13) A1

(57) Abrégé(suite)/Abstract(continued):
shed or house is constituted of the ridge and the top-inclines which are fixed connected at the spaced joining positions, several propping poles are sheathed across the ridge laterally with respect to the beam at the positions staggered to said spaced joining positions, and supported over the beam, so that a portion of the ridge propped by each of the propping poles together with the portions on both sides where they are connected to the top-inclines constitute a skylight in the shape of substantial triangle, therefore, user can install the shed or house conveniently because of the simple structure. In addition, if the walls and the roof are made of different materials, the present utility model can be used to various applications, for example, sunshiny warm-shed, simply-constructed garage, field work-shed, tent, and like.

# Abstract

The present utility model relates to a light-duty structural shed or house with skylights, comprising walls ( 8 ), a roof and beam ( 1 ), wherein on walls ( 8 ) there are openings for doors and/or windows, the roof is constituted of ridge ( 3 ) and two top-inclines ( 7 ), each of top-inclines ( 7 ) has a width smaller than that of the inclined roof-face of the shed or house, ridge ( 3 ) made of flexible material is fixedly connected to top-inclines ( 7 ) at the spaced joining positions, several propping poles ( 2 ) are sheathed across ridge ( 3 ) laterally with respect to beam ( 1 ) at the positions staggered to said spaced joining positions, and supported over beam ( 1 ), so that a portion of ridge ( 3 ) propped by each of propping poles ( 2 ) together with the portions on both sides where they are connected to top-inclines ( 7 ) constitute skylight ( 6 ) in the shape of substantial triangle. In the present utility model, the roof of the shed or house is constituted of the ridge and the top-inclines which are fixed connected at the spaced joining positions, several propping poles are sheathed across the ridge laterally with respect to the beam at the positions staggered to said spaced joining positions, and supported over the beam, so that a portion of the ridge propped by each of the

propping poles together with the portions on both sides where they are connected to the top-inclines constitute a skylight in the shape of substantial triangle, therefore, user can install the shed or house conveniently because of the simple structure. In addition, if the walls and the roof are made of different materials, the present utility model can be used to various applications, for example, sunshiny warm-shed, simply-constructed garage, field work-shed, tent, and like.

# Light-Duty Structural Shed or House with Skylights

## Technical Field

The present utility model relates to a light-duty structural shed or house such as warm-shed, field work-shed, simply-constructed garage, and the like.

## Background Art

Typically, a conventional light-duty structural shed or house has some skylights on its top for the interior air-circulation. A skylight of the prior art generally has a frame made of aluminum-alloy profile and a hinge design, as shown in Chinese patent 200410056875.X, being beautiful and practical but complicated in structure and high in cost. It is uneasy to reduce the volume of the package of conventional shed or house due to its shortcoming.

## Summary

The object of the present utility model is to provide a light-duty structural shed or house with skylights being simple in structure and convenient in installation.

The technical solution of the present utility model is a light-duty structural shed or house with skylights comprising walls on which there are openings for doors and/or windows, a roof and a beam, characterized

in that the roof is constituted of a ridge and two top-inclines, each of top-inclines has a width smaller than that of the inclined roof-face of the shed or house, the ridge made of flexible material is fixedly connected to the top-inclines at the spaced joining positions, several propping poles are sheathed across the ridge laterally with respect to the beam at the positions staggered to said spaced joining positions where the ridge is connected to the top-inclines, and supported over the beam, so that a portion of ridge propped by each of the propping poles together with the portions on both sides where they are connected to the top-inclines constitute a skylight in the shape of substantial triangle.

Above-mentioned walls, ridge and top-inclines are made of fabric, and several fabric belts are arranged laterally at intervals on the ridge to overlap it by sewing them onto the ridge along both side edges, so that each of the propping poles can be sheathed between the belt and the ridge.

Above-mentioned walls and top-inclines can be made of plastic plates either.

Above-mentioned propping poles are made of metal or plastic pipes.

In the present utility model, the roof of the shed or house is constituted of the ridge and the top-inclines which are fixed connected at the spaced joining positions, several propping poles are sheathed across the ridge laterally with respect to the beam at the positions staggered to

said spaced joining positions, and supported over the beam, so that a portion of the ridge propped by each of the propping poles together with the portions on both sides where they are connected to the top-inclines constitute a skylight in the shape of substantial triangle, therefore, user can install the shed or house easily and conveniently in less steps, because it has a simple structure and less members necessary to be connected. In addition, if the walls and the roof are made of different materials, the present utility model can be used to various applications, for example, if they are made of the transparent materials, it can be used as a sunshiny warm-shed for flowers, vegetables, and like, if they are made of the corrugated plates or waterproof canvas, it can be used as a simply-constructed garage, a field work-shed, a tent, and like.

## Brief Description of Accompanying Drawings

The preferred embodiment is a simply-constructed garage in which the walls and the roof are made of waterproof canvas.

Fig.1 is a schematic view of an embodiment of the present utility model;

Fig.2 is a partially-enlarged view of part D in Fig.1;

Fig.3 is a partial top view of Fig.1;

Fig.4 is a schematic sectional vies taken along line A-A in Fig.3;

Fig.5 is a schematic sectional vies taken along line B-B in Fig.3.

## Detailed Description of preferred Embodiment

As shown in the accompanying drawings, in a light-duty structural shed or house of the present utility model, a door of roll-curtain type is arranged on one of walls 8, and windows on others. The roof from beam 1 made of metal pipe to the eaves on both sides is constituted of ridge 3 and two top-inclines 7, each of top-inclines 7 has a width smaller than that of the inclined roof-face of the shed or house, ridge 3 is fixedly connected to the top-inclines at the spaced joining positions by sewing or buckling by means of, for example, buttons or nylon hook-ring fasteners. Several fabric belts 4 are arranged laterally at intervals on ridge 3 to overlap it by sewing them onto ridge 3 along both side edges, as shown in Fig.5, reference number 5 denotes the sewing portions. Propping poles 2 made of plastic pipes are sheathed across ridge 3 between belts 4 and ridge 3 and fixed. Alternatively, it is possible to arrange some fixing strip-rings laterally at intervals on ridge 3, and make propping poles 2 pass through the strip-rings across ridge 3 and be fixed. Propping poles 2 are supported over beam 1, so that a portion of ridge 3 propped by each of propping poles 2 together with the portions on both sides where they are connected to top-inclines 7 constitute skylight 6 in the shape of substantial triangle.

# Claims

1. A light-duty structural shed or house with skylights, comprising walls ( 8 ) on which there are openings for doors and/or windows, a roof and beam ( 1 ), characterized in that the roof is constituted of ridge ( 3 ) and two top-inclines ( 7 ), each of top-inclines ( 7 ) has a width smaller than that of the inclined roof-face of the shed or house, ridge ( 3 ) made of flexible material is fixedly connected to top-inclines ( 7 ) at the spaced joining positions, several propping poles ( 2 ) are sheathed across ridge ( 3 ) laterally with respect to beam ( 1 ) at the positions staggered to said spaced joining positions, and supported over beam ( 1 ), so that a portion of ridge ( 3 ) propped by each of propping poles ( 2 ) together with the portions on both sides where they are connected to top-inclines ( 7 ) constitute skylight ( 6 ) in the shape of substantial triangle.

2. The light-duty structural shed or house with skylights according to claim 1, wherein said walls ( 8 ), ridge ( 3 ) and top-inclines ( 7 ) are made of fabric, and several fabric belts ( 4 ) are arranged laterally at intervals on ridge ( 3 ) to overlap it by sewing them onto ridge ( 3 ) along both side edges, so that each of propping poles ( 2 ) can be sheathed between belt ( 4 ) and ridge ( 3 ).

3. The light-duty structural shed or house with skylights according to claim 1, wherein said walls ( 8 ) and top-inclines ( 7 ) are made of plastic plates.

4. The light-duty structural shed or house with skylights according

to claim 2, wherein said propping poles ( 2 ) are made of metal or plastic pipes.

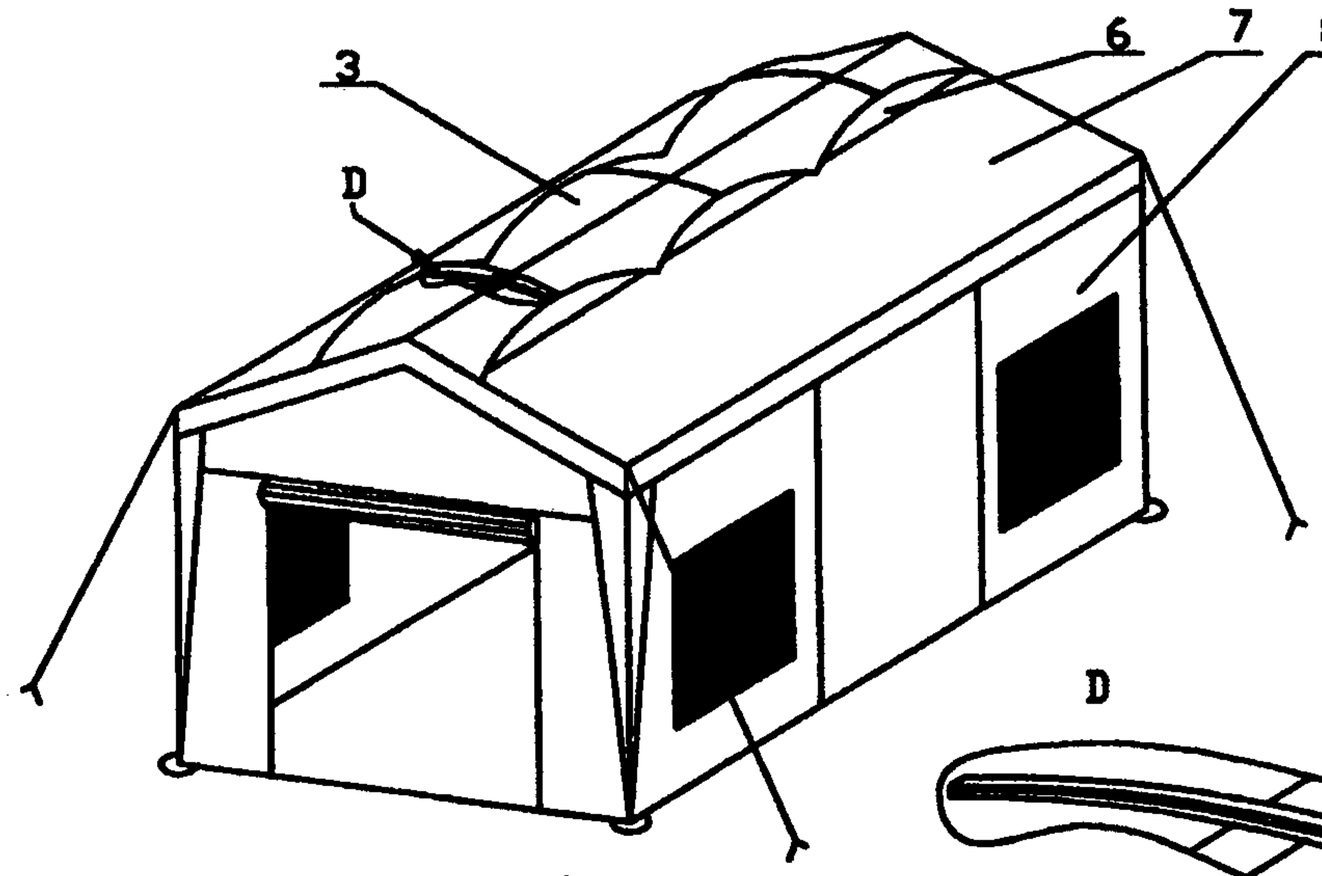



FIG.1

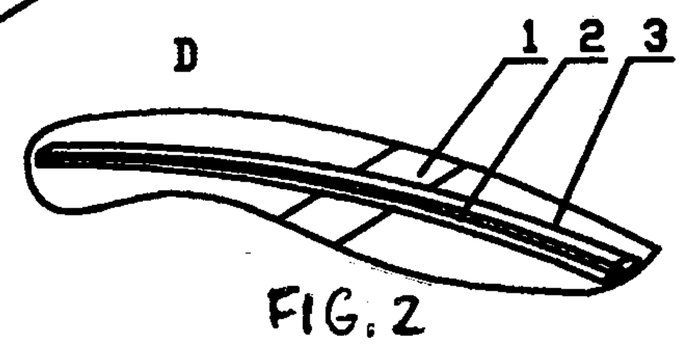



FIG.2

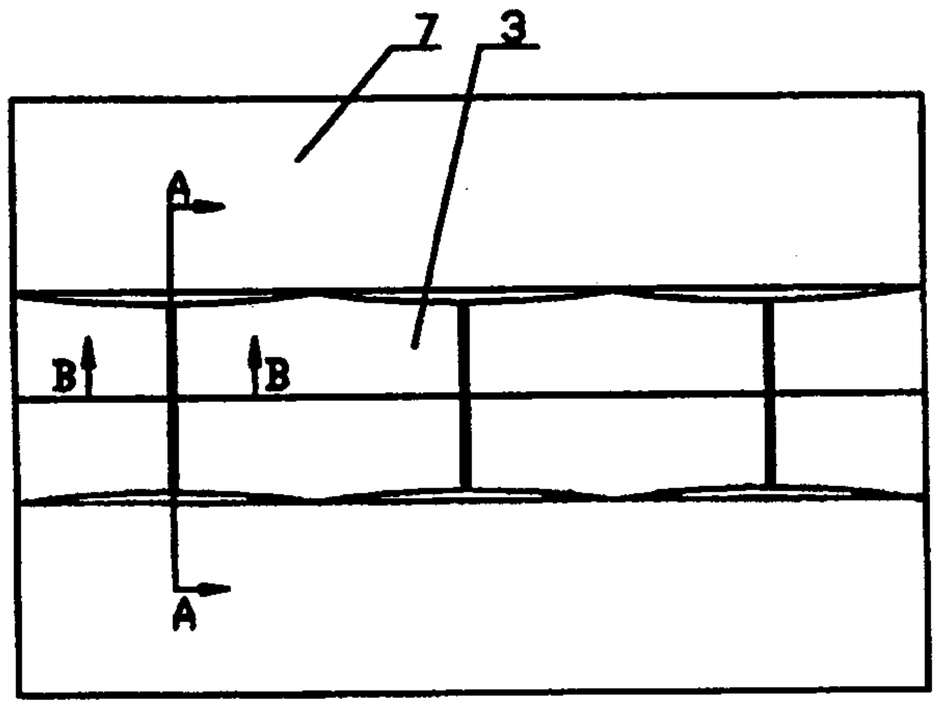



FIG.3




FIG.4

A-A

B-B

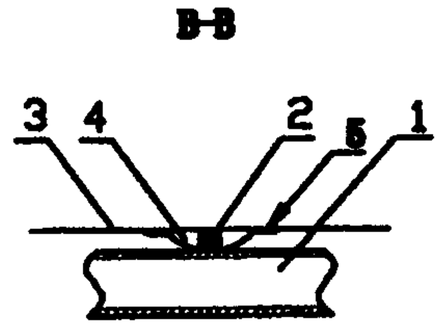
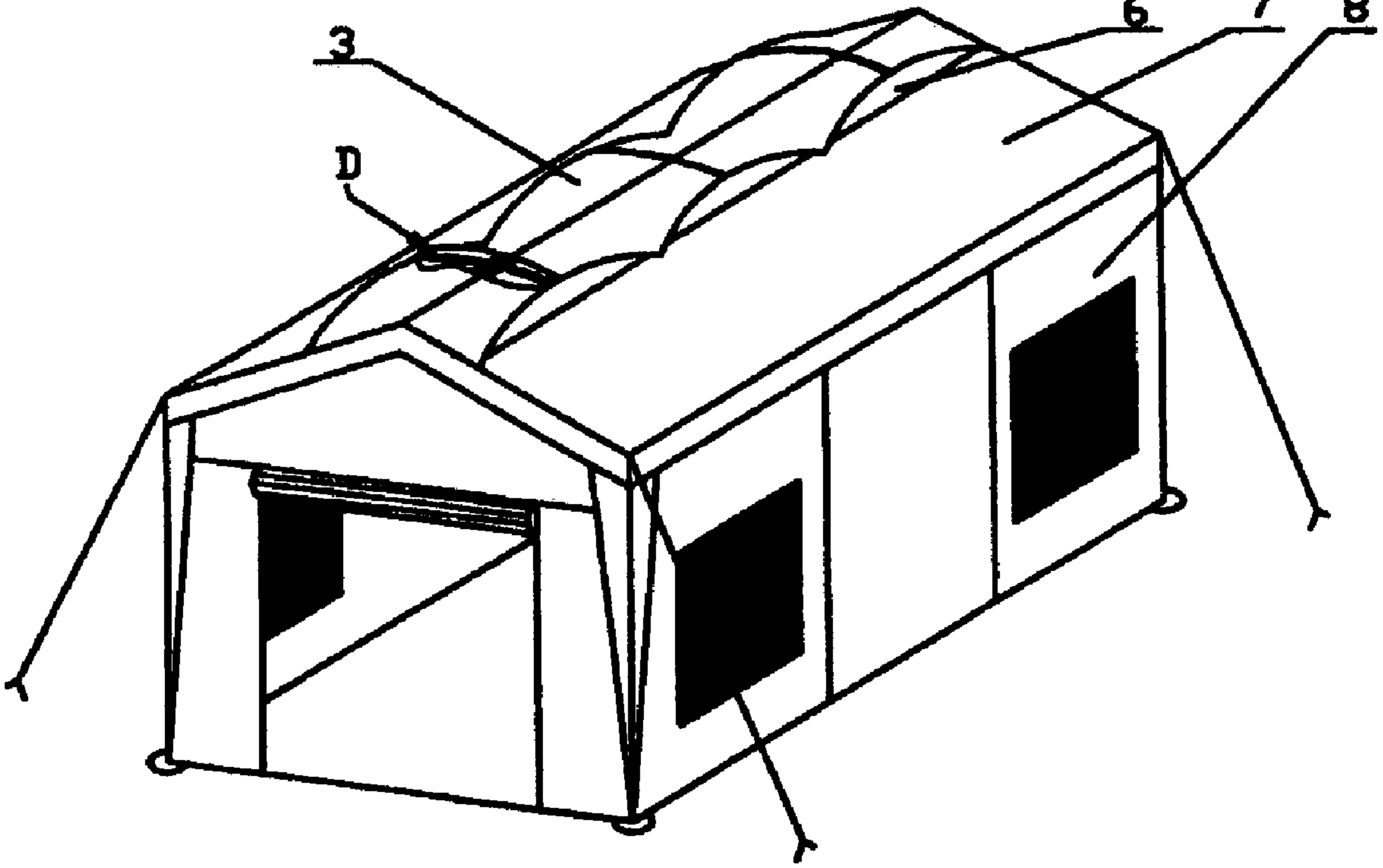



FIG.5


3
6
7
8
D