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(54) **TENT**

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(57) **ABSTRACT**

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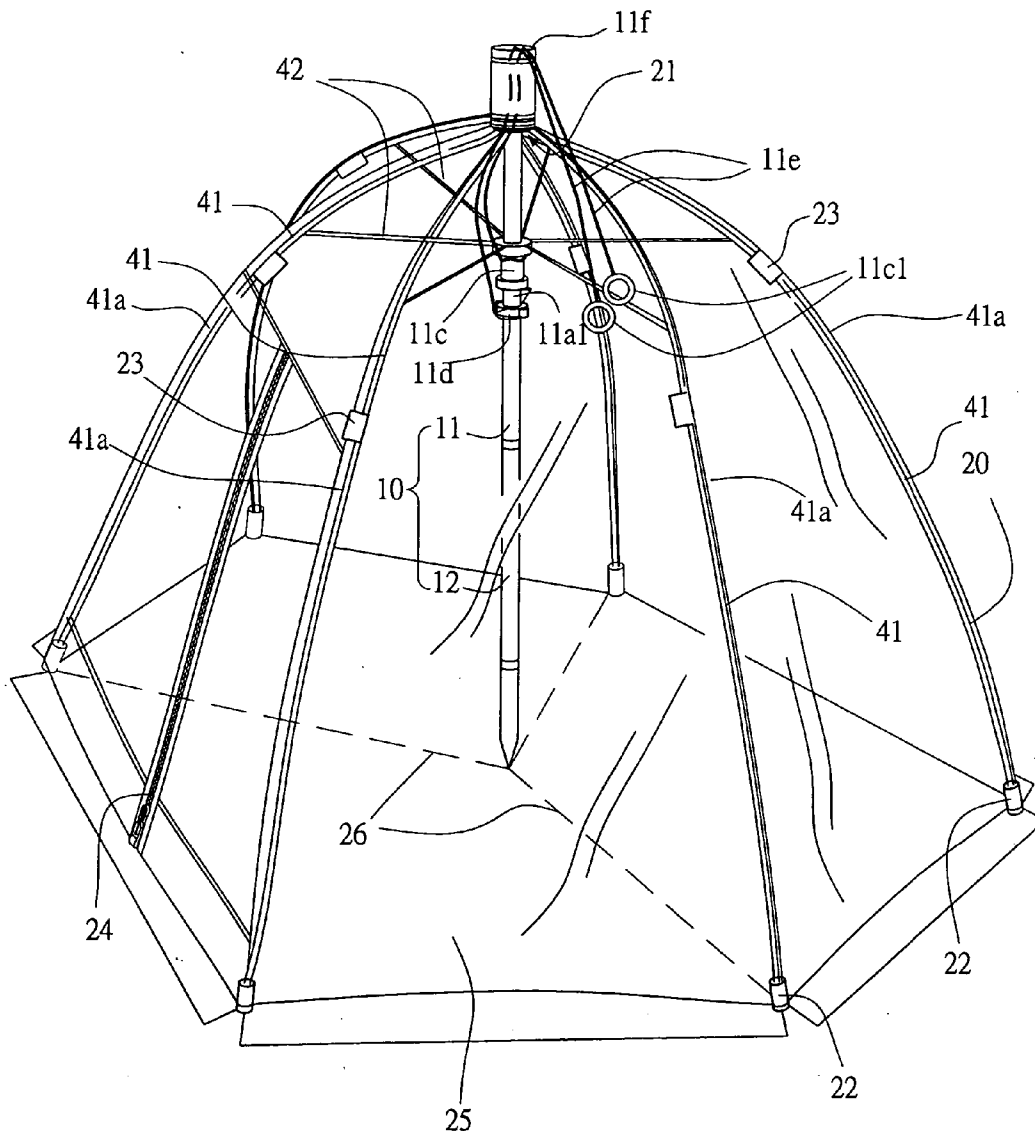
A tent comprising a shaft, a protective cover, a handle and a plurality number of supporting ribs; the upper, lower shaft design and the supporting ribs is easy for storage; a running ring below the runner is on the upper shaft, two ropes connecting to the runner and running ring respectively stretch out from a cap and connect to an opening ring and a closing ring respectively as the open and close switches, a zipper door is on one side of the protective cover, a ground mats covering ground stretches from the bottom of the protective cover, the ground mats has a tri-directional zipper.

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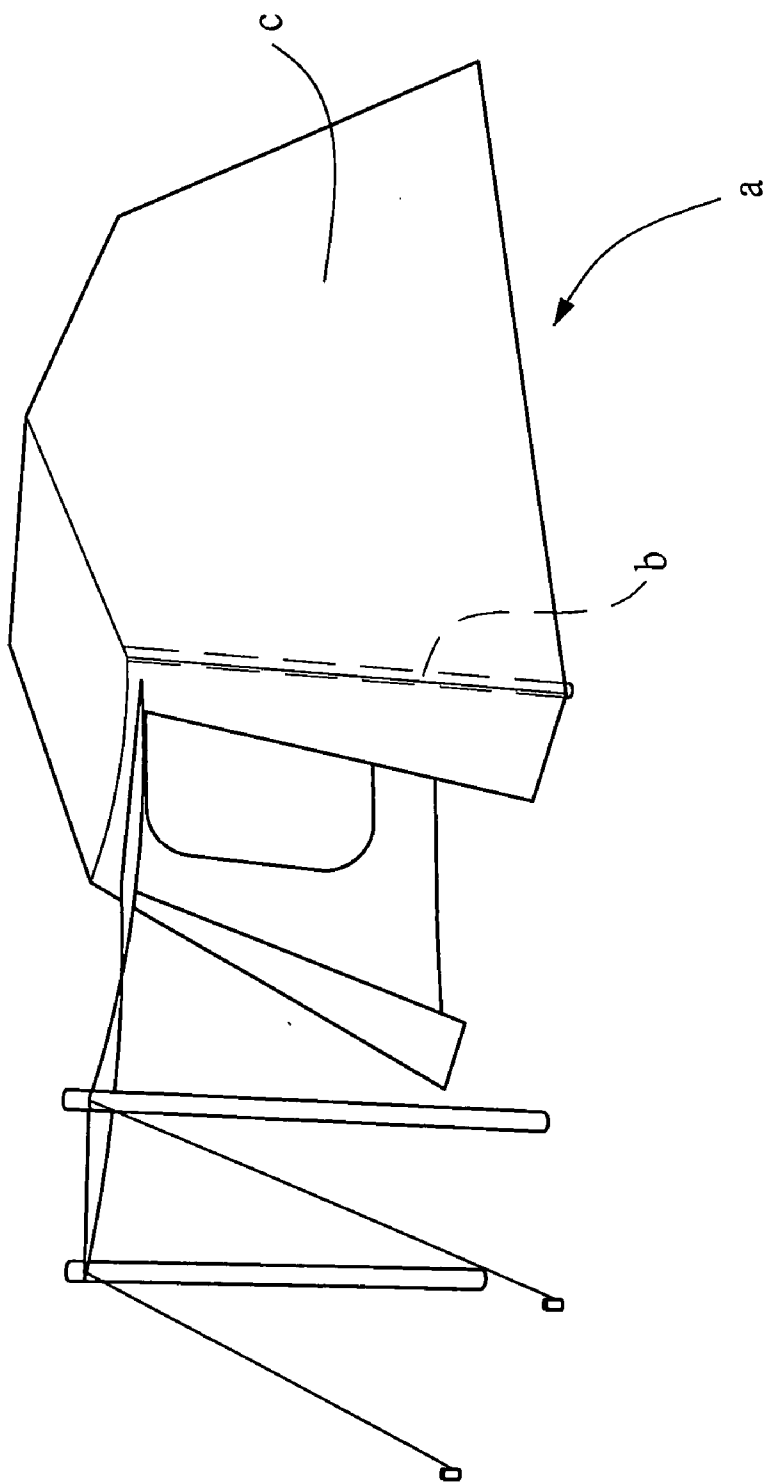


FIG.1 (Prior Art)

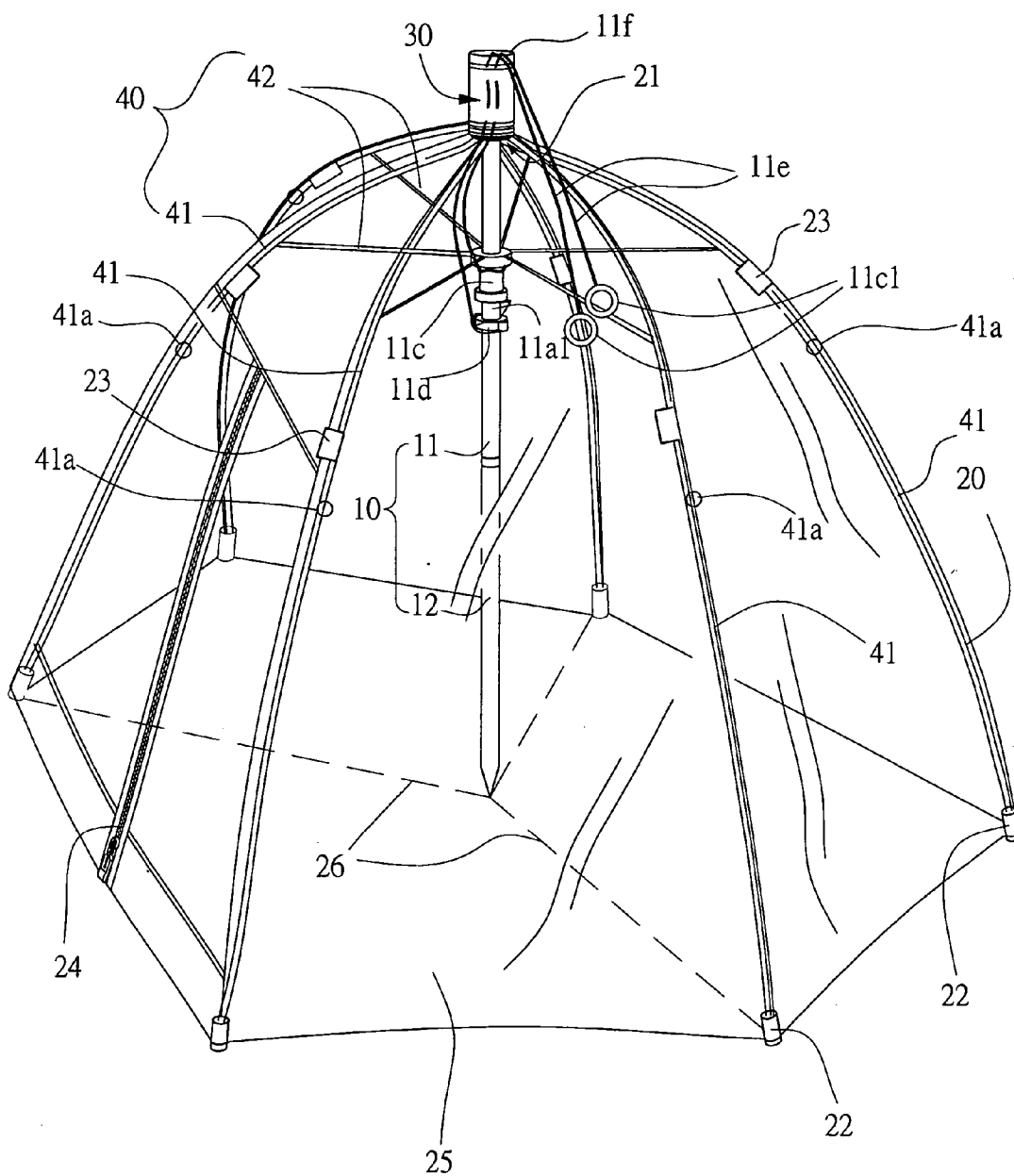


FIG.2

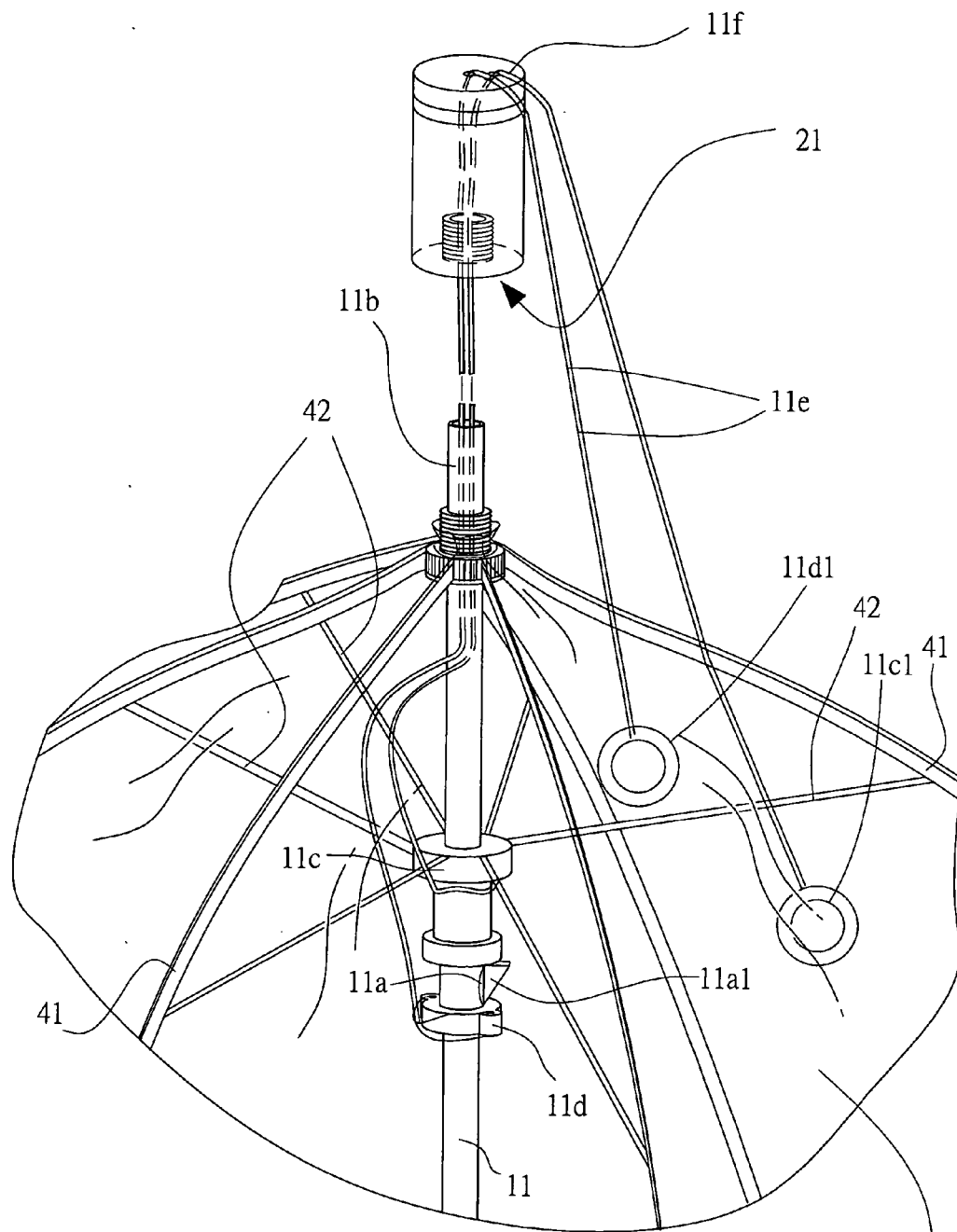


FIG.3

20

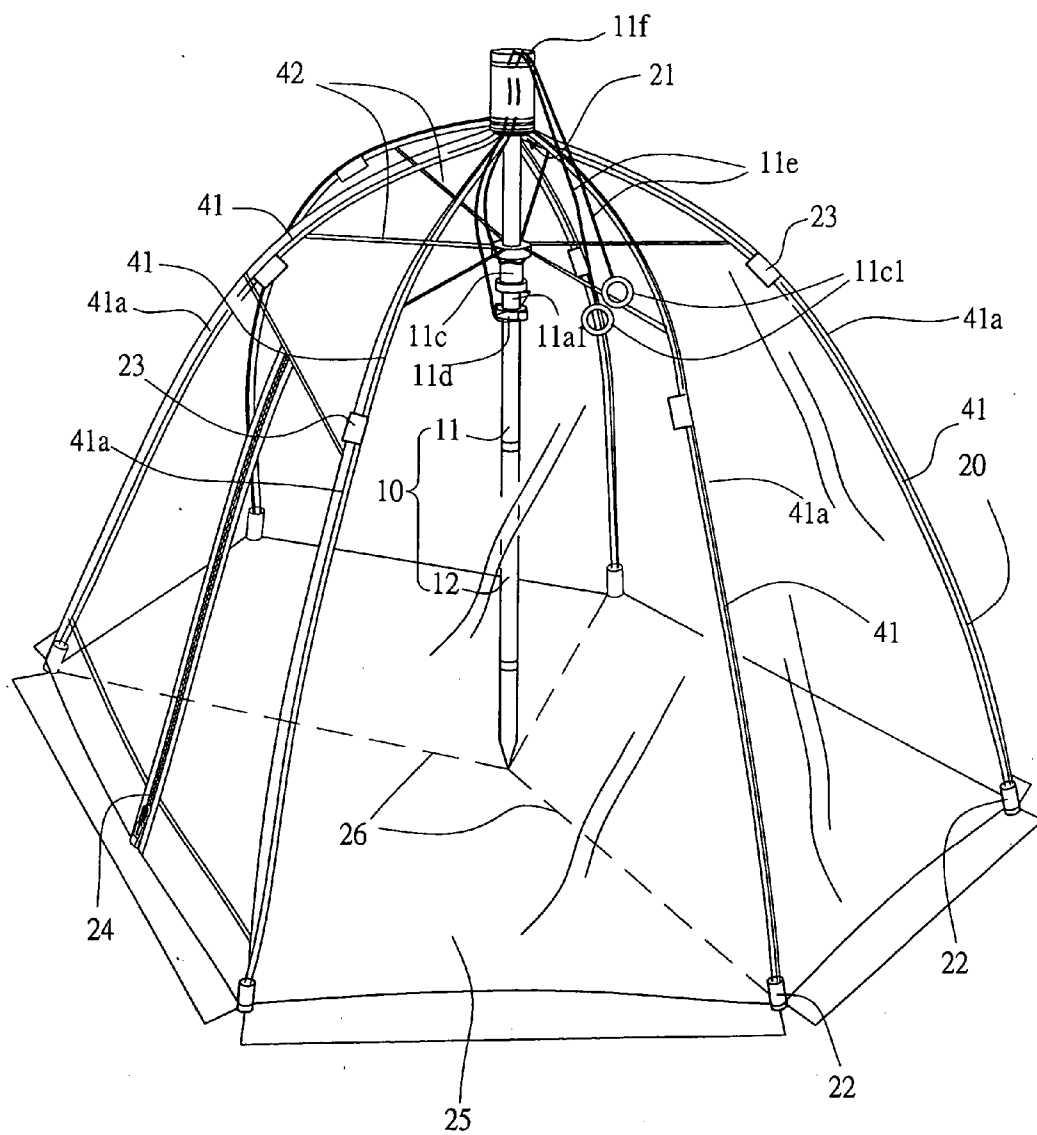


FIG.4A

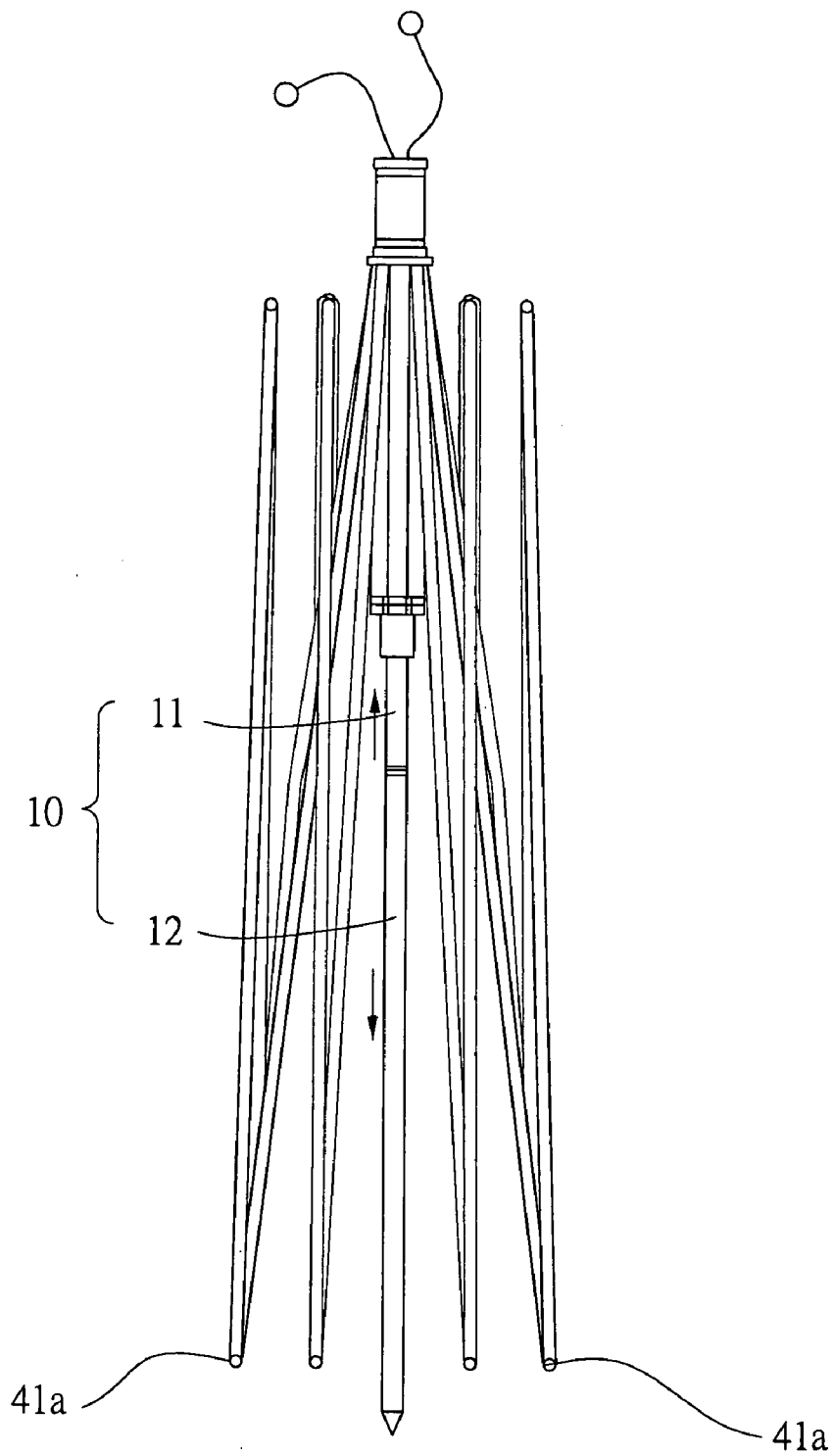


Fig.4B

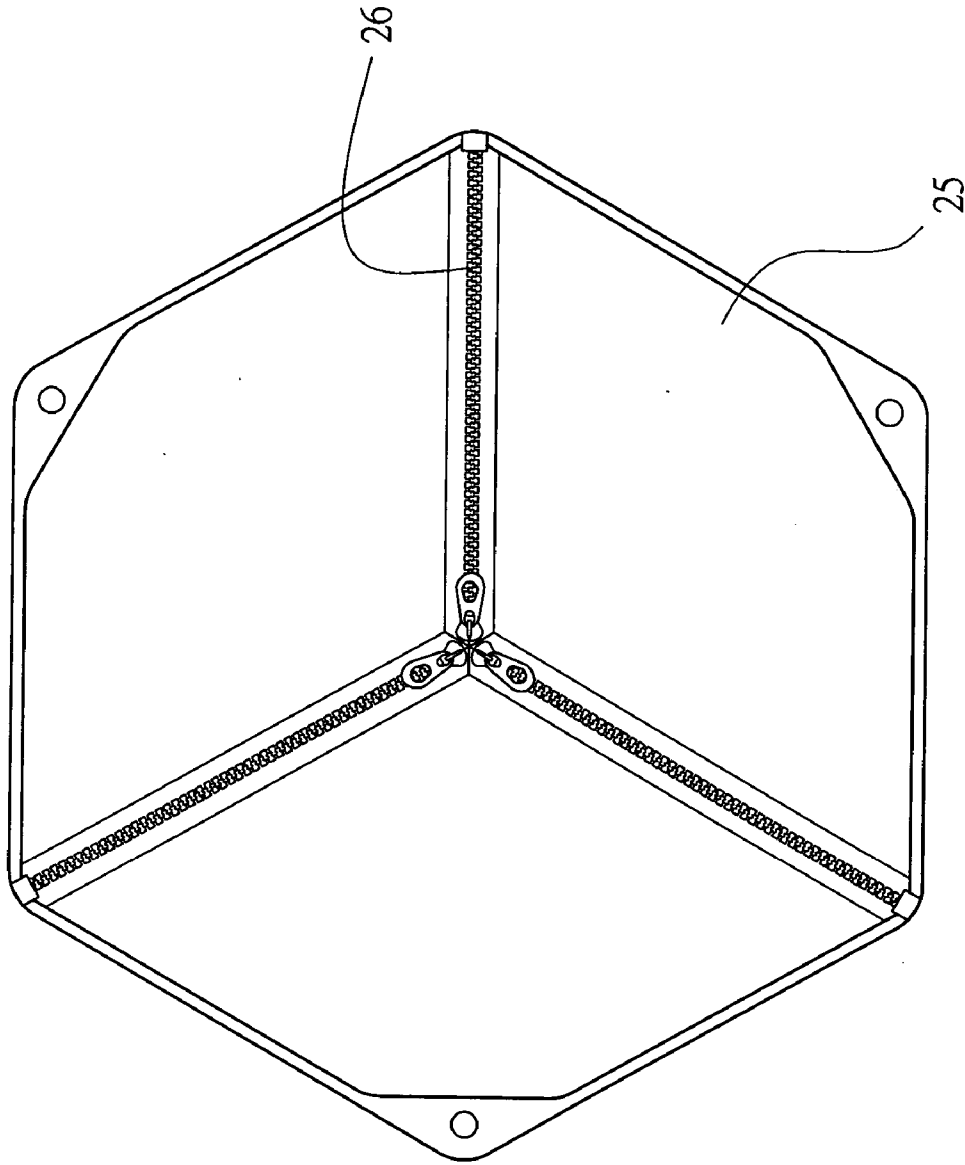


Fig.4C

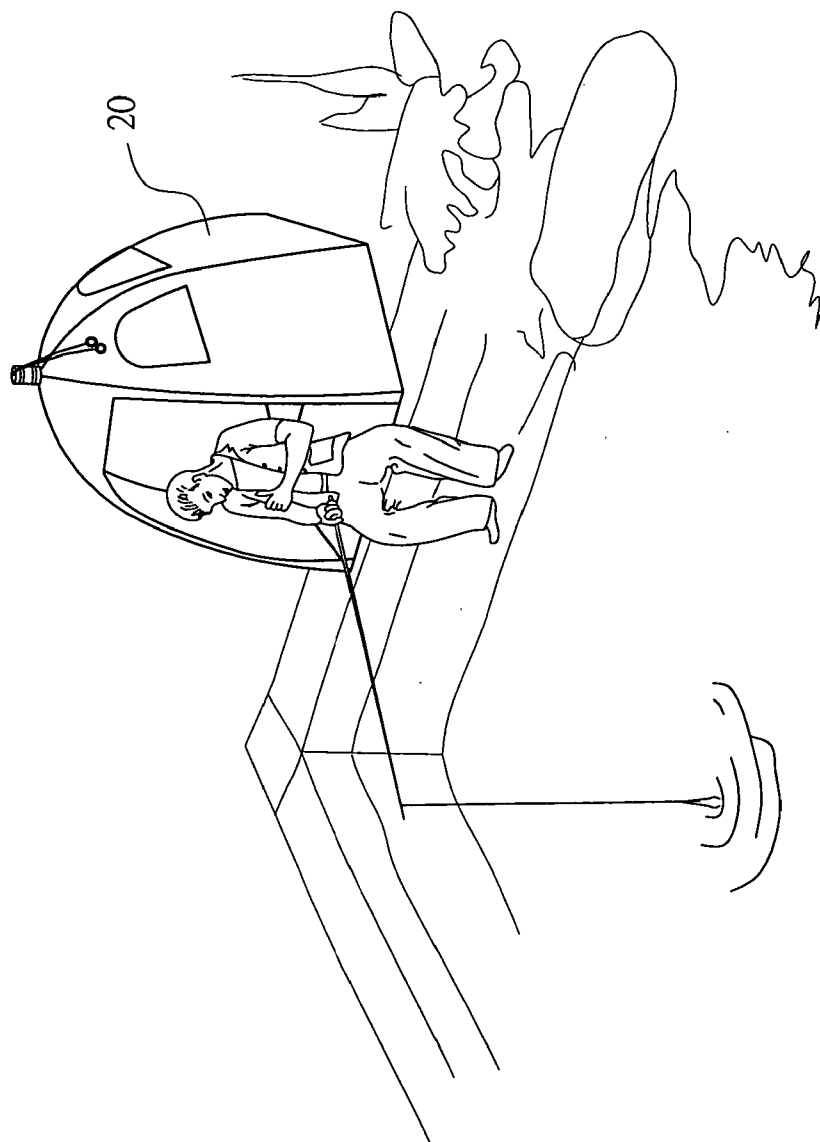


FIG.5

TENT

BACKGROUND OF THE INVENTION

[0001] I. Field of the Invention

[0002] This invention relates generally to a tent and, more specifically, to a tent in umbrella structure with a switch that is easy to open and convenient to store.

[0003] II. Description of the Prior Art

[0004] Heretofore, it is known that tents are for people to rest or sleep in the evening while camping outdoors, or a temporary shelter to avoid insects and snakes.

[0005] The structure of known tents a, referring to **FIG. 1**, is to have several supporting poles b form a space, then apply a cover c externally, four sides of the cover c is stabled on ground with nails or ropes to resist wind and rain.

[0006] However in some special occasions, fishing or mountain climbing for example, the camping location might change as needed, the structure of the known tents is too large and not easy to install and store; some tents have springs as supporting poles for easy recovery, however such supporting poles are with elasticity and not able to resist heavy wind for protection.

SUMMARY OF THE INVENTION

[0007] It is therefore a primary object of the invention to provide a tent that is easy to install and convenient to recovery, store.

[0008] In order to achieve the objective set forth, a tent in accordance with the present invention comprises a shaft, a protective cover, a handle and a plurality number of supporting ribs. The shaft consists of an upper shaft and a lower shaft, an indentation is on the upper shaft, a stopper protruding out on the upper shaft is on the indentation; a fixing ring, a runner and a running ring are on the upper shaft; the fixing ring is on top of the upper shaft, the runner is beneath the fixing ring, the running ring is below the runner. The protective cover with a center hole wraps the upper shaft from top and is fixed onto the fixing ring by a cap; the protective cover has the same amount of tip cover corresponding to each tip of the supporting rib; two ropes connecting to the runner and running ring respectively stretch out from the cap on top of the upper shaft and connect to an opening ring and a closing ring respectively; a zipper door is on one side of the protective cover, a ground mats covering ground stretches from the bottom of the zipper door, the ground mats has a tri-directional zipper.

[0009] Based on the structure described above, the physical size and height of the present invention depend on the moving length of the runner on the shaft for the maximum inner space and easy for storage; therefore the design of the shaft is subdivided into upper and lower portion; a connector is on the proper location of the rib. When users pull the runner up along the shaft and pull the ribs and stretchers open simultaneously, the protective cover is propped up; the runner is fixed by the stopper to maintain the present invention in open state; when users intend to recover the present invention, they can pull the closing ring connecting to the running ring and have the running ring move up along the upper shaft, the running ring pushes the stopper down

into the indentation, the runner moves down by the push from the supporting ribs to have the supporting ribs close inward.

[0010] Based on the structure described above, users can pull the opening ring to prop up the supporting ribs, then remove the lower shaft and close the tri-directional zipper; while recovery, users unzip the tri-directional zipper, connect the upper and lower shaft together, then pull the closing ring to close the supporting ribs.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] The accomplishment of the above-mentioned object of the present invention will become apparent from the following description and its accompanying drawings which disclose illustrative an embodiment of the present invention, and are as follows:

[0012] **FIG. 1** is a perspective view of the prior art;

[0013] **FIG. 2** is a cross-sectional view of the present invention;

[0014] **FIG. 3** is a cross-sectional view of a further embodiment of the present invention;

[0015] **FIG. 4A** is an application view of the present invention;

[0016] **FIG. 4B** is another application view of the present invention;

[0017] **FIG. 4C** is a perspective view of a further embodiment of the present invention;

[0018] **FIG. 5** is a perspective view of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0019] Referring to **FIG. 2** and **FIG. 3**, the present invention is composed of a shaft **10**, a protective cover **20**, a handle **30** and a plurality number of supporting ribs **40**. The functions of each component are described below:

[0020] The shaft **10** consists of an upper shaft **11** and a lower shaft **12**, the total length of the shaft **10** after assembly is slightly longer than the supporting ribs **40**; an indentation **11a** is on the upper shaft **11**, a stopper **11a1** protruding out on the upper shaft **11** is on the indentation **11a**; a fixing ring **11b**, a runner **11c** and a running ring **11d** are on the upper shaft **11**; the fixing ring **11b** is on top of the upper shaft **11**, the runner **11c** is beneath the fixing ring **11b**, the running ring **11d** is below the runner **11c**; two ropes **11e** connecting to the runner **11c** and running ring **11d** respectively stretch out from the cap **11f** on top of the upper shaft **11** and connect to an opening ring **11c1** and a closing ring **11d1** respectively.

[0021] The protective cover **20** is in polygon shape with equal sides and topped with a center hole **21**, the protective cover **20** wraps the upper shaft **11** from top and is fixed onto the fixing ring **11b** by the cap **11f**; the protective cover **20** has the same amount of tip cover **22** corresponding to each tip of the supporting rib **40**, also has a viscous fastening part **23** corresponding to each of the rib **41**; a zipper door **24** is on one side of the protective cover **20**, a ground mats **25** covering ground with the size of the opened supporting ribs

40 stretches from the bottom of the zipper door 24, the ground mats 25 has a tri-directional zipper 26.

[0022] The handle 30 wraps around the cap 11f and is fastened on the top of the upper shaft 11. 10 The supporting ribs 40 consists of a plurality number of ribs 41 and stretchers 42, a connector 41 a is on the proper location of the rib 41 to make the rib 41 fold outward; the two ends of the rib 41 are connected to the fixing ring 11b and the tip cover 22 of the protective cover 20 respectively; the two ends of the stretcher 42 are connected to the corresponding rib 41 and the brim of the runner 11c respectively.

[0023] Referring to FIG. 4A, FIG. 4B and FIG. 4C and based on the structure described above, when users intend to open the present invention, they pull the opening ring 11c1 connecting to the runner 11c to have the runner 11c move up along the upper and lower shaft 11, 12 first, the stretchers 42 are pulled upward along with the runner 11c, the ribs 41 are also stretched open to prop the protective cover 20 open; the runner 11c is fixed by the stopper 11a1 to maintain the present invention in open state; users can split the upper and lower shaft 11, 12 and pull the tri-directional zipper 26 to have the protective cover 20 in enclosed condition; users can come in and out through the zipper doors 24. When users intend to recover the present invention, they can unzip the tri-directional zipper 26 to let the protective cover 20 in loose state, connect the upper and lower shaft 11, 12 together to form a rail for the running ring 11d, users then pull the closing ring 11d1 connecting to the running ring 11d and have the running ring 11d move up along the upper shaft 11; the running ring lid pushes the stopper 11a1 down into the indentation 11a, the runner 11c moves down by the push from the supporting ribs 40 to have the supporting ribs 40 close inward; users can fold the supporting ribs 40 externally from the connector 41a; the viscous fastening part 23 can stick the protective cover 20 and supporting ribs 40 together, moreover for better fastening and easy replacement of the protective cover 20; the ground mats 25 with the tri-direction zipper 26 can wrap the present invention to seal completely for storage.

[0024] FIG. 5 shows an application of the present invention, while fishing, users can install the present invention ashore or on dock and apply the protective cover 20 for the wind and rain resistant function; the present invention is very convenient for users in constantly moving. It can also be applied to a playroom for children or a resting place on the beach.

[0025] While a preferred embodiment of the invention has been shown and described in detail, it will be readily understood and appreciated that numerous omissions, changes and additions may be made without departing from the spirit and scope of the invention.

What is claimed is:

1. A tent comprising:

a shaft consists of a upper shaft and lower shaft, an indentation is on said upper shaft, a stopper protruding out on said upper shaft is on said indentation, a fixing ring, a runner and a running ring are on said upper shaft, said fixing ring is on top of said upper shaft, said runner is beneath said fixing ring, said running ring is below said runner, two ropes connecting to said runner and said running ring respectively stretch out from a cap on top of said upper shaft and connect to an opening ring and a closing ring respectively;

a protective cover with a center hole wraps said upper shaft from top and is fixed onto said fixing ring by said cap, said protective cover has the same amount of tip cover corresponding to each tip of the supporting rib, also has a viscous fastening part corresponding to each of the rib;

a handle wraps around said cap and is fastened on the top of said upper shaft;

said supporting ribs consists of a plurality number of said ribs and said stretchers, the two ends of said rib are connected to said fixing ring and said tip cover of said protective cover respectively, the two ends of said stretcher are connected to corresponding said rib and the brim of said runner respectively.

2. The tent recited in claim 1, wherein the total length of said shaft after assembly of said upper and said lower shafts is slightly longer than said supporting ribs.

3. The tent recited in claim 1, wherein a connector is on the proper location of said rib to make said rib fold outward.

4. The tent recited in claim 3, wherein a zipper door is on one side of said protective cover, a ground mats covering ground with the size of opened said supporting ribs stretches from the bottom of said zipper door, said ground mats has a tri-directional zipper.

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