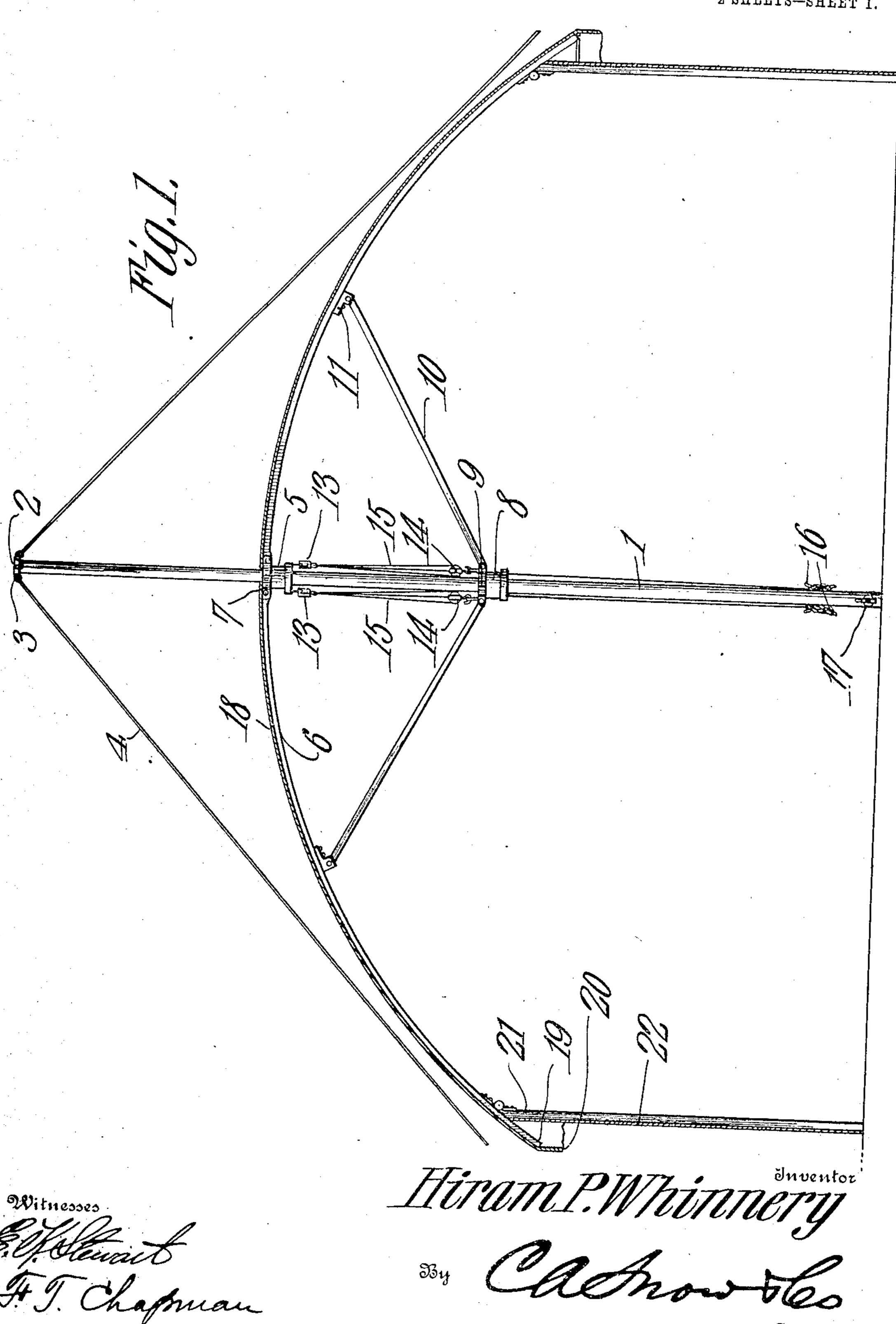
No. 892,698.

PATENTED JULY 7, 1908.

H. P. WHINNERY. TENT.

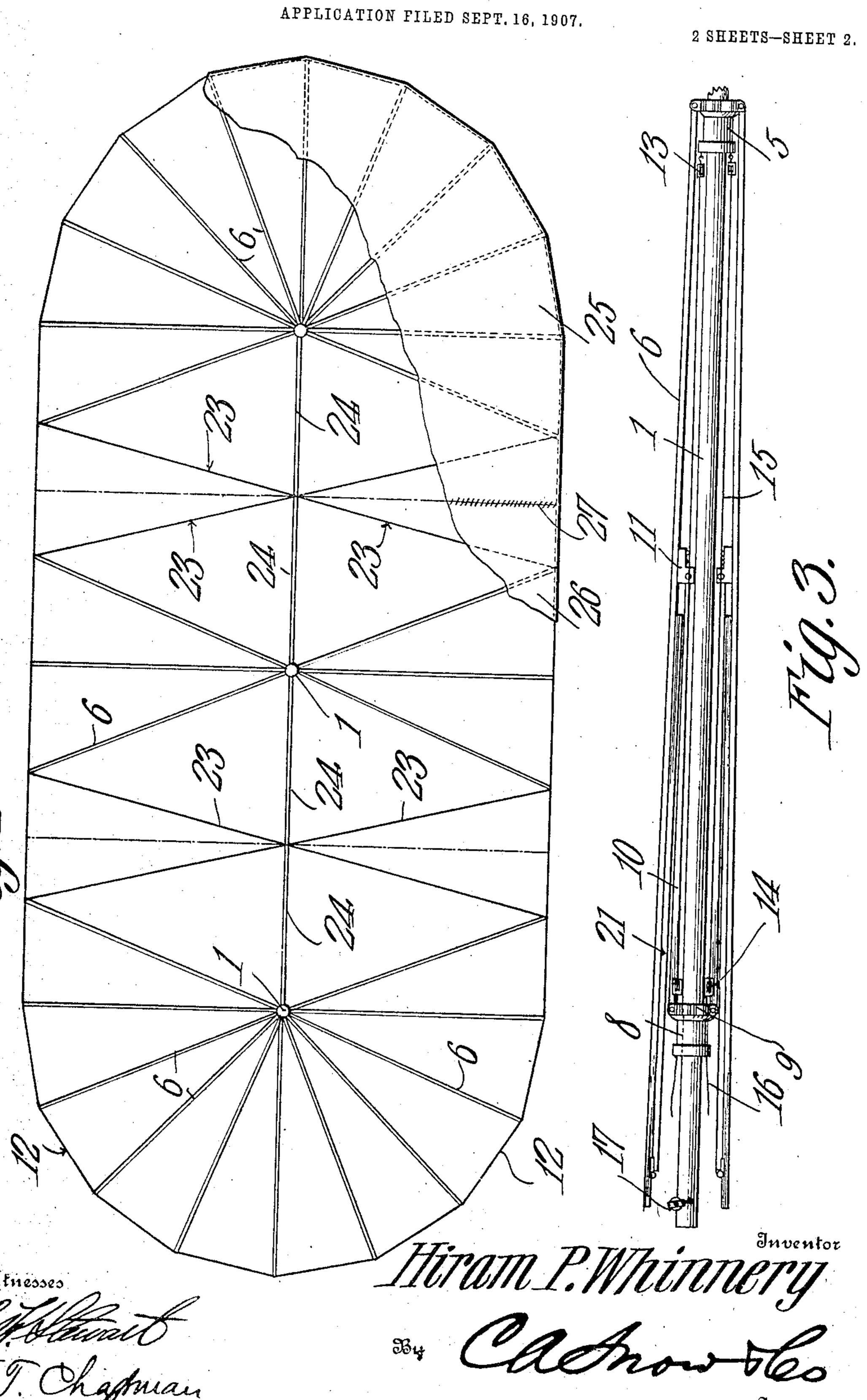
APPLICATION FILED SEPT. 16, 1907.

2 SHEETS-SHEET 1.



H. P. WHINNERY.

TENT.



UNITED STATES PATENT OFFICE.

HIRAM POWERS WHINNERY, OF BLUFFTON, OHIO, ASSIGNOR OF ONE-HALF TO CHARLES G. COBURN, OF BLUFFTON, OHIO.

TENT.

No. 892,698.

Specification of Letters Patent.

Patented July 7, 1908.

Application filed September 16, 1907. Serial No. 393,209.

To all whom it may concern:

Be it known that I, HIRAM POWERS WHIN-NERY, a citizen of the United States, residing at Bluffton, in the county of Allen and State 5 of Ohio, have invented a new and useful Tent, of which the following is a specification.

This invention has reference to improvements in tents, and its object is to provide a tent that may be erected and taken down 10 with great facility, with the several parts so connected as to be readily folded into small

compass for transportation.

The invention consists essentially of one or more elements, each composed of a center 15 pole to which ribs are connected, each rib terminating in a pivoted extension constituting an end support for the ribs. Each rib is also connected by a bracing link to a runner fast on the center pole, so that the whole 20 structure may be folded up like an umbrella. The center pole is continued up above the point of connection of the ribs therewith and at its top carries means to which guy ropes 25 the top of the pole to the ground outside of the area covered by the tent.

For large tents a number of supporting poles may be used, and these are connected together by a suitable rope so that the whole 30 structure becomes as one, after which a canvas or other suitable cover may be applied and the sides of the tent hung from the eaves thereof. In this manner the whole structure is made self-supporting and is easily erected

35 and taken down.

The invention will be fully understood from the following detailed description, taken in connection with the accompanying drawings forming part of this specification, 40 in which,—

Figure 1 is a cross section of a tent constructed in accordance with my invention; Fig. 2 is a plan view of a large tent; and Fig. 3 is a view of one of the elements folded up.

Referring to the drawings, there is shown a center pole 1 having at its upper end a cap 2 provided with eyes 3 to which are attached guy ropes or wires 4 which when the tent is erected are brought to suitable tent stakes 50 driven in the ground at a distance sufficiently remote from the pole to permit the guy ropes to be secured thereto without coming in contact with the tent structure. In the drawing these stakes are omitted since they may 55 be of ordinary type and need no illustration. I intermediate units differs somewhat. For 110

At a suitable point below the top of the pole there is secured a sleeve 5, suitably held against movement on the pole, and to this sleeve are pivoted a suitable number of ribs 6, the pivotal connection being made to a 60 flange 7 formed on one end of the sleeve 5. Sliding upon the pole 1 is another similar sleeve 8 having at one end a flange 9 to which are connected the similar ends of a number of links 10 extending to brackets 11 fast on 65 the ribs 6 at a point between their pivotal connections with the sleeve 5 and their free ends. The ribs 6 are made flexible and, for the sake of lightness may be made of thin strips of wood, so that when the sleeve 8 is 70 elevated and the outer ends of the ribs 6 are constrained from outward movement away from the pole 1 by limiting ropes 12, shown in Fig. 2, the ribs 6 will assume a curved shape similar to that illustrated in Fig. 1. 75 In order that the sleeve 8 may be moved toward the sleeve 5, the said sleeve 5 carries on opposite sides pulleys 13 and the sleeve S may be attached, which guy ropes lead from | has on its upper end other pulleys 14, while ropes 15 interlace through these pulleys and 80 are brought along the pole 1 to a convenient point where, when the sleeve 8 is elevated, they may be secured to cleats 16. In large tents there is provided near the bottom of the pole another pulley 17 through which the 85 ropes 15 may be passed and a horse may be attached to these ropes in order that the tent may be properly elevated. The top of the tent is made of a canvas or other covering 18 suitably shaped for the purpose, and this 90 canvas covering may be long enough to hang over the eaves 19 of the tent and form a drip fringe 20, usually scalloped or otherwise made with an ornamental edge. To each rib near the eave end thereof there is hinged a 95 side bar 21, long enough to reach from the rib to the ground, and arranged around the side bars on the outside thereof are the side walls 22 of the tent. The unit thus far described, that is, the pole, ribs, links and side 100 bars, may be all folded together compactly, as illustrated in Fig. 3 which, as well as Fig. 1, shows only two ribs 6, but it will be understood that as many ribs as are necessary will be used.

In Fig. 2 there is shown a tent of large dimensions which may be very much longer than wide. In this case a number of poles 1 are used and the arrangement of the end and

instance, the end units consist of a pole 1 and a number of radial ribs 6 embracing an area of somewhat more than 180 degrees. The intermediate units, of which only one is shown 5 in Fig. 2, consist of a center pole 1 and but a few radial ribs 6, there being shown but three on one side of the center line of the tent. In this case those ribs which are adjacent to the corresponding ribs of the next adjacent 10 pole are somewhat longer than the other ribs so as to reach the plane of the side walls of the tent.

The rope 12 is carried around the ends of ribs 6 of the end poles and from the ends of 15 the innermost ribs of the end units these ropes are carried diagonally across the tent structure, as shown at 23, to the ends of those ribs 6 which are carried by the intermediate pole 1 next adjacent to the end poles 1. Ex-20 tending along the center of the tent and projecting from each pole 1 is a shorter rib 24, which short ribs 24 meet at the intersection 23 of the ropes and may there be engaged by said ropes, so that the whole structure is ef-25 fectively tied together by the ropes 12 and 23, and because of the cross connecting ropes 23 the tent frame is made particularly strong and rigid. With a structure of this kind the covering is made up of end sections 25 and 30 intermediate sections 26, and their meeting edges, which extend across the tent at the point of intersection of the ropes 23, are laced together as indicated at 27.

35 24 are not curved as shown in Fig. 1 but extend straight between the sleeves 5 of the several poles 1 and therefore constitute the ridge poles of the tent. Of course with the large tents there are provided side bars 21 40 and side walls 22, but it is not deemed necessary that these be particularly shown in the drawing. With this structure the canvas covering may be quickly removed and then the parts may be folded together into 45 the compact form shown in Fig. 3 and bundled for transportation very expeditiously, and there are no loose or separate parts to be

lost or mislaid.

I claim:— 1. A tent unit comprising a center pole, guy-ropes attached to one end thereof, a fixed sleeve between the guy-rope end and the other end of the pole, flexible ribs pivotally connected at one end to the fixed 55 sleeve, means connecting the outer ends of the ribs to cause the flexing of the said ribs when extended, another sleeve movable longitudinally upon the pole, pivoted links connected at one end to the sliding sleeve and at 60 the other end to the ribs at points about midway between the fixed sleeve and the eave-

ends of the ribs, and side bars, one for each rib, hinged to the ribs close to the eave-ends thereof and of sufficient length to reach the ground when the ribs are extended and 65 flexed, said side bars serving to support the free ends of the ribs.

2. A tent unit comprising a center pole, guy ropes attached to one end thereof, a fixed sleeve between the guy-rope end and 70 the other end of the pole, flexible ribs pivotally connected to the sleeve, another sleeve movable longitudinally upon the pole, piv-oted links connected at one end to the sliding sleeve and at the other end to the ribs at 75 points intermediate of the fixed sleeve and the eave-end of the ribs, side bars one for each rib, hinged to the ribs near the eaveends thereof and of sufficient length to reach the ground when the ribs are extended and 80 flexed, pulleys connected to the fixed and movable sleeves, and ropes extending through the several pulleys.

3. A tent comprising a center pole, flexible ribs pivotally connected each at one end to 85 the center pole, a sliding sleeve on the center pole, link connections between the sliding sleeve and the ribs at points intermediate of the length of the latter, and rope connections between the eave-ends of the ribs and serving 90 to flex the ribs when the latter are extended.

4. A tent structure comprising end units, each composed of a center pole and radial ribs, intermediate units comprising a center In the tent shown in Fig. 2 the short ribs | pole and radial ribs, other ribs carried by the 95 poles and all in alinement to constitute the ridge of the tent, and ropes connecting the ends of the several ribs and extending diagonally across the body of the tent from the ends of adjacent ribs of adjacent units.

5. A tent comprising end units, each composed of a center pole having an incomplete circular series of radial ribs extending through an arc exceeding one hundred and eighty degrees, other intermediate units comprising a 105 center pole and radial ribs extending to the side line of the tent, other ribs on each end and intermediate center pole, all arranged in alinement and constituting the ridge of the tent, and rope connections circumferentially 110 arranged about the eave-ends of the ribs of the end units and crossing between the same and the eave-ends of the ribs of the intermediate units.

In testimony that I claim the foregoing as 115 my own, I have hereto affixed my signature in the presence of two witnesses.

HIRAM POWERS WHINNERY.

Witnesses:

FOREST E. MUMMA, H: J. CALL.