

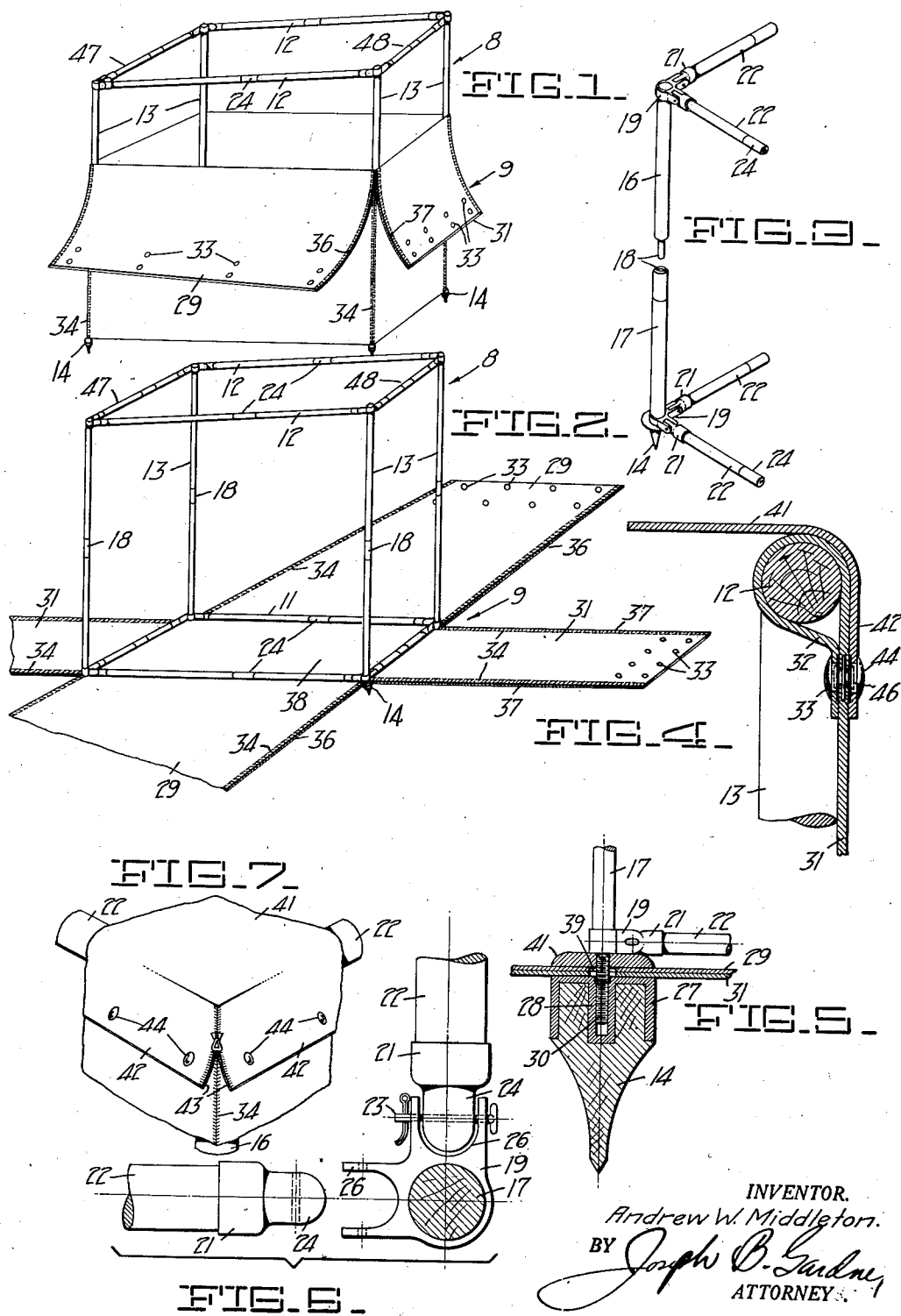
Aug. 8, 1939.

A. W. MIDDLETON

2,168,913

TENT

Filed April 19, 1937



INVENTOR.
Andrew W. Middleton.
BY *Joseph B. Gardner*
ATTORNEY.

UNITED STATES PATENT OFFICE

2,168,913

TENT

Andrew W. Middleton, Oakland, Calif.

Application April 19, 1937, Serial No. 137,652

4 Claims. (Cl. 135—1)

The invention relates to tents and more particularly to relatively small sized portable tents such as used for camping and the like.

5 An object of the invention is to provide a tent of the character described which may be readily dismembered and folded or rolled into a compact portable unit and which may be simply and quickly set up and will provide a relatively rugged and sturdy enclosure.

10 Another object of the invention is to provide a tent of the character above which will have an improved construction of the several supporting members.

15 The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of the preferred form of the invention which is illustrated in the drawing accompanying and forming part of the specification. It is to be understood, however, that variations in the showing made by the said drawing and description may be adopted within the scope of the invention as set forth in the claims.

Referring to said drawing:

25 Figure 1 is a perspective view of a tent constructed in accordance with the present invention and is shown with a part of the covering removed to better illustrate the construction and arrangement of certain of its parts.

30 Figure 2 is a perspective view similar to Figure 1 and showing a complete view of the skeleton supporting frame.

Figure 3 is a perspective view of one of the supporting members of the frame.

35 Figure 4 is a fragmentary cross-sectional view of an upper corner of the tent.

Figure 5 is a fragmentary vertical sectional view of the ground engaging portion of one of the supporting members.

40 Figure 6 is a plan sectional view showing one of the joints of the supporting frame.

Figure 7 is a fragmentary perspective view of one of the upper corners of the tent and showing the attachment of the top or roof of the tent.

45 The tent illustrated in the accompanying drawing and embodying the present invention consists of a frame or supporting structure 8 and a covering 9 of fabric material which is so secured to and supported on the structure 8 as to define a substantially complete enclosure therewith. More specifically, the structure 8 consists of a horizontal bottom frame 11 and a top frame 12 and which are rigidly supported in vertically spaced relation by means of a plurality of vertically extending members 13 which define the ver-

tical corners of the tent and which are preferably secured at their lower ends and below the frame 11 with ground engaging members 14 so as to securely anchor the frame-work in place on the ground.

5 The vertical extending members 13 are each composed of upper and lower detachable sections 16 and 17 and which are secured together adjacent a mid-portion of the members by means of a slip joint 18. Each of the sections 16 and 17 10 is provided at its free end, that is, at its upper or lower end, depending upon the section, with a bracket 19 and to which are secured the ends 21 of sections 22 which, by attachment to each other form the lower and upper frames 11 and 15 12 of the support. In order to enable a simple and compact disassembly of the frame, the sections 22 are preferably pivotably secured to the sections 16 and 17 at the brackets 19 as by means of pins 23 which extend through into fitting portions 24 and 26 on the ends 21 and the brackets. 20 As will be noted from the drawing the pivotable connection is effected along a horizontal axis so as to not interfere with the rigidity of the frame structure. The sections 22 may be provided with 25 engageable slip joints 24 similar in form to the joint 18 so as to enable a ready association of the several connected parts.

The ground engaging members 14 are preferably formed with a convergent lower end so as to 30 facilitate penetration into the earth and are here shown provided with a metallic reinforcing cap 27 which is formed with a longitudinally threaded socket 28 arranged for the receipt of a stud 30 carried by each of the lower sections 17. 35

The outer covering 9 of the tent consists of a plurality of strips or sheets 29 and 31 which are of an elongated, rectangular shape and which are arranged in crossed superimposed relations at the under side of the bottom frame 11 adjacent 40 the mid-portion of the sheets and the free extremities of the sheets are extended upwardly from the bottom frame 11 to cover the space between the adjacent vertical supporting members 13 and may be looped around the top frame 45 12 at the upper ends 32 of the sheets and there fastened by means of a fastening member 33. Fastener means 34 is also preferably provided between the adjacent edges 36 and 37 of the sheets 29 and 31 for tautly drawing the covering 50 around the vertical corner posts 13. In the present showing the fastener means 34 consists of a standard type slide fastener commonly referred to as a zipper fastener and consists of a plurality of fastener elements on the adjacent edges 36 55

and 37 and which are engaged and disengaged by movement of a slide member engaging the fastener elements.

As an important feature of the present construction the sheets 29 and 31 are removably fastened to the bottom frame 11 so as to form the floor portion 38 of the tent, defined by the double layer of the sheets 29 and 31, and to maintain such floor portion smooth and unruffled regardless of the connection of the covering to the remainder of the supporting structure. As will be seen from Figure 5, the sheets 29 and 31 are provided with a plurality of openings 39 at the corner members 13 and in the assembly of the tent the several openings 39 in the sheets 29 and 31 are aligned vertically and slipped over the studs 29 on the members 13 and the sheets are clamped between the ground engaging members 14 and washers 41 carried at the top side of the sheets and below the bottom brackets 19.

The tent is also preferably provided with a top portion 41 which may, as here shown, be formed of a single sheet of fabric material with a set of peripheral extensions 42 which are adapted for folding down against the vertical sides of the tent when the top portion is positioned in place. Also, as here shown, the adjacent edges 42 of the peripheral extensions 42 are provided with a suitable fastener means such as a zipper slide fastener and in addition the portions 42 are provided with a plurality of transversely spaced fastening elements 44 which are adapted to engage with complementary formed fastener elements 46 on the side portions of the tent defined by the sheets 29 and 31.

It will now be clear that assembly and disassembly of the present tent may be simply and quickly effected and that in the former state the same provides a roomy and substantial enclosure and when disassembled may be rolled or folded into an extremely compact and portable form. In assembling the tent the sheets 29 and 31 are laid crosswise over each other, as illustrated in Figure 2, so as to locate the position of the corner members 13. The ground engaging members 14 are then driven into the ground directly below the openings 39 in the sheets 29 and 31 and the lower corner units consisting of the lower sections 17 and the associated bottom frame sections 22 are assembled in place. The upper portion of the frame may then be assembled by fixing in position each of the upper corner units consisting of the upper sections 16 of the vertical members 13 and the associated upper frame sections 22. Due to the pivotable connection of the frame sections 22 to the sections 16 and 17 of the vertical members and also by reason of the simplicity of the slip joints 18 and 24, the frame is very readily assembled and provides a relatively rigid supporting structure. After erection of the supporting frames, the portions of the sheets 29 and 31 extending from the bottom 38, are drawn upwardly to the top frame of the supporting structure and there fastened, as hereinabove explained. One or more of the fastener means 34 may then be closed and the top 41 drawn into place and fastened.

While for simplicity of illustration, I have herein disclosed a tent having four vertical sides, it will be clear that a greater number of sides may be provided if desired without departing from the present invention. Preferably, where

a greater sided polygon is used it is desirable that the polygon have an even number of sides so that a plurality of separate sheets may be used as here shown for covering the opposite sides of the polygon. As will be understood, each of the sheets used provides an additional layer at the bottom 38 of the tent. It will further be noted that the use of the vertical members 13 produces a substantially increased amount of head room in the tent as compared to other types of tent heretofore used having inclined side walls.

Preferably, one end or side of the top frame 12 is slightly lower than the opposite end or side of the frame so as to provide a watershed for the tent. In the present embodiment one end 47 of the tent top is lower than the opposite end 48 for this purpose.

I claim:

1. A tent covering for a cubical frame comprising, a fabric enclosure therefor, the opposed sides of said enclosure being formed of elongated strips of material underlying said frame to define a double bottom for the tent and extending up the opposed sides of said frame, and fastener means for the adjacent side edges of said sides, said strips being perforated at said bottom for extension therethrough of a ground fastening element of frame.

2. A tent covering for a frame having rectangularly set, vertically extending, ground engaging corner members, a pair of generally rectangular pieces of fabric material positioned in crossed horizontal superimposed relation at the bottom of the said frame and extended upwardly therefrom to cover the opposed sides of said frame, and detachable securing means for fastening the adjacent edges of said pieces at said corner members, said pieces having aligned openings under said corner members for extension of the latter therethrough and into the ground.

3. A tent covering for a frame having a plurality of vertically extending, ground engaging members spaced from each other to define an enclosure, a plurality of elongated sheets of fabric material positioned in crossed horizontal superimposed relation at the bottom of said frame and being provided with registered openings for engagement with said members and extending upwardly from the sides of said bottom to cover the opposed sides of said frame, and detachable securing means for fastening the adjacent edges of said pieces at said members.

4. A tent comprising, a plurality of transversely spaced vertically extending, ground engaging members defining a supporting frame, a horizontal frame connecting the lower extremities of said members, a plurality of sheets of fabric material arranged in over-lapped position at their mid-portions and provided with vertically aligned openings for engagement with said members, said members being extendible through said openings, means carried by said members at the underside of said sheets for clamping said sheets to said members, the extremities of said sheets being extended upwardly from the sides of said horizontal frame to cover the sides defined by said supporting frame and to provide a substantially complete enclosure.

ANDREW W. MIDDLETON.