Nov. 22, 1949 B. L. DENN 2,488,809

TENT FRAME

Filed May 28, 1947 2 Sheets-Sheet 1

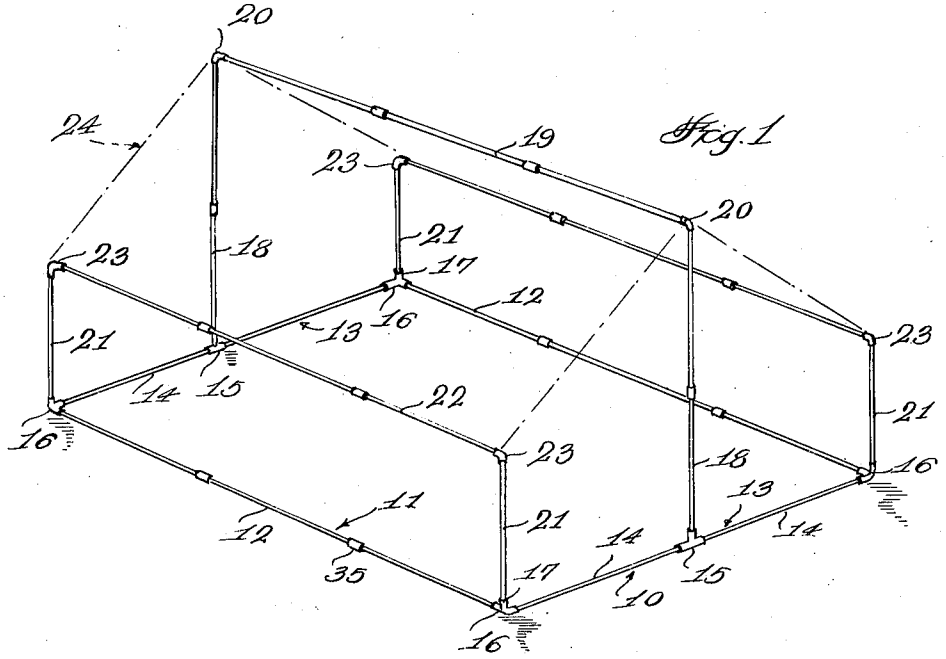


Fig. 1.

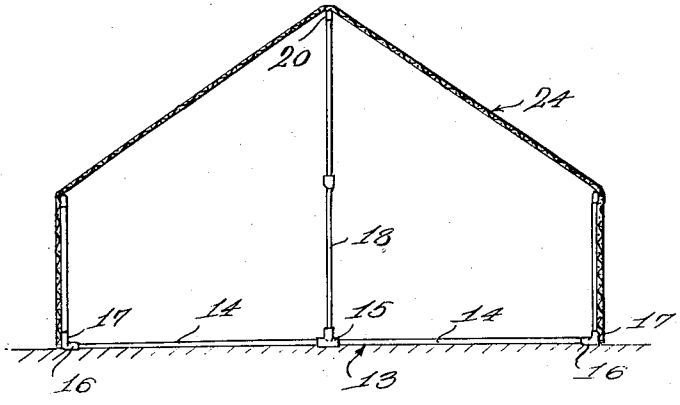


Fig. 2.

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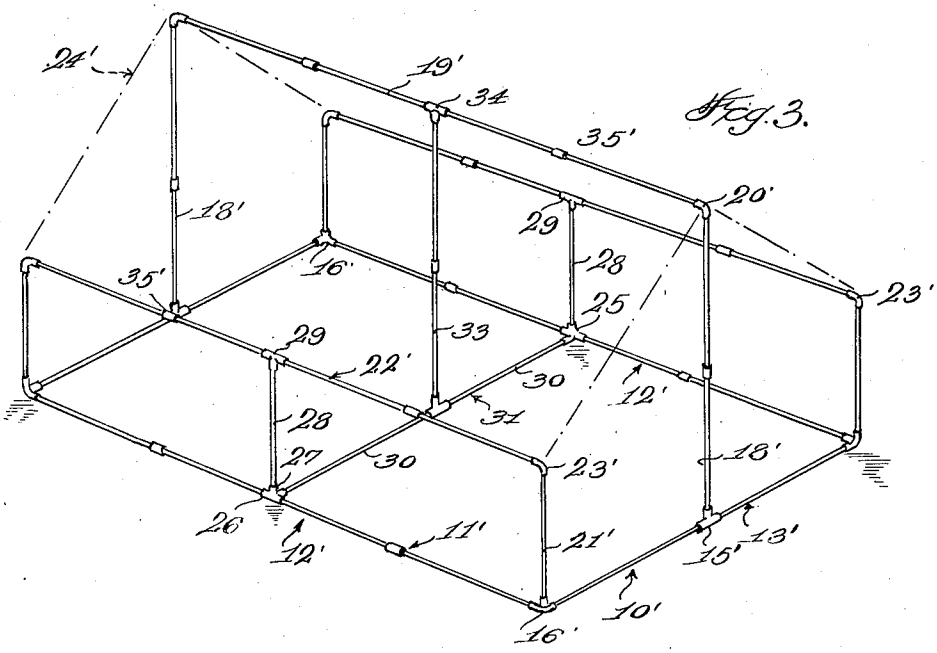


Fig. 3.

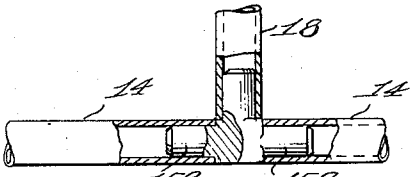


Fig. 4

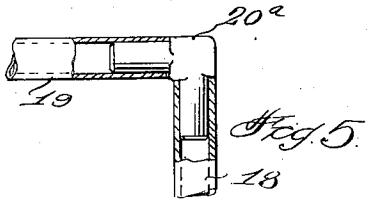


Fig. 5.

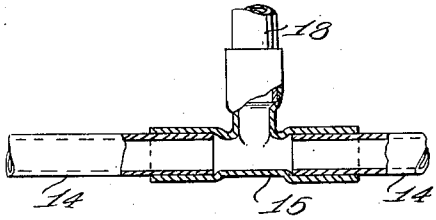


Fig. 6.

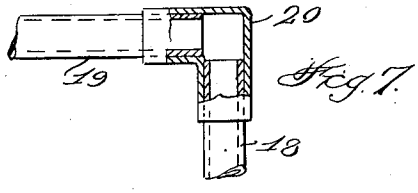


Fig. 7.

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TENT FRAME

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2 Claims. (Cl. 135—3)

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This invention relates to an improved construction of demountable tent frame capable of being readily assembled or disassembled and which, when in disassembled form, can be conveniently packed in a small bundle for storage or transportation.

More particularly, it is an object of the invention to provide a tent frame capable of being unpacked, assembled and set up and a tent applied thereto as quickly as a tent can be pitched in a conventional manner and by the labor of fewer persons.

Still another object of the invention is to provide a tent frame which will afford a much more durable support than the conventional means of pitching a tent, and which will enable the tent to be set up in a smaller space than would ordinarily be required for pitching the tent and utilizing tent stakes and guy ropes.

Still a further object of the invention is to provide a tent frame which is capable of being formed from relatively light weight tubes and readily detachable joints.

Numerous other objects and advantages of the invention will hereinafter become more fully apparent from the following description of the drawings, illustrating preferred embodiments thereof, and wherein:

Figure 1 is a perspective view of one form of the tent frame;

Figure 2 is an end elevational view thereof;

Figure 3 is a perspective view of another embodiment of the tent frame, and

Figures 4, 5, 6 and 7 are plan views, partly in section, illustrating various types of joints of the frame.

Referring more specifically to the drawings, and first with reference to the embodiment of the invention as illustrated in Figures 1 and 2, 10 designates generally the tent frame in its entirety, and which includes an elongated rectangular base, designated generally 11, formed of side portions 12, and end portions, designated generally 13. The side and end portions 12 and 13 are formed preferably of relatively light weight tubes, and each of the end portions 13 includes two sections 14 disposed in spaced end to end relationship and connected at their adjacent ends by couplings 15. The side portions 12 are each formed from a single tube and are connected at their ends by joints 16 to the adjacent end of the end member 13. The joints 15 constitute T-joints and have the transverse portions thereof extending upwardly, for a purpose which will hereinafter become apparent.

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The joints 16 are modified L-joints which include in addition to the two right-angularly disposed legs which are located in the same plane, an upstanding leg 17 which rises from the elbow or bight portion of the L.

The tent frame 10 also includes two king posts 18, the lower ends of which are connected to the upstanding portions of the T-joints 15 and which accordingly rise from the end portions 13, intermediate of the ends thereof, and the upper ends of which are connected to the ends of a ridge pole 19 by L-joints 20. The king posts 18 and ridge pole 19 are each formed preferably of a single elongated tube.

The frame 10 also includes upright corner posts 21, each formed of a single length of tubing, each of which is detachably connected at its lower end to the upstanding member 17 of one of the couplings 16, and the corner posts 21 which are located at each side of the tent frame 10 combine to support a tubular eave pole 22, which is disposed above and substantially parallel to the contiguous side member 12 and which is connected to the upper ends of the corner posts 21 thereof by additional L-joints 23, and as clearly illustrated in Figures 1 and 2, the eave poles 22 are disposed substantially below the level of the ridge pole 19 and the corner posts 21 are substantially shorter than the king posts. The eave poles 22 are likewise preferably formed each of a single length of tubing.

From the foregoing it will be readily apparent that a wall-type tent 24 of a conventional construction having vertical side and end walls and a gable type roof may be readily stretched over and supported on the frame 10. It is to be understood that the couplings 15, 16, 20 and 23 are detachable from the tubular frame members to which they are shown applied in Figures 1 and 2 to enable the tent frame 10 to be readily assembled or disassembled.

Figure 3 illustrates a slightly modified form of tent frame, designated generally 10' and which is adapted for use with larger, especially longer wall-type tents, and which includes an elongated rectangular base 11' having end portions 13' corresponding to the end portions 13 and side portions 12' which differ slightly from the side portions 12 in that each of the side portions 12' is formed of sections similar to the sections of the ends portions 13' and which are connected at their adjacent ends by couplings 25. Each coupling 25 includes a substantially straight portion 26 for connecting the adjacent ends of the sections of the side portion 12' and also in-

cludes an L-portion 27 having an upstanding leg connected to the lower end of an upstanding tubular brace 28. The eave poles 22' are likewise formed of tubular sections connected in end to end relationship by T-joints 29, and the upper ends of the uprights 28 are connected to the depending, angular legs of the T-joints 29 The other leg of each L-portion 27 extends inwardly of the frame 10' and is connected to the outer end of a length of tubing 30, forming an end section of an intermediate base portion, designated generally 31. The adjacent ends of the base section 30 are connected by the T-joint 32 having an angular upstanding leg which is connected to the lower end of an intermediate king post 33.

The ridge pole 19' of the frame 10' is likewise formed of tubular end sections connected at their adjacent ends by a T-joint 34 having a depending angular leg which connects to the upper end of the intermediate king post 33. The king posts 18' and corner posts 21' correspond to the king post 18 and corner posts 21 and the remainder of the frame is connected by joints 16', 15', 20' and 23', corresponding to the joints 16, 15, 20 and 23, respectively, and which are correspondingly located.

As previously described with reference to the frame 10, the couplings of the frame 10' are disengageable from the tubular members to which they are connected to facilitate assembling and disassembling of the frame, and said frame 10' when assembled, as illustrated in Figure 3, is adapted to support an elongated wall-type tent 24' which is stretched thereover.

The various joints, previously described, of the frame 10 and 10', may as illustrated in Figures 4 to 7, assume various forms including the joints 15*a* and 20*a*, as seen in Figures 4 and 5, respectively, which are adapted to telescope into the tubular members; or may be of the socket type, as illustrated at 15 and 20 in Figures 6 and 7, respectively, and which are adapted to telescope onto the tubular members.

Likewise, if desired, the various couplings may be constructed for either slip or threaded connection, and may also be provided with suitable latch means, if desired, for detachably retaining the couplings assembled to the tubular members.

In both the tent frames 10 and 10', all of the long frame sections such as the sections 12 and 12', 22 and 22', 19 and 19' and 18 and 18' are each formed of a plurality of sections connected by slip joints 35 or 35' including an enlarged socket on one end of one section for slip type fit engagement with the regular end of an adjacent section, so that no length of any of the sections will be of a greater length than approximately 42''. Likewise, other of the sections of the frame, if of a greater length than 42'', could likewise be formed of similar sections connected by joints 35 or 35'.

Various other modifications and changes are also contemplated and may obviously be resorted to, without departing from the spirit or scope of the invention, as hereinafter defined by the appended claims.

I claim as my invention:

1. A tent frame comprising a base frame formed of detachably connected sections, king posts rising from the ends of the base frame and detachably connected thereto, a ridge pole extending between and detachably supported by the upper ends of the king posts, a corner post detachably connected to and rising from each of the corners of the base frame, eave poles extending between and supported by the upper ends of the corner posts and disposed substantially parallel to the ridge pole and below the level thereof, said frame base having an intermediate transverse portion detachably connected at its ends to the intermediate portions of the sides of the frame base, and an intermediate king post detachably connected to and rising from said transverse portion, intermediate of the ends thereof, said intermediate king post being detachably connected at its upper end to the ridge pole intermediate of the ends of the latter.

2. A tent frame comprising a base frame formed of detachably connected sections, king posts rising from the ends of the base frame and detachably connected thereto, a ridge pole extending between and detachably supported by the upper ends of the king posts, a corner post detachably connected to and rising from each of the corners of the base frame, eave poles extending between and supported by the upper ends of the corner posts and disposed substantially parallel to the ridge pole and below the level thereof, said frame base having an intermediate transverse portion detachably connected at its ends to the intermediate portions of the sides of the frame base, and an intermediate king post detachably connected to and rising from said transverse portion, intermediate of the ends thereof, said intermediate king post being detachably connected at its upper end to the ridge pole intermediate of the ends of the latter, said frame sides and intermediate transverse portion and said ridge pole being formed of sections, and couplings for detachably connecting said sections in end to end relationship.

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