

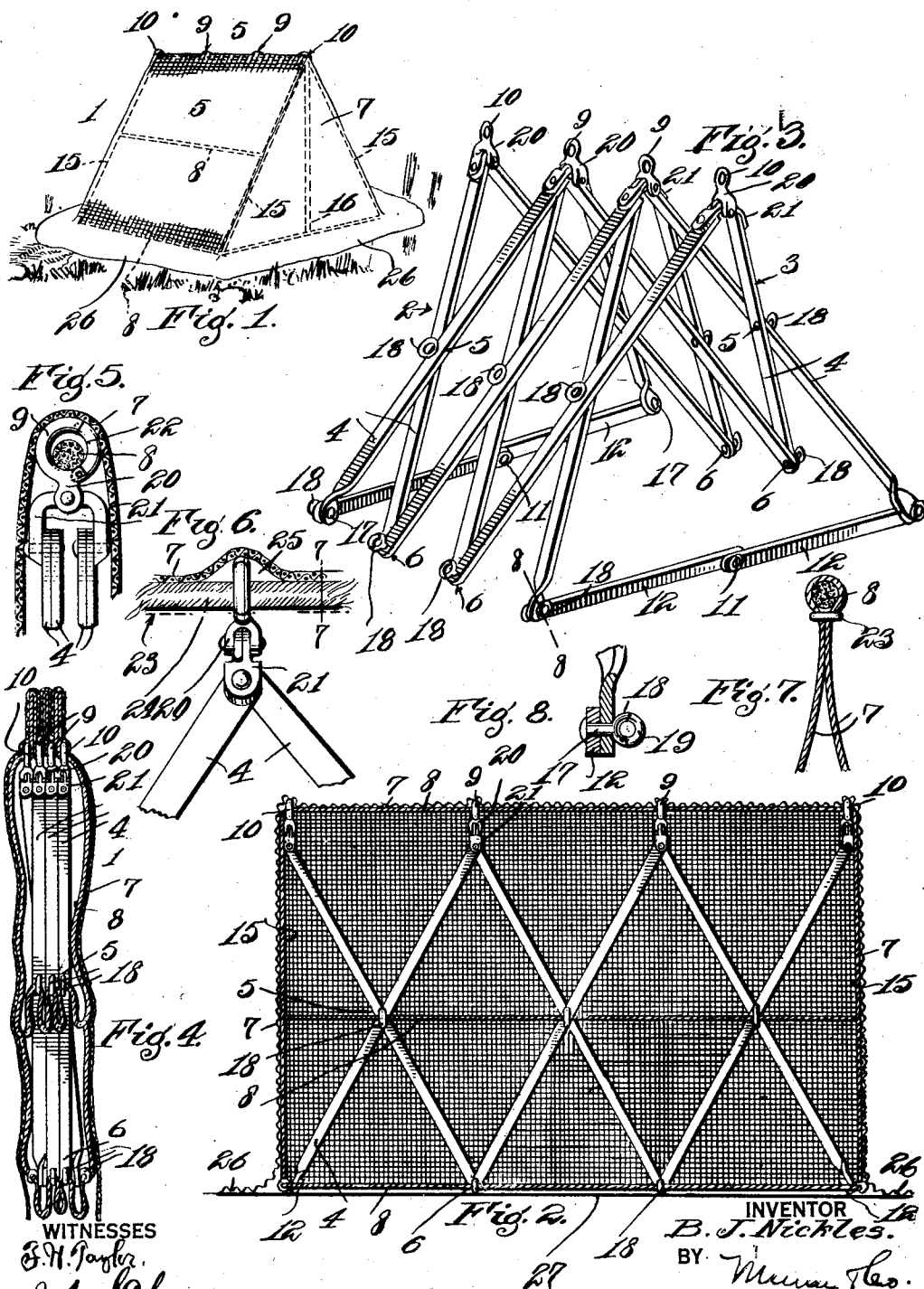
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TENT

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TENT

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This invention relates to improvements in tents, covers, shelters and the like, and it consists of the constructions, combinations and arrangements herein described and claimed.

5 An object of the invention is to provide a tent which comprises a collapsible framework having a suitable covering material attached thereto, the idea being to enable the opening and closing of the tent much on the order
10 of an ordinary umbrella so that the tent can be set up instantly and taken down as quickly.

Another object of the invention is to provide a tent of a construction which admirably lends itself to portability, to which end
15 its use will appeal to campers, tourists, hospitals but especially to persons in the home.

Other objects and advantages will appear in the following specification, reference being
20 had to the accompanying drawing, in which Figure 1 is a perspective view of the tent as set up,

Figure 2 is a central longitudinal section of the tent, the framework being shown in side elevation,

25 Figure 3 is a perspective view of the framework alone,

Figure 4 is a detail view showing the tent folded up,

30 Figure 5 is a detail cross section showing the ridge construction, the parts being shown as though the tent were closed.

Figure 6 is a detail view of a part of the ridge structure,

35 Figure 7 is a detail cross section taken on the line 7—7 of Figure 6,

Figure 8 is a detail cross section taken on the line 8—8 of Figure 3.

One of the outstanding purposes of the tent is a shelter against flies, mosquitoes and other
40 flying pests as well as crawling insects and vermin of all sorts. It is idle to attempt a suggestion of all of the various places where the tent may be employed, but a particular place in mind is the home. For example, a
45 sleeping child or other person can be instantly protected from any of the pests mentioned by merely opening the umbrella tent and standing it over the sleeping individual.

Another important use of the tent occurs
50 when camping or picnicking. It often oc-

curs that food in various stages of preparation or consumption will be stood about for more or less protracted periods to the delight of flies, bugs, etc. By having the tent
55 available it is only necessary to open it up and stand it over the food in question when the latter will be protected from contamination.

These are brief statements of only two of the important uses of the tent. The term
60 "tent" may imply a shelter of considerable size. No limitation on the size of the tent is intended. It can be made small enough to serve as a diminutive shelter, or it can be made large enough to shelter one or more persons
65 when employed in camping. The cover of the tent can be made in a variety of fabrics. Mosquito netting will be used when the tent is intended to be employed as a mere shelter against flies, etc. Canvas or some
70 other impervious cloth will be used when the requirements of the tent are more rigid as to durability.

Reference is made to the drawing. The tent is generally denoted 1. The main part
75 comprises a toggle frame or framework which is composed of sides 2 and 3. The sides are alike in construction, being composed of slender bars 4, pivoted in the middle as at
80 5, and at certain ends as at 6. The frames are capable of being opened and closed with the characteristic lazy-tongs motion.

Although the members 4 are shown as bars they may, in practice, be made of tubular steel or like the ribs of any umbrella. An
85 important consideration is lightness, yet a certain amount of strength is also necessary. Obviously the size and weight of the bars will increase with the size of the tent, but undue weight will be prevented by a careful
90 selection of materials in manufacture. When open, the toggle frame or framework will provide a light and yet sturdy support for a cover 7.

When closed as in Figure 4 the tent will
95 be confined to a very small compass. In practice a suitable bag will be provided to contain the tent. The bag is not included in the illustration, but it is readily understood that this will be of such a character as to receive
100

and contain the closed tent. This provision facilitates the transportation of the tent, and also affords considerable protection.

A ridge cord 8 keeps the top of the cover from sagging down between the members of the framework mainly along the ridge. The term "ridge cord" is to be given a rather general interpretation. The cord 8 does not only run along the ridge of the tent but parts of its also extend between certain corners as indicated at 15 in Figure 1, and also between the ridge and bottom of the tent as indicated at 16 in the same figure. Again, parts of the ridge cord will extend along the bottom of the tent at places where the pivots 6 occur, and along the medial portions of the sides at the places where the pivots 5 occur. The frame work of reinforcing cords is connected together in any desired manner, for example, by tying or splicing the various components to each other.

In other words, the ridge cord is herein known as a cord that extends over certain places in order to give the cover 7 an adequate support at these places and prevent the sagging of the cover as already mentioned in one instance. The corner components 15 of the ridge cord will sharply outline the corners of the tent and support the cover against sagging at these points. This cord is trained through rings 9 which occur at the upper medial portions of the frame, and rings 10 which occur at the upper extreme portions of the frame, in other words at the ends of the ridge. It is from the latter rings 10 that the cord drops as at 16. The ends of these particular cords are joined with pivots 11 of stretcher bars 12 which hold the bottom of the frame work in the spread or extended position.

For this purpose the stretcher bars are pivotally connected with the lower extremities of the sides 2 and 3 by means of rivets 17 (Fig. 8). Similar rivets connect the central ends of the stretcher bars at the pivotal points 11 already mentioned. Again, similar rivets constitute the middle pivots 5 as well as the pivotal points at certain ends 6. Each of these rivets include an eye 18. These eyes are like snap rings. They have pivoted jaws 19 which can be swung open to receive the adjacent parts of the cord 8.

The top or ridge rings 9 and 10 include a hinge construction. Each ring has jaws 20 which receive hinge members 21. These members are pivotally attached to the various bars 4, the purpose of the entire hinge construction being to not only permit the longitudinal opening and closing of the framework but the lateral opening and closing as well. This opening and closing will not interfere with the cover 7. The latter is intended to be permanently attached to the framework although the various rings are

made in such a manner that the cover can be detached if desired.

This provision for detachment makes it possible to apply covers of various weights and colors. Mosquito netting can be substituted for canvas and vice versa. The character of the rivets 17 has been described already. The rings 9 and 10 will be made in the same way. Each ring will have a pivoted jaw 22 as in Figure 5. Upon swinging the various jaws open the ridge cord can be inserted. This presupposes a particular construction in the attachment of the ridge cord to the cover.

In Figure 7 and cover 7 is shown folded around the ridge cord 8 and sewed together or otherwise secured at 23. This makes a permanent attachment of the cord to the cover. But the sewing will stop short of certain places as in Figure 6. This leaves a portion of the ridge cord exposed as at 24, and a loose place 25 in the cover affording room for the insertion and attachment of the particular ring. This principle will be carried out wherever a ring occurs in the tent.

When the tent is merely employed as a shelter from insects and the like the cover 7 will consist of a netting, which as in Figure 1, extends 6 to 12 inches on all sides as at 26 in order that any qualities in the bedding (if the tent is employed as a shelter in connection with a bed) may be compensated for. The extensions 26 can be folded under to exclude crawling insects.

The operation is readily understood. In setting up the tent the stretcher bars 12 will be extended full length from the folded or collapsed position in Figure 4, and in doing so, the sides 2 and 3 of the frame work will assume the pitch shown in Figures 1 and 3. The bars 12 limit the extension of the base of the framework. The middle pivots 11 of the stretcher bars may be made like a rule joint.

The frame is then pulled longitudinally in order to open or separate the bars 4 of the sides 2 and 3. In these actions the longitudinal components of the ridge cord 8 will be drawn taut. There will be a slight slackening of the corner components 15, but this will not be of any noticeable extent. The corner components 15 must be of sufficient length to permit the closure of the frame, and when the frame is open the distance between the corner rings 10 and 19 will be diminished slightly, but this diminution will be so little that the slackening effect on the components 15 will not permit the cover to sag to any noticeable extent.

Usually the camper, when the tent is employed for camping purposes will use a ground cover of some sort as indicated at 27. This may comprise a blanket. It is optional how far the blanket shall extend or whether or not the camper shall fold the extensions 26 under. It has been made plain that the ridge

cord comprises a number of parts which occur in various places on the framework. Its purpose is to support the cover, and it is attached to the framework so that the cover will open and close with the framework very much on the order of the ordinary umbrella.

When the tent is actually used as a tent, the triangular ends will not be of uninterrupted fabric. One or both of these ends will have an opening of a suitable size so that the camper may have passage in and out. These ends will also be provided with suitable drop flaps, and these in turn must have means for securing them so that the camper will have a measure of security within the tent.

The tent is not readily collapsed by a push from either side or either end, regardless of whether it is made in a small or large size. The articulated sides have considerable strength, the pivoted bars acting as supporting braces in respect to each other. Upon desiring to collapse the tent it is the work of but a moment to push the framework in from each end so to close the bars 4 as in Figure 4, then "break" the stretcher bars 12 at the pivots 11 so that they will fold up and the frame sides can be brought together. The cover 7 remains in place on the framework, and will close therewith. The whole structure can then be inserted in the bag mentioned before.

While the construction and arrangement of the improved tent is that of a generally preferred form, obviously modifications and changes may be made without departing from the spirit of the invention or the scope of the claims.

I claim:—

1. A tent of the character described comprising a cover, a frame consisting of a pair of sides each comprising articulated bars, and means by which the bars are pivotally connected along the ridge line to enable standing the frame in an inverted V-form.

2. A tent of the character described comprising a cover, a toggle frame composed of a pair of sides having means connecting them with the cover to define a ridge when the frame is open, and means connected with the sides to hold the base of the frame extended.

3. A tent of the character described comprising a cover, a toggle frame for carrying the cover comprising sides consisting of bars pivoted together at the top and bottom, means pivoting the sides to each other to form an apex when the sides are separated, and pivoted stretcher bars which are pivoted to certain ones of the frame-side bars.

4. A tent comprising a cover, a toggle frame for carrying the cover comprising sides consisting of bars pivoted together at the top and bottom, pivot means connecting the sides to each other to form an apex when the sides are separated, pivoted stretcher bars which are pivoted to certain ones of the frame-side

bars, and means extending from said pivot means to define a ridge for the toggle frame.

5. A tent comprising a framework consisting of bars pivoted together to define sides which can be extended or retracted, pivots by which the sides are joined together to permit lateral swinging of the sides, rings included in the various pivots, and a cover for the framework including cords trained through the various rings in order to secure the cover to the framework.

6. A tent comprising a framework consisting of a pair of sides having bars which are pivoted together for longitudinal extension or retraction, pivots by which the sides are connected longitudinally for lateral opening and closing, stretcher bars pivoted together and to certain bars of the sides to limit the extension of the bottom, a cover included in the tent having cords at predetermined places, and means incorporated in the various pivots for receiving the cords not only securing the cover to the framework but supporting the ridge and corners of the tent from sagging.

7. A tent comprising a cover, a pair of lazy tong frames, and means by which the frames are pivoted together along one side thereof to define a ridge to support the cover in tent formation when the frames are open.

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