Dec. 17, 1963 H. REXROAT ETAL 3,114,376

SHELTER TENT

Filed Feb. 9, 1962 2 Sheets-Sheet 1

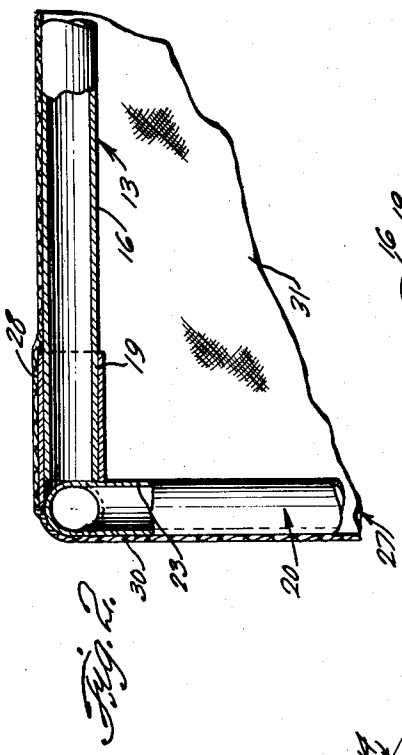


Fig. 2.

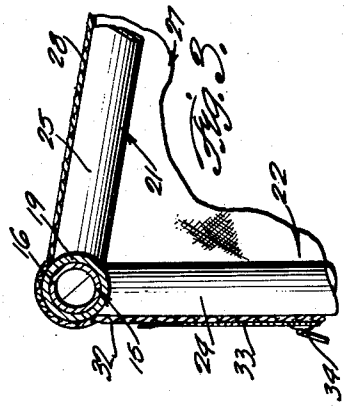


Fig. 3.

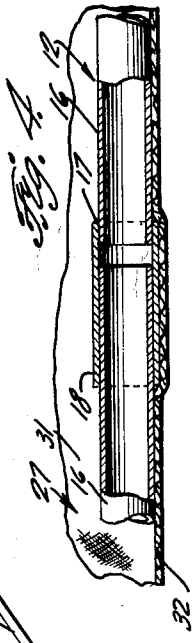


Fig. 4.

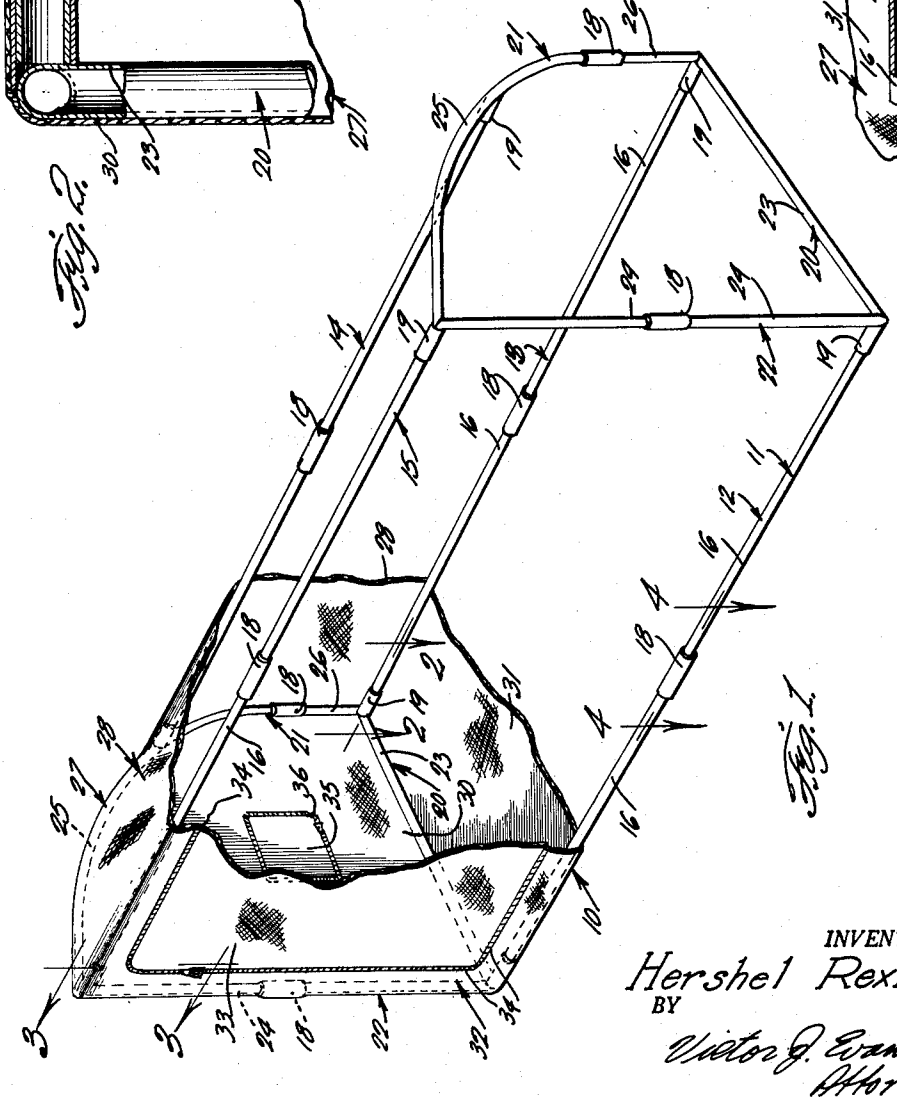


Fig. 1.

INVENTOR.
Hershel Rexroat
BY
Victor J. Evans & Co.
Attorneys

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SHELTER TENT

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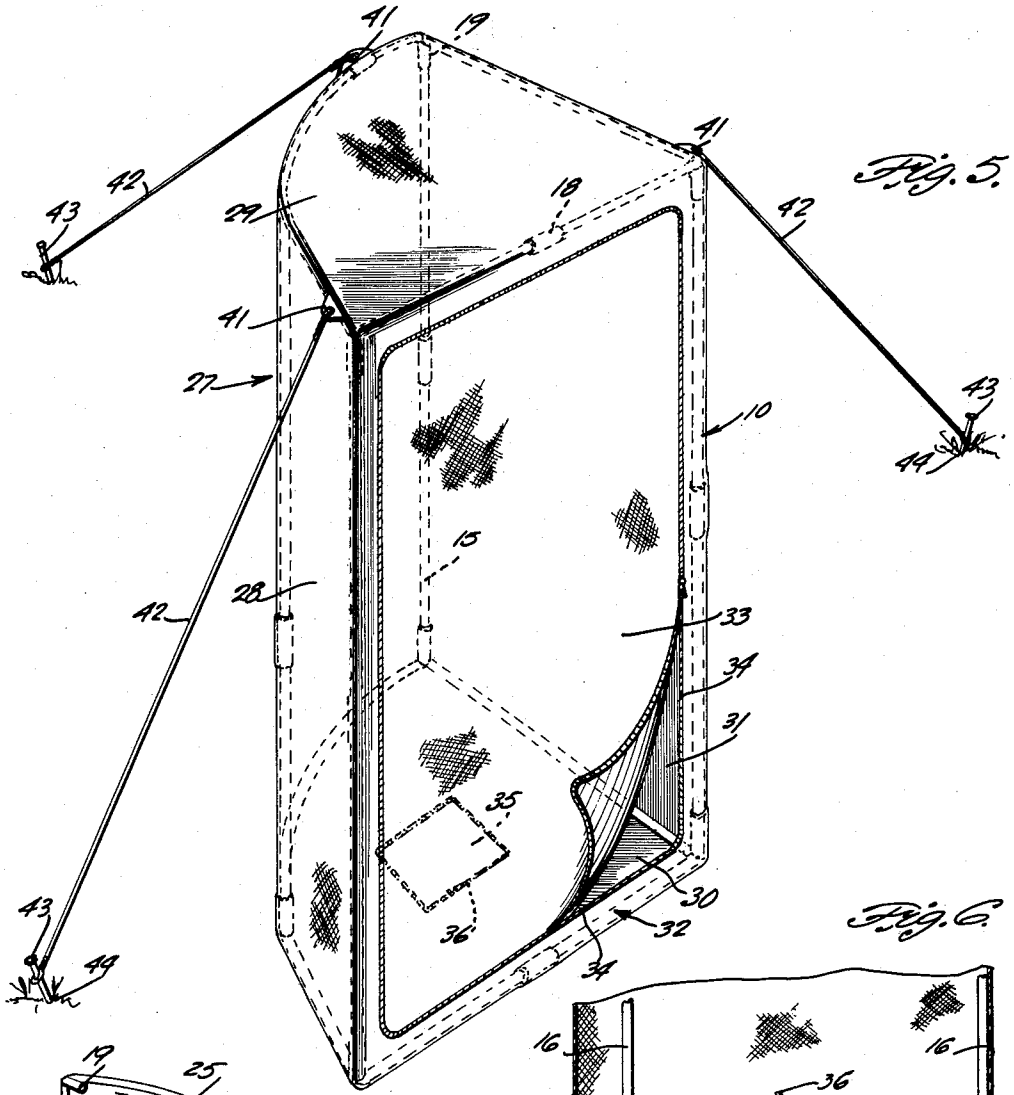


Fig. 5.

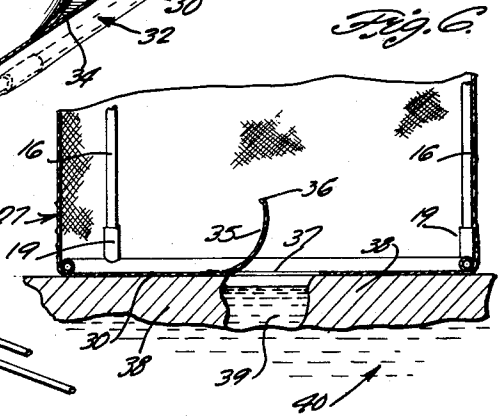


Fig. 6.

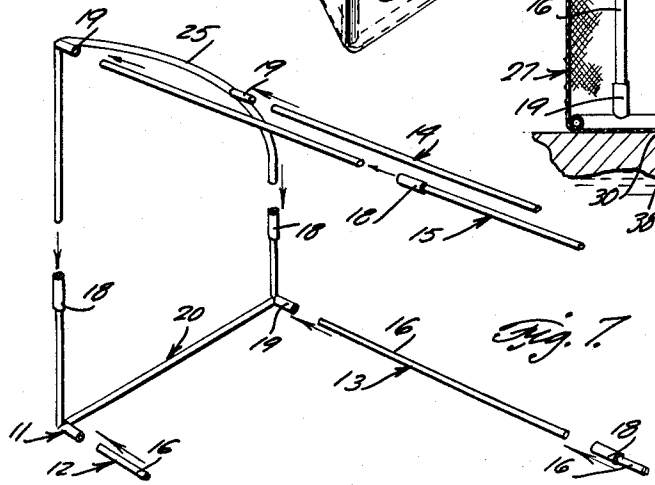


Fig. 7.

INVENTOR.
Hershel Rexroat
BY
Victor J. Evans & Co.
Attorneys

United States Patent Office

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SHELTER TENT

Hershel Rexroat, R.R. 2, Valley Center, Kans.

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2 Claims. (Cl. 135—1)

The present invention relates to a portable shelter and more particularly to a shelter tent that can be readily assembled or disassembled as desired or required.

An object of the present invention is to provide a shelter tent which includes a frame that can be readily put together or taken apart, and wherein the shelter tent also embodies or includes a fabric like cover that is adapted to surround the frame so that with the parts in their proper assembled position an enclosure is defined or provided which can be used for various purposes.

Another object of the present invention is to provide a shelter tent that includes a cover for mounting on a frame, and wherein there is provided in the cover a detachable or removable panel and closure so that openings can be provided in order to permit a person to gain access to the interior of the shelter tent, and wherein the shelter tent when completed includes a rounded or arcuate portion which is adapted to be used as a convenient roof portion so that rain, snow or the like will not have a tendency to accumulate thereon whereby the likelihood of the shelter tent collapsing will be minimized or prevented.

Another object of the present invention is to provide a portable lightweight shelter tent which can be used for various purposes, as for example the shelter tent can be conveniently used by hunters, fishermen, hikers, and the like, and wherein the shelter tent can be arranged in several different manners so that for example it can be used as a duck blind, and wherein it can also be used conveniently by ice-fishermen, and also the shelter tent can be used as a portable shelter for watchmen, timekeepers, and the like.

Another object of the present invention is to provide a device of the character described that may be assembled speedily and readily without any difficulty, and wherein the shelter tent of the present invention is economical to manufacture and efficient in operation and rugged in structure and foolproof in use.

Further objects and advantages of the present invention are to provide improved elements and arrangements thereof in a device of the character described that is economical to produce, durable in form, and conducive to the most economical use of materials and uniformity of members formed therefrom.

Still further objects and advantages will become apparent in the subsequent description in the specification.

In the drawings:

FIGURE 1 is a perspective view of the shelter tent of the present invention, with portions of the cover broken away and in section for clarity of illustration.

FIGURE 2 is an enlarged sectional view taken on the line 2—2 of FIGURE 1.

FIGURE 3 is a sectional view taken on the line 3—3 of FIGURE 1.

FIGURE 4 is a sectional view taken on the line 4—4 of FIGURE 1.

FIGURE 5 is a perspective view of the shelter tent showing the shelter tent arranged on end and guyed in place.

FIGURE 6 is a fragmentary sectional view showing the lower end of the shelter tent positioned over a hole in ice.

FIGURE 7 is a fragmentary perspective view showing portions of the frame disassembled.

Referring in detail to the drawings, the numeral 10 indicates the shelter tent of the present invention in its entirety and wherein the shelter tent 10 is shown to comprise a knock down frame that is indicated generally by

the numeral 11. The frame 11 embodies first, second, third and fourth spaced parallel crosspieces which are indicated generally by the numerals 12, 13, 14 and 15. Each of these crosspieces has generally the same construction so that a description of one will suffice for all. Thus, each crosspiece embodies a pair of tubular members 16 that are arranged in end to end aligned relation with respect to each other, and sleeves or couplings 18 overlap adjacent end portions of the tubular members 16 for joining the members 16 together. The coupling or sleeve 18 may be secured to one of the members 16 as by welding at the point 17, and the other tubular member 16 may be fitted in the coupling or sleeve 18 with a snug fit.

There is mounted on the outer ends of the tubular members 16 fittings 19, and as shown in FIGURE 1 for example the frame includes end pieces 20, 21 and 22 which are operatively connected to the fittings 19. The end piece 20 consists of a straight tubular element 23, and the end piece 22 embodies a pair of aligned end to end tubular elements 24 which have their adjacent end portions jointed together as at 18. The other end piece 21 consists of an arcuate or curbed tubular element 25 which is adapted to be joined to a short straight element 26 by means of a sleeve or coupling 18.

The shelter tent 10 of the present invention further includes a fabric like covering which is indicated by the numeral 27, and the covering 27 embodies a rounded portion 28, and the cover 27 further includes spaced parallel end portions 29 and 30 as well as body portions 31 and 32 that are arranged at right angles with respect to each other. The body portion 32 is provided with a removable panel 33 which is adapted to be held in place as for example by means of a slide fastener 34.

The end portion 30 of the cover 27 is provided with a flap or small panel 35 which is releasably held in place by means of a slide fastener 36. By unfastening the slide fastener 36, the panel 35 can be moved as for example to the position shown in FIGURE 6 so as to expose an opening 37 which is especialy convenient or handy for use in ice fishing as for example when fishing through a hole such as the hole 39 in the ice 30 that is arranged about a body of water 40.

Attention is now directed to FIGURE 5 of the drawings, wherein the shelter tent is shown supported on one end thereof instead of being arranged as shown in FIGURE 1. In the arrangement of FIGURE 5, the shelter tent 10 is adapted to be stabilized or supported as for example by means of guy lines 42 which can be fastened to apertured tabs 41 on the cover 27, and the lower ends of the guy lines 42 may be anchored to the ground 44 as at 43.

From the foregoing, it is apparent that there has been provided a shelter tent which is adapted to be used in a plurality of different manners, and in use with the parts arranged as shown in the drawings, it will be seen that the shelter tent can be readily assembled or disassembled as desired or required. Thus, when the device is not needed, it can be readily taken apart and it will therefore occupy a small amount of space, so that it can be conveniently carried on a station wagon, truck, car or the like, and wherein it will occupy a minimum amount of space for storage or shipment.

When the device is to be used, it can be readily assembled and it is to be noted that the shelter tent 10 comprises the frame 11 which embodies members or parts that can be readily fitted together and maintained in its proper assembled position, and the frame 11 serves to support the cover 27 thereon. The cover 27 may be made of any suitable material such as canvas, suitable plastic material or the like, and with the cover 27 assembled and mounted on the frame 11, it will be seen that the completed article includes a rounded portion 28

which is advantageous since it helps insure, that rain, snow or the like will not accumulate on the roof of the shelter tent whereby it will be less likelihood of the tent of collapsing from overweight of such rain or snow thereon.

The slide fastener 34 can be readily manually actuated in order to disconnect all or a part of the panel 33 whereby a convenient opening will be provided or exposed in the portion 32 of the cover so that such an opening can be used as a means of access to the interior of the device as well as a means of egress from the device, or, such an opening can be used as a means of permitting ventilation to properly take place so that person can remain in the enclosure with maximum comfort. In addition the panel or closure 35 can be partially opened or entirely moved as for example by properly manually moving the slide fastener 36, and the opening 37 exposed by the panel 35 can be used for any desired purpose, as for example it can be used as shown in FIGURE 6 wherein a fishing line can be extended down through the opening 37 in order to permit a person to ice fish through the hole 39 and the ice 30 when attempting to catch fish in the water 40. When such ice fishing is being attempted, the shelter tent may be arranged as shown in FIGURE 5 instead of as shown in FIGURE 1, and with the device arranged as shown in FIGURE 5, the end portion 30 is at the bottom thereof, and the guy lines 42 are adapted to be used for stabilizing or steadying the shelter tent when it is on its end portion 30. The guy lines 42 can be anchored to the ground 44 as at 43, and the upper ends of the guy lines 42 can be fastened to the tabs 41 on the cover 27.

The members such as the members 12, 13, 14, and 15 are made up of aligned elements 16 that are interconnected by the sleeve or coupling 18, and this coupling 18 is secured as by welding as at 17 to one of the elements 16 while the other element 16 may telescope therein. Or, the sleeve 18 may be made so that fits snugly on the adjacent end portions of the elements 16 and wherein the sleeve 18 may be made so that it can be entirely removed from the element 16 if desired or required. The end portions of the elements 16 are adapted to snugly engage the fittings 19 at the corners of the device as shown in the drawings. The parts are arranged so that the cover 27 can be entirely separated from the frame as for example when the device is disassembled and not in use.

The parts can be made of any suitable material and in different shapes or sizes.

It will therefore be seen that according to the present invention that there has been provided a portable lightweight shelter tent which can be used for many different purposes, as for example the shelter tent of the present invention can be used by hunters, fishermen, hikers, packers or the like, and in addition the device can be used as shown in FIGURE 1 or else it can be stood on end as shown in FIGURE 5, and the device can be used as a folding chair for a duck blind or other types of blinds, and it can also be used on end for ice fishermen as shown in FIGURE 6. In addition, it can be used as a portable shelter for watchmen, timekeepers, and the like and it can be used at night as a place in which to sleep. When used on end as shown in FIGURE 5 it can be staked down by guy ropes or lines 42, and one end of the cover has the eyelets or tabs 41 whereby the guy ropes can be fastened thereto. The device can be readily and conveniently packed so that it can be transported in a plane, vehicle, boat or the like and it will occupy a very little space when disassembled and it will be light in weight, and the frame can be taken apart or disassembled and folded inside of the cover 27. The various parts of the frame are adapted to be made of a suitable material such as half-inch aluminum or lightweight steel tubing. When the parts are assembled, the coupling or sleeve 18 is adapted to receive adjacent ends of the elements such as the elements 16 so as to maintain the parts properly connected, and the number of these couplings and the like can be varied as desired or required. The cover 27 can be made of a suitable material such as canvas or other lightweight waterproof material, and in addition camouflage material may be used as for example when the device is being used for a blind, and the cover is adapted to have a construction so that it will fit the frame snugly and properly, and with the parts arranged as shown in FIGURE 1 the slide fastener 34 can be used for opening the panel 33 so that ventilation to the interior of the shelter tent can be readily controlled, and also the panel 33 can be used to expose an opening that can be used for entering or leaving the shelter tent. When the device is being assembled, the frame is properly put together and the cover is then slipped over the frame. The device is adapted to be made of different sizes and for example it can be made to accommodate one or more persons therein, and the device can be assembled and disassembled in a very short period of time.

It is noted that the completed shelter tent, when in the position of FIGURE 1 for example, includes the rounded portion 28 whereby there will be no formation of pockets to trap water, snow or the like on the roof portion, and this sloping roof like portion 28 is therefore advantageous. The cover may be made of any suitable materials such as a plastic, canvas or other suitable material. The present invention is therefore a complete shelter and wherein the device can be assembled or disassembled without requiring the use of any special tools or special skill, and the device includes a means for selectively exposing or covering an opening as for example due to the provision of the movable panel 33 so that persons can readily enter or leave the shelter.

Minor changes in shape, size and rearrangement of details coming within the field of invention claimed may be resorted to in actual practice, if desired.

What is claimed is:

1. A shelter tent comprising a frame including first, second, third and fourth spaced apart crosspieces, each of said crosspieces embodying a pair of tubular members arranged in end to end aligned relation with respect to each other, sleeves overlapping adjacent end portions of said tubular members for connecting the tubular members together, a fitting affixed to the outer end of each tubular member, endpieces affixed to said fittings, one of said endpieces consisting of a straight tubular element, another endpiece consisting of a pair of aligned end to end tubular elements having their adjacent end portions fastened together by an overlapping sleeve, and the other endpiece consisting of an arcuate tubular element joined to a short element by means of a sleeve joint, and a fabric like cover surrounding said frame, said cover including spaced parallel end portions, a pair of body portions arranged at right angles with respect to each other, and said cover further including an arcuate body section, one of said body portions of the cover having a large removable panel therein adapted to be held in place by a slide fastener.

2. A shelter tent comprising a frame including first, second, third and fourth spaced apart crosspieces, each of said crosspieces embodying a pair of tubular members arranged in end to end aligned relation with respect to each other, sleeves overlapping adjacent end portions of said tubular members for connecting the tubular members together, a fitting affixed to the outer end of each tubular member, endpieces affixed to said fittings, one of said endpieces consisting of a straight tubular element, another endpiece consisting of a pair of aligned end to end tubular elements having their adjacent end portions fastened together by an overlapping sleeve, and the other endpiece consisting of an arcuate tubular element joined to a short element by means of a sleeve joint, and a fabric like cover surrounding said frame, said cover including spaced parallel end portions, a pair of body

portions arranged at right angles with respect to each other, and said cover further including an arcuate body section, one of said body portions of the cover having a large removable panel therein adapted to be held in place by a slide fastener, one of the end portions of the cover having an opening therein which is adapted to be selectively closed by means of a flap that is held in place by a slide fastener, and apertured tabs affixed to said cover for engagement by guy lines.

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