

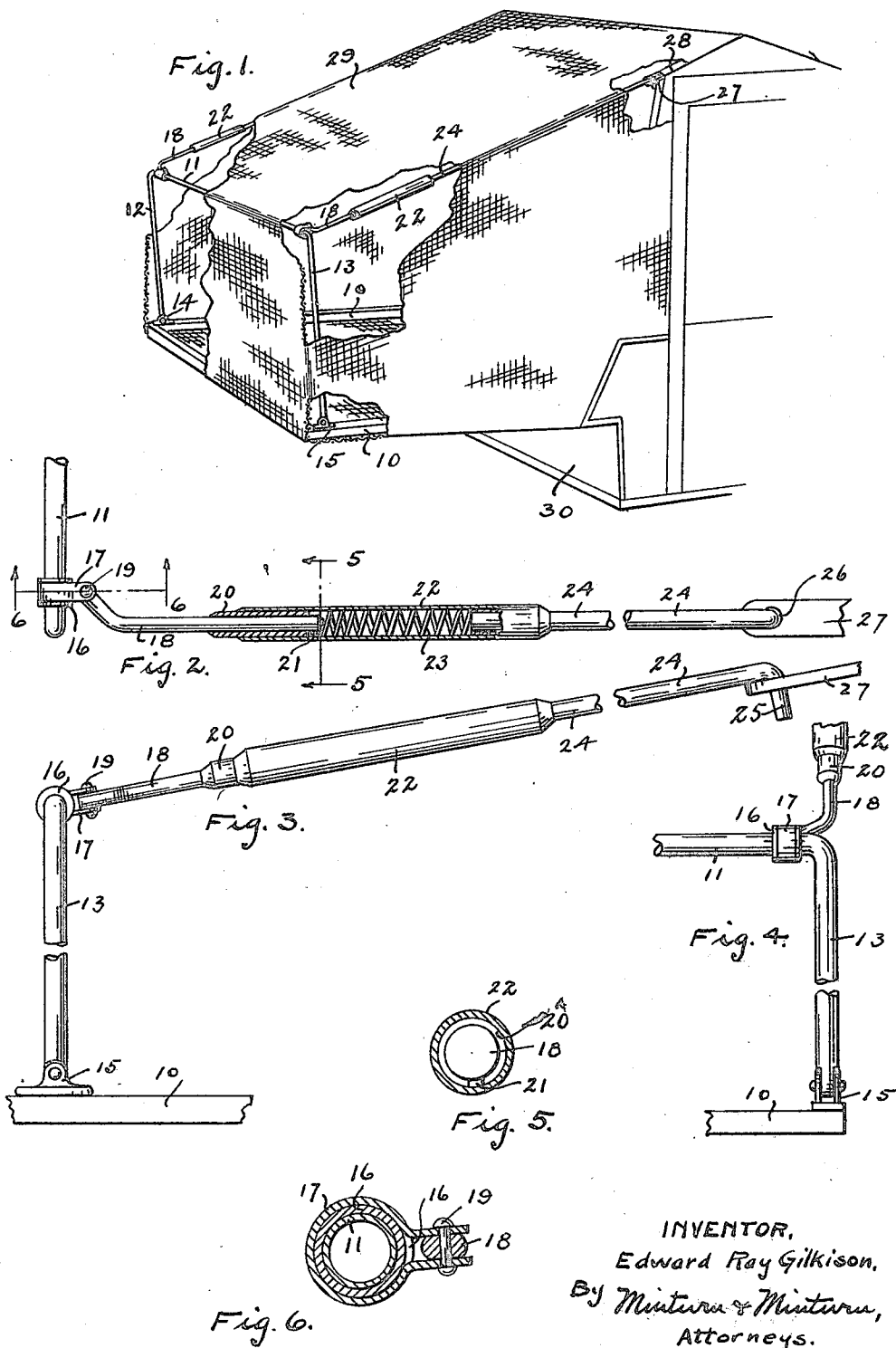
April 2, 1929.

E. R. GILKISON

1,707,960

TENT STRUCTURE

Filed Aug. 1, 1928



INVENTOR,  
Edward Ray Gilkison,  
By Minturn & Minturn,  
Attorneys.

# UNITED STATES PATENT OFFICE.

EDWARD RAY GILKISON, OF TERRE HAUTE, INDIANA, ASSIGNOR TO E. P. GILKISON & SONS COMPANY, OF TERRE HAUTE, INDIANA, A CORPORATION OF INDIANA.

## TENT STRUCTURE.

Application filed August 1, 1928. Serial No. 296,800.

This invention relates generally to means having for its primary purpose the automatic maintaining of the canvas of a tent in a uniformly smooth stretched condition under the varying shrinking and stretching actions of dew or rain and sunshine, and particularly to means for maintaining the canvas of a collapsible camp trailer in a neat smooth condition. Other objects reside in providing a structure for such purposes that may be strong enough to stand up under such service and at the same time is sufficiently light in weight to be readily assembled and disassembled as the tent is raised or lowered on the trailer, and that may be easily and conveniently swung out of the way in carrying positions.

The invention is described in the one particular form now best known to me as shown in the accompanying drawing, in which—

Fig. 1 is a fragmentary, front perspective view of one side of a trailer embodying the invention;

Fig. 2, a fragmentary top plan view of the extension rod;

Fig. 3, a side elevation of the rod;

Fig. 4, an end elevation of the outer rod support;

Fig. 5, a transverse section through the rod on the line 5—5 in Fig. 2; and

Fig. 6, a vertical section through the outer rod support hinge.

Like characters of reference indicate like parts throughout the several views in the drawing.

Referring first to Fig. 1, where a tent structure is shown in a raised position extended to one side of the trailer, a frame 10 is extended from the trailer 30 to form a foundation, and a horizontal bar 11 is formed with the legs 12 and 13 turned downwardly from the respective ends, to have the lower leg ends hinged to the frame 10 by the brackets 14 and 15, so that the bar 11 may be free to be swung in an arc about the brackets.

Near each end of the bar 11 is fixed thereon a spool 16, between the flanges of which is revolvably carried a band 17 wrapped therearound with its ends projecting and spaced apart to receive therebetween the end of the rod 18, the rivet 19 being passed through the band ends and rod end to pivotally retain the rod 18, so that the rod 18 may be free to be swung in a plane normal to the bar 11 as the

band 17 slips around the spool 16 and also free to be swung about the rivet 19 in planes including the bar 11 and rod 18, Figs. 2, 3, and 6.

The rods 18 are bent angularly outwardly to lie in the planes of the legs 12 and 13, and each rod 18 is slidably carried through a short length of tubing 20 and has a lug 21 welded on its side to prevent the rod 18 from being pulled entirely through the tubing 20, Figs. 2, and 5. The tubing 20 is fixed in the end of a tube 22 which carries a spring 23 therein bearing against the end of the rod 18. In the other end of the tube 22, is welded or brazed a rod 24, the inner end of the rod 24 being pressed against the end of the spring 23 so that the spring 23 is under an initial pressure between the ends of the rods 18 and 24.

The free end of the rod 24 is turned downwardly to form a hook 25 to be engaged through the hole 26 in the bracket 27 carried on and near the top of the trailer frame 28. The overall lengths of the rod 18 and rod 24 as held apart by the tube 22 thus determines the position of the bar 11 as spaced from the bracket 27, and is normally slightly longer than is the corresponding length of the tent 29 when dry.

When the tent 29 is to be erected, the frame 10 is pushed out to the side of the trailer 30, and the bar 11, being normally carried down on the frame, is swung up and outwardly from within the tent, and the rods 24 are swung around from their carrying positions parallel to the bar 11 or diagonally across the frame 10, depending upon the lengths, to be swung upwardly and hooked into the brackets 27, putting an initial pressure against the bar 11 at each end to press it outwardly against and tightly stretch the tent to determine the angle between the roof and side wall. Should the tent become wet and tend to shrink, the springs 23 permit the bar 11 to move inwardly due to the increased pressure thereon, and when the tent dries again, the springs 23 will automatically return the bar 11 to its normal position, and thus travel with the canvas to maintain it in a smooth condition regardless of the moisture content.

I claim:

1. In a tent structure, a bottom frame, a bar spaced from and hinged on one side of the frame, a relatively fixed frame, and a rod yielding in length adapted to be engaged

between said bar and said fixed frame, whereby said bar is yieldingly spaced from said fixed frame.

2. In a tent structure, a bottom frame, a bar spaced from and hinged on one side of the frame whereby the bar may be swung over and down across the frame, a rod connected to said bar to swing in planes both normal to the bar and including the bar and rod, a relatively fixed frame, a second rod adapted to detachably engage, said fixed frame, means engaging said two rods maintaining them in longitudinal alinement and permitting longitudinal travel one in respect to the other,

and spring means resisting the travel of said rods toward each other. 15

3. In a tent structure, a movable bar determining the angle between the top and a side-wall of the tent, a relatively fixed tent support, a rod universally hinged to the bar by one end, a tube slidably retaining the rod by the other end, a second rod fixed in the tube, a spring in said tube between said two rods, said second rod having means on its free end to detachably engage said fixed support. 20 25

In testimony whereof I affix my signature.

EDWARD RAY GILKISON.