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- (21) Application No. 41081/76
- (22) Filed 4 Oct. 1976
- (19)
- (31) Convention Application No. 2 136 566
- (32) Filed 28 April 1976 in
- (33) Fed. Rep. of Germany (DE)
- (44) Complete Specification published 30 April 1980
- (51) INT. CL.<sup>3</sup> E04D 13/06
- (52) Index at acceptance  
E1W CPD  
E1K 1B1F



(54) PURLIN FOR THE ROOF OF A TENT OR MARQUEE

(71) We, LOSBERGER KG., a German Kommanditgesellschaft, of Hans-Riesser-Strasse 7, 7100 Heilbronn, West Germany, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The invention relates to a purlin for the roof of a tent or marquee, and which has a support surface for a roof covering or awning.

According to the invention there is provided a purlin, for the roof of a tent or marquee, comprising an elongate hollow body having an upper face for supporting a roof covering, at least one holding groove with an opening slit extending along the body in a lower region thereof for holding a sheet forming a side wall of the tent or marquee, at least one collecting channel extending along said upper face for collecting condensation water, and drainage holes connecting said channel with the interior of the hollow body.

The invention will now be described further, by way of example only, with reference to the single figure of the accompanying drawing which illustrates one embodiment thereof in perspective view.

Referring now to the drawing, a purlin 1 comprises an elongate hollow body in the form of a profiled tube of substantially square cross-section formed by extrusion of a light metal or of a synthetic plastics material, or by bending steel strip. In the region of its side faces 3, 4 the upper face 2 of the purlin is profiled to provide two similar collecting channels 5, 6. The collecting channels 5, 6 have partly curved bottoms 7 which merge into approximately vertical side walls 8, 9. The side walls 8, 9 of the collecting channels 5, 6 are of unequal height, the outermost side wall 8 of each channel merging via a sharp longitudinal edge 10, into the upper longitudinal edges 11, 12 of the side faces 3, 4 respectively. The higher side walls 9 of the collecting channels 5, 6 respectively merge via longitudinal edges 15, into the flat centre part 17 of the upper face 2, which upper face forms the bearing surface for a roof cover or awning. The upper face 2 of the purlin 1 therefore incorporates the centre part 17 and upwardly facing surfaces of the longitudinal edges 11, 12 of the side faces 3, 4 respectively. The collecting channels 5, 6 have drainage openings 16 arranged in equi-spaced disposition longitudinally of the purlin whereby water collected in the channels can flow into the side of the tube.

In its lower face 19 the purlin 1 has, adjacent each longitudinal edge thereof, holding means 20, 21 for holding a sheet forming a side wall of a tent or marquee, not shown, formed from textile or of solid material. The holding means 20, 21 comprise grooves which extend inwards of the purlin. The grooves 20, 21 are approximately circular in cross-section and open outwardly of the purlin through slits 22, 23 provided in the lower face 19 and extending throughout the full longitudinal extent thereof. The slits 22, 23 merge, via rounded edges 24, 25 respectively, into adjacent sections 26, 27 and 28 of the lower face 19. Thus, damage to the sheet from sharp edges upon introduction thereof into the holding means 20, 21 can be avoided. The grooves 20 and 21 which define the holding means are formed by profiled sections 29, 30 respectively, of the lower face 19 and by profiled sections 31, 32 respectively, of the side faces 3, 4. The sections 29 and 30 of the lower face 19 are arcuately curved inwardly of the purlins whilst the other parts of the grooves 20, 21 formed by the profiled sections 31, 32 consist of lower sections 33, 34 of the side faces 3, 4 respectively, which latter sections are widened downwardly to merge at the lower longitudinal edges of the side faces 3, 4, respectively, with the sections 27, 28.

The purlin 1 is so mounted that one side face points to the ridge and the other to the eave of the roof frame. The roof awning is then placed on the frame with the inner sur-

face of the roof awning on the centre part 17 of the upper face 2 of the purlin 1. The sheet forming the side wall of the tent or marquee is then introduced into the slit of the respective groove 20 or 21, via a fixing part provided on the upper longitudinal edge of the sheet formed, for example, by a beading. Where the purlin is an eave purlin, the roof awning may also be fixed to the purlin via holding parts such as buckle belts, hooks or the like.

As the purlin has two grooves inner and outer sheets may be used for the side wall of the tent or marquee, such sheets being fixed respectively in the two holding grooves of the purlin.

As each purlin has two grooves it can be used on both sides of the roof frame without a special position of the purlin having to be observed. In this respect it will be noted that the two holding grooves and also the two collecting channels are disposed symmetrically with regard to the longitudinal median plane of the purlin extending through the said upper face thereof. The grooves of the purlin may have any desired shape. Only in the region of the lower face of the purlin must the groove openings be so narrowed that the fixing parts of the sheets are securely held.

Purlins as described above can be used for supporting roof awnings as well as for fixing sheets forming side walls of tents or marquees. Thereby it is sufficient to keep in stock only one kind of purlin. Due to the uniform construction of all purlins the eave purlins do not have to differ from the other purlins, so that relatively frequent assembling and dismantling of tents or marquees can be much facilitated.

#### WHAT WE CLAIM IS:—

1. A purlin, for the roof of a tent or marquee, comprising an elongate hollow body having an upper face for supporting a roof covering, at least one holding groove with an opening slit extending along the body in a lower region thereof for holding a sheet forming a side wall of the tent or marquee, at least one collecting channel ex-

tending along said upper face for collecting condensation water, and drainage holes connecting said channel with the interior of the hollow body.

2. A purlin according to claim 1, wherein there are two said holding grooves disposed symmetrically with regard to the longitudinal median plane of the body extending through the said upper face.

3. A purlin according to claim 2, wherein a respective said holding groove extends along each longitudinal side edge of a lower face of the body which lies opposite said upper face.

4. A purlin according to claim 3, in which each holding groove is formed by a profile section of the said lower face and a profile section of an adjacent side face of the body, and the said opening slit lies in the said lower face.

5. A purlin according to claim 4, in which the profile sections lie completely within the body.

6. A purlin according to claim 4 or claim 5, in which side rims bounding the slit are rounded off.

7. A purlin according to any one of claims 1 to 6, wherein there are two said collecting channels disposed symmetrically with regard to the longitudinal median plane of the body extending through the said upper face.

8. A purlin according to claim 7, wherein a respective said collecting channel extends along each longitudinal side edge of said upper face.

9. A purlin according to any one of claims 1 to 8, wherein said upper face has a flat centre part.

10. A purlin, for the roof of a tent or marquee, substantially as hereinbefore described with reference to and as shown in the accompanying drawing.

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