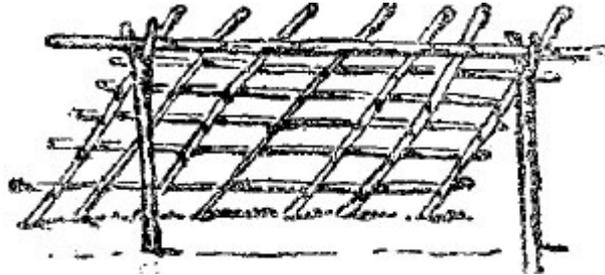


## Bivouacs

For thatching you can use thick spruce branches, or grass, reeds, ferns, sods, slabs of wood or bark (called "shingles"), or small twigs of heather closely woven in.

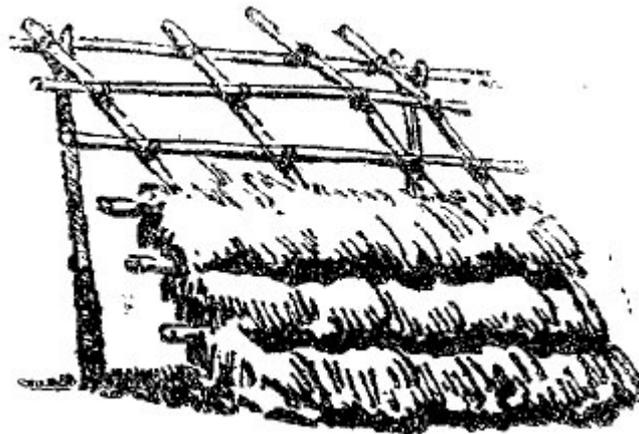
It is generally advisable to lay a few branches and stout poles over the thatch when finished in order to keep it on if a gale springs up.



## Framework

If you want to build a complete hut, you can make a lean-to from each side on the same ridge-pole; but the single lean-to, with its fire in front of it, is quite good enough for most people.

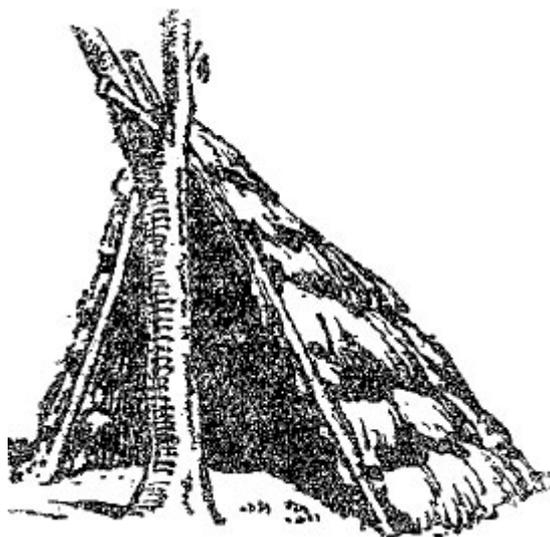
Another way to build a shelter hut is to lean a ridge-pole or backbone from the ground into the fork of a small tree about 5 ft. above the ground, the butt of the pole being about 4 ft. to windward of the tree. Then put up a few side poles leaning against this, and roof over in the same way as for a lean-to. Build your fire just in front of this, and you will have a very safe and cosy little house.



## Thatching

In country where there are no trees to make poles with, like parts of South Africa, where there is only a lot of small thorn bush and long grass, you can make "scherms," or loose thorn bushes piled in a heap and made into a small horse-shoe, arched over, back to wind, and covered or roughly thatched with grass.

These, with a fire in front, make very good shelter against cold wind or against sun, and, if covered with a canvas waggon-sail or tarpaulin, make a good enough protection against rain and against very hot sun. A "schirm" can be made with heather or gorse—only look out for its catching fire!



A Shelter Hut

Remember that to make a tent or hut cool in hot sun put on more roof—put blankets over the top of your tent, and bank up the sides near the ground. But if you want to make your tent or hut warm, take care to thicken the walls at the foot to prevent draughts coming in along the floor.

Also never forget that your floor is on raised ground, not in a hollow that will become a pool in wet weather.