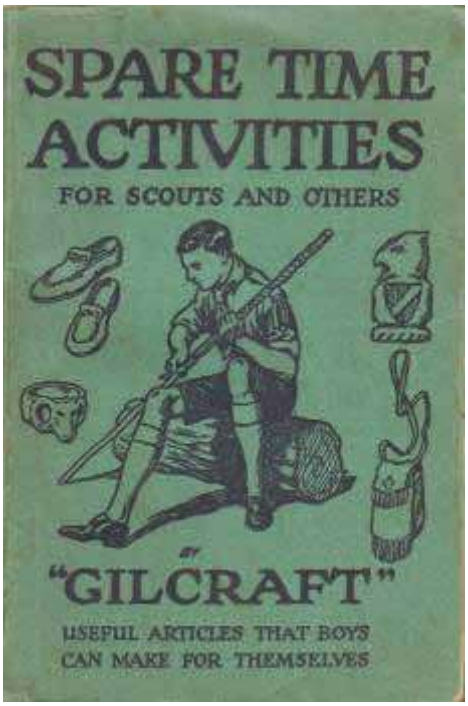

SPARE TIME ACTIVITIES

FOR SCOUTS AND OTHERS

by

"GILCRAFT"

("SKIPPER" GIDNEY AND GEORGE MOORE)

ILLUSTRATED WITH NUMEROUS DIAGRAMS

By A. A. MOORS

WITH FOREWORD BY THE CHIEF SCOUT

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Editor's Note:

The reader is reminded that these texts have been written a long time ago. Consequently, they may use some terms or express sentiments which were current at the time, regardless of what we may think of them at the beginning of the 21st century. For reasons of historical accuracy they have been preserved in their original form.

If you find them offensive, we ask you to please delete this file from your system.

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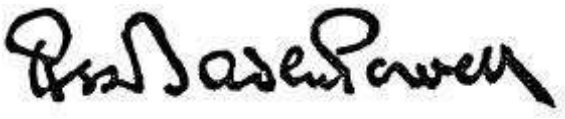
FOREWORD

BY THE CHIEF SCOUT

I've lived longer than any of you who are likely to read this book, but in all that long time I don't remember ever having had an idle time. I have often looked forward to it, but it never came (I daresay that is why I have had such a happy life). I have had *spare* time, but this spare time has always been filled up with some sort of activity.

So my advice is this: *If you want to enjoy your life never have an idle minute, but let your spare time be filled up with activities.*

This book will show you a lot of activities that you can get to work on, especially in your winter evenings. When you have done them it will be a big satisfaction to you to record them, as "Gilcraft" suggests, on your Scout staff with the signs which he has drawn at the beginning of each chapter.



Chief Scout.

Many of the articles described in these pages are suitable for wearing with Scout Uniform, whilst some will be found more appropriate for other occasions.

INTRODUCTION

Such things as lighting a fire in the Indian way, inventing camp gadgets, making a pair of moccasins, axe cases, a woodcraft knife sheath, hiking gear, belts, hatbands, shirts and Eskimo jumpers are all things that can be done by any fellow who has a bit of gumption, and can handle a few simple tools; and it is to help this kind of chap that the following chapters are written dealing with all the above stunts and dozens of others besides, under the general title of Spare Time Activities (which we will call Esses Toe Ac's for short).

If you try your hand at these things whenever you have a few odd moments in camp or elsewhere, there is no reason why you should not keep a permanent record of your skill which might count for points in your Patrol competitions. A good scheme would be to record permanently every spare time activity on your staff by means of branding.

To help you with this, at the head of each chapter is shown a suggested design for a staff brand – so when you have made, say, a "noggin," you will burn on your staff a conventional sign which will proclaim you to the initiated as a noggin maker, and so on with all the other Esses Toe Ac's.

Nothing is described which has not actually been made and tried out by a troop of Scouts, so don't say "It can't be done." After all, what one fool has done another jolly well can do – so get busy.

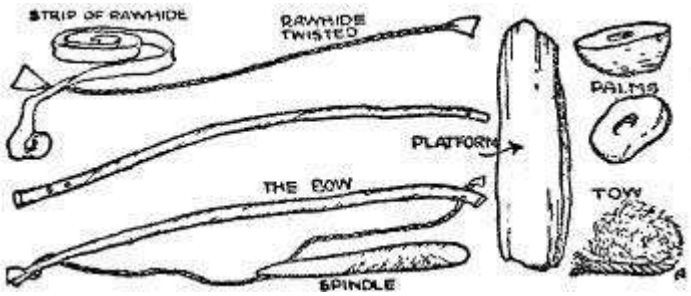
I

FIRE WITHOUT MATCHES

SUPPOSE we start on fire by friction as our first Esses Toe Ac. It's easy enough if you first of all get the right kind of materials and then know how to use them.

Now if you are half the Scout we take you for you won't buy your fire-making outfit from some Scout "shop," but get down to it and make it yourself, and the first question is, "What kind of wood shall I use?" Well, there is no need to import tamarac or balsam fir or any other foreign wood, for it can be done just as well with our native woods, such as elm, sycamore or willow. In point of fact, the writer has made fire with an old broomstick and a bit of a Tate sugar-box, so it doesn't really much matter.

All you have to remember is that the wood you use must not be too hard or too full of resin to prevent it crumbling a little when friction is applied, and by far the best wood of this kind is elm. If you are lucky enough to find a dead elm tree fallen over and can get permission to cut off a few pieces from the stump you have got the best possible wood, but if not a few pence will purchase plenty of odd pieces of elm from a friendly undertaker or carpenter, and these will do just as well.



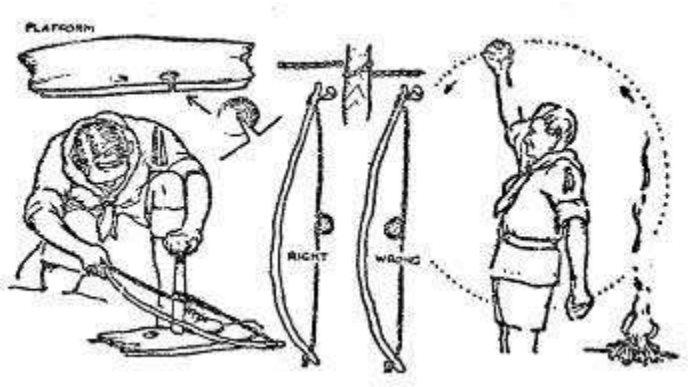
The sketches clearly explain how to make your fire set. The twisted raw-hide is fastened to a stiff piece of wood two feet long to form a bow. The platform is a piece of elm, as also is the spindle. The palm is a stone with a hole in the centre, or you can make one from a knob of wood. The tow is made by fraying a piece of rope.

Having got your elm, make a flat platform about 6 in. by 2 in. by ½ in. thick.

Then from the same wood make a shaft or spindle about a foot long, shaped rather like a cigar, with one rather rounded blunt end and one pointed end. It is important that one end should be fairly broad, say ¾ in. in order to get plenty of friction.

Now you want a palm or socket. The best thing for this is a flat stone with a little recessed hole in it, but unless you live at the seaside this may be difficult to find. However, make a note of that for your next seaside camp, and meanwhile you will have to carry on with a wooden palm. You can make this of a thickish piece of wood with a hole bored in it about ⅜ in. deep. A small knot of wood does pretty well – just a little knob cut off level, with a hole bored in it by the top of a knife. Remember, by the way, to put a little grease in the hole or it will get very hot.

Our next need is a bow. For this any stiff piece of wood will do, but it must be stiff. You want a rigid bow and not a springy one, and you should make it, roughly, two feet long.



These illustrations demonstrate the proper way to use the fire set. First you twist the rawhide round the spindle as shown in the centre sketches. Place the base of the spindle in the notch in the platform and commence drilling, the palm being at the top of the spindle. A glow will soon appear. Put the embers in the centre of the tow and swing it round in your hand. It will soon burst into flame, and you can get your fire going.

For a thong some strong leather is needed, such as the belting used on small lathes and sewing machines, or you can make a twisted one out of a flat piece of leather, as shown in the sketch, but don't try using your bootlaces – they will only break long before you get a fire.

Note how the thong is attached to the bow by means of three holes bored in it; this enables you to easily adjust the tension on the thong, upon which a good deal of your success depends.

All you need now is some tinder. If you are in the wilds you use dry fine grass or moss or bracken or fine shavings, but in more civilised surroundings you can get tow or frazzle out of an old piece of rope to use as tinder.

When you have made your fire-lighting outfit you will want to know how to use it.

Have you ever read *Alone in the Wilderness,* by Joseph Knowles? If not, you must. He tells you how to make a fire drill without a knife, or axe or anything, and many other things besides just to prove that modern civilised man could do what his primitive forefathers had done.

If a Scout was lost in the woods he wouldn't get excited and lose his head as though he were a towny; he would set to work at once and get the material to produce a fire, even though all his matches may have been used up.

Having made the fire drill outfit, the business of getting a fire with it divides up into two parts. First getting a spark and then converting the spark into flame.

To get the spark take your knife and gouge out a shallow round depression near the edge of the platform. Then cut a V-shaped notch in the edge of the platform reaching nearly to the middle of the shallow hole. See that this V-shaped notch is not too narrow. It should be almost as wide as the board is thick.

Now fix the thong on to your bow. Just a thumb or figure-eight knot one end and slip through the two holes the other. Don't have it too tight. Place the platform on a firm, smooth, surface and hold it down by putting your left heel firmly upon it. Slip the thong round the spindle, taking care that the spindle is outside the thong, and not inside. A glance at the diagrams will make this clear. Then put the base of the spindle on to the hollow in the platform and the point in the palm-stone held firmly in the left hand, *with the left wrist pressed hard against the shin.*

See that the spindle is perfectly upright, and then start drilling away with the bow, slowly at first and not putting on too much pressure with the left hand.

In a few moments the wood will begin to get hot – so will you – and then smoke begins to curl up. Gradually press harder with the left hand and increase the speed of the bow. You will then have dense clouds of smoke and a little pile of glowing wood dust in the V-shaped notch. Do not disturb this, lay aside the bow, wipe your forehead and try not to be too much overcome by excitement.

There is no need to hurry for the moment. Remember the motto, "Softly, softly catchee monkey." The little pile of embers will smoulder for some minutes.

Take your tinder of tow or grass or whatever it may be, and make it into a kind of bird's nest about as big as you can conveniently hold in one hand. Then take your pile of glowing wood dust and put it into the bird's nest with the tip of your knife, and close it all up. Then swing it round and round, holding it not too tightly, and just as it bursts into flames drop it on the ground and start your fire.

You will probably bum your hands the first time, but never mind, it's worth it, and if you don't know the glow of satisfaction which comes from your first fire lit without matches you have not yet really lived.

II

A KNIFE SHEATH

NEARLY everyone nowadays carries a sheath knife, and very handy it is too in hands that know how to use it, but a sheath knife is not for kids or fools. Both of these, not knowing that a big knife is entitled to be treated with respect, abuse it by trying to drive screws with it, or making it perform the function of a poker, or split firewood by hammering the back of the knife; one even tried using his Gilwell knife the other day to open oysters. Needless to say he broke off the point.

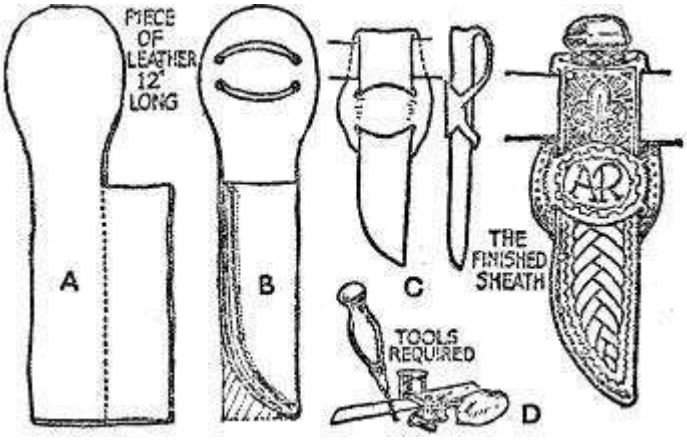
Then there's knife throwing – very nice when you know how to do it – but how many knives are minus the tips of their blades through unskilful throwing?

If you want to acquire the knack – though I don't know why you should, it is not the primary use of a knife anyway – get an old cheap one, and practise on something soft, not necessarily a brother Scout's head, but a cork mat or a chunk of lime or other soft wood. At any rate, don't start slinging knives at any tree you meet – it is simply not done by the best people – meaning ourselves.

But the important thing for keeping your knife in good condition and in safety is a sheath, and here is one that you can make for yourself, which is far more satisfactory in use than the usual press stud affair generally sold with this type of knife. It is modelled on the cowboy's revolver holster, and is not very difficult to make if you know how to sew leather.

You need a piece of leather about five inches broad and a foot long in order to make the whole holster out of one piece, but you can make it quite easily out of two pieces, 12 in. by 3 in., the other, 8 in. by 2 in. If you decide upon the former, which gets rid of one seam, cut it out as you see in diagram A.

Soak it well in water so that it is quite soft, then cut out of a piece of ¼-in. board a sort of wooden knife, roughly the same shape as your knife blade and about 8 in. long. This is to use as a mould on which to build the sheath,



(A) shows the rough shape to which you must cut the leather. You next fold at the dotted lines, then sew as shown in sketch (B); also cut the slits depicted at the top. (C) shows the method of fastening the sheath to the belt. (D) shows the tools you require, and finally you have the finished article.

Lay the leather on a board and fold it over this wooden knife, and stretch it well over, rubbing hard all round, where the edge of the blade comes, with the handle of an old tooth-brush, so that it shapes well all round. Then tack it here and there to the board, but do not cut it yet.

Next pierce your holes – about six to the inch – through both top and bottom leather, and also through the little fillet of leather slipped underneath, which you will see shown by the dotted line in the diagram. This is inserted to prevent the blade cutting the stitches.

Now sew it firmly round, using two needles and strong wax-end, and when you have sewn right round the edge cut off the surplus leather to shape. Then you can deal with the flap. Punch four holes as shown by the black dots (diagram B) and cut two slits as illustrated.

This flap is then folded back and the bottom of the sheath pushed through the slits, and that's about all, though you can put in a few rivets if you like to make assurance doubly sure.

Put the knife in and leave the sheath to dry, after which you can go round the cut edges with a bit of glass paper on a wooden block just to put a finish on, and you might try your hand at embossing or some other form of decoration to make it look really beautiful, as in the drawing, but no fringes please.

The advantage of this sheath is that no retaining strap is needed to keep the knife from falling out. The sheath coming right up over the haft keeps the knife quite secure.

III

AN ESKIMO TIMIAC

You know, of course, that what keeps you warm is not so much your woolly shirts and blankets as the air which is mixed up with the material. That's why fluffy blankets keep you warmer than closely woven ones. It's not the wool which keeps you warm.

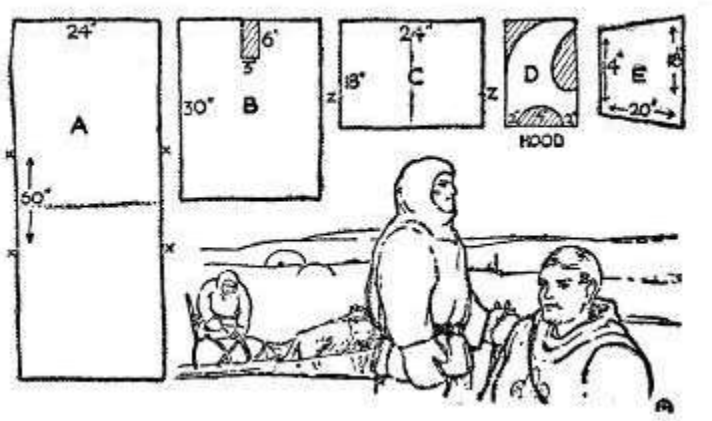
Now the Eskimo, living as he does in a very cold climate, seems somehow to have found this out, and finding that air not only keeps you warm, but has

also the additional advantages of being cheap and easily obtained almost everywhere, decided to use air instead of underwear, and thus combined warmth with economy.

This is the whole principle of the timiac. It is a loosely fitting garment with drawstrings round the face, wrists and waist, so that it soon becomes filled with a layer of nice warm air, inside of which the Eskimo is quite happy, even with a thermometer at thirty below zero, and a north wind blowing.

"Bit fuggy" did you say? Well, yes, perhaps, but Eskimos are used to fugs anyway, and prefer fugging to freezing. The timiac is just the thing for Scouting in cold weather. It is much better than wearing one's mufti jacket, especially for snow-balling. Also it makes a fine camp garment to slip on after tea when it begins to get a bit chilly.

Some Sea Scout Rovers have found that it is admirable for boating and cruising ; made in light waterproof material it will keep off rain, wind and sun, and when stuffed makes a fine pillow for sleeping when hiking.



A) shows the length of blanket required for the body.
B) the material folded and the cut for the head to go through,
C) is the cloth required for the hood, which is folded at the dotted lines and sewn up for six inches from the bottom.
D) shows the shape of the finished hood, and
E) the cloth required for the sleeves.

Now to start making it. An army blanket – price 3s. 6d. – does very well, and contains sufficient material to make two timiacs.

We will now proceed to make it.

1. – Fold the blanket lengthways.
2. – Cut off a piece 2 ft. wide from the folded end (diagram A). This gives you a piece of material 5 ft. long by 2 ft. wide.
3. – Fold it across the middle, and in the centre of the fold cut out a small piece 6 in, deep and 3 in. wide (diagram B).
4. – Cut out the sleeves which are two pieces of cloth 20 by 18 by 14 (diagram E). Stitch them on at XX (diagram A), but do not sew up the sides nor the seams of the sleeves. Leave that till last.
5. – Make the hood from a piece of cloth 24 in. by 18 in. (diagram C). Fold at the dotted line, and stitch up about 6 in. at Z – Z. Then try it on inside out. Next cut out two pieces of cloth from the bottom of the hood, 8 in. by 4 in., allowing 2 in. at either side, as shown in diagram D. This is so shaped to fit the shoulders. The remaining shaded portions shown in diagram D are the parts to be cut away after the hood has been adjusted to suit the shape of

your head and the size of your face. Now tack hood and body together. (Probably a little help from mother or some other expert will be necessary here.)

6. – Now sew it all together, arranging for a hem round the face opening to take a drawstring. Also round the wrists. And finally sew up the sides and the sleeves in one continuous seam, taking care that you get a good joint under the arms. Now turn it right side out and the job is done.

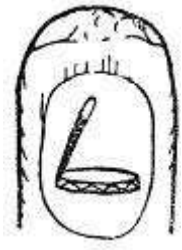
There is no need for a drawstring round the waist as you will wear a belt outside.

The foregoing instructions may appear a bit complicated at first sight, but you will find it quite easy when you begin.

Two Scouts made one of these timiacs in less than an hour

IV

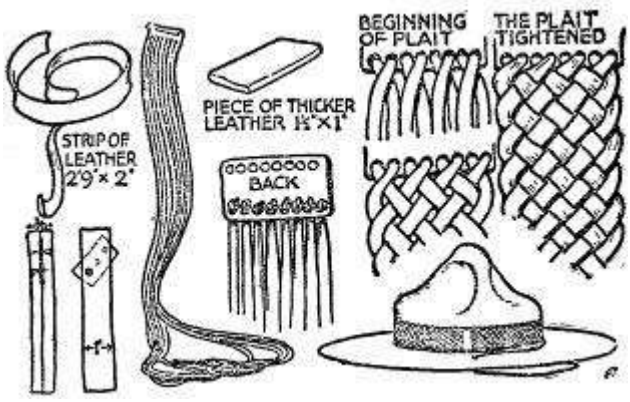
A SMART HATBAND



IT seems to be the fashion in some circles to decry the Scout hat as useless piece of uniform. This surely is a pity, for it is perhaps the most characteristic part of our uniform, and has captured the popular imagination ever since it was first brought into prominence twenty years and more ago when the Chief Scout was the hero of Mafeking.

A stiff-brimmed, well-kept Scout hat adds that cowboy touch which we want, and proves that its wearer is a Scout who takes a pride in his uniform. On the other hand a floppy hat with no dents to speak of and a paper imitation leather hatband with a chin strap of the same material is a disgrace, and should not be seen except on a scarecrow, so see to it that your hat brim is kept stiff by an occasional ironing and washing with starch, sugar or seccotine mixed with water. And then you might further improve it by making a leather hatband. Here are instructions for making a very effective one quite easily and fairly cheap.

Get a strip of leather 1½ to 2 in. wide and 2 ft. 6 in. to 2 ft. 9 in. long. This has to be split into six or eight strips. You can do this by means of a straight-edged piece of wood and a knife, but this is a difficult method, and results are rather poor, so it is well worth while to make the little gadget illustrated in the diagram.



When you have obtained the strip of leather, make the knife with two strips of wood and an old safety razor blade. Next cut the leather into strips, fix them into the small thick piece of leather, and commence plaiting. When you have done that to your liking, join round the hat, and the hatband is then complete.

This is made out of two strips of wood 3/16 in. thick and about 1 in. wide. Between these – like the ham in a sandwich – you fix an old Gillette razor blade by means of two screws. You have then a cutter and a gauge in one.

Fix your strip of leather to the table by a couple of drawing pins or tacks at one end. Get a pal to hold the other end and slice it up into six or eight thongs, each about 3/16 in. wide.

Now make a tab of leather, as shown, about 1½ in. long by 1 in. wide and punch six or eight holes along each of the longer sides. Put one end of each thong through each of these holes. Cross them in pairs right over left and plait as shown in the drawing.

You wall notice that each time you start with the outside thong alternately left and right. Keep the thongs close together when plaiting, so that no daylight shows through, and take care that they lie flat and even and do not twist. You will soon get the knack so that it becomes almost automatic.

When you think you have gone far enough, just try it round your hat to get the right degree of tightening. Then put the ends of the thongs crossed in pairs through the other holes in the leather tab. Lay all the ends out flat and cut them off so that they meet in the middle at the back of the leather tab, or you can tie a thumb knot in each end. Then wet them and hammer them out flat, and if the thongs fit tightly in the holes they will be quite secure.

Now dip the hatband in water and flatten it out all round, either with a hot iron or with a hammer. You can, if you wish, put on a finishing touch by using a little brown boot polish or just a rub of oil to take off the newness.

V

A DRINKING CUP

HERE'S an idea for making a really jolly drinking cup which was described for the benefit of British Scouts by that grand old pioneer and backwoodsman, Dan Beard.

Do you know what a noggin is? If not, look up your dictionary, which will give "Small mug, small measure, usually ¼ pint of liquor," so that's that; and the noggin we are going to make is the real backwoods article as actually made and used by the pioneers and trappers in the days of Dan Beard's boyhood.

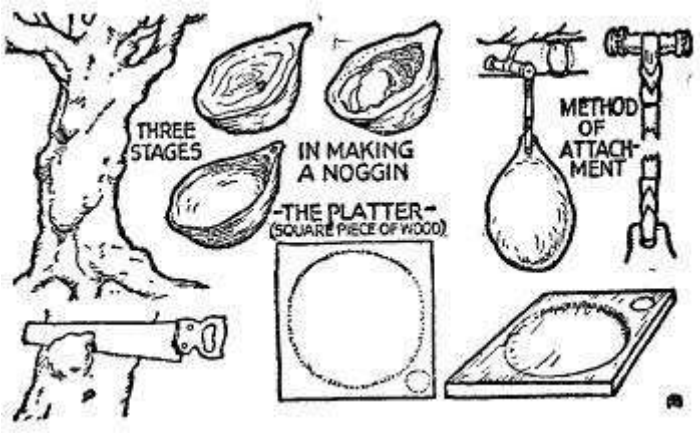
You know, or at any rate you ought to, that no self-respecting Scout goes about with axes and frypans and billycans hung about him like a pedlar's caravan. Just one thing is essential, and that is, the knife; everything else should be in his rucksack except perhaps his noggin hanging ready for a drink if need be. But how to make it?

First of all you find a tree, for preference maple, beech, or sycamore, which has, as you will find on so many trees, a little bump or swelling of the right size. Then you get permission to saw it off. If you live in town don't rush off to the nearest public park and start cutting the corns off the ornamental trees. There's no need to be an ass, and ask for trouble – you get plenty without asking.

The thing to do is just to keep this idea of noggins in your mind until, one day, you are camping in the country and find a suitable tree with just the right bump – then get the owner's permission, and there you are.

Well, having done all this, saw off your knob of wood, as you see in the drawing, and then get busy scooping out the wood in the middle until your cup is about ⅛ in. thick ; mind you don't go

right through the shell – when you arrive at this stage you will find a certain amount of care is needed. Having got the shell thin enough, make it really smooth by using bits of broken glass, finishing off with glass paper. Then polish it with a little linseed oil and shellac well rubbed in.



When you have found the ideal "bump," on a suitable tree, saw it off. Having done this, scoop out as much wood as you can, leaving the cup about ⅛ of an inch thick. To hang the cup to your belt, bore a hole in the wood, and attach by means of a piece of rawhide. To make the wooden "platter," get a piece of wood about a foot square. Scoop the wood from the centre. The small hole in the corner is for such things as salt.

If you are going to hang it on your belt, bore a hole and attach a strip of rawhide, as you see in the diagram, fastening a small wooden toggle at the other end by a rawhide splice. To make this you simply cut two slits in the leather, slip the short end through the second slit and the long end through the first, and haul taut. This will hold the rawhide absolutely secure, like the latigo lash.

Another useful gadget which you might like to make just to keep the noggin company is an old English wooden platter, which schoolboys and others used as long ago as the days of Good Queen Bess, and before that.

Take a flat piece of wood of the same kind as the noggin, from 9 in. to 1 ft. square – according to the size of your appetite – and ½ in. thick. Draw a circle to within ¼ in. of the sides and scoop out the wood to a depth of ¼ in. Then in one corner draw a little circle of 1 in. diameter and cut out a little recess to hold your salt, and you have a very serviceable camp platter which will stand any amount of rough usage.

There's no need to tell you that the brand illustrated at the head of this chapter is the Indian sign for water.

VI

A SCOUT SHIRT

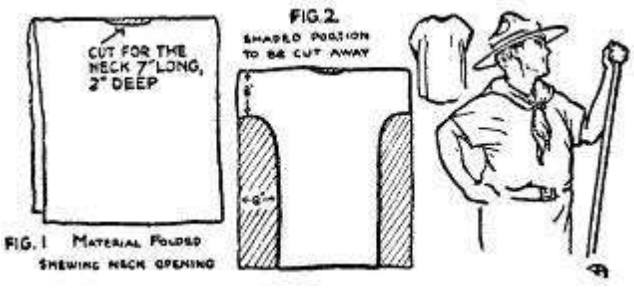
WHY not make your own Scout shirt? There are no outfitters in the backwoods, and the old-time pioneers, if they needed clothing, just had to make it themselves in the same way as the Redskins, out of soft doeskin maybe, sewn together with sinew.

So every Scout ought to feel that he can, if necessary, turn out a comfortable garment for himself, which looks neat and workmanlike, and which he can feel

proud of as his own handiwork. The fact that his shirt was made by himself makes it ten times more valuable to a Scout than a shop-made article for which he has done nothing but hand a few coins over a counter.

Probably you will not get doeskin for your home-made shirt, but khaki drill or flannel or other shirt material – especially jungle cloth if you can get it – will do just as well, and is incidentally much more comfortable and easy to keep clean. Whatever the material chosen, you will need a piece of it 1 yd. wide and about 2 yds. long.

Double it across the middle, and cut out a piece of the centre of the fold 7 in. long and 2 in. deep at the deepest part, as you see in the diagram (1). This forms the hole for your head to go through. There is no need at all for a Scout shirt to have a turn-down collar; it would be covered up by the scarf in any case, and a Scout wants to have plenty of freedom for his neck. Also, like sailors, he wants to get all the fresh air he can on his skin, so he does not muffle up his neck with wraps and comforters. All this shirt needs is just a hem round the neck opening, or, if you wish, bind it round with a piece of braid or softer material.



You first of all obtain your piece of material and double it (fig. 1). Cut the neck-piece and form the sleeves by cutting the pieces shown by the shaded parts (fig. 2). Hem and stitch together, and your shirt is complete.

Then in order to form the sleeves you cut out a piece from each side of the doubled cloth, 8 in. from each side, and make the sleeves themselves 8 in. wide (diagram 2). This means that the sleeves will be 16 in. round, which gives you plenty of freedom.

It is hardly necessary to say that this shirt is meant for the open air, free-and-easy type of Scout, who does plenty of hiking and camping and so needs a loose, comfortable shirt, with sleeves which terminate at the elbows.

This kind of chap knows how uncomfortable and hot that wad of rolled up sleeve is, and how it prevents the free passage of air when tramping along on a hot summer's day.

"What about a cold winter's day?" did you say. Well, of course, you are not going to be a fool and stand about with bare arms and insufficient clothing when there is a cutting east wind and the thermometer below zero. There is no point in swanking as a hardy Scout with bare arms and summer attire when you ought to be warmly clad.

Some chaps seem to think that hardiness and foolhardiness are the same thing, camping out at Christmas-time with one blanket and all that sort of thing. So in cold weather wear an Eskimo Timiac, which we told you how to make in Chapter III, then you can defy the cold.

Of course, knees don't matter; did you ever meet anyone with a cold in his knees? Keep your body warm and all is well.

But let us get back to our shirt. This kind of shirt is not sewn up with deer sinew; in fact, if you are wise, you will be humble enough to ask your mother to let you use the prosaic but very

useful sewing machine. This will probably need a little tactful persuasion and a preliminary lesson in its use. You can point out that it is your great ambition to become a real handyman.

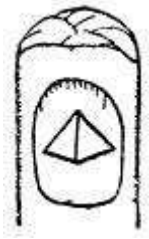
Well, then, you simply sew the shirt right up the sides, leaving a little piece, about 4 in., unsewn at the bottom. You may find the armholes a bit difficult to negotiate. Remember to hem the sleeves wrong side out, and not to sew up the armholes; the hemming is best done before sewing up the sides.

Lastly, you hem round the bottom and then turn the shirt right side out. If you need pockets you can put on a couple of patch pockets made out of the material cut off the sides – but it looks very nice and plain with no pockets at all.

Now try your shirt on and see if you are not proud of your handiwork.

VII

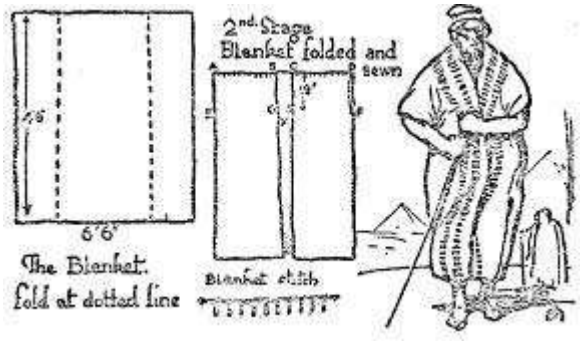
AN ARAB ABAIAH



YES, the name looks rather like a minor prophet or one of the Kings of Israel, doesn't it? But there's really no connection beyond the fact that he probably wore one, for the abaiah is the garment which has been worn for centuries by the nomads of the East. You can still see them being worn by the Arabs, who make them out of material woven from goat hair, which is quite waterproof, and wears very nearly for ever. Well, now, the abaiah is absolutely the ideal camp-fire garment for us – you will see in the sketch how effective it is in appearance, and the surprisingly graceful effect of the folds.

It is a good thing to get out of the horrible garb which civilisation decrees we shall wear, and put on something more picturesque than trousers when we get the chance, and a troop sitting round the jolly old camp fire clad in abaiahs made out of brightly coloured blankets is a sight which can give the "pictures" points.

An abaiah is a very easy thing to make – all you need is a piece of blanket material, about 6 to 7 ft. long, by 4 ft. or 4 ft. 6 in. wide. This you fold down each side, as you see in diagram 2, so that the ends nearly meet in the middle; they should be about 3 in. apart. Now join along the top from AB and CD, using wool and sewing with what is known as the blanket stitch. (Examine a blanket, or ask mother to show you this.)



First get your blanket and fold it to the centre, leaving the ends about three inches apart as in diagram 2. Blanket stitch at the top and slit from A to E and D to F. This gives you the arm-holes. Sew a button and make a loop at X and your abaiah is ready for use.

Next you grapple with the armholes. Cut slits at the top of each fold 9 in. long (at AE and DF) and buttonhole stitch them round to prevent fraying. This large armhole gives you plenty of room for your arms and allows the garment to hang properly.

You will find now if you try it on that it folds over of its own accord – but it is quite a good plan to put a button and loop at X just to keep it in place, or you can have a couple of strings or a loop and toggle or any kind of fastening which appeals to your fancy.

Some kind of girdle can quite well be worn with the abaiah if you like, though it rather destroys its characteristic loose appearance.

Well, having made it, you have a garment which is not only ideal for the camp fire, but also makes a splendid dressing-gown for home use. When packing for camp you will find that it will fold up quite flat, with no sleeves to take up the room, and in camp its usefulness as a blanket is in no way impaired, as you can still sleep in it comfortably.

VIII

USEFUL BASUTO SANDALS

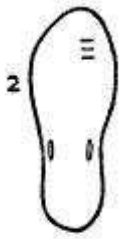
How would you like to be shut up in a more or less airtight case, in which you could only just move and with the sun and light shut out all day long? Well, that is how your feet feel about it. We shut them up in tight leather cases, and very seldom let them out for a little fresh air or a sun bath, and then wonder why they put up a protest in the shape of a corn or a blister when we ask them to take us for a hike.

Why not give your feet a holiday now and then by wearing sandals whenever you can in camp or club-room? There is nothing which gives you such freedom and real foot comfort. The illustrations show the way the Basutos in South Africa make their sandals.

First of all you get a couple of pieces of leather just a little larger than your flat feet. Put your foot down on one and draw round it with a pencil, taking great care to keep the pencil upright. Do not cut round this line, though. You must make the sandal ½ in. bigger all round than your foot, so run another line round ½ in. away from the other one, not with an ordinary knife but with a sharp knife, which makes all the difference. Diagram 1 makes this clear.

To find how big you want the soles you place your foot on a piece of leather like this. You should be careful to hold your pencil upright.

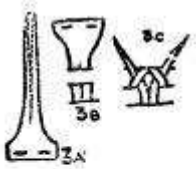
Now put your foot on the leather shape again and make a mark with a pencil between your big toe and the next one; then cut a little slit about ½ in. wide across this mark and two more slits parallel with the first one and about ⅓ in. apart. You will see what I mean by referring to diagram 2.



This is where the slits are cut in the sole.

After that you make the toe-piece (diagram 3a). It is better not to use leather which is too stiff or hard for this, because it has to fit snugly between the big toe and its neighbour. Use some soft fabric. You fix this toe-piece by putting the ends down through the first slit, up through the next, then down through the third slit; they are then made fast by putting the ends under their own standing points. Perhaps that is a bit difficult to follow, but diagrams 3b and 3c will make it quite clear.

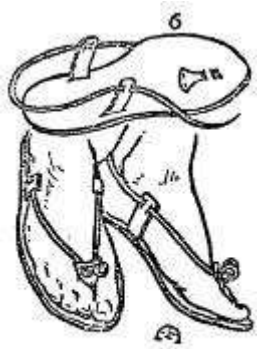
Having done all this, you next make the instep strap, which is simply a piece of stoutish leather about 6 in. long by 1 in. wide. Cut two ½-in. slits in each end, as shown in the fourth diagram. Now put your foot in the sole again and mark the places on either side for the slits to take the instep strap. Again see diagram 2. Cut two 1-in. slits and pass the strap through.



The toe-piece should be cut as in 3a, and fixed as in 3b and 3c. Fig. 4 shows the instep strap.

A thong, like this, should be obtained about two feet long.

Then last of all make the retaining thong, which is a strip of rawhide, the stuff which merchants call Helvetia rawhide is best. You will want somewhere about 2 ft. of it for each sandal, a ¼ in. wide.



This diagram shows how the thong is ad justed and made fast.

If you examine diagram 6 carefully you will see how this is adjusted and made fast. Point each end of this thong, and just border the tips by toasting them by the fire a little. Bore three or four holes so that you can adjust the thong to any degree of tightness, and simply make fast by doubling the ends back on themselves and pushing the points through the hole which is most convenient. Diagram 6a shows the thong fastened.

Make fast by doubling back the thong and passing the end through one of its own holes.

Well, that is all there is in it, and having once worn sandals you will simply hate having to go back to boots. A great advantage of sandals is that you don't need to wear stockings with them; so there is no question of catching cold through wearing wet stockings in rainy weather; and also somebody – and I hope yourself – is saved hours of darning stockings or socks.

IX

THE HANDY RUCKSACK

You are probably making up your mind to do lots of hiking during the summer in order to qualify for your 1st Class Journey Test, or perhaps someone is reading this who is tackling that splendid Camper Badge, but whoever you may be, make the most of your time and hike whenever you can; there's nothing like it, believe me.

Your pack is perhaps the most serious consideration when going hiking, and there are such a lot of different patterns and types from which to choose. Some

hikers swear by one kind and some another – but it is pretty generally agreed that the rucksack is a very satisfactory kind of pack and one which has stood the test of many years of use among chamois hunters and travellers generally.

Also it is easy to make, so we will set to work to make the simplest form of rucksack; it is not in the least novel or original, but follows the old design, well known to old hands in the great brotherhood of the open road all the world over.

First of all then, the material required: it must not be too heavy. You cannot afford to carry a single unnecessary ounce of weight on a hike, also it must be strong enough to stand plenty of strain and hard wear, and then it must be waterproof. Obviously the best type of stuff would be some kind of light canvas of the Willesden type, preferably in a khaki colour or some such neutral tint.

You can still get army surplus green canvas very cheaply at any of the shops that sell that kind of thing, and this would do splendidly, though a khaki shade looks better if you can get it.

Take a piece of canvas 38 in. long by 22 in. wide (diagram 1). Make a hem about 1 in. wide along the top. Take care to make a really strong job of this, because it has to stand most of the wear and strain. Then fold the material across the dotted line and sew it along the bottom and up one side, turning it inside out first, of course. This gives you a sort of flat canvas bag (figure 2).

The next job is to sew on the flap. This is made out of a piece of canvas 8 in. by 6 in., shaped at one end and sewn on the back of the rucksack as you see in diagram 3.

Having done this you make the holes through which the "puckering cord" will run. Make them about 3 or 4 in. apart, twelve holes in all, and either fit brass eyelets, or, if you are clever, work eyelets with a needle and well-waxed sail-maker's thread. To do this you wind a few turns of twine round the edge of each hole and then sew neatly round with a simple "over and over" stitch. The sketch (figure 4**)** makes this clear.

After that you might make the slings. For these you can use leather or webbing straps about 2 in. wide. If you have them narrower they are very uncomfortable.

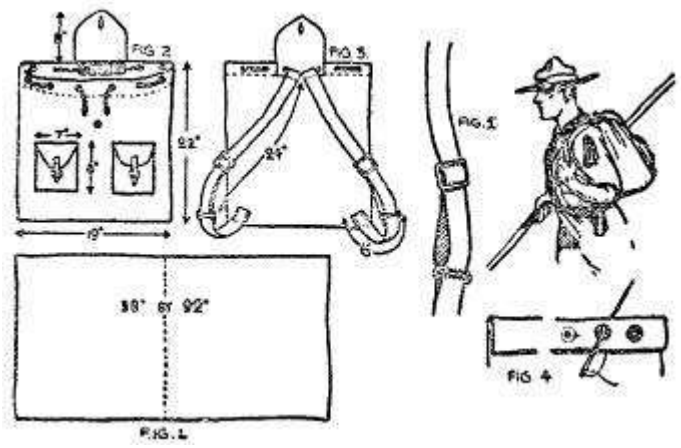


Figure 1 shows the length of material required. It is folded, and sewn up at the bottom and along the side, making a kind of bag. Sew on the flap, make the holes for the cord, and stitch on the straps. Figure 4 shows you how to sew round the eyelet holes.

Nowadays you can get old army webbing slings very cheaply and they answer admirably. You will see from diagram 3 that you sew the short 6-in. lengths very securely to the bottom

corners of the rucksack. Then you attach the upper adjustable part to the centre of the top of your pack by simply running your puckering cord first of all through the hem made in the ends of the slings. Figure 5 shows the method of adjusting the slings.

It is a good plan to have a little strip of wood (you can see where to put it in the second illustration) with a couple of holes bored in it inside the rucksack at this point in order to take the strain and prevent the cord pulling through. The puckering cord is securely knotted on the inside of this wooden strip, then laced round through the eyelets.

You can please yourself about pockets, but they are jolly useful to hold your map and note-book and other small odds and ends. The ones shown in the diagram are just ordinary patch pockets, 8 in. by 7 in., with a flap secured by a small strap and buckle. If you prefer it you could use loop and toggle or even button fastenings instead of the buckles.

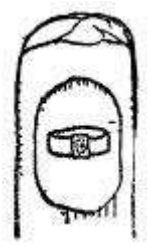
Now if you pack your rucksack full of hiking gear you will see how comfortable it is. The weight rides nicely on those big bones at the bottom of your back, and the whole thing is slung from the centre, so that there is no strain on your shoulders.

With such a pack you can swing along all day if you have been wise enough to leave all unnecessaries at home when packing it. If you want to possess a more roomy pack, which is certainly an advantage, make the back and front in two pieces, and form the two sides and bottom by inserting a strip, say 6 in. wide, beneath front and back.

This is the type the Scout in the sketch is wearing, and is surely the kind of rucksack R.L.S. had in mind in his delightful essay on *Walking Tours,* which you must read some day. Talking of books, have you read Stewart Edward White's *The Forest*? If not, save up is. 6d. and buy it; and then if you don't make a rucksack and sally forth a-hiking you are not the fellow I take you to be.

X

A COWBOY BELT



IT is always a good thing to see a chap striking out a line for himself, and not simply taking things for granted with out thinking.

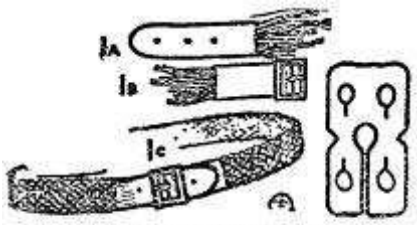
Take that very essential bit of uniform, the belt, as an example. Most Scouts are content to take the ordinary shop belts. Why not have a shot at mailing a really Scouty belt for yourself? If you look at the sketches you will see various gadgets and ideas from which you can work out a belt of your own.

You can, if you wish, make a fine comfortable belt on the same lines as the plaited hatband which we dealt with in Chapter IV. Then you would have your belt and hatband to match. You can turn back to that chapter for details of the plaiting and so on, and then look at diagrams 1a, 1b and 1c to see how the idea is applied to belt-making.

You see a strap is needed one end and a buckle the other, or you could apply one of the other fastenings about which I shall tell you in a minute.

In any case make your plait of strong leather strips. There is some ripping stuff called white hide sold by harness makers, ready cut into strips, which lasts practically for ever, and can be stained in brown if you wish. Diagram 1c gives you an idea of what this belt looks like.

If this doesn't appeal to you, perhaps you would like to tackle a real cowboy belt. Next time you go to the pictures you notice the cowboys' "chaps" (those woolly trouser things they wear) and you will see that they are always buckled behind.

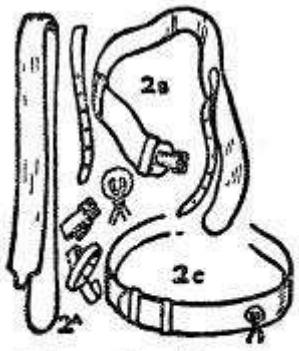


The plaited belt and how it is put together. The picture on the right is one of the shapes required for making the motor-cyclist's belt.

The reason is that the cowboys want to avoid anything which might catch up in their lariats or sleeves, and for the same reason this cowboy belt has no fastenings outside; they are hidden away under cover, as you see in diagram 2C.

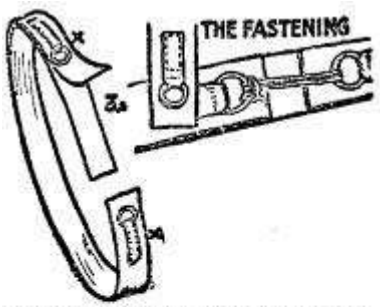
To make this belt, get a strip of leather about 2 in. wide and long enough to go round your body and overlap about 4 to 6 in. Shape this like diagram 2a.

Then sew a small strap 8 in. long inside the belt at about 8 in. from one end, and a small buckle to take this strap on the other end of the belt. Diagram 2b shows you this.



The cowboy belt. First there is the leather shape, then the buckles and strap, the concha, and lastly the finished belt.

You then make two loops about ½ in. wide which you see at the lower end of figure 2a in the diagram. The one nearest the buckle is fixed, but the other is a slider. Now your belt is made, but if you want to hang a knife or whistle on it (though whistles are mercifully going out of favour nowadays) do not have swivels. They are abominations, and cause lots of nasty gashes, especially when playing rough-and-tumble games.



The cowboy belt fastened by the latigo. Your two tabs are sewn on at x—x, then after procuring the thong you fasten it to one ring, pass it through the other ring, back again and once more to the other ring and tie by latigo as shown in the sketch.

Instead of swivels make a couple of leather rosettes rather like the cowboy's conchas. Pierce two holes in concha and belt and thread a piece of lace or thong through, so that both ends come out in front. Cut a slit in each, close up the concha, and thread each end in turn through the other's slit, then haul them up tight. The little sketch just above 2C shows you what it should look like before being hauled taut.

Perhaps you would prefer to fasten off your belt with a latigo instead of a buckle. As a matter of fact the latigo is much better because you can adjust it to any degree of tightness, whereas a buckle has no intermediate stages between the holes.

This belt is made of a strip of leather like the cowboy one, but shorter. It can quite well be about 4 or 6 in. shorter than your waist measurement, and you bridge the gap by sewing on a tongue long enough to give you a couple of inches overlap. See diagram 3a.

Then you sew two strong brass rings on to the belt at x – x shown in the same diagram, attaching them by means of two little leather tabs.

Next a piece of rawhide about 18 in. long by a ¼ in. wide is needed for the latigo.

Attach one end of this to one of the brass rings by a rawhide splice, which is dealt with in Chapter V.

To fasten the belt you pass the end of the thong through the other ring, back through the first ring and across to the other again where it is made fast by means of a latigo. Just follow it out in the picture.

This latigo lash is used for tightening the girth of the cowboy's western saddle, and, as you probably know, is the best knot to hold securely in rawhide.

Perhaps that is really enough about belts, but there is just one more which you might like if none of the others appeal to you, and that is a sectional belt, as worn by motor-cyclists.

All you have to do is to cut out a cardboard shape about 3 in. long and 3 in. wide (like the picture on the right of the plaited belt, diagram 1), and use this as a pattern.

Lay it on your leather, mark round with a pencil, and cut out a couple of dozen or so of these sections.

Double one section across the middle, then pass the split ends of the next section through the holes of the double section, doubling the second piece in the same way. Proceed in exactly the same way with each section until you have built up a sufficient length of belt.

The ends present a little difficulty. You can use buckle and strap or rings and latigo.

If you decide on the former, you must slip the buckle on to the first section before you start building up the belt, and then when you get to the last section, take a piece of leather about 6 in. long and the same width as the belt. Punch two holes in it the same distance apart as the holes in the sections, and lace the last section and the strap together in the same way as the concha is fastened to the cowboy belt.

XI

HOW TO MAKE MOCCASINS

You should certainly try your hand at making this very Scouty form of footgear if you aim at being anything of a "buckskin man." Don't make the common mistake of calling them mocassins, though. The word is pronounced *mok*-a-sims, accenting the first syllable. But that is only by the way. What I want you to know is how to make the things, however you may pronounce the word.

You know moccasins are the jolliest, most comfortable things to wear; whether you use them as slippers in the house, or for knocking about in camp, or, best of all, to put on at the end of a long day's hike; there's nothing more comfortable for tired feet, as any old hand will tell you.

Now you must know that there are many different types of moccasins; nearly every Indian tribe has its own pattern, and the plains Indians wear a moccasin totally different from that worn by the tribes living in the hills, where there is much snow. The kind we are going to make is adapted from those worn by the Ojibways, whom you will know if you have read Thompson Seton, get their name from the fact that they wear puckered moccasins. The word "Ojibway" simply means "puckered shoe."

Well, now, let's get down to it. First of all, the material and tools required. The Indians used buckskin, moosehide, and in some parts Dan Beard says he found them using calfskin and cowhide; so if you can afford to buy some fairly stout pliable leather from a bootmaker or saddler it will do splendidly, and will stand any amount of wear; but if you only intend to make a pair of bedroom slippers, something less expensive, like basil, will do very well.

For each moccasin you will need a piece of leather about 14 in. by 8 in., and another piece about 6 in. by 4 in. These measurements are for an average small man's foot, about size 6. The Indian moccasins of this type had no sole, but for our purpose a sole adds tremendously to their wearing powers, and you would do well to buy two fairly stout pieces of sole leather as well, one for each moccasin.

For the rest, you will require a shoemaker's awl, some waxed hemp and needles, and a piece of thick board to make a rough kind of foot-shape, called a "last."

This is not shaped exactly like a foot, but made like figure A out of a piece of 1-in. board. If you make it rather straight, and get it at the same length and width as your foot, there's no need to make two, as it will do for either foot.

Cut out the leather soles about a quarter of an inch bigger all round than this piece of wood, and then sew them to the underneath of the leather "uppers" as you see in figure B.

If you are as observant as I take you to be, you no doubt have watched a friendly bootmaker sewing on a sole.

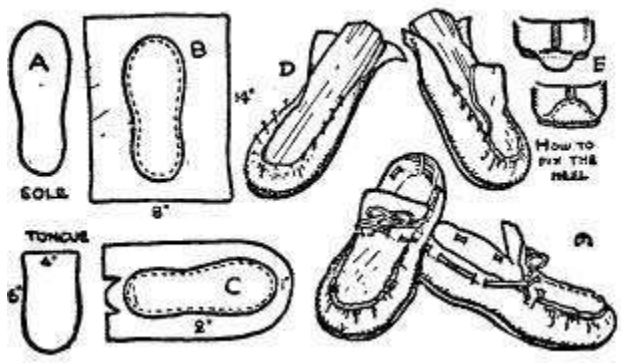
He first of all takes his knife and cuts a little channel about half-way through the sole and about a quarter of an inch from the edge. Then he runs a blunt-pointed instrument round this cut to open it up, and sews his stitches at the bottom of the groove, boring a hole for each stitch with his awl and stitching with a waxed thread.

You will remember, too, that before he starts working on the sole he puts it in a bucket of water for about ten minutes, then lays it aside for a bit until it is nice and workable. Another cobbling tip is to "beat" the leather well to increase its wearing qualities.

To do this you borrow a flatiron, lay the leather side on it, rough on top, and hammer it well all over. Take care to bring the hammer down flat or you will break the grain of the leather.

Well, having sewn on the sole, rub down the flange, that is the cut you made, on top of the stitches, and tap it down all round with the hammer, and you will find the stitches are perfectly hidden.

The next job is to shape the "uppers" like figure C. Note that it is only 1 in. wide at the toe, gradually widening out to 2 in. at the sides.



Cut out the sole, and place it on the underneath of the leather as illustrated in B. C shows you how to shape the "upper." Place the dummy foot inside the "upper," draw the leather over, and tack round as in D. Now cut out a tongue and sew inside as illustrated in the right-hand picture of D. E shows you how to fix the heel. Then finally you see the finished moccasins

Then you soak it in water, place the wooden foot inside and shape the "upper" over the toe by pulling and banging and rubbing it into position; tack it round as you see in figure D to keep

it there temporarily. You will find that it has a series of puckers all along the top edge. Try and get these as even as you can, and put in a tack for each pucker.

Now cut out the tongue from your piece of 6 in. by 4 in. leather, and begin to sew it in, starting at one side. The way to dispose of those troublesome puckers is to let the stitches take up more leather on the outside than on the inside. Make about six stitches to the inch outside and about ten to the inch inside. This sounds a bit complicated, but you will find it works out all right.

When you have sewn right round, cut off the edges quite level and hammer the toe into shape. The leather will go almost anywhere when it is wet.

Now turn your attention to the heel. You will see how it is cut by referring to figure C again. Slip your foot in to find how much you need to cut away, then sew the two edges together like the top drawing in figure E, and finish off by sewing up the flap as shown at the bottom of figure E.

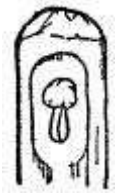
All that now remains to be done is to cut slits or punch holes, through which to run a thong. The sketch of the completed moccasins makes this and the method of lacing and fastening off quite clear.

Making these moccasins is perhaps the most difficult job I have given you so far, but if you have followed the instructions carefully you will have a pair of moccasins as good as, or better than, any the Red Indians make.

They are very roomy and most comfortable. I have a pair by me as I write in which I have tramped many a mile without getting footsore, and they cost about 7s. 6d., which is not expensive as shoes go nowadays. So get busy and cut down the parental boot bill.

XII

HOW TO MAKE BUTTONS



IF you have never seen Dan Beard or read any of his books, you may have wondered who he is when I have referred to him in this publication. You ought to know all about him, for he is one of the finest Scouts living, and one of the few remaining old-time pioneers whom we know as “buckskin men.”

He is the guide, philosopher and friend of our brother Scouts in America, and as you cannot get directly in touch with him, I am going to start this chapter by handing on one of his ideas for making buttons.

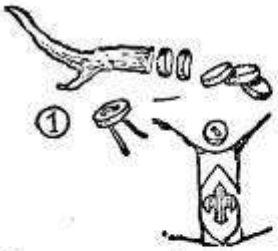
You get an old stag’s horn (which can be done even in England, if you happen to know where there are any herds of deer, and then keep your eyes open when they are shedding their horns) and saw off little flat discs about ¼ in. thick, like those shown in diagram 1.

Drill a couple of holes through each disc, and then you have a most serviceable button, which you can either leave plain or ornament by carving, according to your own taste or fancy.

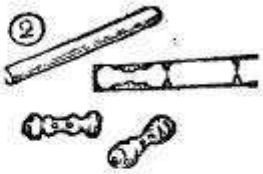
The same idea could be used in making buttons of leather. Just cut discs of the right size out of any odd pieces of stout leather you may have lying about, and you can soon have a set of buttons of the “buckskin man” type. Diagram 1 shows you what they look like.

Then, of course, there’s the toggle, which is quite a good backwoods fastening whether for your coat or tent flaps. If you are keen on whittling or chip-carving you could fashion a ripping set of toggles out of a beech-wood dowel which you can buy for a few pence. Diagram

2 will give you the idea. When you have made them you can make them look like old bog oak by soaking them in a strong solution of permanganate of potash.



Here you see buttons made from a stag's horn, also one made from a piece of stout leather. Both types are ever so simple to make. You see one on the pocket of a Scout shirt.

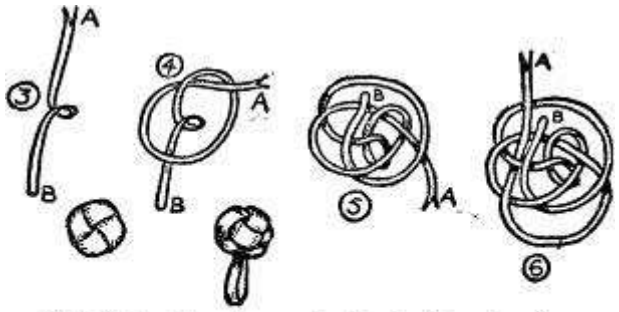


This picture shows two toggles, another kind of button, made from a piece of beech-wood. They are just carved from the solid wood.

You could apply this toggle idea to bone as well, though it is a bit more difficult to carve.

Probably most of you have made the button described by the Chief Scout, in *Scouting for Boys*, and a jolly good button it is, too. Here's another leather one you might like to try.

To make this type of button you take a piece of leather about 7 inches long, and say, ¼ in. wide, though of course this varies with the size of the button you are making. If you want shirt buttons an ordinary brown leather bootlace hammered out flat does admirably.



This illustration shows a leather button, the view from the head, also a side view. Simply follow out the instructions for making them, and check by the pictures 3, 4, 5, and 6.

Having got your leather, you first double it in the middle with the end A away from you to the left and the end B to you on the right (diagram 3), A is then taken completely round from left to right, then in front of B and up through itself (diagram 4). Next you take the other end B and go round in the same way and the same direction, coming round over the top of end A and up under the next strand on its left (diagram 5). Lastly, take the first end A, put it up *over* the one that you last put B *under*, and then thread it under the next one to it. Diagram 6 will make this clear.

You will have to learn how to do this slowly, one step at a time. If you read it again carefully and work it out gradually it will soon become clear.

Having learned how to get each end in its right place, all you have to do is to work the button up tight and flatten it into shape and the thing is done.

When you have got it really tight all round, pull hard on the ends and then cut them off close up to the button so that they will not show. With a little bit of practice you will get quite quick at this and turn out a set of buttons easily in half an hour.

A little tip to remember is that it is much better to work with leather which has been wetted; it packs together nicely and so makes a much neater and harder button when it has dried out.

The way to get the leather right is to put it in water till it is soaked, then lay it aside for ten minutes or so to dry, then it is just the right degree of dampness for work.

Have a try at making some of the buttons I have described next time your Patrol meets. It would be fine for them all to have buttons on their uniforms made by themselves, and when you have done that you could make enough cash to pay a year's subscription to *The Scout* by selling sets of buttons to other people who are not so clever at button-making as yourself.

This type of button is excellent for use on sports coats and so on. Every fellow can find a use for home-made buttons.

XIII

HOW TO DECORATE YOUR SCOUT STAFF

Figure 1.—Perhaps one of the first things you would like to carve on your staff is your Patrol totem? In this picture you see the totem of a member of the Owl Patrol of the 1st City of London Troop. The troop badge is also introduced.

EVERY chap worth his salt loves whittling – that is, cutting wood with a small knife – and a very good thing too, for it is a real backwoods accomplishment. You know how the Chief talks about the frontiersmen who carve their own buttons and collar studs, even though they have only an axe to do it with.

Your Scout staff gives you a splendid chance of applying your skill at whittling, and at the same time you will be helping to rid some people of the idea that a Scout is a chap who goes about staff carrying a broomstick.

A real Scout must have a real staff. The rough ash ones now generally sold are splendid – they look thoroughly "woodcrafty," and are very light and strong; but I want you to go one better than that and make your staff a real thing of beauty.

Never mind if it is a crude type of beauty. If you have really put all your skill into it you will always look upon it as one of your very special treasures, and when, if ever, Scouting days are over, you will hang it up over the mantelpiece, where you can see it as you sit by the fire, wearing carpet slippers and eating bread and milk, at the age of about ninety-nine.

First of all you get the staff. Get an ash one, rather thick, so that it will stand whittling away. Ash is quite the best wood, being both light and strong.

You will remember that Achilles' spear was made of ash. I wonder if you know anything about him? If not, look him up, and then, whether you carve a staff or not, reading this article will not have been time wasted.

Probably the first thing you would like to work into your staff decoration is your Patrol totem. If you happen to be a member of the Owl Patrol you might carve a rough figure of an owl, as you see illustrated in figures 1 and 2.

The way to set to work is first of all to flatten the sides of your staff at the end, enough to give you a surface to work on. Then draw the outline of your bird or beast with a pencil.

Having done this to your satisfaction you cut a few notches as starting points and gradually carve out the details of the figure.

You can if you like make your staff to resemble a Red Indian totem pole, as you see illustrated on this page. But remember that the redskin is not the only type worth copying, and that there is plenty of better material available nearer home, which is far more worthy of a Scout's imitation than Indian art.

You may use in your staff scheme such things as the arms of your town, or church or school, or perhaps the symbol of your particular saint or hero could be worked in somehow.

You see illustrated in figure 1 an idea for the tops of the staves of members of the Owl Patrol, 1st City of London Troop, introducing the troop badge of the Lord Mayor's Own Troop, London.

Having done the top of your staff, you need not be in a hurry to complete it, just do a little bit now and then, and take your time over it so that you do it really well.

How would you like your staff to look like this? Whittle it in a similar way and you'll be mighty proud of the result.

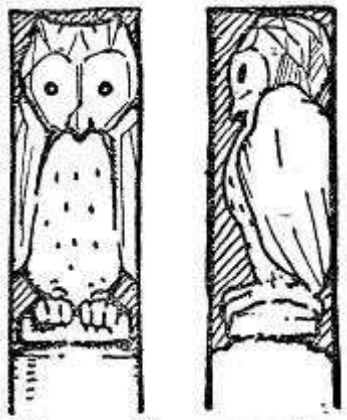


Figure 2.—Here you are given the front and side views of the totem shown in the sketch on the right-hand side of the title.

Possibly you will arrange a series of little panels all down your staff on which to brand the records of all these spare time activities, the tests you pass and the camps you attend.

In that case I must not write too many of these articles, or you will all be needing staves about 10 ft. long, though you might get over the difficulty by having two staves, one for Sunday and one for weekdays.

Another idea for your staff is a gadget for finding a right-angle. It is always useful in mapping or surveying, or even in laying out a garden or a cricket pitch. To make this you simply bore two holes straight through your staff at right angles, one to the other. This needs doing with great care in order to get the angle exact.

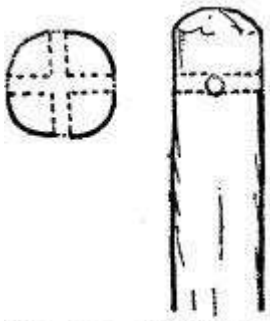


Figure 3.—To find a right-angle with your staff bore two holes straight through it at right-angles. This article tells you how to use it.

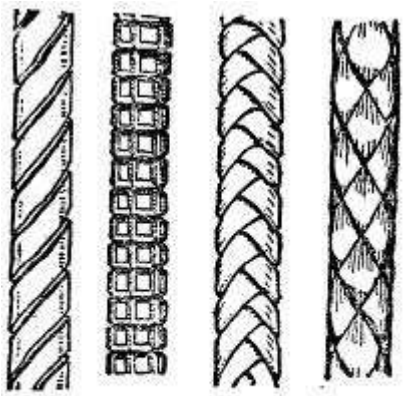


Figure 4.—This illustration gives four ideas of staff decoration. Perhaps you might like to copy them?

Then when you want to get a right-angle laid out you simply stick your staff in the ground, squint through one of the holes and get a pal to put in a stick in line with your eye, something like getting "centre" at cricket.

Then put your eye to the other hole and repeat the process and you have a right-angle.

This book will only be read by sensible chaps, so I know you can be trusted with a spike on the bottom of your staff. It comes in very handy when you use your staff as your hiker's tent pole. You just jab it into the ground and there you are. Remember, though, when you are using your staff for feeling your way at night, that unless you turn it the other way round the clink of the metal spike against a stone will give you away at once.

One thing more. A staff needs a sling, for it is very convenient to sling your staff over your shoulder when you are hiking along and want both hands free for writing your log or drawing a map or sketch; also, in a crowded town quite the best way of carrying the staff is to sling it over one shoulder where it gets in nobody's way.

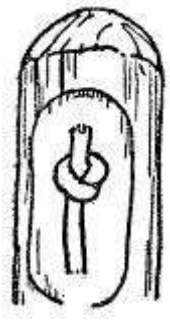
There is just one more thing to say, and that is – always carry your staff when in uniform. This is the wish of the Chief Scout, so don't let him down and say a staff is a nuisance.

If you have only a broomstick, of course it is rather a bore to carry it, but even a broomstick could be made into something like the staff in the sketch, and then anyone would be jolly proud to be seen carrying it.

There will be no need for a staff brand for this, the staff itself is sufficient evidence of your handicraft.

XIV

HOW TO SPLICE ROPES



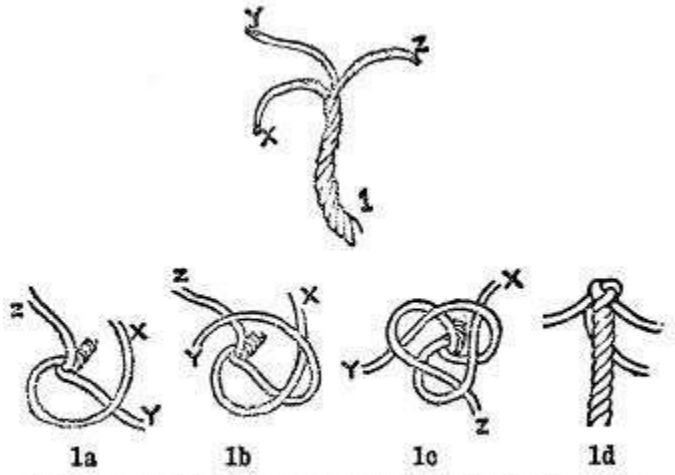
IF you want to be anything of a handyman you must know how to splice; it is one of those little "odd and endy" sort of accomplishments which every Scout should have, whether in camp or in everyday life.

You know anyone can tell at a glance on entering a Scout camp or clubroom whether it is just the ordinary kind of troop, or one in which the chaps really know how to do things for themselves.

Such things as a guy line or a drag rope neatly spliced, or ends of lashings properly whipped, all quietly testify to the efficiency of the fellows in the troop, and these are the things which rejoice the heart of the old camper, far more than sleeves covered with proficiency badges, which so seldom indicate any sort of proficiency in their wearers.

So in this chapter we will tackle splicing, though I fear it is very difficult to explain in cold print. If you were all here it would be so easy to show you how to do it, but as you cannot all come here to camp I must try to "broadcast" to you through these pages.

Suppose we begin with the crown knot and backsplice. This is used on the end of a rope to prevent it from becoming unravelled, and when you cannot spare the time to make a more permanent and neater job of it.

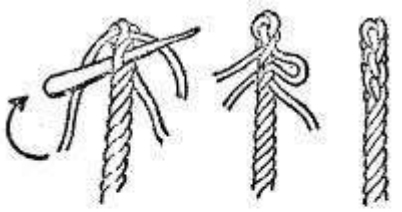


This series of illustrations show the crown knot. It is used to prevent the end of a rope becoming unravelled. Follow the instructions carefully, and you will have a knot as shown in Figure 1d.

You begin by unlaying the rope a sufficient distance, which is roughly about ten tunes its thickness (a rope ½ in. thick would be unlaid about 5 or 6 in.). Be very careful about this unlaying, and keep a hold on the strands so that they will not lose the twist which gives them their strength.

Having unlaid your rope, the end should now look like diagram 1, with the three strands X Y Z banging down equally on three sides.

Now take X and put it over Y (diagram 1a). Then take Y and lay it over X and Z (diagram 1b). Lastly, put Z down through the bight of X and there is your crown knot complete (diagram 1c). Then you tighten up the crown by pulling gradually on each strand in succession till it is all snug and tight (diagram 1d).



2A 2B 2C

To put a finish to your crown knot, you use a backsplice—that is—you tuck away the loose ends with the standing part of the rope, as shown in 2a and 2b. 2c shows the finish of the splice.

Now you have to splice back the ends; to do this you need the marline-spike on your Scout knife; that's what it's there for, you know. With it you open the strands of the rope (diagram 2a) and *put each end in turn over the nearest strand and under the second one* (diagram 2b), always remembering to work diagonally across the lay of the rope. Have you got that, I wonder? You ought to learn that little bit by heart, for it applies to practically all splicing; just remember *over one and under one.* Diagrams 2a, 2b and 2c will help you considerably.

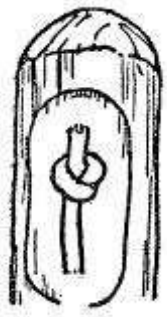
Just follow it out and you will see daylight ahead. When you have completed the first tuck (each end in turn has been over and under a strand of the main rope), you can then start to taper off.

To do this you very carefully unlay one of the smaller strands of which the bigger strands are made up and cut it out close up, so that it will not show. This of course makes the strands thinner, and if you do it every time you complete a tuck you will find that your splice tapers off and looks very neat.

Remember to pull the strands up tight and close after each tuck, otherwise you will have a loose, ungainly end to your rope which will soon come undone. If you are in a hurry, three complete tucks will hold all right, but it is better to do five or six and really make a good job of it if you have time. Then, when it is done and the ends cut off, lay the rope on the ground and roll the splice under your foot to put on a finishing touch.

XV

MORE ABOUT SPLICING



HAVING done a crown and back-splice, you might next try your hand at an eyesplice. This is perhaps a little more difficult, but it will come all right if you begin the right way, so let us make that clear first of all. Unlay the rope as before, and arrange the strands so that you have one in the *middle,* one on the *left* and one on the *right* (diagram la).

Remember that order because that is the order in which the ends have to be spliced. Now make your eye, or loop, as big as you need, see that there are no kinks in it, open up any strand on the main rope and put your middle end through it. That's the first thing done. Next you put the *left-hand* end *over* the strand that the *middle one* went *under*, and then under the next strand to the left. Diagram 1b makes this clear. (Just say that slowly once or twice and you will get it.)

Remember always that the ends which you are working with never cross each other but are woven into the main strands of the rope.

So far we have disposed of two ends and only one now remains, the *right-hand* one. This is the most difficult of the three, but if you turn the splice round you will see that there is one strand of the rope which has not yet an end through it, and this is the one through which the last end goes.

But in order to get it across the lay of the rope you must bring this end right across the back of the splice and go in from *right* to *left.* See the shaded strand in diagram 1c, which shows how this is done.

Having completed this first task, all your difficulties are over, and you can now go straight ahead as in the backsplice; each end in turn going over and under one strand at a time, and tapering off as before. Three complete tucks are really enough, but it is better to do a few more and taper off gradually in a neat and workmanlike way. Diagram 1d shows the finished eyesplice.

Probably you have had enough of splicing by this time, if so you need not read any more; this article ought really to be taken in three "goes," like breakfast, dinner and tea. One is apt to get indigestion after eating all three meals at one sitting. The thing to do is just to take one splice at a time, and come back for another when you have digested the first.

So assuming that you can do backsplice and eyesplice, the next one to learn is the short splice, which is used to join two pieces of rope together when you are in a hurry. To make it you unlay the two ends to be joined, the same as before, and interlock the two ends each in the other.

You will probably find it helps at this stage just to put a seizing round the two where they meet to keep them in place. Having done this, you follow the old plan which you have learned in the other splices, putting each end in turn over and then under the strands of the opposite end of the rope. Then turn round and serve the opposite ends in the same way.

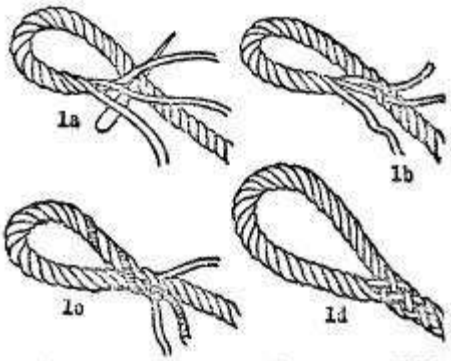


Diagram 1a shows you the rope unlaid ready for splicing. In 1b you see the left-hand and middle strands worked into the main rope. In 1c the right-hand strand is shaded, having been brought across the back of the splice. 1d shows the finished splice.

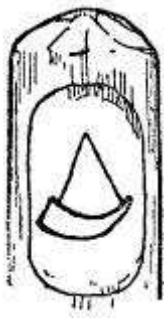
Diagram la shows you the rope unlaid ready for splicing. In 1b you see the left-hand and middle strands worked into the main rope. In 1c the right-hand strand is shaded, having been brought across the back of the spike, 1d shows the finished splice.

When you have done one complete tuck each way, pull tight, and then do two or three more tucks each side. Taper and cut off as usual, finishing off with a roll under the foot to put on the final polish. The only drawback to this splice is that it makes the rope so much thicker at the point where the splice comes, that's why I must teach you how to do a longsplice sometime, but we will deal with that another time.

There is no need to brand your staff again, that is if you did it after making the splices described in the last chapter. If you didn't, you'll find the brand repeated in the heading of this chapter.

XVI

A CAMP HORN



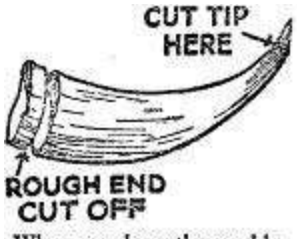
PROBABLY most of you chaps who are reading this don't remember the year 1907. If you had chanced to be at a place called Brownsea Island one fine morning in that year you would have seen the very first Scoutmaster waking the very first Scouts in the very first Scout camp that was held.

A good many of us since then have been roused in the mornings by the sound of *réveillé* blown on a bugle, but those first Scouts never heard a bugle in their island camp, for their Scoutmaster was none other than the Chief Scout himself, and the sounds that roused them came from the long, twisted horn of a kudu, a kind of buck, which the Chief had shot in Africa.

Now after Brownsea, Scouts began to spring up everywhere, and a good many of them, probably because there are not many kudus which can be shot in England, took to using bugles instead, and so people gradually got the idea that the proper thing for every Scout troop to have was a bugle.

Scouts should go about like parties of working woodsmen, and not imitate soldiers. So now we are getting wiser again, and harking back to the Brownsea ideas and leaving bugles in their proper place – that is, the Army.

But we can't all get kudu horns, and it's no use slanging the poor old bugle unless there is something better to put in its place. So I want to tell you how to make a camp horn out of a bullock's horn, which you can buy very cheaply, or even get for nothing, if you know a butcher who is a kindly disposed sort of chap.

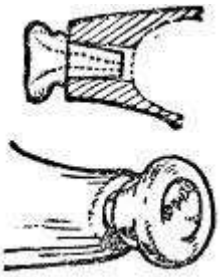


When you have thoroughly cleaned the horn, cut off the rough end, also the tip, as illustrated.

Having got your horn, the first thing to do is to get it clean. This is a nasty job, but the best thing to do is to boil it, and then you can get rid of the superfluous fat, and so on, more easily.

Then when you have got it really sweet and clean you cut off the rough end as you see in the illustration, and start smoothing down the whole horn. If it is very rough you start with a blacksmith's rasp, and then gradually work it down to a nice surface with sandpaper and a piece of broken glass.

Next you cut off the tip of the horn as shown in the diagram. This is done with a saw – a hack-saw does very well, though you will find this a rather trying operation.



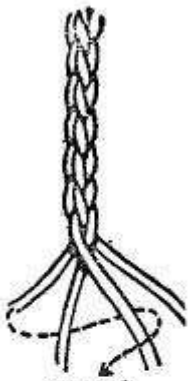
The top picture shows the spigot of a bugle mouthpiece pushed into the end of the horn. In the bottom illustration you see how the spigot looks when fixed into the horn ready for use.

After you have recovered, you drill a hole straight into the end of the horn, large enough to take the spigot of your bugle mouthpiece which you then drive in tightly. The illustrations make this clear. Failing a mouthpiece of this sort you can hollow out the end of the horn into a cup-shaped mouthpiece, but this is not so easy, though you could do it with a hot iron if you could endure the smell.

Well then, having done all this, you now begin the real part of the work, that of ornamenting your horn. The one shown below has leather fixed on at each end. This is stretched over and sewn on firmly while wet, then it dries and shrinks tight.

When you have got it on you could spend a lot of spare time embossing it similar to the illustration, or, better still, invent new designs of your own.

Another way would be to plait strips of leather over the horn rather like basket work. This also looks very effective.



To make a lariat plait, you cross the two middle strands, then put the outside right-hand strand behind the middle two, then down between them. Do the same with the left-hand strand and your plait will soon form.

A finished camp horn.

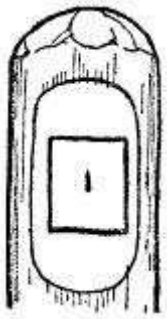
Then lastly the sling. The lariat plait is a good one to use – you probably know it was used by the Mexicans for making rawhide lariats. It consists of four strands. To make it, cross the two middle strands right over left, then put the outside right-hand strand across behind these two, and then down between them. Lastly, left-hand outside strand also goes behind the middle two and down between them. That is probably a bit difficult to follow. It all boils down to this.

You always work with the two outside strands, each alternately behind two strands, then down between the same pair.

The part of the horn in the middle between the leather could quite well have the name of your troop branded on it, and perhaps a little brand of some sort to commemorate each camp in which the horn has been used. This can quite easily be done with a red-hot knitting needle or bradawl. A horn of this kind ought to be the treasured possession of any troop. It is thoroughly English in origin, being just like the horns which Robin Hood and his merry men once used.

XVII

HOW TO MAKE A PONCHO

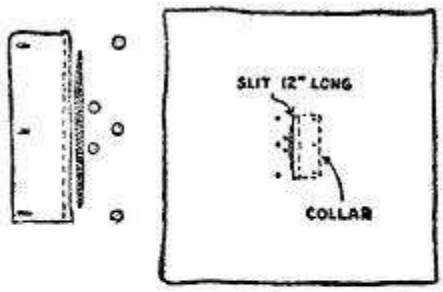


IN this chapter we will grapple with a very simple spare time activity, for a South American poncho is one of the easiest things to make, and at the same time one of the most useful. Some time ago some of you were making the Arab abaiah as a camp-fire garment. Instructions for making it are given in Chapter VII. If you have already made one of these you probably will not need a blanket poncho for the camp fire, but you can make one out of waterproof material to keep you dry in wet weather, and also to use as a ground sheet.

For those chaps who are doing a lot of hiking a poncho made of balloon fabric, or similar material, is a splendid thing to have. You can leave your mackintosh at home, and slip your waterproof poncho on if it comes on to rain; while at night it forms a ground sheet practically big enough for two to sleep on.

If, however, you have not made an abaiah, the poncho, which is the garment of the South American horsemen, and made by them out of a blanket, is well worth consideration, for the blanket requires very little alteration, so that its usefulness for sleeping purposes is not impaired in any way.

Blankets nowadays are so cheap that you can get one for less than it costs to buy a dog licence, in fact you can get about two blankets for the price that you pay to keep a dog ; so expense need not prevent you making a blanket poncho.



The first thing to do is to cut a slit a foot long nearly in the centre of the blanket. This slit is buttonhole-stitched all round. The collar is now sewn on the back of the neck slit. The left-hand sketch shows the arrangement of the buttons and their buttonholes.

The proper size is about 6 ft. square, though you can make it a bit smaller if you like, but it is better to be on the safe side and allow for growing.

The first thing to do is to cut a slit about 1 ft. long, nearly *but not quite* in the centre of the blanket. This slit should be about 4 in. nearer to the front than to the back of the blanket.

Having cut your slit, buttonhole-stitch it all round to prevent fraying. You probably know how to do buttonhole-stitching by now; if not, ask your mother to show you how it is done; it's very easy, anyway.

Before sewing on the two buttons that will enable you to button up your collar in wet weather you should try the poncho on yourself. This picture shows you how the collar should look when buttoned-up correctly.

Next you tackle the collar. This is made about 18 in. long by about 6 in. wide, and is sewn on to the back of the neck slit as you see in the first diagram.

You then make *three* buttonholes in the collar and sew *five* buttons on the front of the poncho. A glance at the picture will show you their positions, the three buttons in line being for use when you are not wearing the poncho, and the other two when you want the collar buttoned up in wet weather.

It is best to find the position of these two buttons by experimenting on yourself, then you will get the collar to fit round nice and snug.

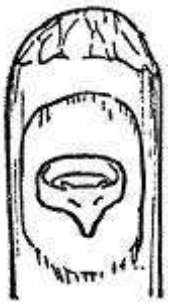
For camp fires you will probably want to make your poncho really gorgeous by making it of a coloured blanket, and then ornament it still further by working things on it in coloured wool.

There is plenty of scope for originality and skill in this direction, so I will leave you to form an original colour-scheme that will put to shame the finest effort of the Arapajos.

Here you get an idea of what a poncho looks like when worn by an original South American horseman.

XVIII

A SCARF "WOGGLE"



THE idea of wearing a slide on the scarf has become very popular among Scouts who have been quick to imitate the fashion set by the 1st Gilwell Park Troop. It is certainly far too good an idea to be confined to any one troop, and although the leather Turk's Head ring is only worn officially with the now well-known Gilwell scarf there are other varieties of woggles which Scouts may wear.

I am going to hand on to you a few ways of making scarf slides which I have come across.

A very keen Scout friend of mine who calls himself the "Lynx," made a ripping scarf ring out of an old ham bone. The first illustration shows you how this is done. Just saw off a ring of bone, smooth down the inside with a file, and then ornament the outside to please your own particular fancy.

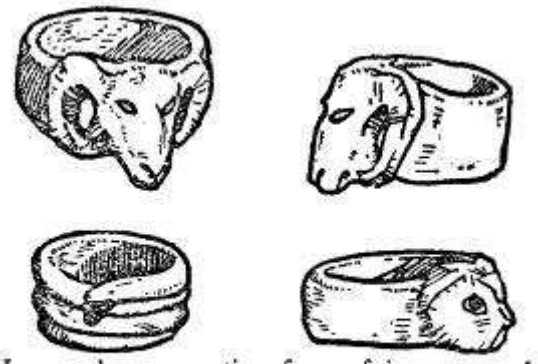
The "Lynx" carved a lynx's face on his ring looking most fierce with bristling whiskers, and you might well adopt that idea – carving the head of your Patrol animal or bird on the front of the ring. This you will find is not so easy to do in bone, but the same idea can be applied to wood, which is easier to carve and brand.

You see in the next picture suggestions for scarf rings for the Ram or Giddy Goat Patrol, and also for the Owls and Rattlesnakes. Probably you will be able to work out your own Patrol sign from these ideas.

Simple " woggles " can be made quite easily from an old ham bone. A ring is cut off, the inside made smooth with a file, and the outside can then be decorated to suit the wearer's fancy.

If you are making a wooden scarf ring don't choose wood which splits easily. Remember also to bore out the wood from the middle of the ring before you get the outside whittled down too thin, or you might find all your labour wasted by splitting it when you bore the middle away.

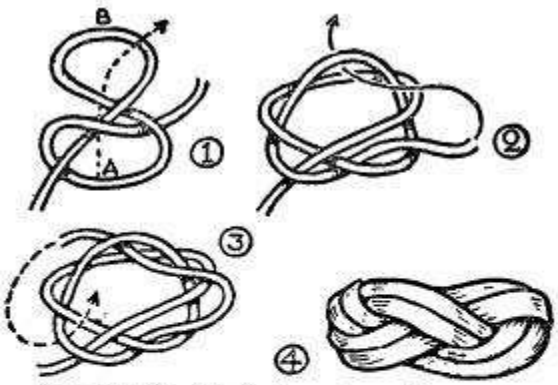
Perhaps the simplest type of scarf slide is one made from a small piece of leather strap just bent round into a ring and sewn at the join. This type can be made to look very attractive if embossed with a Scouty design after first soaking the leather to get it soft.



Here you have suggestions for scarf rings engraved with the Patrol sign of the wearer. They may help you in making your sign.

This article would not be complete without a description of the Turk's Head, for though you cannot officially wear the leather, two-strand pattern of the 1st Gilwell Park Troop, there is no real reason why you should not make similar slides in coloured cord or other material; and, anyway, every Scout should know how to make a Turk's Head, for it is perhaps the most useful of all ornamental knots. You will often find it decorating the tiller of a barge, manned by a bargee who takes a pride in his craft, or it is frequently worked into lanyards and other fancy work by sailors. There are several ways of working this attractive knot. See if you can work it out on this plan with the aid of the diagrams.

First lay out the cord like diagram 1. Then take a loop – A – behind and up through the loop B in the direction shown by the arrow. It should then look like diagram 2. The line and arrow show you the next move, which is simply to put the right-hand end *over* the next strand to it and then *under* the next one.



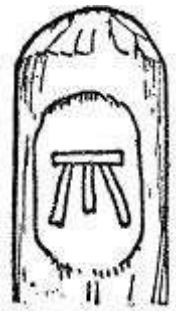
The Turk's Head is perhaps the most useful ornamental knot. To make it you first lay out the cord as in diagram 1. Then take the loop "A" behind and up through "B" so that it looks like diagram 2. Now take the end shown by the line and arrow and carefully follow the article with the aid of diagrams 2 and 3. The fourth sketch shows a double Turk's Head finished.

Having done this, you put the same end down over the next strand to it, and then up alongside the other end. Then having thus got the two ends together, you simply follow round as many times as need be, keeping the strands side by side. When the Turk's Head is as big as you want it to be, either double like the illustration, treble, or quadruple, cut the ends off so that they just meet, bore a hole through each end and join them up together with a piece of thin wire, or in the case of cord just sew them strongly together.

I hope that you will not exactly copy these patterns but try and invent something for yourself. If you could get a sailor friend to show you how to make a pineapple – which is something like a Turk's Head but much more elaborate – you could make a really beautiful "woggle" for your scarf.

XIX

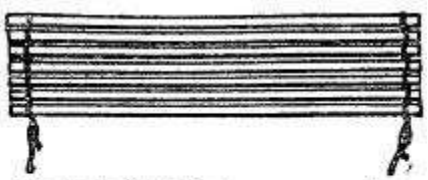
FURNITURE FOR THE "OUTDOOR HOME "



PROBABLY most of us have experienced the discomfort of badly served meals in camp, and have consoled ourselves with the chilly comfort that after all "carnp is camp," and we must Be Prepared to "rough it" for a little time. This is really only partly true. Of course we are quite ready to rough it, if need be, with anyone; but there is no need to exalt roughing it into a virtue and to endure intolerable conditions when you might easily be living in decency and comparative comfort.

You can always tell the camp of the old hand from that of the tenderfoot. The old campaigner knows how to make himself comfortable, and has a thousand little dodges up his sleeve. He is always improvising, adapting and making use of the things that lie to hand in order to make himself at home in the wilds, while the tenderfoot is enduring all sorts of discomforts in the vain belief that he is becoming a hardy campaigner. This not only applies to sleeping arrangements but also to cooking and feeding, and it is about feeding that we are going to talk to-day.

I wonder if you have ever sat on your blankets in a bell tent eating Irish stew or drinking cocoa; if so, you know how difficult it is to keep your blankets clean and your tent fresh and sweet. The moral is, of course, that food should never be eaten in your sleeping tents. Rig up a little shelter outside and then provide your Patrol with a dining-table, which can easily be made with a few old staves and some ordinary builder's laths, about 2 ft. 6 in. long.



To make the table-top you must get some ordinary builder's laths about 2 ft. 6 ins. long. These are joined together very simply as explained in the text.

Fasten the laths together by tying a couple of clove hitches in the middle of two pieces of string around the first lath, and then join the others by means of the Malay hitch, which the diagram makes clear. When you come to the last lath you finish off by knotting the ends of the string.

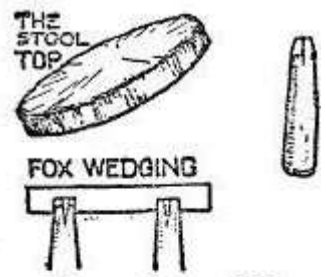
You have now a sort of wooden mat which can be rolled up and carried about quite easily This forms your table-top, and four pieces of staff driven into the ground make the legs. The table-top is supported by two staves lashed horizontally to the legs at a convenient height from the ground by means of square lashings, or if you use forked sticks for the legs no lashings will be needed at all. The picture on the next page makes all this clear. The finishing touch is put on by having a piece of American cloth to cover your table.

Camp stools, too, are quite easily made if you know how to use a saw and an auger, and are lucky enough to have a tree to cut up. In this case the easiest way to make a stool is just to cut off slices from your tree about 2 in. thick with a cross-cut saw. Probably you know how to use the cross-cut already, but if you don't, just remember the following little tips: –

Your table-top resembles a wooden mat which can be rolled up and carried about with ease.

First of all *don't push it* – always *pull it* to and fro. The teeth are set to cut on the pull. Then don't dance about – keep your feet still; shuffling is a great waste of energy, so get a firm stand and swing down to it. Last of all, don't *press* on the saw, it will do the cutting all right if you will keep it steadily going. Cross-cutting is fine exercise, as you will find out if you try it on an oak tree.

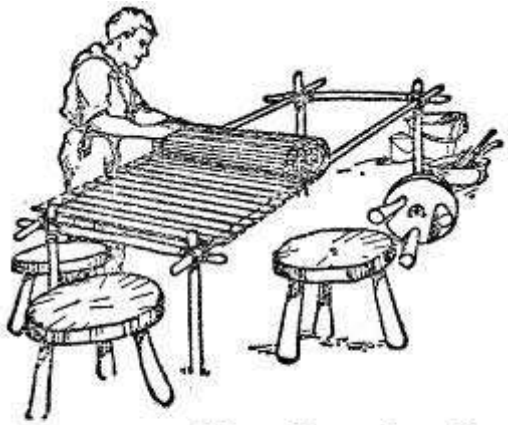
Well now, having cut your slab cleanly off the tree-trunk, the next job is to make the legs, which consist of just three or four sticks about 1½ in. thick and say 1 ft, or 15 in. long. Bore holes with an auger about two-thirds of the way through the seat from the under side, being careful not to go right through or you will spoil the whole job.



The stool top, which should be about two inches thick, is made from a slice of tree-trunk. The legs are sticks about fifteen inches long. The wedging, which is explained fully in the text, helps the legs to fit tightly into holes cut in the under side of the stool top.

Shape the ends of the legs so that they fit quite comfortably in the holes, don't make them too tight or there will be no room for the wedges to work. These wedges – called fox wedges – should be made just a little too large to fit the slits which are cut in the tops of the legs. Then when you put the legs in the holes bored for them, and drive them firmly home, the wedges expand the tops of the legs so that they grip tightly, and if you have done the job well they will be as firm as a rock.

It is not, of course, essential to have a round section cut off the tree-trunk for your stool tops; actually it would be far better to use a thick piece of plank rather than a piece cut across the grain, for it is much less likely to split. When you have made a few rough stools for camp and become pretty good at making them, you could set to work to furnish your Patrol Corner or Rover Den with some really well-made ones, ornamenting them by chip-carving the tops, or covering them with leather.



Here you see a dining-table complete with wooden "mat." Notice how easily the table supports are constructed. Nothing could be more simple to make than the stools.

XX

WHAT WHIPPINGS ARE

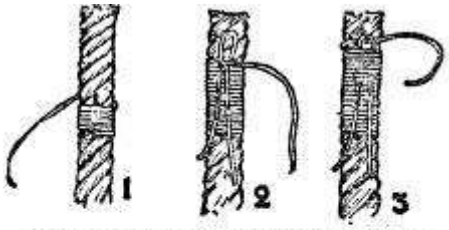
YOU will remember that when we were talking about splicing I said that it was far better to do a whipping on the end of a rope to prevent it from coming unlaid than to adopt the more untidy way of finishing it off with a crown and back-splice. The drawback to this last method is that it makes the rope so much thicker at the end, so only do a crown and backsplice when you haven't the time for the more workmanlike whipping.

I want now to show you three different whippings, and then you will know enough about whipping to tackle any job that comes along.

First of all, then, the ordinary whipping. This is generally used for finishing off the end of a rope and also for binding such things as fishing-rods, bat handles and thumbsticks.

To make this whipping lay the end alongside your rope or whatever you may be binding and bind it securely down as you see in figure 1. Take care that you serve it evenly, and that no one turn overrides another.

There are several ways of finishing off. Perhaps the easiest is to bind in a little bight of twine as you see in figure 2, then when you arrive at the finishing point, slip the end through the bight and pull it down through the binding (figure 3), carrying the end with it; then cut the end off close up so that it does not show. This makes a very secure and neat job.

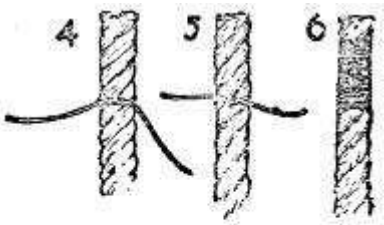


This simple whipping is very easy to follow. End off by slipping a little bight of rope over the binding. Cover part of it, slip the end of the rope through the loop, pull down and cut off all unnecessary ends.

Another very good whipping, which deserves to be used much more than it is, is the West-country whipping; this is perhaps the easiest of them all. To make it you simply tie a half-knot in the middle of your thread as shown in figure 4. Then take the ends round to the other side and tie another half-knot, then back again to the first side and tie another, and so on and so forth until your whipping is long enough. Lastly, you finish off by making a half-hitch round the rope with each end of your thread and then tie them together, needless to say, with a reef knot.

You will find this a very easy and quick whipping to do, and it certainly holds very tightly, though it is not perhaps quite so neat as the first one.

We have saved the best one of all till last. It is a bit more difficult than the others and takes a little longer, but it is well worth the extra trouble, and once made practically stops there for ever. It is called a needle whipping or sometimes a sailmaker's whipping, and to make it you need a needle (sorry, no pun intended!) and waxed thread.

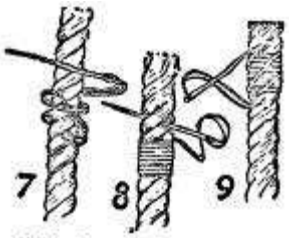


This is the easiest whipping of all. It is made up of a series of half-knots on alternate sides of the rope.

Start inboard and work outward towards the end. The diagram, figure 7, shows you how to start. Slip the needle under one strand, lay the short end along the rope, then bind it in just the same way as you did the first whipping.

When you get to the end, push the needle between either of the strands, pull the end up close to the whipping, then carry it back over the top of the whipping following the lay of the rope.

Now go under a strand on the other side of the whipping and so on backward and forward until each strand has been served alike. A glance at figure 9 will make this clear. To finish off you push the needle up through the middle of either strand on the inboard side, then cut off close up, and your sailmakers' whipping is complete.



To do the needle whipping, you start by passing the twine beneath a strand as you see in 7. Now pass the twine round and round as you see in 8. Finish by passing it through a strand, pulling sharply downwards and repeating the operation until each strand has been served alike. Cut off after passing the twine through the centre of one strand.

The hemp thread which saddlers and shoemakers use is the best stuff to use for whipping, about three thicknesses worked up together with cobbler's wax or beeswax will stand anything, being much stronger than ordinary twine.

Now you know all about whipping, and there is no excuse for you if the ends of your ropes come unlaid. I want you to take a real sailor's pride in any rope you may have to deal with ; there is all the difference in the world between a neatly whipped rope's end and one that looks like a cow's tail. These little things, like shoes laced Scout fashion and shirt sleeves cut short at the elbows, all go to show which side of the hedge you are on.

XXI

TWO EASY-TO-MAKE KITBAGS

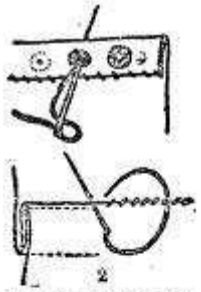
EVERY fellow needs a kitbag of some kind for camp, and many of you I know would much rather make one for yourselves than buy one, especially if you have acquired the habit of making the things I have been talking about in the previous chapters.

To make an ordinary kitbag you need a piece of material about 5 ft. long by 3 ft. wide. There is no need for you to buy brand-new canvas for this. Perhaps you have an old tent lying about which is no longer useful as a tent but with still enough wear left in it for a kitbag.

Even a cement bag well beaten and turned inside out is not to be despised. Then you take some waxed twine and a sail needle, a palm also is useful, and a little grease to make the needle work easily.

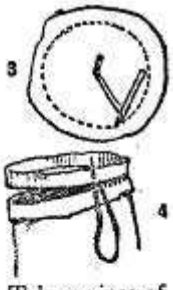
For the body of the bag, assuming that you are going to make a kitbag a 2 ft. 6 in. long, you cut out a piece of canvas 38 in. by 34 in.

Begin by folding over the top of your bag as shown in figure 1, each fold is 1 in. wide, and you sew along the bottom of the hem with a flat stitch. Next you make the eyelet holes for the puckering cord to ran through. If you look again at figure 1 you will see how this is done. First punch out the hole, then wind some twine round the edges, and lastly sew all round the hole over and over the turns of twine.



2

In diagram 1 you will notice that the top of the bag is folded and hem-stitched at the bottom of the fold. Next you punch out the holes for the puckering cord, and sew round with twine, taking the needle over and over the hole. The next thing is to sew the sides of the bag together, diagram 2.

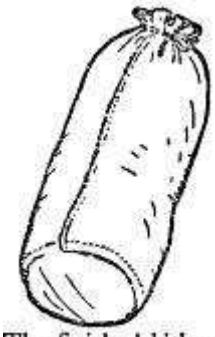


3

4

Take a piece of canvas similar to that in figure 3 and mark out, with the aid of pin, string and pencil, two circles, one 12 in. in diameter and the other 10 in. Cut round the outer circle, and turn this circular piece back about 1 in. Now turn back the bottom edges of the bag 1 in. and sew the circular piece to it as you see in diagram 4.

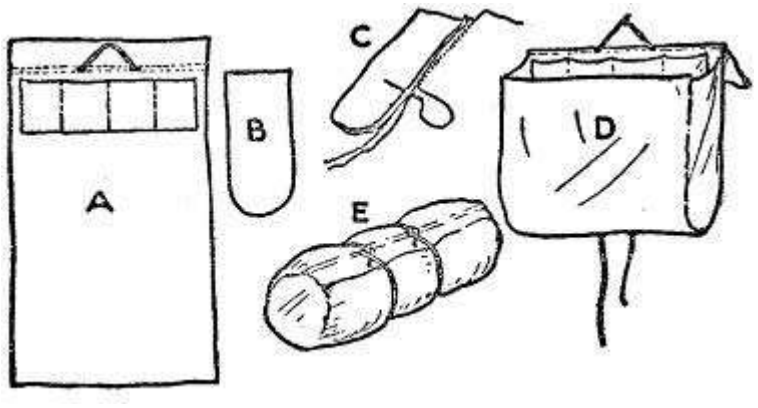
Having done all this you sew the side edges of the bag together in the manner shown in figure 2. This is called a flat seam. The diagram shows only one side being sewn, but actually you sew your seam on both sides, making a fine secure job of it similar to a lapped joint in a billycan.



The finished kitbag.

That finishes the body. Turn it inside out and now you have a canvas tube open at each end. Take another piece of canvas, similar to that in figure 3, and draw two circles on it, using pin, pencil and piece of string to make the lines, one 12 in. in diameter and the other 10 in. Now cut round the outer circle.

Figure 4 makes the next process clear. Make sure that the bag is inside out, then turn back about 1 in. at the edges of your circular piece and 1 in. of the bottom of the kitbag itself, then sew on as you see in the diagram. Last of all you sew the bottom edge of the bag to the sides. Glance back at the finished kitbag, which shows you where these stitches should come, then turn your bag right side out, reeve a piece of cord through the eyelets and splice the ends together and you hare a kitbag of which you can be proud.



These diagrams show you another type of kitbag. It has the advantage of having pockets. A shows the piece of canvas, with the hem 6 in. down from the top. Through this you pass a strip of wood and make a hanger of cord. Just below is a piece of canvas with four divisions – the pockets. B shows one of the side-pieces; while in C you have the method of sewing it to the bag. To make the hanger shown in D, get a piece of cord, bore two holes in the wooden strip, pass the cord through, and knot inside and outside. The two long ends of cord are used for securing the pack when rolled up as you see in E.

Another type of kitbag is adapted from Abercrombie's Kewadin pack. Figures D and E show you what it looks like.

The pockets are very handy, and its great advantage is that you can get at things easier than in the ordinary pack or kitbag, for it's queer how things seem to have an uncanny knack of getting down to the bottom of a kitbag whenever they are wanted.

You see in figure A the first stage in its construction. A piece of canvas is needed about 4 ft. 6 in. long by 2 ft. 6 in. wide. About 6 in. from the top fold over and stitch up a hem 1 in. wide; inside this you slip a strip of wood as shown by the dotted line at the top of diagram A. Then you sew on a piece of canvas about 2 ft. long by 8 in. wide to form the inside pockets. These again you see in diagram A.

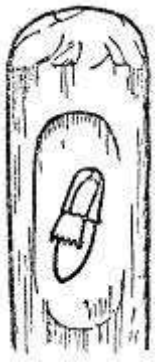
Now make the sides as shown in B. They are cut out of pieces of canvas 2 ft. long by 10 in. wide. Round off the lower ends as illustrated. Diagram C shows you how to stitch the sides together, working, as always, with the bag inside out.

Having finished this, all that remains to be done is to bore two holes in the wooden strip and insert a piece of cord, knotting it both inside and out, so that there is a loop on the inside, to hang it up by, and two long ends outside for securing the pack when it is rolled up.

If you make this type of kitbag you will see that very little adaptation is needed to convert it into a rucksack; a few eyelets round the top and a couple of slings and the job is done. See what you can evolve out of this.

XXII

SIMPLE INDIAN MOCCASINS



YOU will remember that in Chapter XII told you how to make Ojibway moccasins; I said there that the different tribes of Indians wore different patterns of footgear suited to the kind of country in which they lived.

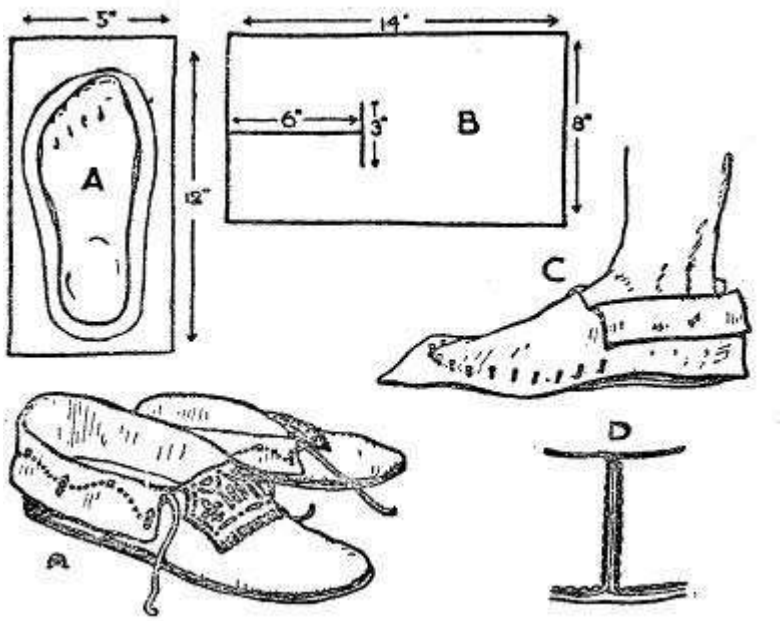
The Ojibway is a soft moccasin for wearing in snow, but is no use at all on the hard, stony plains, so here is the kind of moccasin which the Plains Indians wore, and which, incidentally, you will find much easier to make than the Ojibway footgear.

Take a piece of stout sole leather about 1 ft. long and 5 in. wide for each of the soles. Put your foot on one and draw round it with a pencil held upright. Then draw another line outside this first one about ½ in. away, but just rounding off the corners as you see in figure A. Now cut cleanly round this outer line with a sharp knife.

You probably know, if you have done any leather work, that the way to keep your knife sharp for leather cutting is to glue a strip of emery paper on a piece of board and give your knife a rub on it every now and then. This puts on a coarse cutting edge which goes through leather very easily.

Next time you take a pair of boots to be mended you will see the bootmaker using one of these to sharpen his knife.

Having cut your first sole you can lay it on the second piece of leather – reversing it first, of course – and cut out the other sole from it, and your soles are ready.



First of all you cut soles from two pieces of leather about 12 ins. long by 5 ins. wide. The uppers – diagram B – have a slit 6 ins. in length, with another 3 ins. in length at right-angles to the first. After soaking the upper, place your foot on a sole and slip the upper over it, tacking round as in C. Remove tacks and replace with stitches, then cut away the waste leather. The heels are brought to the back of the moccasin, where they should just meet. Cut off waste and stitch as shown by D. The finished moccasins are shown just below A.

Now for the uppers. Each upper will require a piece of leather, much thinner than sole leather, roughly 8 in. wide and about 2 in. longer than your foot. First of all cut a slit 6 in. long down the middle from one end and then another slit 3 in. in length at right angles to the first one. Diagram B gives you the idea. Soak the leather in water, then put your foot on the sole and slip the upper over it, shaping it down over the foot, and stretching it until it shapes well.

Then mark round where the stitches will come through the upper on to the sole (diagram C). The best way of doing this is to drive brads – about six to the inch – down through the upper into the sole. Start on each side of the instep and work round towards the toe, gathering up any surplus leather of the uppers as you go along, as shown in diagram C.

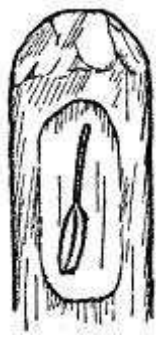
This done, the next thing is to pull out the brads and to use the holes which they have made for your stitches, sewing strongly all round with well-waxed thread. Now you should look up Chapter XI, where I described the Ojibway moccasin, for hints on the sewing of the soles. The easiest way to do it is by using two needles and pulling out the brads a few at a time, then putting stitches in where the brads were as you go along.

When you have sewn from one side of the instep to the other, going right round the toe, and cut away the waste leather, you can start to fit the heel. Slip your foot into the moccasin, bring the two sides round the heel so that they just meet, cut off any surplus there may be and stitch the ends together, as in diagram D. Then complete the sewing of the upper to the sole.

Now turn over the top edges of the upper and stitch them down at the top, running a piece of thong through the hem thus formed. This comes out at each aide and ties in front. It improves the appearance of the moccasin if you sew on a tongue of leather as you see in the sketch of the finished article. It can be ornamented in any way you like. Beadwork is not difficult^ and looks most effective. The picture suggests a scheme of decoration, but you could no doubt evolve other and better ones for yourself.

XXIII

"FLIPPING" A FLAPJACK



THE other day, to my intense surprise, I discovered that there are still many fellows who have never tasted the joys of making and eating flapjacks. This is terrible! I simply cannot imagine how any fellow who in any way considers himself a wood-crafter can go on making those abominable things which are generally served up as dampers when he might be eating flapjacks, which to my mind are quite the most delightful and edible form that flour and water can be made to assume in camp.

There certainly is a bit of an art in making flapjacks, but it is an art well worth acquiring, even if you don't succeed at first.

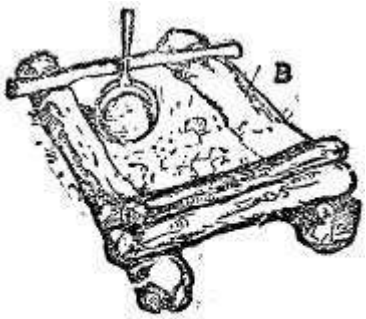
This is how it is done. First of all get some flour. Take about a double handful of it, and put it in a basin; mix in some salt – a small salt-spoonful would be about right – and a couple of tea-spoonsful of baking powder. You need not use any baking powder if you are using self-raising flour, but personally I always use just a little baking powder.

Then you mix all this together thoroughly before you put in any water, using a wooden spoon or a stick with which to do the mixing. Never use your hands more than you can help when making damper or twist or flapjack; you will get much lighter bread if you don't handle the dough. Having mixed flour, baking powder and salt together, you add water, gradually stirring away with the stick all the while, until the mixture is about the same consistency as cream or Nestle's milk. Stand the basin down for a few minutes while you get the fry-pan ready.

This illustration shows various ways of cooking a twist. You can do this with the aid of two forked sticks; placed round a piece of wood stuck in the ground is another method, or you can cook a twist in front of a reflector fire.

Now you must have a sensible fry-pan in which to cook flapjacks, a round one of iron or thick aluminium is best, and it must have a rigid handle, not a hinged one like those fry-pan lids of Army mess tins; you will see why in a minute. Having got your pan, you proceed to warm it by holding it over the fire for a little while; there's no need to make it red-hot of course, half a minute does the trick.

Then take a little grease of some sort, lard does very well, or bacon fat, but margarine is no good at all – there's very little fat in marg. All that is needed is enough fat just to cover the bottom of the pan with a film of hot grease; so about a level teaspoonful is more than ample.

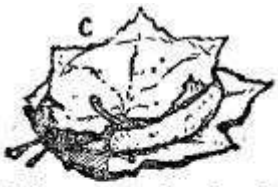


Here is a simple way of cooking a damper. It is placed in a fry-pan, which in turn is propped up in front of a fire.

The backwoodsmen just rub the pan over with a piece of greasy bacon rind, so you see very little fat is required. When the fat is hot and gives off a film of smoke, pour in enough batter, nearly but not quite, to cover the bottom of the pan. Pour it in gently from the centre so that it spreads outwards; stop pouring when it gets to within half an inch or so from the sides.

Very soon bubbles will begin to come up through the batter so that it looks something like a very thin crumpet. All the while this is going on – and it doesn't take very long – you keep giving the pan a gentle shake so that the flapjack is kept sliding about on the bottom of the pan and so cannot stick.

Now the supreme moment has arrived. Take the fry-pan in your right hand, give it a quick jerk, dipping the front down and then up quickly, and you will have the extreme gratification of seeing your flapjack turn a graceful somersault in the air and come down flop on its other side ; in the pan if you are lucky, or, as is more likely the first time, in the ashes.



A damper may be placed between two Plane leaves and cooked in the burning embers of the fire. The leaves prevent the damper from burning, and are peeled off when the " cookie " is ready.

You can practise this "flip" with a circular piece of leather or linoleum – this is as near the real thing as possible – and when you are good at this, chance your luck with the flapjack itself.

Anyway, the knack soon comes, and then you will want to go on making and eating flapjacks all day, like some Scouts of a very famous Swift Patrol who were in camp with me once.

Probably I ought to say a few words about making twist and damper. Twist is quite easy to make; you use the same proportions of flour, salt and baking powder as for flapjacks, but less water, of course. Probably you know the best way to mix the dough is to put a mountain of

flour in the pan, make a crater on top of it, and gradually pour in water, stirring away with the wooden spoon until you have a nice spongy dough.

The supreme moment has arrived. Up goes the flapjack for the "grand twist."

Leave it for a bit while you make the stick to wind your twist upon. This should be a piece of clean wood – birch for preference, but don't use yew or holly – about 2 ft. long by, say, 1½ in. thick. Now the whole secret of twist making is just this:

The stick must be heated first before winding on the dough. This ensures that the dough is cooked inside as well as out. So peel the stick and bake it well before winding on the ribbon of dough. Another essential is a really good fire of glowing embers. Oak or ash or thorn makes good fires, as you know, ash best of all, but it is no good trying to cook on a few blazing sticks.

Diagram A shows the way to bake your twist, either on a couple of forked sticks or stones, or turves over a trench fire, or in front of a reflector fire, or you can just sharpen the end of the stick and drive it in the ground; but in any case don't forget to heat the stick first.

Damper is nearly always badly made by Scouts, There are lots of ways of baking it, probably the best way being to make your dough into thin, flat cakes, put them into a slightly greased fry-pan, hold over the fire to make them rise, and then prop up the pan in front of the fire as shown in diagram B.

Another very sound "stunt" is to get a couple of Plane or other large leaves, put the damper, made into a flat cake, between them, and pop it on the embers, as shown in diagram C. The leaves prevent the damper burning, and when it is done all you have to do is to peel off the charred leaves, and there is the damper nicely baked. But remember to make the cake thin or it will be hard outside and pasty in the middle.

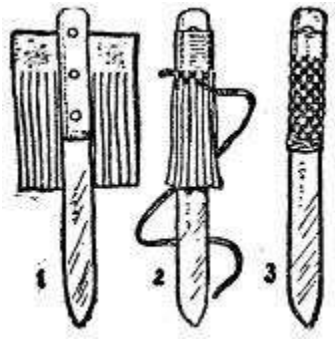
XXIV

A REAL SHEATH KNIFE

SOMEONE said the other day that we ought to be able to get a real backwoods type of hunting knife without paying such a lot of money, so I propose to show you how to convert an ordinary butcher's knife, or even old table-knife, into a really serviceable and "woodcrafty" hunting knife.

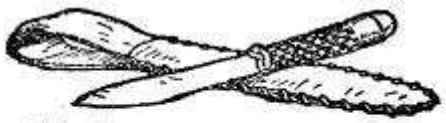
You can buy quite a useful knife about 8 in. long, with a plain wooden handle, for about two shillings at any tool shop where they sell butcher's or bootmaker's knives. Knives of this type are really much better for Scout use than the more expensive hunting knife, because they have thinner blades, which make them much better for cutting up meat and bread, which is their principal camp use. We don't often need them here in England for skinning moose or grizzly bears, which is what those beautiful hunting knives are intended for.

But that is all by the way. Let's get back to the job. Having bought your knife, the first thing to do is to cover the handle.



A piece of leather is cut as long as the handle of the knife and just wide enough to go round it. Cut this into strips, leaving a band at the top about half an inch wide, as you see in the first sketch. Wet the leather and stretch it round the top of the handle, stitching the edges where they meet. Now take a long strip of leather, fix one end to the handle by means of a brad, and after a good soaking in water commence to plait the strap in and out as you see in the second illustration. The third sketch shows the handle complete with the plaited covering, and finished off with a Turk's Head.

Cut a piece of leather as long as the handle, and wide enough to go just round it. Cut it longitudinally (good word that – it means from top to bottom) into strips a ¼ in, wide. You don't, however, start cutting at the top, but leave a band of uncut leather across the top about ½ in. wide (fig. 1). Wet the leather, stretch it tightly round the top of the handle and stitch the edges together where they meet. You now have the leather firmly attached to the handle at the top, and the strips hanging down all round.



This illustration shows how the knife and sheath should look when finished.

Take a long strip of leather – a couple of bootlaces joined neatly together with a rawhide splice, which I have told you how to do several times, would do very well. Fix one end of this strip to the handle by means of a little brad close up to the top under one of the strips, and having got the whole nicely soaked in water and workable, start to plait the long strip in and out, alternately over one and under one of the longitudinal strips. Sketch 2 will make this clear. Pull tight, and work up close every time round, and you will soon have the handle covered with a closely woven basket-work of leather. Gently hammer it all flat, and make fast by binding round the bottom of the handle with a turn or two of wire, which is then covered by another band of leather sewn round, or by a Turk's Head made of bootlace (fig. 3).

For the sheath you could make the one described in Chapter II, or simpler, try your hand at this one, which is much easier to make.

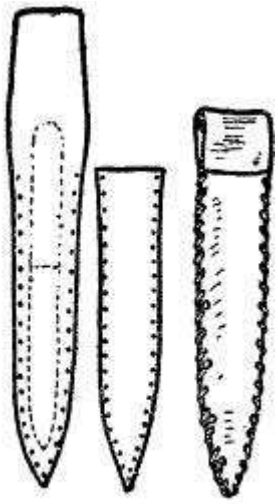
Take two strips of leather about 3 in. wide, one piece 1 in. or so shorter than your knife, for the front of the sheath, the other about 4 in. longer to form the back. Then back the top 3 in. of this longer piece and sew it securely across the back, using two needles and waxed thread; this forms the belt loop. Now make a flat wooden knife the same shape as the knife for which the sheath is being made, lay it on the back piece of leather, wet on the knife. Then take an old toothbrush handle, and shape the front of your sheath down over the wooden knife by rubbing hard all round the edges. This will leave a mark where the edge of the blade will come in the sheath. Cut away all surplus leather with a sharp knife ¼ in. away from this mark all round.

You can now sew the sheath together with a needle, thread and awl; or a much easier way is to punch holes, about four to the inch, all round the sheath, and just lace it tightly with a flat leather bootlace. This looks very well.

There is just one other thing to remember – that is either to put in a few copper rivets to prevent the knife cutting through the bootlace, or to insert a strip of leather right down the side between the front and back of the sheath.

The artist has left the sheath plain, showing you the simplest possible knife sheath, but you can emboss it or ornament it in any way you like, of course. Last of all, remember it is no use having a swanky-looking knife if it isn't in really good cutting condition.

The Chief Scout says: "A Scout does not carry a knife, but a *sharp knife.*"



To make a sheath, take two strips of leather about three inches wide. One of these strips should be an inch or so shorter than your knife, while the other should be about four inches longer. These two pieces are then laid on one another and the top three inches of the longer strip turned back and sewn securely across the back, to form a loop for your belt. Take the "dummy" knife explained in the text and shape the sheath as told. The third sketch shows the sheath after sewing round.

XXV

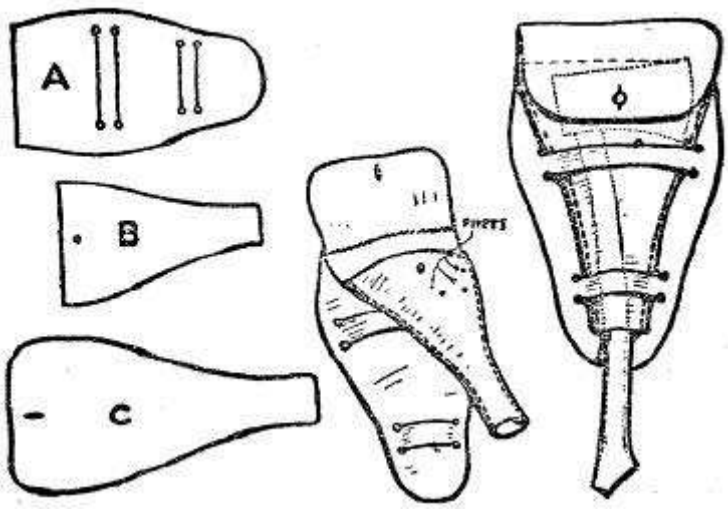
A COWBOY AXE CASE

THE way a Scout treats his axe is a very clear indication to an old campaigner of the kind of chap he is. Only the "greenhorn" will leave his axe lying about on the ground; the old hand knows that an axe is no good unless it is sharp, so he treats it with the same care that the soldier bestows on his rifle, and always keeps it in a case when not in use.

All kinds of axe cases are possible, and it doesn't much matter from the point of view of utility which you have; but if you are making one, there's no real reason why you shouldn't have a shot at a really "posh" one with a touch of the "wild and woolly west" about it.

I don't want you to run away with the idea that cowboys really use cases like this for their axes – for as a matter of fact they don't. I only call this a cowboy axe case because it is modelled on a cowboy revolver holster which I came across the other day.

Start off by making the back, as shown by A. For this you need a piece of leather 9 in. long by 7 in. wide. The diagram shows you how to shape it. The holes are punched ¾ in. from the edge, each pair being 1 in. apart.



A – shows the shape of the back piece of leather. Eight holes are punched in it, which are joined by slits cut in the leather. B and C form the case proper. B is placed on C and stitched, leaving the top part of C quite free. Slip the axe into the case, then put in rivets to prevent the stitches being cut. A is sewn on to the back, and the case is slipped through the "straps" of leather in A. Finish by making a fastener to keep the case closed.

Then cut the slits across as you see, thus connecting the holes together, and forming the retaining strips to keep the holster in position. A very effective way of ornamenting this part is to punch holes all round the edge about a ¼ in. apart, and then interlace a binding consisting of a flat leather bootlace over the edge all round.

Now you make the case proper, consisting of two pieces of leather, B and C in the drawings. B is made 8 in, long, 6½ in. wide at the broad end, and 2½ in. at the small end. C is, as you see, longer in order to provide the flap. Make it 11 in. long, 6½ in. wide at the top, and 3 in. at the bottom.

B and C are then stitched together up both sides in the usual way with strong waxed thread, and a couple of needles.

You need not stitch these together at all unless you like – the plan I suggested in the last chapter for the knife sheath would do very well. Punch holes through both sections, and bind them together with a leather bootlace. It makes a very strong job of it, and certainly looks more picturesque than most stitching.

Having secured the two together, slip in your axe, then put in a few copper rivets to keep it in place, and to prevent the stitches being cut. You should use a few more rivets than the artist has drawn in the picture.

Then you sew the back piece, A, on to the case. You will at once see how this provides the means of attaching it to your belt, and lastly, arrange for a fastening of some sort on B and C to keep the flap closed. Probably a brass stud and buttonhole is the easiest method, but you could have some sort of carved wood or bone fastening if you like, or a hard leather button of your own manufacture.