

C. ARTHUR PEARSON LTD.
TOWER HOUSE, SOUTHAMPTON STREET
STRAND, W.C.2

Downloaded from:
"The Dump" at Scoutscan.com
http://www.thedump.scoutscan.com/



Contributed by Scouter Ric With thanks to 1st Kersley

Editor's Notes:

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. This book was written in England and thus contains English spelling and English terms. This and other Traditional Scouting texts are available for free download at the Dump.

Revised Edition	May, 1943
Reprinted	August, 1944
	October, 1945
-	February, 1953

A WORD FROM THE EDITOR

This little book is a sort of Scout's Enquire Within. Handy in size—it can be carried in your jacket pocket or the pocket of your shirt when in uniform—the book forms a most useful reference to those things a Scout is constantly needing.

Whilst as much information as possible has been packed into the pages, it was found impossible to cover all the tests but you will find many hints that will help you to gain your badges and much in the way of general Scouting knowledge.

Every Scout should make a point of going over all the things he has learnt in passing up to the First Class stage, and it is in this respect that you will find this book invaluable.

F. HAYDN DIMMOCK, Editor of THE SCOUT.

THE SCOUT PROMISE

On my honour I promise that I will do my best:
To do my duty to God, and the King,
To help other people at all times,
To obey the Scout Law.

SCOUT LAW

- 1. A Scout's honour is to be trusted.
- 2. A Scout is loyal to the King, his country, his officers, his parents, his employers, and to those under him.
- 3. A Scout's duty is to be useful and to help others.
- 4. A Scout is a friend to all, and a brother to every other Scout, no matter to what country, class or creed the other may belong.
- 5. A Scout is courteous.
- 6. A Scout is a friend to animals.
- 7. A Scout obeys orders of his Parents, Patrol Leader or Scoutmaster, without question.
- 8. A Scout smiles and whistles under all difficulties.
- 9. A Scout is thrifty.
- 10. A Scout is clean in thought, word, and deed.

SCOUT LAW REMEMBRANCER

This easily learned rhyme will help you to remember the ten laws in their correct order.

Trusty, Loyal, Helpful, Brotherly, Courteous, Kind, Obedient, Smiling, Thrifty, Pure as the rustling wind.

THE SCOUT BADGE

You will see from this sketch of the Scout badge that each of the three leaves stands for one of the three points of the Scout Promise: Duty to God; to help other people at all times; to obey the Scout Law.

There are two five-pointed stars in the badge. These are sometimes described as Scouts' eyes - that is to say, a Scout keeps his eyes open, noticing and observing all things. Each of these stars has five points, ten points together, and they serve to remind us of the Scout Law.

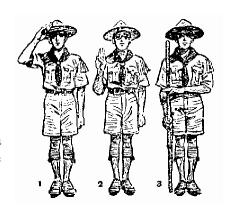
The band binding the three leaves together stands for the band of brotherhood of Scouts.



SIGNS AND SYMBOLS EVERY SCOUT SHOULD KNOW

THE SCOUT SALUTE.

Scouts and Rover Scouts salute, whether wearing hats or not as shown in Fig. 1. The Scout sign, as in Fig. 2, is given whenever the Scout Promise is being made. When carrying a staff a Scout salutes as in Fig. 3. When his hands are occupied a Scout salutes by turning his head and eyes smartly to the left or right as the case may be.



THE SCOUT SIGNS



This road to be followed.

This road not to be followed.

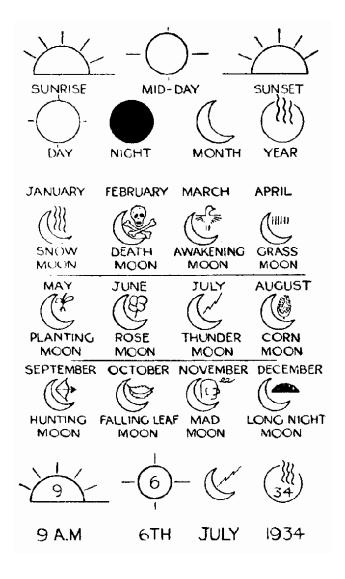
Message hidden three paces in direction of arrow.

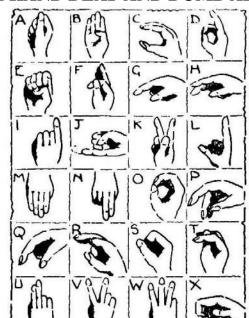
"I have gone home."



WOODCRAFT SIGNS FOR YOUR SCOUTING LOGS

Picturesque time, day and month signs for use in logs and messages.





THE ONE HAND DEAF AND DUMB ALPHABET

A knowledge of this alphabet may prove very useful to a Scout, especially those assisting a Special Test Group of Deaf and Dumb Scouts. The alphabet can also be used for silent messages between two Scouts.

Learn to read the TRAMPS' LANGUAGE

An unusual and interesting object for a hike—suitable for Springtime and Summer—is a study of tramp signs, which are to be found chalked on walls, fences and gateposts, in every part of the country. These curious signs, meaningless to the average person, convey a wealth of information to the professional hobo. They were invented by tramps many years ago to save themselves unnecessary labour, time, and the running of risks, and with only slight variations they are the same in every part of Europe and America. A knowledge of these signs tells the tramp whether it will be any use appealing to the inhabitants of a certain house for assistance, and whether that assistance will be given in food or money. There is a sign which means



Nothing doing here." and another which warns the 'gentlemen of the road' that a "Public official lives here".

You may have frequently noticed a crude drawing of a railway engine chalked on gates and fences, and have thought it the work of some child. Really you have probably seen the tramps' sign for "Traveling money will be paid."

One of the most ingenious of these markings is the one informing the hobo how many women there are in a house. In this case a series of triangles are placed in a row, the bases of which are joined. In front of these geometrical figures is a capital V. Each triangle represents one woman; thus a V placed before three triangles would mean that "Three women live here." Other interesting signs and their meanings will be found in the sketch.

ALL YOU WANT TO KNOW ABOUT TRACKS AND TRACKING

RECORDING TRACKS



In *Scouting for Boys* the Chief Scout devotes a whole chapter to woodcraft. He calls on Scouts to learn as much as they can about the habits of wild animals and birds, and to study tree and plant life.

The tracks of many wild animals are still to be found in the woods and along the banks of streams and near watering places, along the seashore, a marshy track through the forest, or a sandy stretch a few hours after it has rained.

If only you keep your eyes open you will be amazed at the number of tracks you can find. Large tracks and small ones, a few you can recognise, many that you cannot; and if you add deduction to your observation you may find wonderful stories in the tracks.

Of the methods of obtaining a record of the tracks so that you can identify later, the one which gives the truest impression is the plaster cast, for it is an exact reproduction of the track. And it might almost be called the simplest method, for taking an impression in plaster is a wonderfully easy operation.

All you need is a piece of cardboard about a foot long, and one and a half inches wide, a paper clip or pin, a tin of Vaseline, a small quantity of talcum powder — you can buy it from a chemist — a little salt, the plaster of Paris, and an old tin in which to mix it.

Presuming you have found the track you wish to record first see that the ground in which it is impressed is not

too damp — it must be hard to get a good plaster impression and evenly sprinkle over it a quantity of talcum powder. This is to fill in any holes such as water bubbles that may be in track so you must use the smallest possible amount of the powder.



Now place the cardboard, which you must first smear with the Vaseline, so that it just encircles the track and where the ends overlap, fasten with the clip or pin, as shown in the sketch.

Fixing the Cardboard Circle

The next thing to do is to mix the plaster of Paris. Place a sufficient quantity in the mixing tin, add a pinch of salt — it helps to harden the plaster quicker — and then pour in enough water to bring the mixture to the

consistency of thick cream, so that it will just pour out of the tin with ease.



Pouring in the Mixture.

Now pour the mixture from one side of the cardboard circle until it completely covers the track to a depth of about 1 in. Leave the mould for twenty minutes. But — and this only if you have been able to recognise the track — just as the plaster is hardening, with the aid of a match-stick or thin piece of wood you can print in it the name of the animal that made the track, the date and the place at which it was found.

When the twenty minutes have elapsed — and not before — carefully remove the cardboard from around the track, dig away the earth and lift the plaster cast. When you have washed from the cast with a soft brush and water any dirt that is

adhering to it, you will find you have an exact reproduction of the paw of the animal that made the track.

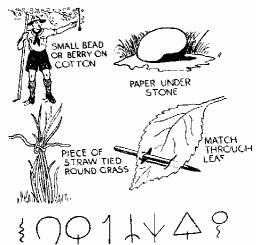
Once you have obtained an impression of the track it will be a simple job to identify it, if necessary. An authority on tracks — a tracking book, either will help you.

LAYING A TRAIL

Don't lay a trail which everyone can read, there is no skill in following a trail of chalk arrows, and it is too easy to be interesting. A trail should be laid so that it can only be read by the tracker who has a keen eye. Even the usual Scout signs are well-known to many who are not Scouts,

Why not invent your own Patrol or Troop signs? Keep those a secret amongst yourselves and do not tell anyone outside your Troop what they mean. Here are a few suggestions which will give you an idea for originating your own.

There are hundreds of trail signs which can he used and are a real test of observation. Here are some examples: Coloured wools —small pieces of each placed upon a background of the same colour. A small bead tied on a length of black cotton and hanging from a tree at the eye level. A few hazel leaves placed upon a birch tree or vice versa. A dandelion flower fixed upon a blackberry bush. A small piece of paper placed under a stone. A



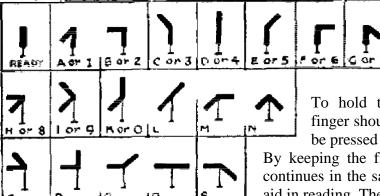
match-stick stuck through a holly or any other leaf. A piece of straw tied round a piece of grass. These signs would not be noticed unless you look for them.

Now and then when laying a trail a message could be hidden which would be found by the trackers by means of a pre-arranged Message Hidden" sign. These messages would test the trackers in distance judging and direction-finding by stating that the "trail commences again 200 yards 45 degrees left of direction of nearest fire-alarm North," or again "100 yards in (Hospital, Police-station, Telegraph office, etc.). then face S.W. and pick up trail 100 yards ahead." Trackers should set out at various intervals, timed at the start and their return.



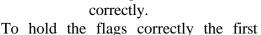
SIGNALLING FOR SCOUTS

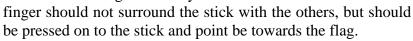
Semaphore signalling is not difficult to learn, but it is essential that a Scout should keep in practice. An expert signaller should be able to transmit or read from eighteen to twenty average-sized words a minute.



ERASE

The important thing is to make the angles correctly for unless this is done the message cannot be read correctly.





By keeping the finger along the stick, the stick of the flag always continues in the same straight line as the arm, and this is a very great aid in reading. The stick should be held close to the flag.

As only the letters A to G are made with one arm, H to Z will, of course, require both arms, and in most cases both on one side of the body.

When the distance between the signallers is not great, flags can be dispensed with, and the arms alone put into the various positions. Each illustration on this page shows you the sign and the position arms should be in if you were to stand with your back to the page.

The letters of the alphabet should be learnt, not from A to Z, but in the following groups:

1. — From A to G inclusive, which are made by one arm or flag only. Take A as a starting point and you will see that the right arm goes round up to D, going up one stage, as it were, for each letter. At D the right arm leaves off and is dropped, the flag being held in front of the body, and the left arm goes on and completes the semi-circle down to G.

That is all that can be done with one arm, so now we start with two-arm groups.



- 2. From H to N omitting J, which is an exception. In group 2 all the letters are formed by holding the right arm in the position of A and going round the semi-circle with the other. This forms H, I, K, L, M, N. The next group
- 3. Contains the letters O to S, inclusive, and in this group letters are formed by holding the right arm at B.
- 4. The letters T, U, Y, and the "Erase" sign form the next group, each having one arm at position C.
- 5. The letter J, or alphabetic sign, the letter V and the numeral sign, have each one at D.
- 6. W and X have one arm each in the E position.
- 7. Z all alone as one arm at F.



If you learn them this way, you will learn them more quickly, and you will remember them better. There is only one thing to do now. That is, to get out in the open and start signalling. At the end of each word drop the arms to the "ready" position by holding the flags downwards in front of the legs and pause for a moment.

Should you find that you have made a mistake make the "Erase" sign and commence word afresh.

If the signaller wants to include a number in the sentence he will make the "Numeral "sign, which indicates that the signs that follow are to be read as numbers and not letters (e.g., E=5, H=8, BG=27, etc.). When the number is finished make J, the alphabet sign, again, to indicate that numbers are finished, and what follows are letters again.

After you have read each group of letters sent to you, you should send A (called the general answer) to show that you have read the word correctly. If you do not send an answer to the group the sender will know that you are not quite sure what it was, and he will go on sending it again and again until your have read it and answered.

"Ready." If a figure or group of figures is sent, you do not answer A, but you send back the letters of the alphabet corresponding to the figures sent you, thus: if 25 is sent to you, you would check by sending BE.

MORSE SIGNALLING.

ABODEFOH-JKLM	• • • • • • • • • • • • • • • • • • • •	POR OF UVXX	
1			
2		7	
3	•••-	8	
4		9	
5		0	

The symbols employed in Morse are a series of shorts and longs, or dots and dashes. Remember the fundamental principle, a "short," or "dot," is just one-half the length of a "long," or "dash," in flag- signalling. In all other methods it is one-third. Try from the first to signal at rate three — that is, fifteen letters a minute; words average a length of five letters. Alongside is the alphabet.

USING THE FLAG.

Start right; do not be slovenly. First, remember the body must be kept upright, not swaying about following the movements of the flag. Get a square stance, feet slightly apart, and stand at the ready position. (Fig.1.)

The method of holding the flag stick is very important. Right hand about six inches from the butt, left hand just below the right, thumbs pointing upwards. Right hand at the "ready" position should be in line with the

hand at the "ready" position should be in line with the nose so that you may see the distant station all the time you are signalling. In the "stand by" position, grasp the folds of the flag in your left hand, and the staff in your right. The two illustrations will make this quite clear.



Now for the waving movement which is not so simple as it looks. When out of doors, always try to get into a position where the wind blows from behind you, not always possible, but, for practice see that it does so. For a

dot, the flag is waved from the ready position to a point exactly opposite on the other side of the body, not in a straight line, but in the form of figure "8".

Commence by waving the flag away from the body until it has nearly reached a line directly in front of the nose, then bring it round to the end of the "dot "position, from there outwards again to the nose, and then back to the ready.

THE "READY" POSITION.

For a dash, the flag is taken from the "ready" position, just twice as far; that is, until it is horizontal. Do not forget the figure-of-eight movement. You will find this waving rather awkward at first, but with practice it should come quite naturally. Do not stop signalling if your flag gets tangled up; go on to the end of the word or group, then clear it when you come to the "stand-by" position.

Here are the signs. You must know and understand their use:

MORSE.	SEMAPHORE.
VE	VE
K	
AR	AR
	Opposite sign to "L"
	VE KAR R

The alphabetical check for numbers is always used by the receiving station to check any numbers which have been sent. This is done at once:

A is the check of 1; B 2; C 3; D 4; E 5; F 6; G 7; H 8; I 9; K 0.

Lastly the erase sign, used at once if you make a mistake in sending. Make the sign and then go back to the last word or group. It should be the aim of every Scout to attain first class standard. That is:—

SEMAPHORE — Rate four (twenty letters a minute),

MORSE — Rate three (fifteen letters a minute),

neither faster nor slower.

Practise out of doors as much as possible, at a distance apart so that you can see but not hear one another; you will then appreciate the practical value of signalling.

Morse can be used for flashlight or sound signals. Do not forget in these methods a dash is three times the length of a dot.

FIRST AID

CUTS AND SCRATCHES.

(a) If ambulance box available. Wash cut with water to which has been added antiseptic, such as Lysol or Condy's Fluid, or paint with Iodine.

Apply clean pad of lint (woolly side out), cover with cotton wool, and bandage. Avoid handling lint as much as possible.

(b) No ambulance box available. Wash cut under tap. Cover with clean piece of linen. (Rags can be made free of germs by boiling.) In all cases wash your own hands first.

BRUISES AND SPRAINS.

- (a) For bruises apply cold fomentations at once so as to avoid as much effusion of blood as possible. Cold fomentations consist of cloths dipped in water as cold as possible, slightly wrung out.
- (b) A sprain is caused by a sudden jerk straining or tearing the ligaments. Rest part affected and apply cold fomentations. Do not tie bandages too tightly.

BURNS AND SCALDS.

The pain is increased by exposure to air so cover up as soon as possible.

- (a) With ambulance box. Cover with picric acid gauze.
- b) No ambulance box. Apply clean linen, covering burn carefully.

GRIT IN THE EYE.

Sit patient in good light. Stand in front and get him to move his eve up and down and from side to side. If you cannot see any speck, pull down lower lid and look in, paying special attention to corners. Remove speck with camel hair brush or corner of handkerchief. If you fail to remove speck and patient is still in pain, put in drop of castor oil, bandage lightly and take to doctor.

BLEEDING FROM NOSE.

Keep patient sitting up with head back. Place a sponge or cloth wrung out of cold water at back of neck and another at root of nose. If that fails, very gently plug nostrils with cotton wool.

STINGS AND BITES.

Mop the part freely with ammonia or with a solution of washing soda. If stung by a bee, remove the sting.

HOW TO CLEAN A WOUND AND APPLY A CLEAN DRESSING.

See that your own hands are clean.

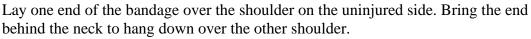
Wash the wound in clean water. Encourage a little bleeding to wash out dirt. Kill germs by washing, with antiseptic lotion. Do not touch the part of the dressing which will touch the wound. Lint should have its woolly side away from the cut to prevent sticking. Cover with cotton wool and bind in place.

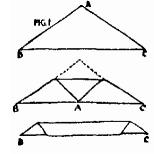
THE TRIANGULAR BANDAGE AND HOW TO APPLY IT TO DIFFERENT PARTS OF THE BODY.

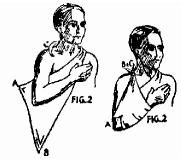
Triangular Bandage (Fig. 1).

Fold point A to the base. Then fold in half to the base for a broad fold bandage. Fold again for a narrow fold bandage.

The Large Arm Sling (Fig. 2).







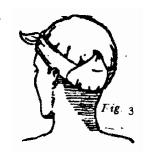
Place the point of the bandage under the elbow on the injured side and gently place the arm across the chest in front of the bandage, in such a position that the hand is higher up than the elbow. Take the lower end of the bandage, and tie it by a reef knot to the upper end hanging over the shoulder adjusting the length so that the arm is suspended comfortably in the position in which you placed it. Pull the point of the bandage out and turn over the front of the elbow, fixing it there with a pin. The knot tying the two ends should be on the shoulder.

The hand should be kept on a higher level than the elbow, otherwise it is apt to swell.

The finger tips should just show outside the bandage.

Scalp Bandage (Fig. 3.)

Turn back the base of the bandage for about one inch. Place the centre on the middle of the forehead, close down on the eyebrows, with the point hanging down behind the head. Carry the ends round the head just above the ears, and either tie at the back over the point or, better, if the ends are long enough, take them round the head and tie off in front. Pull on the point so as to tauten up the whole bandage, turn it up, and fix with a pin.



To keep a dressing on the forehead, the eye, the side of the head, or indeed for any rounded part of the body, a narrow bandage can be used. Place the centre on the dressing, carry the ends round the head, or the limb, and tie off with a reef knot.

Shoulder Bandage (Fig. 4.)

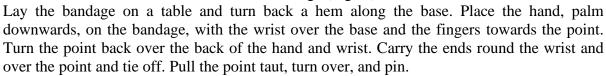


Two bandages are required. The first is laid open on the outside of the shoulder, the centre of the base being over the middle of the upper arm and the point running up the side of the neck to below the ear. Turn back the base for about one inch, carry the ends round the arm, and tie off. Make a broad-fold bandage. Lay one end over the injured shoulder, covering the point of the first bandage, and hanging down from the sound shoulder. Sling the arm by tying the lower end of this bandage to the upper end. Pull the point of the first bandage taut, turn down, and pin.

Elbow Bandage.

Turn back a hem on the back of the bandage. Lay the centre of the base on the back of the forearm, with the point running upwards to lie on the back of the upper arm. Carry the ends to the front of the arm, cross them below the joint, then back round the upper arm, above the joint, and tie off. Pull the point, turn over, and pin.

Hand Bandage (Fig. 5.)







Chest or Back Bandage (Fig. 6.)

Place the centre of the bandage over the dressing on the chest or back, and bring the point over the shoulder on the same side. The two ends are carried round the waist and tied. The point is then pulled down over the shoulder and tied to one of the ends.





Two bandages are needed. One is a narrow bandage tied round the body just above the hip bones, and with the knot on the injured side. The second is laid on the outside of the thigh, with the centre of its turned-hack base over the dressing. The ends are tied round the thigh and the point pulled under the first bandage, turned over, and pinned.

Knee Bandage (Fig. 8.)

Turn back a fold on the base of the bandage and lay its centre on the leg just below the knee-cap, with the point lying in front of the thigh. Carry the ends behind and cross below the joint, then in front, and tie off above the joint. Pull the point tight, turn over, and pin.

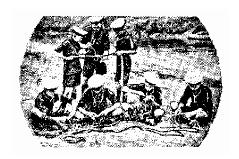


KNOTS YOU MUST KNOW!

Every Scout must know how to tie a certain number of knots. As the Chief Scout says in *Scouting for Boys*, "To tie a knot seems to be a simple thing, and yet there are right ways and wrong ways of doing it, and Scouts ought to know the right way. Very often it may happen that lives depend on a knot being properly tied."

Always use rope or cord when practising knot-tying and not messy pieces of string.

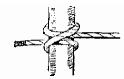
Here are the principal knots a Scout should know:—





The Bowline, a loop that will not slip, to tie round a person being lowered from a building, etc. Form a loop, then in the standing part form a second and smaller loop. Through this pass the end of the large loop and behind the standing part and down through the small loop.

Clove Hitch, for fastening a rope to a pole. Either end will stand a strain without slipping, either lengthways or downwards.

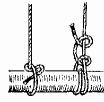




The Fisherman's Knot, is favoured by anglers and is a method of joining two lines. A knot quickly made, and is easy to undo, the ends being simply pulled apart.

The Reef Knot, for tying two ropes together under strain, as in tying up a parcel. Being a flat knot, it is much used in ambulance work. The best simple knot, as it will not slip and is easy to untie.

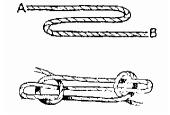




Half Hitch, made by passing rope end round standing part and behind itself. If free end is turned back and forms a loop, the hitch can be easily loosened. A round turn and two half hitches are used for tying a rope to a spar.

Sheet Bend, or common bend, for joining ropes of equal or unequal thickness together. Make loop A B with one rope and pass end C through and round whole loop and bend it under its own standing part.





The Sheep Shank, for shortening ropes. Gather up the amount to be shortened as in first illustration. Then with parts A and B make a half hitch round each of the bends, as in finished drawing.

Middleman's Knot, made in similar fashion to fisherman's knot. This loop will not slip when knots are drawn together, and can safely be used as a halter.



WHIPPING THOSE ROPES

Whipping a Rope.

All ropes in use by Scouts should be whipped at the ends to prevent fraying. Here is the way it should be done:

Loop the whipping twine and lay it alongside the end of the rope. Take the running end B round the rope about an inch and a half from the end. Now continue to bind the running end B round the rope end and the loop.

When you have got to about a quarter of an inch from the end of the rope, slip the

running end B through the loop that lays alongside the rope. Now cut off the running end B about two inches from the loop, then pull on the standing end A. This will draw the loop, and at the same time the running end B, into the binding.

Trim the two ends A and B close to the completed whipping. Remember when making the turns to bind tightly.

USEFUL KNOTS TO LEARN

Once a Scout has learnt how to tie the simple knots required for the Tenderfoot badge, he should go on learning other useful knots. Here are a few of them and the uses to which they can be put.

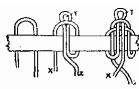


Fig. 1.

A favourite was the "Highwayman's Hitch." It enabled a highwayman to tether his horse to a post with one end of the rope, and when he vaulted into the saddle for a quick getaway he pulled the other end and away came the whole rope. In Figure 1 a loop of the end X is taken up and down through the loop Y in the last stage of the knot. The strain can be taken on Z. Pull on X to release.

The marline-spike hitch is a knot you've got to know for making a rope ladder. Staves could form the rungs, secured by marline-spike hitches, as shown in Figure 2.

Make a double bowline, and you'll find it easy to make a cradle for an aerial ropeway or as an emergency lift. The large loops of the knot take the legs, and extra loops for the arms can he pulled out at the point of the making of the knot. If a person was unconscious out had to he hauled up a cliff the arm loops could be secured at the back with a Scout scarf or handkerchief.

The Marlinestike hitch.

Fig. 3.

Fig. 2.

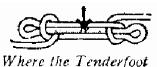
If ever you're giving a tow you can add your weight more effectively to the rope if you put a man harness hitch in it and slip it over your shoulder.

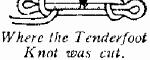
This hitch (Figure 3) will not slip.

Three men went to steal some hell-ropes. One cut the rope above him and fell and broke his neck, while the second cut the rope below him and hung there until he was exhausted, when he fell and broke his neck. But the

> third used a certain tenderfoot knot, and by means of it got away with nearly a whole rope—and his life. How was it done?

> He made a sheepshank in the rope above him, and cut it as shown. When he had climbed down he shook the rope and a long length came away in his hand.

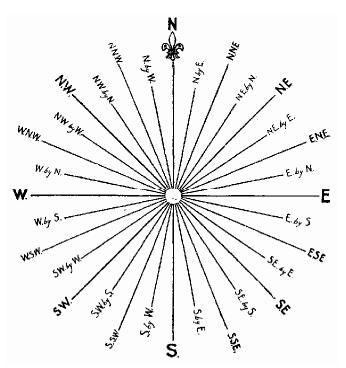




SCOUTING PRACTICES



Every Scout must know the principal points of the compass. A knowledge of the compass is always useful, in finding your way in strange country and in map reading and map making. In the sketch on this page you will find all the points of a compass. It forms a very handy reference.



It is not sufficient for a Scout to be able to reel off the points of the compass parrot fashion. He must learn how to use the compass when Scouting.

Take a compass with you when you go out for a walk, put it down on a level patch, then sight various objects over the compass and give their compass bearing If the objects do not come directly over one of the sixteen points you have learned, give the nearest point and add "a little Northerly" or "a little Easterly" as the case may be.

Every Scout should possess a compass. They can be bought quite cheaply. Even those costing a few pence will be good enough to give you practice. Getting accustomed to using a compass will help you to pass your examination in the compass tests, besides providing you with knowledge that may one day come in most useful to you.

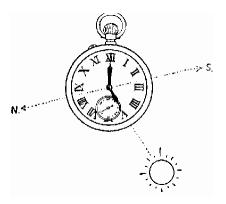
FINDING DIRECTION WITHOUT A COMPASS.

It is useful to know how to find direction when you are without a compass. You can do it with a watch this way. The watch must, of course, be set at correct time. At noon the sun is due South, therefore a stick placed in the ground will cast a shadow due North. Allowing for summer time, it will be one o'clock by the watch.

Another method is to hold the watch flat, so that the hour hand points directly at the sun. South will lie midway between the hour hand and XII on the watch (see illustration.) Allow for summer time as before.

Churches are generally built with the chancel in the East; most of them have a weather vane.

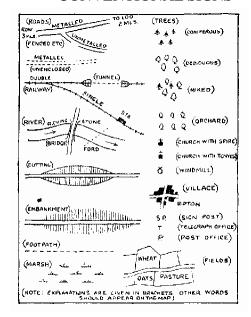
By night, the Pole Star, which is North, can be found by means of the Great Bear, or "Orion".



MAP MAKING AND READING

Before you can make or read a map it is necessary to know something of the conventional signs used in maps. Some of the most important are given in this sketch:—

CONVENTIONAL SIGNS



When making a map stick to essentials. Print in all names carefully, not forgetting to print in the destination of roads which go off the map. All chief features must be named, such as villages, railways stations, farms, etc.

Remember to fill in the North point, and at the foot of the sketch map state the scale, e.g. two inches to the mile.

TACKLING ESTIMATION TESTS

One of the tests for the First Class Badge is estimation of numbers, distances, heights and lengths. Here are some helpful guides.

NUMBERS.

Let us take numbers first, B-P. says: "You should be able to tell at a glance about how many are in a group, or in a 'bus, or in a big crowd; how many sheep in a flock; how many marbles on a tray, and so on." The only way to attain proficiency is by using the Unit method. Let us take 10 for our unit.

Now, the first opportunity you have of being near a group or a crowd of people, count off ten of them, carefully notice how much space they occupy, if they are bunched together, or in a queue. Do not be in a hurry, get the picture thoroughly in your mind's eye, then see how many similar groups there are in the whole.

Practice this same unit method with all ordinary things you are likely to meet. Those who live in towns are more likely to meet with people than sheep.

In this test you will find it a great advantage to know your own personal measurements, especially when estimating the number of small articles, such as marbles, potatoes, eggs, and so on.

If you know by practice that so many go to one inch or one foot, and you have a known inch and foot in your personal measurements, the matter becomes very simple. Tackle this one section and satisfy yourself you can do it before going on to the next.

DISTANCES.

Now for distances. Here again you must know some unit which you yourself possess to be at all successful. What is the length of your pace? How far can you walk in an hour? Can you be sure of correctly covering a mile in twelve minutes at Scout Pace?

To measure your pace correctly, set out on a level stretch 99 feet long, then pace in your ordinary step from one end to the other. Divide the number of paces taken into 99, and this will give you the length of your pace in feet. You should do this at least six times from each end, and take the average.

You will then have a true measure of your pace. Correct this every six months in order to allow for your growth. It is not always possible to pace a distance, so you must get accustomed to estimating unit distances, as 50 yards, 100 yards, half mile, and mile, by vision only.

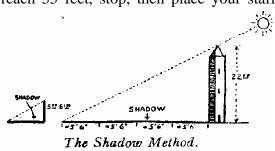
This is done by finding two points at these distances apart and getting thoroughly accustomed to them. Do not try any artificial aids; just get these units firmly ingrained in your mind. To get to know such distances as these, use telegraph posts for 50 and 100 yards, look up a large scale map of your district, measure by cyclometer or milestones for the longer distances. A church spire or factory chimney for one spot and a clear view for the other are useful to accustom you to visualise the longer distances.

A few of the usual lengths met with in sport are useful aids. A full-size Association football ground is 120 yards long and 80yards wide. Rugby football ground, 110 yards long and 75 yards wide. Lawn tennis court, single size, 78 feet long by 27 feet wide, whilst a double court is 36 feet wide. A cricket pitch is 22 yards long between stumps.

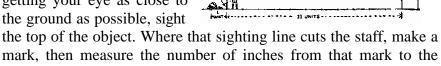
As regards your distance for an hour's walk, simply time yourself over a measured distance, checking both ways, walk in a natural way, not stretching your pace to break a record.

HEIGHT.

Height judging can be good fun, but practice must be regular until you are proficient. There is the "inch to the foot" method, or "One in twelve." Here you start from the base of your object which you are measuring, mark off eleven units of any length you like, of course they must be of reasonable length, say five feet. When you reach 55 feet, stop, then place your staff in an upright position in the



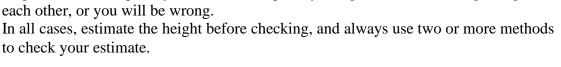
ground, measure off another unit, in this case five feet, beyond the staff, and there, getting your eye as close to the ground as possible, sight

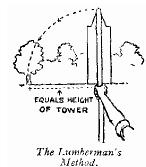


The Shadow Method. ground. This will equal the height of object in feet.

Another method is to measure the shadow of your staff when erected close to the base of the object, then see how many times that length will go into the shadow of the object. If your staff is 5 feet 6 inches and its shadow goes into the shadow of the object four times, then the height is four times 5 feet 6 inches, or 22 feet.

One more method, the "Lumberman's." Take a light, straight stick in your hand, hold it at arms length in an upright position, stand so that you can just see the top of the object over the top of the stick and the base over where your hand grasps the stick. Then very carefully turn the stick over to a horizontal position, not moving the direction of your arm or body, sight over top of stick and note point which this covers. You now measure from the base of object to point noted. This equals the height. Be sure the point you note and the point you sighted from are at right angles to each other, or you will be wrong.





WEIGHTS.

Weights are not at all difficult. Books are good things to practise with. Try your judgment on all sorts of things, checking on a pair of scales or the kitchen balance. Get to know the weight of familiar objects, such as a brick (7 lbs.). Three pennies, or five halfpennies, or ten farthings, weigh one ounce.

HOW YOU CAN GO WRONG WHEN ESTIMATING DISTANCES

You are bound to make terrific errors in the estimation of distance unless you allow for certain conditions. The information given here will be extremely useful to you.

The distance of objects is usually over-estimated in the following cases:

When one is kneeling or lying — When the object is in the shade — When looking over a valley or undulating ground — In avenues or long streets — When the background and the object are of the same colour — In a mist or poor light, or when heat is rising from the ground — When the object is only partially visible.

Under-estimation is usually the fault in these conditions:

When the sun is behind the observer — In clear atmosphere (for instance, a sunny day after a heavy shower) — Overlooking level ground, or when ground is snow-covered — When looking upwards or downwards — When, as in the case of an isolated monument or church, the object is large compared with its surroundings — When the background and object are of different colours — When looking over water or a deep chasm.

PERSONAL MEASUREMENTS.

A pioneer or backwoodsman doesn't carry a foot rule about with him, but he has ways and means of measuring. For instance, he knows his exact personal measurements. Below is a table of the average man's measure.

Span of thumb and forefinger......8 inches,

(This also gives you the length of your foot.)

Extended arms, from finger-tip to finger-tip, is called a fathom and nearly equals your height.

Pulse beats about 75 times a minute; each beat is a little quicker than a second.

Pace: A pace is about 2 feet; about 120 paces equals 100 yards.

Fast walking paces are shorter than when going slow.

Fast walking, you walk a mile in sixteen minutes, or nearly four miles an hour.

Check up your own personal measurements and make a record of them for your use in emergencies.

FIRE LAYING AND FIRE LIGHTING

Lay and light a wood fire in the open, using not more than two matches," reads the test in the Second Class Badge. That isn't really half as difficult as it seems — when you know how. Of course a Scout isn't able to obtain a ready made bundle of wood when in the backwoods, so he has to collect his kindling material and wood where he happens to be.

This is what B-P. says about fire lighting:—

You should begin a fire in a small way by putting first some dry "kindling" or small splinters and shavings, dry grass, or a little paper—anything that will easily take fire, and over that stack a lot of small dry sticks, standing on end and leaning together, or standing against a log -on the windward side of it.

Remember, DRY STICKS are very different from STICKS when it comes to lighting a fire.



Dry sticks are seldom found on the ground — they are generally best got from a tree with a dead branch or two. Break these off and you will have dry slicks. For "kindling" a number of sticks partly split or splintered with your knife are useful.

Do you know what Punk is?

Well, punk, or tinder, is what a good many backwoodsrnen carry about with them for lighting their fires.

It can be a small bit of cotton waste soaked in petrol or spirits, or very dry, baked fungus or bark fibre, or anything that will catch fire from the smallest spark.

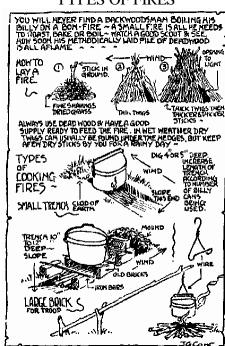
Then, if you have no matches, you ran strike a spark with a flint and steel (the back of your knife on a stone sill do it) and so set light to your punk.

Or you can do it with a magnifying glass if there is a good sun shining by making the sunlight pass through the glass on to a small amount of punk, and in a few seconds it will set it smouldering; and you must then gently blow it up into a glow, and finally into a flame, with which you can light the kindling.

Red Indians and other people who have neither matches nor burning glasses, make fire by rubbing wood together.

The easiest way is by putting a slat of dry wood on the ground and boring a hole through it with a stick of dry wood, twirling the stick by means of a bow string. The friction of the two woods causes the kind of sawdust which comes from the hole to get red hot and if a little punk is then placed on it and blown into it, it begins a flame.

So soon as you have got your small kindling fire alight, add bigger, dry sticks, upright and leaning together, until you can get a really strong fire going, when logs can be added.



TYPES OF FIRES

TIPS WORTH KNOWING.

Always have a good supply of small dry twigs ready before you light your fire. Dead twigs of elder, birch, pine, holly and thorn are good for starting your fire, but if you can obtain it, birch-bark is the best.

To boil water a fierce flame is needed. The woods given above are suitable for this purpose, though, since they burn very quickly you need a good supply.

Embers are needed for frying. Pine and fir cones make fine embers for this. Here again, kindling woods are useful as, if used with some other harder woods, they make good embers.

For cooking you must have a steady fire. Lime, chestnut and sycamore are good for this. Oak also makes a good cooking fire and lasts well. Elm and poplar are not much use for fire-making. Poplar has to be well seasoned, and elm, even if thoroughly dry, does not burn well, and is hard to light.

Either start your fire as suggested by B-P. or by using the fire-stick method. For this shave a number of sticks all the way round, leaving the shavings attached. One of these sticks is stuck in the ground and the others arranged around it in the form of a pyramid. Small twigs are placed on it and the fire lighted.

In windy weather it is hard to keep a match alight long enough to start your fire. Cut shavings on the matchstick in the same way as for fire-sticks before lighting and this difficulty is overcome.

'WARE FIRES.

Whenever you make a fire out in the open always remove the turf and put it on one side, so that it can be replaced before you leave the site.

From experience it has been found best to remove a fairly large area of turf where your fire is to be, especially in the case of a standing camp of several days duration, because the ground around the fire becomes scorched and blackened. Replace all turf with care, stamping it down, and if possible well water it before you leave.

When you are hiking and have made a fire for the purpose of cooking a meal be careful to see that it is out before you move on. If ever you have to leave a fire for any length of time make quite sure that it is safe. Serious fires often result from carelessness.

AXEMANSHIP FOR SCOUTS

Get a handaxe made by a well-known maker. The "Gilwell" handaxe is specially made for Scouts and is a really good tool.

Axes with spikes, nail extractors, glass cutters and the like attached, are sold as "Scout axes" — give them a wide berth.

See that the head is in line with the haft, the haft straight grained, and has a well balanced feel when swung.

B.-P. says: "Never play the fool with an axe; it is a dangerous weapon."

So let us first learn the safety rules which govern the use of an axe, whether light or heavy.

SAFETY RULES.

(1) See that the edge of an axe is masked when not in use. If carrying, have a special mask or case for the cutting edge. If unmasked, carry on the shoulder with the edge

outwards. Any companions should walk on the opposite side to the axe. When laid aside temporarily, either place the axe in its case, or see that the edge is masked in a dead log or branch—never in a living tree.

(2) Never chop leaning sticks as in Sketch 1. They fly off at high speed and generally hurt somebody. Lay sticks on a log or chop ping block and cut at an angle.

- (3) See that onlookers are at least two axe lengths away—that is, the axe held at full arm's length. This rule is frequently broken with dire results.
- (4) Clear the ground an axe length around as shown in Sketch 2. See that all twigs, brambles, and so on, are cleared away, failure to see this done will result in your

stroke being deflected, probably into your foot or neck!

Get these simple rules into your head and never relax. An axe is a good friend, but a very bad enemy!





Sketch 2.

FELLING A TREE.

Let us now get on with the actual use of an axe. For the First Class Badge, a light handaxe is all that is required.



Sketch 1.

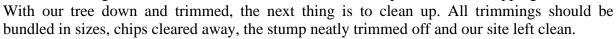
Use it only for the work for which it is designed—light work. A small tree up to 12 inches circumference is about the limit of its felling powers. Let us fell a tree of this size for our test. After seeing the swinging area is clear, decide which way you wish the tree to fall, then on this side of the tree commence to make your cuts.

Get a good stance, swing your axe easily, letting the weight of the axe do the work. Keep your eye on the spot where you wish the axe to fall. Go on cutting until you have a fair sized cut, a little over half way through the trunk. Then on the opposite side make a cut slightly above the other. Pause before you are quite through and look round to see that all is

clear. Warn any spectators out of the danger zone, then complete the cut, giving a shout as the tree begins to fall. Jump to one side as this is happening, as sometimes the butt jumps off the stump and kicks backwards, as in Sketch 3.

You may think all these precautions rather silly for so small a tree, but do not be misled—they are not!

Trimming is just clearing the trunk of all branches and twigs. Make a workmanlike job of it; a well trimmed tree is worth all the trouble taken. Always trim upwards from the butt or base; that is with the grain, as in Sketch 4. It means less work and prevents bark stripping.





USING AN AXE.

The blow should always be delivered at an angle of about 45 degrees to the grain, not straight, or at right angles. In cutting a thick branch, make a "V" shaped cut, cutting from right and left alternately. In splitting, lay branch flat upon chopping block and cut from the far end towards you.

When pointing stakes, rest the end to be pointed on the block and cut downwards. Remember the advice about leaning sticks.

THE CARE OF AXES AND KNIVES.

By "Gilcraft."

Let us take axes first. After purchase it will generally be necessary to grind an axe down to the thinness you require. For this purpose a grind-stone is used, but be sure that plenty of water is used with it. It is safest to turn the stone away from the cutting edge of the blade. Start to grind about 6 in. back from the edge and work for a fan-shaped effect. Grind towards the edge and to within about ½ in. of it, from there make a bevel, or slant, to the edge itself. The grinding has, naturally, to be done on both sides of the blade. Once an axe has been properly ground it should be seldom necessary, if ever, to use a grind-stone again.

In order to touch up the edge from time to time a file and a stone are all that is necessary. The file should be flat and smooth. Carborundum stone is, perhaps, the best stone to use, and a special one suitable for Scout purposes is procurable.

In using the file, work backwards from ½ in. from the cutting edge of the axe to 3 in. back, again working for the fan-shaped effect. Use the file on the stroke towards the back of the head of the axe and lift it clear when returning to the original position. When that is done, file the bevel, rolling it down from ½ in. back to the edge, but still sending each stroke towards the back of the head.

In using the stone, rub with a circular motion over the edge from heel to toe on one side, and with the same motion from toe to heel on the other side. A fine stone can be used dry.

Now for knives! Neither a grind-stone nor a file is necessary, only a piece of carborundum stone. Lay the knife on a flat surface, so that it is fixed, and work the stone with a circular motion along the blade from heel to point and back again, and repeat the process on the other side. For knives it is usually best to use oil with the stone.

After use see that the blade, whether of axe or knife, is wiped dry, and put oil on occasionally. Also oil the haft of an axe to prevent it from getting dry and brittle. When not in use grease the whole head of an axe and oil the haft.



MAKING THE MOST OF CAMP

In this section you will find lists of gear you will need for camp and many hints that will help you towards successful camping.

FORMS BEFORE CAMP.

In making preparations for a week-end camp remember you must get a permit. Camping without a permit is strictly forbidden by I.H.Q., but don't run away with the idea that you will have a host of forms to fill up. Your Scoutmaster can obtain free from your District Commissioner a short-camp permit card available for camps of not more than two nights' duration, although D.C.'s can authorise their use at Easter, Whitsun, and August Bank Holiday for four nights.

It is most important that you should include this permit as part of your camp gear.

PERSONAL KIT FOR SUMMER CAMP.

Just to remind you that you will need the following kit for the Summer Camp:

Rucksack (to hold all the gear).

Groundsheet.

2 blankets (or a sleeping bag).

Pyjamas.

Soap and towel (and flannel if you like it).

Toothbrush and paste.

Hairbrush and comb.

Overcoat or raincoat.

Sweater or small warm jacket.

Spare pair of shorts (white footer ones are good).

Spare pair of stockings.

Spare vest, and shirt.

Spare shoes.

Canvas shoes or plimsoles (for wear in wet grass without stockings).

Handkerchiefs.

Enamel plate and mug.

Knife, fork and spoon.

Needles, buttons, cotton, etc.

Boot-cleaning kit.

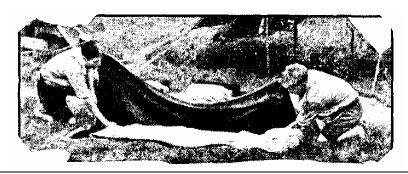
Book and pencil.

Writing paper, envelopes and postcards.

Stamps.

Bathing costume (if you are going near water).

Camera (if you've got one).



GENERAL GEAR FOR A TWO-MAN SUMMER CAMP.

Two fellows camping for a week or longer will need the following general gear:

Tent (a hike tent for two).

3 groundsheets (one will make a grub shelter).

2 small paint-pot billies, and 1 large billy.

1 small frying pan.

1 canvas bucket (for washing).

1 hand-axe.

1 entrenching tool (for fireplace and latrine).

Hank of rope and some sisal.

Small first-aid outfit.

Tin opener (may be on your knife).

Swab and teacloth.

GENERAL GEAR FOR A PATROL SUMMER CAMP.

Eight fellows camping for a week or longer will need the following gear besides their personal equipment:

A patrol tent (or four hike tents each to house two).

Spare groundsheet (for food shelter).

2 large paint-pot billies (10 pint).

2 small paint pot billies (4 pint).

2 frying pans.

2 canvas buckets (one for washing).

1 hand-axe.

1 entrenching tool or spade.

Screen, with poles, pegs and guys (unless you are camping on a permanent site).

Butter muslin (for a camp larder and tea bags).

Plenty of rope and cord.

Prayer book.

Patrol first-aid outfit.

Swab and two teacloths.

Primus (for use in emergencies).

Washing bowl.

And perhaps signalling flags, tennis balls, football, or any other gear required for the programme.

Lantern and torch.

MARKING CAMP GEAR.

If you wish to mark your camp gear with your Woodcraft sign you will find it a lengthy business to paint on the design separately each time, so it is a good idea to cut a large and a small stencil of your sign from imitation vellum (lampshade parchment does quite well).

With the large stencil you mark large articles such as your groundsheet and bucket, and the small one does for plates, etc.

Oil colours will do for marking on ordinary material, and cycle enamel baked in a fairly hot oven when partly dry, will make a permanent job of the marking of enamelware.

KEEP A CAMP LOG-BOOK.

On another page you will find some very interesting log-book signs. You will get a lot of interest from the records of your camps. Make notes of all the happenings in camp, record all the tips you have picked up and make drawings of new gadgets. The Chief Scout has a wonderful collection of diaries of his camping experiences. He values them highly as you will those you keep of your own Scouting days.

HOW TO PLAN A WEEK-END CAMP

	SATURDAY.
3.30	Arrive in Camp.
	Prepare Latrines and Refuse Pits, pitch
	Tents, arrange Kitchen.
5.0	Tea.
5.30-7.30	Continue Camp arrangements, make Camp
	gadgets, etc.
7.30 - 8.15	Exploration Walk or Camp Games.
8.30 - 9.0	Camp Fire. (Yarns and Choruses) or Night
	Scouting Game.
9.0	Cocoa and Biscuits.
	Wash and get ready for the night.
9.45	Lights Out.



SUNDAY.

7.0	Rise.
8.0	Salute Flag, and Prayers.
8.10	Breakfast.
	Tidy up and put out Kit.
10.0	Practice Inspection.
	Morning Church or Scouts' Own.
	Talk on Camping by P. L. explain

Talk on Camping by P. L. explaining the arrangements of this particular Camp.

1.0 Dinner. 1.30-2.30 Rest.

2.30-4.0 Exploration, or practice of any points in which the Patrol is weak in camping.

4.0 Tea. Pack Up.

This is only a suggestion and the programme will depend on many circumstances, such as the time at which the Patrol can arrive in camp, and the particular things in which practice is necessary.

SLEEP WARM.

Here is a method of making your bed in camp which you should try.

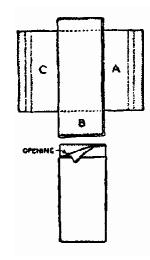
First of all, lay one blanket flat on the ground. Fold your second blanket lengthwise in two, and lay it in the middle of the first blanket, along its shorter breadth, as shown.

Now fold the part of the first blanket marked over the other blanket, fold B on top of it, and then fold C over the top of that. You then turn the whole bed over, so that all the ends are under you, and creep in between the two layers of the blanket folded lengthwise.

It is almost impossible to wriggle out.

The secret of sleeping warm in camp is to have more blankets underneath than on top of you. In the absence of a groundsheet covering the whole of the tent you must have your own groundsheet on the ground. Newspapers laid out underneath your blankets will help to keep you warm, and if you tuck the end of your blankets under your feet that will help to prevent cold feet.

Whenever the weather is fine hang your blankets in the sun on rising in the morning. The blankets will absorb the sun's rays.



WATERPROOFING YOUR TENT.

After considerable use tents sometimes require reproofing. Here is a satisfactory method of waterproofing canvas.

Boil an ounce of isinglass in a pint of soft water until it is quite dissolved, and strain through a piece of clean linen into a saucepan. Dissolve a quarter of an ounce of white Castile soap into a pint of water, strain as before, and add to the first solution. Dissolve an ounce of alum in two pints of water, strain and add.

Stir and heat the combined solution over a slow fire until the liquid simmers, when it is ready for use. The solution should be applied while still hot to the outer surface of the tent with a small flat brush, care being taken to work it well into the seams.

It is desirable, of course, to erect the tent for the operation. The quantity here given is sufficient for about eighty square feet of material.

In proofing a tent, be careful not to overproof it, as this is worse than not proofing it at all.

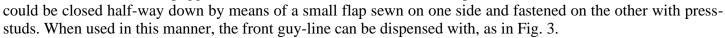
ENLARGING THE TENT.

You can very easily enlarge your tent when required by utilising the doors. All you have to do is to sew a small triangular piece of tent material across the bottom of each door flap, as shown in Fig. 1 at A.

When the tent is pitched, you can easily ascertain the size of the required piece of material by pulling the door out forward and measuring the distance from the forward end to the ground. This should be in a straight line with the side of the door as at A.

Now measure the height from the end of the door to the ground, as in B. This will give you the width of the triangle. The other side is the length of the bottom of the door. The base of the triangle is, of course, straight.

The doors, when both are pegged out, will make room for an extra camper, and



When the enlargement is not in use, the doors can be closed as usual, and the extra piece of material folded under inside.

OVERHAULING YOUR TENT.

If you are overhauling or making your tent, you will find the use of small brass rings better than the usual "punched in" eyelets. By using rings there is no need to cut the material, which often results in a hole being made too large for the eyelet.

The rings are quite easily fastened on with tape which is sewn to the edge of the tent.

When putting on the cord for the guy-line, put a small brass ring on this also as shown in the sketch. Push the peg through this. The ring prevents wear on the line caused through contact with the edge of the metal skewer.

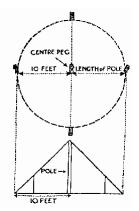
You can buy half-inch "solid" brass rings very cheaply at most ironmongers.



PITCHING A BELL TENT.

It does not take many minutes to pitch a bell tent correctly if you know how. Follow these instructions and this will soon be accomplished.

First, drive a peg in the ground where the pole is to stand. Next drive another peg into the ground 10 feet from this, measuring the distance from the pole, which is 10 feet long. Now place a second peg 10 feet from the centre peg in direct line with the first peg. A third peg is placed 10 feet from the centre midway between the first and second pegs, and a fourth peg in direct line with the third and centre pegs, also at a distance of 10 feet from the centre.



Now place the top of the pole to the top of the tent and the bottom of the pole to the centre peg, and raise the tent.

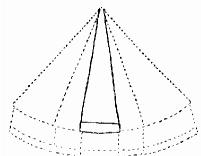
Next fix the four diagonal guy-lines (the guy-runners of which are usually painted red) to the four pegs, tighten up the guys, and the tent will stand. You can soon run round, knock in the other pegs, fasten down the walls, and the tent is ready for use.

STRIKING A BELL TENT.

- 1. Fasten the door, and tighten corner or red runners to full extent.
- 2. Slip all other runners off pegs, and roll each up neatly.
- 3. Pull up all except the four corner pegs, scrape free from mud and place in the bag.
- 4. Slightly loosen runners at sides and front, but tighten the back one.
- 5. Slip the two front runners off pegs, and allow tent to fall slowly backwards. It will then be roughly in the correct position for folding.
- 6. Pull up remaining pegs, and place in bag, together with mallet.
- 7. Roll up each runner.

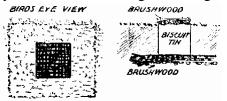
FOR PACKING.

(a) Spread out fully, door uppermost. (b) Fold wall and sod-cloth upwards. (c) Fold one side of the tent two-thirds across, and (d) the other side on top of this. (e) Now old in half and repeat. (1) Turn down apex about two feet and roll *tightly* towards wall. The roll should then fit the bag exactly. The sketch shows the lines of the different folds.



A NOVEL GREASE TRAP.

Try this idea for making a better grease trap. Dig a pit about two feet square and slightly deeper than a biscuit



tin, and line the bottom with brushwood. Now take a biscuit tin, pierce holes in the bottom, and place in the pit, so that it is level with the ground. Replace the earth round the tin and cover the mouth of the tin with more brushwood.

The top layer of brushwood is burnt each day and the tin cleaned out when necessary.

TAKE A FIRST-AID BOX.

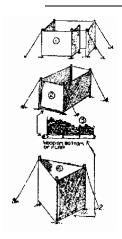
Scouts should make a point of never going to camp without first-aid kit. Make up a small box with the following contents, which you will be able to procure quite cheaply:

Two 2-inch and two 3-inch roller bandages; some pink lint for antiseptic dressings; a small roll of adhesive plaster; a bottle of iodine and a camel-hair brush; tablets of Cascara Sagrada; tapes, safety pins and needles; Picric Acid—for burns.

CAMP SANITATION.

Carelessly erected latrine screens are the cause of much inconvenience and often render a well-pitched camp open to criticism.

Frequently the screens are erected without allowance being made for wet and windy weather. Hessian, with which the screens are usually made, is subject to a great deal of shrinkage when wet, and therefore the screens should not be pulled too tightly round the poles, and it is well to sew tapes on the Hessian to tie round the poles. A six-pole screen, as in Sketch 1, is the best form of erection, but in order to reduce the amount of baggage a four-pole screen can be used quite conveniently (Sketch 2).



One side of the four-pole type will act as a flap-door, and in order to prevent this from blowing about in windy weather, a small piece of rough wood should be tied to the bottom, as shown in Fig. 3. This method can also be employed on a small three-pole latrine, as in Sketch 4.

When trees are so situated that poles can be dispensed with, the Hessian can be roped to the tree trunk.

BEFORE INSPECTION.

You will find it useful to check the following points before inspection at camp. See that the tent pole is upright and the guy ropes are tightened up. Have your tent pegs complete and make sure that they are all secure and driven in the correct way. The walls or brailing of the tent should be rolled up, if dry, the entrance wide open with flaps made fast. The mallet,

tent-bag and the correct number of spare pegs should all be together. If the weather is fine there ought not to be anything inside the tent, and blankets should be out to air and not folded. Make sure that the ground is perfectly clean.

Each Scout in the Patrol should arrange his own gear in the same way, and should make sure that his uniform is quite clean.

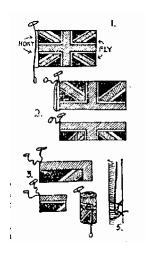
"BREAKING" THE FLAG.

Although some Troops prefer to hoist the Union Jack "free" at the morning flag parade, the majority hoist it rolled up, and then break it at the top of the flagstaff.

The whole ceremony is spoilt if the flag refuses to break at the critical moment in the second case. If you follow the instructions given below, however, this won't happen! Here's how to do it:

The flag is folded twice, longways, as shown in Fig. 2. in doing this the flag should he laid out upside down, so that the free end of the rope (that is, the end opposite to the toggle), known as the lanyard, remains on the outside. It is then folded twice across (see Fig. 3) and rolled up tightly. The lanyard, which is still on the outside, is taken 3 twice round the bundle and a loop slipped under the turns, as shown in Fig. 4. A pull on the halliard will break the flag.

If there is no cleat on your flagstaff, make the halliards fast round it with a rolling-hitch. Fig. 5 shows you how to do this, and to make it more simple a single rope only is shown instead of the double cord of the halliards, and the knot has not been pulled tight.



CAMPING REMINDERS.

Don't camp without first asking the land-owner's permission.

Don't leave gates open and let animals stray.

Don't chase cattle.

Never cut wood without permission.

Don't crash about in woods and startle game - keep to the path unless you have been given the use of the wood for Scouting games, and then move quietly.

Never miss an opportunity to do a good turn to the land-owner or the local inhabitants.

Leave your camp-site exactly as you would wish to find it.

Don't forget to thank your host.

COOKING IN CAMP

Cooking in camp is a very different business from cooking at home over a gas stove.

The hints given in this chapter will help new hands and serve as reminders to all old campers.

BREAKFAST.

Porridge. Use about a handful (2 oz.) for each fellow. If possible, leave in soak all night. Put on to boil on a steady fire. Add a small pinch of salt to flavour. Let fire die down so that porridge just bubbles, and then keep stirring. Porridge is burnt by not stirring. Takes about twenty minutes. Don't always believe what you read on the packet.

Coffee. Allow water to boil. Then pour in coffee and keep boiling slowly for about ten minutes or more, stirring occasionally. A very small drop of cold water will settle the grounds quickly.

Bacon. Cut off rind, nick the fat with a knife, and fry slowly over a bed of embers. Do not frizzle it.

Eggs (boiled). Boil water first, place eggs in with a large spoon and boil for four minutes. (Fried): Use a clean pan and clean fat. Fry until white of egg solidifies. Try not to break yolk. (Scrambled): Pour a small quantity of milk into a billy, add a piece of butter, and put on fire to melt. While melting beat up egg in a cup. Pour into billy, and then stir briskly with a fork. It is done when mixture becomes dry and solid.

Sausages. Prick both sides with a fork and fry slowly. As a change steam them in a Gilwell canteen. Place in the frypan with a small piece of dripping. Place lid on frypan and steam over a slow fire, shaking all the time. Sausages will not break by this method.

DINNER.

Potatoes. Peel or scrape and place in cold water in billy. Bring to boil, add salt, and then boil slowly for twenty minutes. Done when they fall off a knife after digging it in.

Cabbage and greens. Allow water to boil first, then place in the greens, and add salt and a small pinch of soda. Boil from twenty minutes to half an hour.

Meat (boiled). Boil only salt meat, or meat for stews. Place in water, bring to boil and allow to simmer. Twenty minutes for every pound. (Roast): Twenty minutes for every pound. Don't forget to turn. (Fried): Steak, unless desired underdone, should be fried slowly until blood disappears when prodded with a knife. (Liver): Cover with flour and fry in plenty of fat. Done when brown right through.

Puddings (Suet puddings). Dough should be made from flour and suet mixed thoroughly together and water added until it holds together. Place in cloth with room for swelling, and boil for two hours. To make "Spotted Dick," add currants, raisins and sugar before pouring in water. To make an apple pudding, use a pudding bowl well greased inside. Roll out paste and place into pudding bowl so that it lines the inside. Put in sliced apples, add sugar and then cover with the paste. Put a pudding cloth over the top of the bowl, tie round the edge and steam in water for two hours. (Rice): Place in cold water. Bring to the boil, and then keep stirring until done. Raisins dropped into the rice when almost done make a tasty dish. (Custard): Read directions on the packet. Put milk on in billy to boil. Mix powder with small quantity of milk in a mug. Add sugar. When milk boils pour into mug until it is full, stir, and quickly empty contents of mug back into the hilly. Now keep stirring until custard just bubbles. Then it is done.

TEA.

Bring water to the boil, drop in tea and leave on fire while you count twenty. Then take it off the fire, add milk and sugar, put lid on again, and let it stand for three minutes. If you wish, put tea in a muslin bag before placing in water. Tie the bag loosely, and do not leave it in more than five minutes after you have taken water off the fire. Never place tea in at any time unless the water is bubbling fiercely. That's the secret of making good tea. An ounce makes enough for about ten fellows. Don't make it too strong, and don't take any notice of the "one teaspoonful for each chap and one for the pot" rule. It's all wrong!

SUPPER.

Cocoa. Make cocoa well—or not at all. You will need almost a quarter of a pound for a Patrol of eight, but at the same time six ounces would be enough for about twenty. You will find this by practice. Boil water first, then add cocoa, stirring all the time. Keep on fire while you add milk and sugar (plenty of sugar) and keep simmering for about five minutes.

Soup. If left over from stew at dinner add a little Bisto or Oxo, just heat and serve in mugs, with a hunk of bread or toast. Very nice soup can also be made from prepared packet-soup, but you will need a lot of packets. Directions are given on the packets.

HINTS.

Never start cooking without enough wood to finish the job. A meal may be ruined by the fire suddenly going out in the middle of cooking.

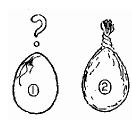
Only the cooks should be allowed in the kitchen which should be roped off.

Have a bowl of water and a towel in the kitchen. A cook must have clean hands.

A small broom made of twigs is useful for keeping the kitchen tidy. Keep it in a handy place.

If you're a P.L. don't do all the cooking yourself. It may be very nice and kind of you, but Johnny wants to learn as well, even if he is a Tenderfoot.

BOILING A CRACKED EGG.



Isn't it annoying to find that the egg you so carefully packed in your rucksack has been cracked? This is usually left until breakfast-time, when it can be fried with the bacon. If boiled, the white will flow out and the loss of half the egg is the result.

A cracked egg can be boiled without loss if it is wrapped in a piece of tissue paper as shown in Sketch 2. The corner of a paper bag will do. Try it.

COOKING WITH A CAN.

A New Idea for Hike Cooking.

Here is a novel cooking idea your Patrol ought to try out on a hike. Instead of lighting a small fire for cooking,



take a tin, such as lard is packed in, along with you. An opening is cut away in the side of this near the top, about four inches square. Now, turn the can upside down and cut a small opening, say an inch square, in the bottom, and on the opposite side to the cut in the side.

In this way you have a stove and a frying pan in one! The can is inverted and small twigs put in the larger opening as fuel, with the opening at the top serving as a chimney. You will need a lot of twigs, but you will find that the can heats quickly.

Bacon, eggs and pancakes can all be cooked to a turn on what was originally the bottom of the can.

An advantage of the tin-can cooker is that the risk of fire is lessened, since the fire is confined to the can itself.

HOW TO COOK KABOB.

Kabob is a backwoodsman's name for a meat dish cooked without the aid of cooking utensils. Cut a small green

stick, making sure that the bark is not bitter. Meat cut into small squares is then skewered on it. If you can obtain an onion you may put alternate pieces of onion on your skewer. Your kabob is now ready for cooking, and if you like you can cook a twist over the same fire. After making your dough, twist it on another stick. Now make your fire as shown, thrusting the sticks into the side of the trench when the fire has burned down to a heap of glowing embers.



You can leave your kabob and damper and they will cook without any more trouble. Turn the sticks occasionally.



WHEN YOU GO HIKING

What gear you will need How to carry your map: Care of your feet: Grub: Washing: And General Hiking Hints

WHAT TO TAKE.

Here is a list of the equipment you will need for a hike:

LIST I.—(ESSENTIAL).

Spare clothes (including stockings).

Blankets.

Tent.

Groundsheet.

Canvas shoes or sandals.

Billy (in which fork and spoon can he carried).

Food.

Jersev or Sweater.

Mackintosh.

Towel and soap, toothbrush and paste.

Comb.

Candle and Matches.

First Aid Outfit.

LIST II.—(OPTIONAL).

Shoe-cleaning materials.

Mirror.

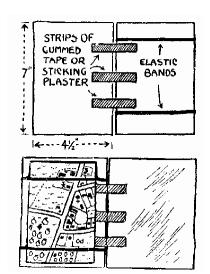
Axe.

Cord or light rope.

Camera.

You will, of course, go in Scout uniform. It is the only really comfortable form of dress for hiking in this country. Don't forget to take your staff. You will soon come to regard it as a trusty and valuable friend.

Other good friends are your compass, knife, and notebook which should all be in places where they can be easily got at.



MAKING A MAP CASE.

You will want to use your map pretty often, especially if you are in country which is unknown to you. Even when there is no wind it is annoying to have to keep opening the map full out when you wish to look at it. Here is an excellent little map case which you can make yourself. The best type of Ordnance map is cut into sections and mounted on linen so that you can fold it any way in order to show just the part you want. If you get the cheaper paper kind you must cut it into sections. Then get two pieces of stiff cardboard about seven inches long and four and a half inches wide, and hinge them together with a few strips of gummed tape. Put an elastic band round each end of one of the cards and slip the section of the map you are likely to want under the bands.

YOUR FEET.

A hiker is as good as his feet. Keep your feet thoroughly clean and give your toe-nails regular care. Wear good woollen stockings and do not wear them too long at a time without having them washed. See that your shoes fit well and do

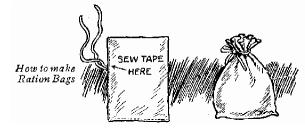
not hurt you in any way. They should be strong and water-tight; light, thin shoes not only let in the wet but are actually more tiring than heavier ones. Break them in well before you do any long distance in them and keep them clean and in good condition.

GRUB.

You will need some ration bags as described by the Chief Scout in *Scouting for Boys*. Experience will teach you the most convenient sizes for the different articles.

If you have to descend to tinned milk you can keep the holes you make in the tin well stopped up by covering them with small strips of sticking plaster!

Remember that rolls pack much more easily and keep longer than ordinary bread. You can always get eggs, milk, fresh



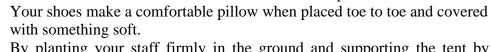
fruit, cabbages, lettuce and other green stuff in the country, so do not carry more than is absolutely necessary in the way of food. Have your big meal in the evening when you have reached camp.

WASHING.

You will not want to carry a washing-basin with you, neither will you want to make yourself unpopular with the farmer by washing in a cattle-trough. You can improvise a wash-basin by finding a convenient hole in the ground, folding your groundsheet double, putting it in the hole and filling it with water. If there is not a hole at hand, a ring of stones will do.

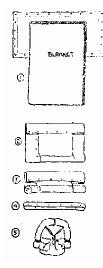
GENERAL HINTS.

Use candles for illuminating the tent. They are more satisfactory and are easier to carry. You can make a candle-holder out of wire which will fix to the tent-pole.



By planting your staff firmly in the ground and supporting the tent by means of a rope tied from the staff to a tree, you can dispense with tentpoles altogether. Sometimes two trees can be found to support the tent. It is knowing these little hints which is the difference between the experienced hiker and the Tenderfoot.





CARRYING BLANKETS WHEN HIKING.

For those Scouts who do not possess a rucksack large enough to contain all their kit when hiking, here is a method of carrying either blankets or tent by strapping them round the rucksack.

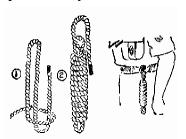
Lay your waterproof lengthwise upon the ground, rubber face downwards. Then fold your blanket or tent in halves and lay this on the waterproof as shown in sketch 1. Roll up the blanket until you reach the waterproof, then fold over the sides and end, sketch 2. Now roll up both blanket and waterproof as in sketch 3. Tuck the roll underneath the fold as in sketch 4. This roll is now strapped to the rucksack as in sketch 5.

ESSES -TOC - ACS!

You will not need to be told that this is the Morse language for spare time activities. Every Scout makes the most use of his leisure time, making and doing things. Here we give you some ideas for you to work upon in your spare time.

A HANDY HANK.

The Scout staff can be used for many purposes and is a very useful item of kit. It can be put to many more uses with the aid of a good stout piece of cord. Ladders, bridges, racks



and rafts all need rope, and a broken trek-cart shaft or a loose wheel tyre will alone prove its worth. Who knows but what a

life-line may be needed during the course of a hike? Be prepared and carry a good coil of strong cord or light rope with you. Make this a part of your camping kit. This cord can either be carried wound in a coil, attached to the ruck-sack, or hung upon the belt in the form of a knot. The knot can easily be tied by commencing as in Fig. 1. Make a double loop, the length being according to the length of the rope to be bound round the loop. When the top of the loop is reached, the end of the

rope is passed through the loop and pulled tight.

WOGGLES.

This is the way to make a fine brass woggle that will be the envy of the other fellows in your Troop.

Take a piece of brass (18 gauge) 3 ½ ins. long and 1 in. wide. Now work out the design of the woggle on paper and paste it on the brass. Then take some metal snippers or an old pair of scissors and cut round the outside edges as in Fig. 1.

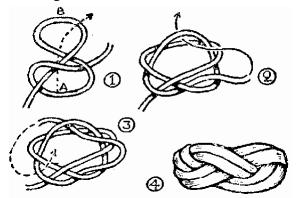
The next part is more difficult. Taking a nail or punch, drive a hole through each corner of the design (Fig. 2) and pass the blade of a small metal saw through one of the holes. Making sure that the blade is firmly fixed, cut out the shaded portion.

The metal should now he smoothed and polished. By bending back the ends and hammering them together as in Fig. 3 you make the soldering job a fairly simple one. A broomstick or some other circular object is the best means of bending the brass into the cylindrical shape.



A TURK'S HEAD WOGGLE.

Below you will see four sketches which will enable you to make the Turk's Head knot, but here is one word of warning: don't make it from a leather boot-lace or leather thong, as that pattern can only he worn with the



Gilwell scarf. However, ii you make it out of plain or coloured cord there is no objection.

First you lay out the cord as in 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.

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

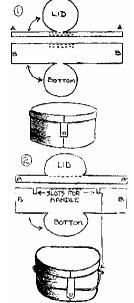
is as big as you want it, either double like the illustration, treble or quadruple, cut the ends off so that they just meet, and sew them strongly together.

A CASE FOR YOUR BILLY.

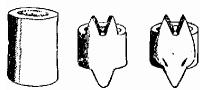
Unless you clean the outside of your billy-can thoroughly, it is a difficult thing to pack without fear of getting the other articles of your kit dirty with soot. You can overcome this difficulty by making a case for it from an old waterproof mackintosh or groundsheet. Fig. 1 shows you how to cut out two pieces for a billy of the round type. In Fig. 2 is the shape required for the half-round type. In each case, the covers should be sewn together inside-out, so that when they are turned the right way out, the stitching will be on the inside.

Ends A and A, B and B, in each sketch should be sewn together. The lids in each case should be made slightly larger than the bottom. The lid is sewn to the bottom where indicated by the dotted lines in each sketch.

A simple form of buckle or snap fastener can be used for the flap.







Here is a woggle which can he made from a large heel bone.

The sketch shows you how to make the totem of the Fox. Other totems such as the Wolf, Owl, Bear, can be made in the same manner.

When you have boiled the bone, take out the marrow from the centre, and cut off two inches. Now cut the two ears at the top and the nose at the bottom. You can now file away the bone so that the head is raised as shown in the sketch. The eyes can be burned out with a hot piece of iron, or cut out.

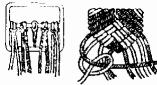
WAMPUM BELTS.

Belts can easily be made with coloured twine, which, if carefully worked closely resemble the bead wampum belts which the North American Indians used to make.

All that is necessary are two balls of different coloured twine, and a belt buckle. Half-pound balls of macrame twine, in, Say, green and yellow, can still be obtained, and will be sufficient to make three medium-sized belts. If you have any difficulty in obtaining the twine write to the Editor and he will help you.

To commence your belt cut two lengths each of the green and yellow twine about six to eight feet long. Fasten them to the buckle as shown in the first sketch. Now fasten down your buckle by slipping it over a nail or by inserting in a drawer.

Take the cord on the extreme left in the right hand, and hold it parallel to the centre bar of the buckle. This cord



is known as the "filler." Now, with the left hand, take the cord next to it, and with it make two half hitches over the filler. The sketch shows how the half hitches are made.

Arranging the cords
on the belt. How a haif-hitch is made.

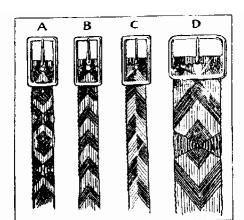
The second hitch locks the first, and makes it "stand up" on the filler. When making the half hitches it is important that the filler be held taut and that the knots, which are made over it, are pulled up tight.

Repeat this with the next cord, still using the original filler, until you reach the centre. The extreme right cord

then becomes the filler and knots are made over it in the same way, until the centre is reached.

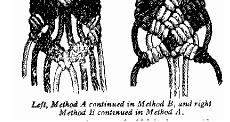
Now the fillers meet. Keeping the filler from the right on top, make two half hitches over it with the filler from the left and your row is complete. This is Method A.

Another way of knotting is to start from the centre and work out to the edges. Take the two centre cords and make two half hitches on the one from the



Above you see various types of wampum belts. A is made by carying Methods A and B. B and C are made entirely in Method A, the difference in design being due to the arrangement of the cords on the buckle. D shows a wider telt, made by using a under buckle and extra cords.

right with that from the left. Using these two



cords as fillers work towards the edges. Always start a new row in Method B in this way. By varying this method with method A it is possible to get some very fine patterns. A new cord should be added when only about six inches remains of the old one. Do this when the old one is being used as a filler, and first make a few knots over it alone in the ordinary way. Then lay the new cord underneath the old one so that it projects a few inches, and continue to knot over the double filler. At the centre the old cord is passed to the back, and the row finished with the new cord

acting as filler. After a few rows the ends of the now cord and the old one can be cut off short, without danger of

HOW TO MAKE A PLAITED BELT.

slipping.

The sketch shows quite clearly how to make a plaited belt from one strip of leather divided into three sections. The dotted leather shows the underside of the belt.

Get busy and make yourself a plaited belt now!

THE "PINEAPPLE."



A fine lanyard is made with the "Pineapple" knot. Knot two cords over a "core" of two or

more cords as shown. The effect is varied, according to whether the right-hand cord is taken over or under the left one.



PLAITING AND LANYARD MAKING.

Here are some methods of plaiting cord into lanyards, dog-leads and staff slings. The "Boondoggle" needs four cords of two colours. Tie these together, secure over a nail or hook and proceed as follows. Take No. 1, pass it behind Nos. 2 and 3 and turn it left in front so that

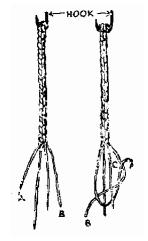
it becomes No. 2. No. 4 is taken behind 3 and the new 2, brought in front and turned back on itself until it becomes No. 3. Continue as long as you like.

SQUARE KNOTTING.

A square knot thong uses four cords, the two inner ones being held taut all the time by a stick such as is used in making square knot belts. Bring "B" over the top of the inner cords, Pass "A" over it, under the centre cords and then up through the loop "C" made by "B."

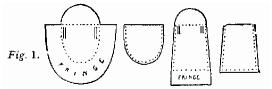
Repeat and the knot is finished.

The second pair of knots are made with "A" coming in front and "B" passing behind. If this is not done the thong will twist into a cork-screw shape.



SCOUT BELT POUCHES.

After the introduction of flint and steel, the Indian carried these implements on his belt in small bags called strike-a-light pouches. They are easily made and are attractive to wear with camp clothes or for carrying a first aid outfit. These small bags may be beaded and can be laced or sewn together.



The pattern for a round pouch of this kind is shown in Fig. 1. The piece for the outside of the pouch is five inches wide across the top and live inches deep. The back piece, which includes the flap and the fringe, is nine inches wide at its greatest width, and ten inches it its extreme depth.

The flap is two and a half inches long. Belt loops are made in the back by cutting slits two inches long and half an inch apart as shown in the sketch. Now lace the parts together. Make the holes with a leather punch half an inch apart around the three sides. Then with a thong an eighth of an inch wide, lace the bag together.

Pouches of this kind can he made very attractive by using a lacing thong of red, yellow, blue, or green calf or sheepskin.

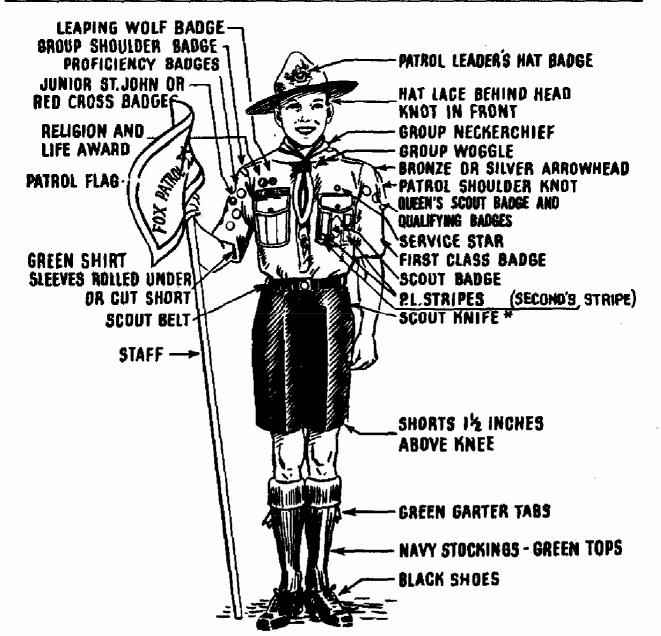
A button to hold them closed can be made of a half-inch thong by rolling it up tight. Then with a thin knife blade cut a slit through the centre of the roll and draw the tapered end of the thong through it, as in Fig. 2.



Fig. 2.

HOW TO WEAR YOUR UNIFORM

UNIFORM - BADGES - INSIGNIA



^{*}Sheath knives may only be worn by First Class Scouts. Clasp knives may be worn by all Scouts.

Provincial and District Emblems are worn as directed by the Provincial or District Council.