

Group A - Select one Badge

Naturalist



- (i) Explain in his own words and from his own observations:-
 - (a) The pollination and development of a wild flower, or
 - (b) The development of a bird from an egg; or
 - (c) The life history of an insect or a fresh or salt water fish; or
 - (d) A month's observation of pond life.
- (ii) Keep a nature diary, illustrated by sketches of the animals, birds, trees, plants, insects, etc., recorded; this diary to contain the dates and places of:-
 - (a) First appearance of 12 spring or autumn migrants;
 - (b) First flowering of 18 wild flowers, or description of appearance and habits of six sea-birds or water fowl;
 - (c) First appearance of six butterflies or moths or description of six animals.
 - (d) Make a carbon or other impression of 18 leaves of common trees.

In towns one of the following alternatives may be selected in place of (ii) (the District Commissioner deciding whether the area may be considered a town for the purpose of this badge):- Make a collection of leaves of thirty different trees; or of sixty different species of wild flowers, ferns and grasses, dried and mounted; be able to name these correctly and identify them in the field;

Or,

Make coloured drawings of twenty flowers, ferns or grasses from life. Original studies, as well as finished pictures, to be submitted.

Stalker



- (i) Demonstrate his ability to stalk through undergrowth and long grass, quickly and inconspicuously, and understand the value and use of cover, camouflage and danger of wind.

- (ii) Give proof of having stalked and studied at least six wild birds or animals in their natural state in the open, by producing photographs or sketches which he himself has taken, and by describing what he saw.

Tracker



- (i) (a) In Kim's game remember 25 out of 30 well assorted articles after one minute's observation three times running; each article being described.
- (b) By smell alone recognize 8- out of 10 as sorted liquids or solids in common use.
- (c) By hearing alone recognize 8 out of 10 different sounds.
- (d) By touch alone recognize 12 out of 15 assorted articles (including such things as dry tea leaves, flour, sugar, etc.)
- (ii) (a) Recognize and explain two different characteristics in each of five different types of simple human tracks.
- (b) Solve within 25 per cent, error, three simple tracking stories set in sand, snow or other suitable media.
- (iii) Produce six casts of animal or bird tracks, all casts taken by himself, unaided, two at least of the casts to be those of wild animals.
- (iv) Follow a simple nature trail of at least one mile in length, containing at least 40 signs, of which 35 must be noted and described verbally or in writing when trail is completed.

Group B - Select one Badge

Forester

Candidate must successfully complete Part I before proceeding with Part II.

Part I



- (i) Identify ten principal native tree species in own locality, and explain their principal distinguishing characteristics.
- (ii) Identify five kinds of native shrubs.

Part II

- (i) Describe the principal uses of ten species of Canadian woods. If possible visit a wood-using factory.
- (ii) Explain the aim of forestry, and compare with unregulated lumbering.
- (iii) Tell what are the effects of fires on soil, young forest growth and mature timber; the principal cause of forest fires and how best to overcome them; three general classes of forest fires, and how to fight each.
- (iv) Describe the Government Forestry activities in the Province.
- (v) Successfully plant or assist in the planting of at least 12 trees.
- (vi) Describe the general features of lumbering, or shingle mill or pulpwood operation; how the cutting is done in the woods, method of transportation to the mill, and manufacture there. Visit some portion of woods operation or sawmill, pulp or paper mill or shingle mill.
- (vii) Discuss one or more of the enemies of trees, such as insects (leaf-eaters, bark-borers, wood-borers), or decay (fun-gas diseases), produce a specimen of any one of them, and tell something of how damage from these sources may be lessened or overcome.

Starman



- (i) Have a knowledge of the Solar System, including general information concerning the Sun, Moon, Planets, Meteors, and Comets.
- (ii) Describe the causes of Tides and Eclipses. (iii) Have a general knowledge of the heavenly bodies beyond the Solar System; their composition, size, distances and movements.
- (iv) Be able to name and point out at least six Constellations, and know their principal stars.
- (v) Be able to find direction and tell time by the stars.

Pioneer



Show real efficiency in the following:

- (i) With a felling axe cut through a 9-inch log or other piece of timber neatly and quickly.
- (ii) Tie the following knots and thoroughly understand their uses: Tenderfoot Test knots. Timber Hitch. Bowline on Bight. Rolling Hitch. Catspaw. Double Sheet Bend. Man Harness knot. Marline Spike or Lever Hitch. Draw or Highwayman's Hitch. Fisherman's Bend or Hitch and Fisherman's knot.
- (iii) Use the following lashings in the proper way: Square. Diagonal. Sheer or Round. Figure of 8. Be able to lash a block to a spar.
- (iv) Build a model bridge or derrick.
- (v) Make a camp kitchen.
- (vi) Build a camp shelter or hut suitable for three occupants.

Weatherman



- (i) Know the names of at least two cloud types at each of the low, middle and high cloud levels, and demonstrate his ability to recognize these clouds. He must be familiar with the formation of afternoon cloud and its relation to showers.
- (ii) Have a knowledge of the chief source regions of cold, warm, moist, and dry air masses, and understand something of the way they are formed and how they affect the country over which they move.
- (iii) Know Buys-Ballots Law relating wind direction and low pressure or storm centres.
- (iv) Keep a continuous daily record of weather observations for at least two months. This includes observations of wind, cloud types and their direction of motion, temperature and rainfall. (One observation, and preferably two, a day, at fixed times.)

- (v) Obtain from the official check temperature location in his Public Weather Region a record of observations for the same two months, and, by comparison with his own, find the average daily difference in simultaneous or nearly simultaneous temperature readings, for the whole period. Then determine one or more corrections to be made to the official forecast temperatures to obtain a forecast of local temperature.



The Bushman's Thong is worn like this

- (vi) From his weather record and knowledge of the weather elements, prepare at least five rules for local weather forecasting.
- (vii) Make as continuous a record as possible of the wind, and cloud types, before, during and after a rainstorm.

Chapter VII

A QUEEN'S SCOUT



With the accession of Her Majesty, Queen Elizabeth II to the throne, the time honoured rank of King's Scout, became Queen's Scout, with Her Majesty's gracious approval.

The significance of the rank of Queen's Scout is sometimes forgotten. It is the top grade and honour in Scout training, for it literally means what the name implies,-a

Scout who has passed certain tests of proficiency qualifying him for “the Queen’s service,” in times of national emergency, and who has assumed the obligation always to **Be Prepared** for such service.

Appropriately the idea of King’s Scouts originated with a British King, King Edward VII, “Edward the Peacemaker.” It was mentioned on a doubly notable occasion, the day on which Lieutenant General Baden-Powell resigned from the British Army to give all his time to the new, rapidly spreading Boy Scout Movement, and the occasion on which he was knighted as Sir Robert Baden-Powell.

You will be interested to read what the Chief Scout some years later wrote of the happening. After relating the circumstances of his visit to King Edward at Balmoral Castle, the Chief Scout continued, characteristically:

Colonel Legge called to a footman to bring a cushion, and to another to bring a sword. It was like a preparation for an execution.

“Then we walked in. The King, in Highland dress, shook hands, smiling most genially, and kept hold of my hand while he told me that for my many services in the past and especially for my present one of organizing the Boy Scouts, he proposed to make me a Knight Commander of the Victorian Order.

“He then sat down, and I knelt on the cushion in front of him. The equerry handed him the sword, and he tapped me on each shoulder, and hung the cross round my neck and hooked the star of the Order on my coat.- “After dinner King Edward called me aside and sat me down on the sofa beside him, and talked for half an hour about my “Boy Scouts.” The Movement was not two years old then, but it had spread rapidly. The previous day I had been at Glasgow for a rally at which 5,640 boys were present, and the previous month 11,000 were present at the Crystal Palace.

“His Majesty asked me all about our aims and methods, and expressed his belief that the Movement was just what the country needed, and that he would like to review the Scouts the following year at Windsor Castle.”

It was after this talk that His Majesty “King Edward the Peacemaker” offered the suggestion that “Scouts who passed special tests of efficiency should be named ‘King’s Scouts.’

Queen’s Scout Requirements.

Following are the Queen’s Scout requirements as laid down in Policy, Organization & Rules:- Must be a First Class Scout, qualified to wear four of the following badges of which Ambulance Man and either Path. finder or Coast Watchman are obligatory:- Ambulance Man, Coast Watchman, Cyclist, Fireman, Horseman, Interpreter, Pathfinder, Pilot, Public Health Man, Rescuer, Signaller.

A Queen's Scout must be reexamined annually for his Ambulance Man's badge, and must cease to wear the Queen's Scout Badge should he fail in it.

The badge of the Queen's Scout is a golden crown worn on the left arm above the First Class Badge, and surrounded by the qualifying badges.

The Queen's Scout Badge Tests.

Following are the Queen's Scout Proficiency Badge requirements.

Ambulanceman

(To be passed annually.)

In addition to passing First Class first aid tests must:-



- (i) Know how to improvise splints and diagnose and bind a fractured limb.
- (ii) Know how to deal with choking, burning, poison, grit in the eye, sprains and bruises.
- (iii) Know how to diagnose and treat fits, fainting and insensibility as the examiners may require; drag an insensible person with ropes, and improvise a stretcher.
- (iv) Know the Schafer and Holger-Nielson methods of artificial respiration.

Demonstration called for by each paragraph above.

- (v) Know the causes of and how to treat the following common camp ailments :-Constipation, diarrhoea, indigestion, chills and colds, headaches, rashes and sore throat.

Coast Watchman.



- (i) Know every rock and shoal within five fathom line on a four mile stretch of coast near his headquarters.
- (ii) Know all the danger spots to bathers and visitors, and what to do if they get into difficulties. If on tidal waters, know the places where persons are liable to be cut off by the tide.
- (iii) Know when the moon rises and sets, and its quarter.
- (iv) Know the best landing places for boats, and where they may shelter and find safe anchorage under all weather conditions.

- (v) Make a rough sketch chart of local waters, showing principal danger points, shoals, lights and channels.
- (vi) Know the light houses which can be seen from his strip of coast and describe the lights they exhibit.
- (vii) Know the routine followed in his own home waters in the event of a serious accident along the shore, the information to include life-saving stations, coast guards, rocket apparatus, telephone and addresses of doctors and police.
- (viii) Know the mercantile code of signals.
- (ix) Know the marks of fishing boats and the national and house flags of all ships which regularly pass the home waters of the Troop.
- (x) If on tidal waters know:
 - (a) The rise and fall of tides, both spring and neap, and how to ascertain the times of high and low water.
 - (b) Know the set of current at all stages of the tide in the home waters of the Troop.

Pathfinder



- (i) (a) For country district and towns up to 5,000 population, have a reasonable knowledge of the history of the community and places of historical interest; also location of doctors, ambulances, hospitals, schools and churches.
- (b) Have knowledge of farms with their approximate acreage and registered stock, also the location of blacksmith shops and garages within two miles in all directions from troop headquarters.
- (c) Have a general knowledge of the country within a 25 mile radius, so as to be able to guide strangers to districts, towns or cities.

Make and present a map, drawn in ink, showing as much as possible of the information required above.

Examiners may use their judgment in excluding undesirable areas and substituting others.

- (ii) (a) In towns and cities, population 5,000 to 50,000, have an intimate knowledge of the locality, either round his home or troop headquarters as may be decided by the Scoutmaster, including fire alarm boxes, hydrants, fire and police station, sub-post offices, telegraph and telephone offices and the names and addresses of six doctors, (three nearest troop headquarters and three nearest home); veterinarians, factories, livery stables, gasoline stations, motor repair shops, the principal food, provision, drug and hardware stores, taxi stands and cycle repair shops.
- (b) Make and present a map, drawn carefully in ink, showing as much as possible of the information required above.
- (c) Have a general knowledge of his town or city, and its history and places of historical interest. Also the location of all main hospital, fire and police administration buildings, ambulances, post offices, railway stations, colleges, universities, churches, cathedrals, large hotels, museums, airports, bus terminals, and radio stations; government, municipal and large office buildings, monuments, memorials, and plaques, parks, rivers, and lakes, and places of amusement. Also a comprehensive outline of all the important street car and bus routes and the principal main and cross streets. Any of the above, if within his area, to be on his map.
- (d) Have a general knowledge of the country within a 25-mile radius and be able to direct strangers to the nearest districts, towns or cities by railroad, electric railway, highways and water routes.

Note:- The area over which the above intimate knowledge will be required has a one-mile radius from home or troop headquarters. The Examiners will use their judgement in excluding undesirable areas and substituting others.

- (iii) In cities over 50,000 in population, same as (ii) but with an area having a half mile radius.

Cyclist



- (i) Sign a certificate that he owns, and has owned for at least six months, a bicycle in good working order, correctly equipped with lamp, bell, rear reflector, pump, tools and tire repair kit, and that he is willing to use it in public service if called upon at any time of emergency.

- (ii) Ride his machine satisfactorily and keep it in repair and good running order and show that he can mount and dismount neatly by either pedal.
- (iii) Demonstrate ability to repair punctures satisfactorily, take a bicycle apart, clean it and put it together again.
- (iv) Know the Highway Safety Rules as laid down in the Traffic or Vehicle Act of his Province, traffic signals; be able to read a road map; know the names or numbers of the principal highways in his part of the province.
- (v) Repeat correctly a verbal message after a ride of at least one hour's duration.

On ceasing to own a bicycle he must cease to wear the badge.

Fireman



- (i) Know how to turn in a fire alarm. Know the local fire department telephone number and the nearest fire alarm box to his dwelling, school or place of business.
- (ii) Have a knowledge of the dangers of the use of gasoline, celluloid products, illuminating gas; oil, gas, alcohol and gasoline stoves and lamps; Christmas decorations; and method of fighting a fire resulting therefrom.
- (iii) How to work in fumes and smoke.
- (iv) Have a knowledge of fire prevention in the home, the factory, and in the forest.
- (v) Have a knowledge of the use of hose and hydrants; ladders, ropes, jumping sheets, and how to improvise same: passing buckets. Know the various types of fire extinguishers and their proper use for various classes of fires. Know the various ways of forming a scrum (using arms, hands, staves, ropes).
- (vi) Have a knowledge of the different fireman's drags and lifts; First Aid for burns; artificial respiration and the method of changing operators.
- (vii) Know how to control panic rescue animals and salvage property.
- (viii) Know how properly to attend a house furnace and be able to explain the drafts system.

- (ix) Have a knowledge of why fires are caused by defective electric wiring and defective electrical appliances.

Horseman



- (i) Must have a horse at his disposal.
- (ii) (a) In the case of light horses, ride properly at all paces and jump an ordinary fence or ditch; saddle and bridle a horse correctly; harness correctly in single and double harness, and be able to drive single and pair:
or
- (b) In the case of heavy draught horses, know how to harness them in single and double harness. And in either alternative:
- (iii) Know how to water and feed, and groom a horse properly.
- (iv) Know how to clean and keep harness.
- (v) Know the evil of bearing and hame reins and ill-fitting harness.
- (vi) Know the points of a horse, and be able to detect common ailments and lameness.

If the Scout ceases to have a horse at his disposal he must cease to wear the badge.

Interpreter

Carry out the following tests in any language other than his own:



- (i) Carry on a conversation.
- (ii) Write a simple letter of at least 100 words on a subject given by the examiner.
- (iii) Read and translate at sight a passage from a book or newspaper.

Pilot



- (i) Be able to read any chart and have a good knowledge of the chart for the nearest port and the coast or shore on each side of it. This must include a knowledge of the standard markings on the chart.
- (ii) Know the buoys, beacons, land marks, and leading marks into and out of his home port or harbour.

- (iii) Know:- The rule of the road at sea, as adopted either for deep sea service or for inland waters; the lights carried by various kinds of vessels; the simple sound (whistle) signals used to indicate course in passing of proximity of dangers; and the conventional storm signals.
- (iv) Know the lead and its markings; understand arming of the lead.
- (v) Know Canadian Government systems of buoys and buoyage.

Public Health Man



- (i) Know the modes of transmission of the following diseases:-Scarlet fever, diphtheria, tuberculosis, measles, mumps, whooping cough, chicken-pox, typhoid fever, dysentery, summer diarrhoea, small-pox, malaria, ringworm, scabies; the measures adopted by sanitary authorities to prevent their spread, and the steps which should be taken by private individuals in cases of infection.

NOTE: *Bacteriological and medical details are not required.*

- (ii) Explain the local health laws regarding notification of the presence of infectious disease, and the regulations regarding quarantine or isolation; and describe one or more methods for disinfecting a room and its contents, and for disinfecting a house, after a contagious illness.
- (iii) Describe one or more methods of sewage and garbage disposal, including the method used in his own community. Describe an accepted method of garbage disposal in a summer camp.
- (iv) Explain how the house-fly carries disease.
- (v) Describe methods for assuring supplies of pure water, milk, meat and exposed foods.
- (vi) Describe ways in which Scouts may aid the local health authorities in promoting good health in the community.
- (vii) At the age of 16 or thereafter be instructed by a qualified physician (or his appointee) in the dangers of venereal disease.

Rescuer



- (i) Perform in the water four methods of rescue and three of release from the clutch of a "drowning" person; of about the same size as the rescuer, the "victim" to be carried at least ten yards in demonstrating each of the rescue methods.
- (ii) Dive from the surface to the depth of at least five feet and bring up a stone, brick or iron-weighted object of not less than five pounds.
- (iii) Demonstrate the Schafer and Holger-Nielson methods of resuscitation and the promotion of warmth and circulation.
- (iv) Swim 50 yards and then undress before touching ground.
- (v) Throw a life-line to within one yard of a small object 15 yards away three times out of four. See First Class Test No. 7.

A Story

The practical value of this test had an unusual and convincing demonstration following the capture of Hong Kong by the Japanese during the 2nd World War. The incident, related by Pte. Leslie Canivet, a former Scout of the 1st Ottawa and 10th Britannia Troops, occurred on the tragic Christmas Day of 1941 when the Canadian and British garrison was overwhelmed by the Japanese.

Pte. Canivet, with seven other Canadians, escaped to the nearby hills, and at the first opportunity set out to swim Repulse Bay to the mainland. Four of the party, weighted down by their clothes and boots, were drowned. Leslie Canivet got his clothes and boots off in the water, and reached the shore.

"That was the advantage of being a Boy Scout," he declared, when finally back home. "I learned to take off my clothes in the water when I took swimming lessons with the Scouts."

Hints on Diving Rescue

When a person drowning has disappeared in quiet water the location of the body will be shown by rising bubbles. If there is a tide or current, dive where the person went down, and look along the bottom, swimming with the current.

On reaching the victim, grasp him by the hair, the slack of the coat or the shirt between the shoulders, or under one arm, and plant a foot on either side of the body. Pull upwards, shove off with the feet, and swim with the back

stroke. At the surface change the grip to the head hold as shown on Page 88.

It is not difficult to raise the body of an unconscious person from below water. Because of displacement pressure, the actual submerged weight of the average person is less than ten pounds.

Signaller



- (i) Send and receive by Semaphore flags at the rate of seven words (35 letters) a minute, and by Morse flag at the rate of three words (15 letters) a minute 90 per cent, accuracy. Sending style to be 100 per cent, accurate.
- (ii) Send and receive at the rate of six words (30 letters) a minute on buzzer or sounder-90 per cent. accuracy.
- (iii) Send and receive at the rate of five words (25 letters) a minute by lamp, hello, or other flash system—90 per cent. accuracy.
- (iv) Understand how to call distant stations, and the procedure in handling messages-95 per cent accuracy.
- (v) Know the phonetic alphabet-100 per cent, accuracy. (vi) Know the bird or other Troop calls, staff and hand signals used in his Troop-90 per cent. accuracy.

Chapter VIII

THE ALL-ROUND CORDS



Scouts are entitled to wear any of the following All-Round Cords for which they are qualified. Only the highest grade cord is worn; that is, when the B Cord is earned, it replaces the A Cord. The Cord is worn on the right shoulder.

A Cord.-Green and Yellow. For holders of six Proficiency Badges. Open to First Class Scouts only.

B cord.-Red and White. For holders of twelve Proficiency Badges. Open to Queen's Scouts only.

C Cord.-Gold. For holders of eighteen Proficiency Badges. Open to Queen's Scouts only.

Note:-A and B are double cords, C single.

SEA SCOUTING.



What Are Sea Scouts?

“This point should be settled first of all” says Gilcraft in **Sea Scouts**. “Sea Scouts are Scouts primarily, belonging to the same Association and passing the same tests as other Scouts. They are all **Boy Scouts** and this fact must always be kept in mind.”

“A Sea Scout should be able to camp, to build bridges, and to render First Aid as efficiently as his shore-going brother, and sea training is never given at the expense of his ordinary Scout work. The Sea Scout has this special privilege, however, that **in addition** to the wide interests that he is offered as a Scout he has also the added interest and experience that are given him on the water.”

The additional tests for Sea Scouts in Tenderfoot, Second Class and First Class work are included in those sections. In addition to those tests the Sea Scout has the opportunity to earn the Anchor Badges. “The Canadian Sea Scout Manual” carries all the necessary instructional material on these Tests and Badges. As the Anchor Badges may be earned by Boy Scouts as well as Sea Scouts the requirements are included here.

The Anchor Badges



These three badges, Red, White and Gold respectively, show that the Scout has developed proficiency afloat as well as ashore, and he may work for them while he is taking his Second Class, First Class or Queen’s Scout tests.

The Anchor Badge is worn on the right breast above the “Boy Scouts-Canada” Badge and to the left of the Leaping Wolf Badge.

The Red Anchor Badge

- (i) Be a Second Class Scout.
- (ii) Be able to swim 50 yards wearing socks, shorts and shirt.
- (iii) Demonstrate his ability to handle a small boat under oars or paddle; the position from which to row or paddle; how to follow a straight course; how to steer; how to pull away from or approach a dock; how to tow and be towed.
- (iv) Know the commands used in a pulling boat.
- (v) Know how to stow gear in and keep trim a small pulling boat or canoe.
- (vi) Know the safety rules for small craft as prescribed by the District Council or Provincial Commissioner.
- (vii) Demonstrate his ability to make the following knots; Carrick bend, Bowline on the Bight, Double Sheet Bend, and explain their uses.
- (viii) Know how to get help in case of an accident on or near the water in the area in which he operates.

The White Anchor Badge

When this badge is earned it replaces the Red Anchor Badge. To qualify for the White Anchor Badge the candidate must:

- (i) Be a First Class Scout.
- (ii) Know the lead line, its markings and purpose.
- (iii) In areas where they exist know the system of buoyage and navigation lights in his home waters.
- (iv) Know the locations of the main channels and the chief landmarks in the area in which he operates.
- (v) Be able to make minor repairs to his Patrol or Troop craft and its gear.
- (vi) Have done his share of the overhaul and maintenance of his Patrol or Troop craft.
- (vii) Be able to follow a chart of the area in which he operates.
- (viii) Describe three types of craft.
- (ix) Know the parts and the uses of three types of anchors.

- (x) Demonstrate ability to repass tests for the Red Anchor Badge.

The Gold Anchor Badge

When this badge is earned it replaces the White Anchor Badge.

To qualify for the Gold Anchor Badge the candidate must:

- (i) Be a Queen's Scout.
- (ii) Hold the Rescuer's Badge.
- (iii) Hold two of the following Proficiency Badges:- Coast Watchman. Pilot, Signaller, Rigger.
- (iv) Hold two of the following Proficiency Badges:- Boatman, Weatherman, Starman.
- (v) Demonstrate his ability to repass the White and Red Anchor Badges.
- (vi) Must hold a Charge Certificate as required by Rule 359(g) Policy, Organization and Rules for Canada.

Chapter X

ROVER SCOUTS WHAT THEY ARE!



Rover Scouts are a Brotherhood of the Open Air and Service. They are hikers on the Open Road and Campers of the Woods, able to shift for themselves, but equally ready to be of some service to others. They are in point of fact a senior branch of the Boy Scout Movement—young men over 16 years of age.

Every Scout should aspire to be a Rover Scout some day. By so doing he is able to complete the full programme of training that Scouting has to offer through Wolf Cubs, Boy Scouts and Rover Scouts.

If there is already a Rover Crew in connection with your Group, you will naturally pass on into it with the approval of your Scoutmaster and the Crew, when you are sixteen and ready to move up.

If there is no Rover Crew connected with your Group, talk over the whole question with your Scoutmaster, who will discuss the matter with the Group Committee and see if a Rover Scout Leader can be obtained and a Crew started.

Rovering offers plenty of red-blooded adventure for older boys, and your Scout training will help you in carrying out the programme of the Rover Scout Crew.

Don't be discouraged if there is no Crew with your Group. Do what you can through your Scoutmaster to see that a Crew is organized, and an opportunity provided for older Scouts to continue in the Scout Brotherhood.

Chapter XI



LONE SCOUTS



Boys of Scout age (12 to 18 years) living in small villages, on farms or elsewhere, where it is not possible to form Scout Troops owing to lack of sufficient boys or of a suitable person to act as Scoutmaster, may register with Provincial Headquarters as Lone Scouts.

Each Lone Scout chooses a "Counsellor and Friend", a man who will take an interest in his Scout activities, give him advice and guidance when needed, and act as his Examiner in the necessary tests.

The Lone Scout is just as much a member of the great World Brotherhood as is any Scout anywhere. He makes the same Scout Promise. Except that connection with Scout Headquarters or a Provincial Lone Scoutmaster usually is maintained by personal letters, the Lone Scout programme is carried on very much as Scouting in the towns and cities.

As a matter of fact, in his outdoor opportunities the Lone Scout usually is better able to follow the ideas of the Founder, Lord Baden-Powell, than is the average town or city Scout. The real outdoors is just beyond the kitchen door. With more spare evenings the Lone Scout will find more interest in the study of Scout Proficiency Badge hobby subjects.

Lone Scout Tests

Except that they are carried out mainly by mail, the Lone Scout programme tests, etc., are the same in all respects as laid down for other Scouts.

Uniform

The uniform is the same as for Boy Scouts, except the neckerchief which is mauve.

Lone Scout Patrols

In special cases permission will be given to Lone Scouts to organize Lone Patrols of from five to eight members, including a Patrol Leader. If desirable, one person may act as Counsellor and Friend for a whole Patrol.

Making the Scout Promise.-For the Lone Scout the arrangements for making the Scout Promise will be somewhat different to those outlined for the Scout-to-be of a town Troop. If he is to become a member of a Lone Patrol, the Patrol Leader will instruct him in the meaning of the Promise and Law; and at the Investiture, the Promise will be made to the candidate's Counsellor and Friend.

If he is to be a single Lone Scout, he will have the meaning of the Promise and Law explained by his Counsellor and Friend, and the latter will receive the Promise, in the role of a Scoutmaster.

The Promise may be made in the presence of the boy's parents. Usually this is much appreciated by parents, and helps them to understand the real purposes of Scouting.

Occasionally a Lone Scout-to-be is able to visit a town or village Troop for his Investiture. This makes a very nice occasion. In fact, it provides an ideal introduction to the Brotherhood friendliness of Scouting. In such cases the Counsellor and Friend, if possible, accompanies the boy, and receives his Promise instead of the Scoutmaster of the Troop.

Starting a Lone Patrol.-After you have made some good progress with your tests, and have qualified as a Second Class Scout, you may be in a position to interest several other boys and form a Lone Patrol.

As you know, it is always more fun to do things along with other lads; and you will be able to help one another in studying the more advanced tests and the Proficiency Badges.

And, equally important, as a Patrol you will be able to do various Good Turns-for your school, in connection with different church happenings, and in other ways. (A very fine Good Turn has been the tidying up of a country church yard that has grown up in weeds and otherwise been neglected.)

New Friends Through Scouting.-One of the fine things about Scouting, especially for the boy in a district where there are few lads of his age, is the making of Scout friends, and the right kind of friends. Lone Scouts frequently have the opportunity of spending a few days or a week camping with other Scouts, in a camp planned by Provincial Headquarters. Again there are occasional Patrol Leaders' Conferences and Training Courses to which Lone P.L.'s are always welcome,- with billets arranged for them in friendly homes. And finally, a few years later, if going in town to High School or to College, you will at once find yourself among Scout friends, the finest way to start college life.

Lone Scout Gate Signs.-The common practice of Lone Scouts is to erect on a post or tree at the entrance to their farm or village home, a sign like those illustrated. This helps the Scout Field Commissioner to find you when in the district, and occasionally will bring you a friendly visit from a passing Scout or Scoutmaster. The signs shown will suggest others- mechanical weather vanes with a Scout hiking, Signalling, etc.

Some Lone Scout Proficiency Badges

Lone Scouts may try for any of the more than 80 Scout Proficiency Badges. Here are the requirements for a few which will be of special interest to many Lone Scouts.

Bee-Keeper



Have a knowledge of

- (i) The principal tools, equipment and supplies used in modern bee-keeping.
- (ii) The flowering season of the principal nectar-yielding plants of the neighbourhood.
- (iii) Apiary management throughout the season for both comb- and extracted-honey production, as well as of hive-manipulation to prevent natural swarming.
- (iv) At least one good method of producing queen-cells by natural means, as well as by grafting, for use in artificial increase.
- (v) At least one practical system of artificial increase.
- (vi) The use of bee-escapes, and the care and preparation of the honey harvest for sale.
- (vii) The feeding and preparation of bees for winter, and both cellar and out-door wintering.

Dairyman



- (i) Have a knowledge, gained by practice, of management of dairy cattle (or much goats), milking, making butter and cheese, pasteurization of milk, care of dairy utensils and appliances.
- (ii) Have a practical knowledge of the use and purpose of the Babcock test.

Farmer



- (i) Have a knowledge, gained by practice, of ploughing, cultivation, drilling, fencing and draining.
- (ii) Have a general knowledge of farm machinery, hay-making, reaping, loading and stacking, and an acquaintance with the routine seasonal work on a farm, including the care of cattle, horses, sheep and pigs.
- (iii) Know how to lay down fire guards.

Poultryman



- (i) Know how to construct an all-year type of sanitary poultry house to accommodate at least eight hens and a male bird.
- (ii) Know how to care for a flock of at least eight hens.
- (iii) Know how to run an incubator and test hatching eggs; and have a practical knowledge of rearing chicks by brooder; or, know how to take care of a setting hen, and of a hen with chicks.
- (iv) Have a practical knowledge of feeding, killing and preparing birds for market.
- (v) Know how to grade and pack eggs for market.
- (vi) Know the names of two light-weight laying breeds, four medium weight general purpose breeds and two heavy-weight table breeds.
- (vii) Know two methods of determining whether a hen is about to lay, is in full lay, and near the end of a laying period.

Stockman



- (i) Know the value and meaning of pedigrees and the principles of selection through the choice of pure bred sires of proper conformation.
- (ii) Have a practical knowledge of the care of beef cattle and sheep.
- (iii) Know the three best breeds of beef cattle and characteristics of each breed.
- (iv) Know the breeds of sheep recommended for his district with the reason for selection.
- (v) Have a practical knowledge of the methods employed in the sheltering, feeding and watering of stock during the winter and be familiar with the other seasonal work of the stockman.

Rope On The Farm

Rope is in some way used every day on the farm, and “knowing rope” and its uses should be a specialty of every Lone Scout. He should be able to splice a broken hay-fork rope, and so keep the work going, perhaps with rain threatening; should know how to improvise a halter so the knot will not slip and strangle the animal, etc.

Kinds of Rope.-For the hay-fork, grain slings and hoists, hemp and Manilla generally are used; for livestock halters and halter shanks, the softer and more pliable cotton rope. Manilla is more pliable than hemp and equally strong. The 3-strand is commonly used, although the 4-strand is stronger and more pliable. It costs more, but gives better service, everything considered.

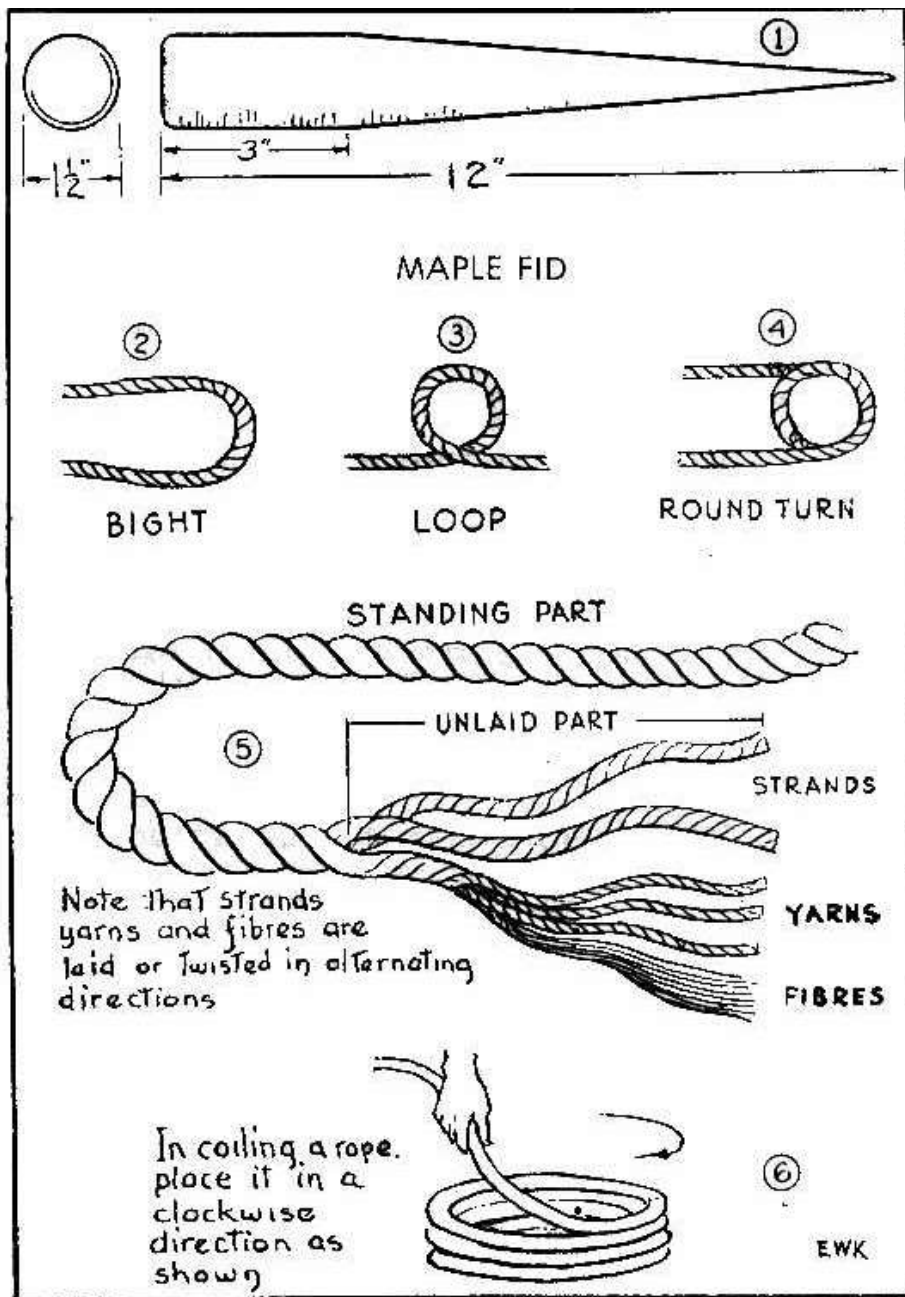
Rope Deterioration.-On the average farm about half the original cost of rope each year is lost through neglect to whip ends, and failure to dry wet rope before coiling. In other words, rope care in these two details would double the life of farm rope. Other deterioration results from overloading, surface wear, and internal wear and heat. Surface wear is the greater evil, since farm rope is in frequent contact with the ground, and picks up sand and other grit, which wears surface and cuts the rope fibre. Internal wear comes from heavy strain, and friction from rubbing beams or posts, or the edges of poorly aligned pulley blocks. Sharp bends put unequal strain on outer and inner fibres.

Rope care.-For heavy hoisting use the largest suitably sized pulley block and rope.

See that your rope is free of kinks before making up grain slings.

When hemp and Manilla rope become dry and brittle, apply as much good

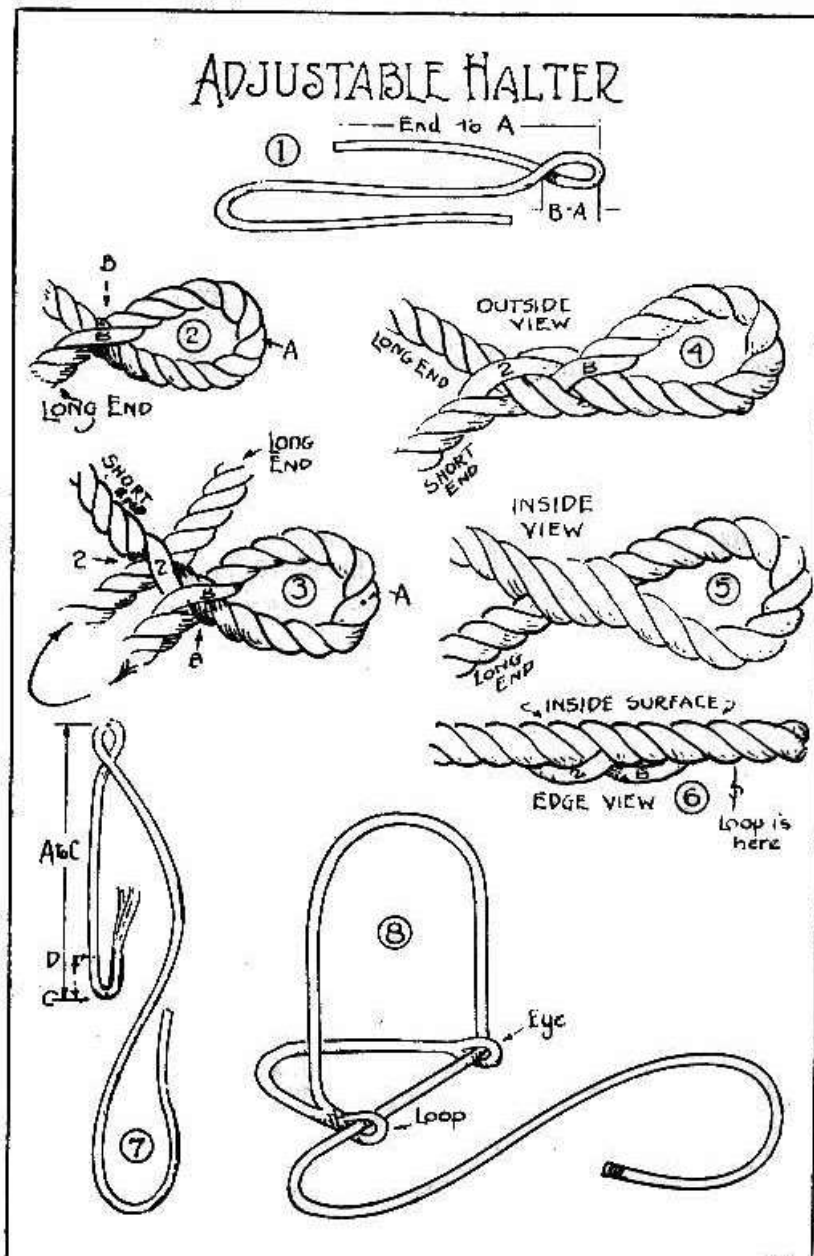
lubricating oil, tallow or fish oil as the fibres will absorb. Keep acids away.



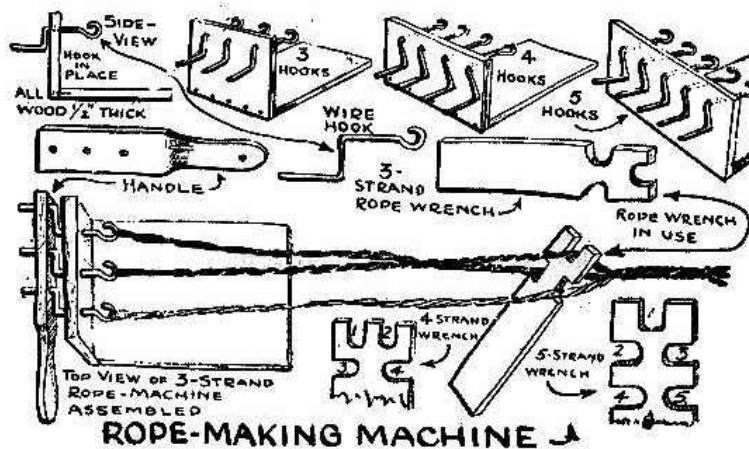
Making an Adjustable Halter

1. Cut rope to required length. (See table on page 133.)
2. Place rope on a bench, with long end to your left.

3. Measuring from end on your right, mark point A at "End to A" distance in table. A" now divides rope into a long and short end.
4. Measure from A towards long end, and mark the distance A to B.



5. With the rope still flat on the bench, and your marline spike parallel to the bench top, raise the strand B. Drawing the short end towards you, still keeping it in touch with the bench top, bend in a bight so that this end may be passed under strand B and away from you (Fig. 2 in Illustration.) As you pull through, keep it parallel as possible to the strands of the long end. Pull until you have a small loop of a size to admit the rope not too loosely. (Fig. 2.)
6. Without turning the loop over, pass the long end away from you under the second strand of the short end, counting two full strands of the short part, out from under and to the left of the B strand. (Fig. 3.)
7. Pull the long end up snugly (Fig. 4.), thus putting a flat surface on the rope on the side opposite to the raised strands. This side will go next to the animals jaw. Draw the four strands of the short end close together on the flat side (Fig. 5.). An edgewise view of the loop will now look as in Fig. 6.
8. Measure A to C (Fig. 7).
9. Bend a bight in the rope with C at the point (Fig. 7).
10. Measure back on the rope same distance as A to B (to point D).
11. Unlay the end and make an eye-splice. Eye and loop AB should be the same size.
12. Pass long end of the rope through the eye, then through the loop AB.
13. Crown and tuck end of rope.



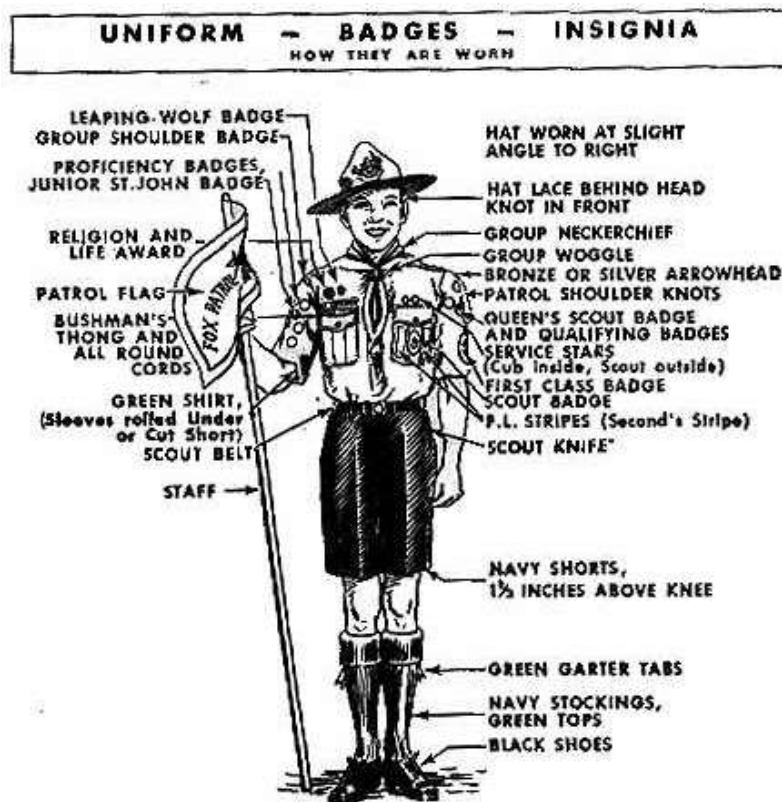
Adjustable Rope Halter Dimensions

	Rope Sizes		Measurements		
	Diam.	Length	End to	A to B	B to C
Animals			A-D		
Sheep and Calves	3/8"	8'	18"	13/4"	9"
Small Cows	1/2"	12'	24"	3"	12"
Average Cows	1/2"	12'	27"	3"	14"
Large Cows and Bulls	9/16	15'	30"	3 1/2"	16"

Chapter XII

It's Smart To Be Smart

One of the first things a visitor to Canada wants to see is a Mountie. Their colourful scarlet coats and Stetson hats represent to the tourist from abroad the reputation of Canada's finest-the Royal Canadian Mounted Police-the reputation for smartness, efficiency, dependability.



In the same way the Boy Scout Uniform is recognized by our fellow Canadians as the sign of a boy who is "Prepared", who is efficient, who can be relied upon in any emergency.

In an emergency a boy in uniform is worth a dozen without it. He can be readily recognized in a crowd, and his uniform clothes him with a certain authority that his ordinary school clothes can never do.

Another reason for pride in the Scout uniform is its distinctiveness, which has been one of the reasons for Scouting's growth and popularity throughout the world. And one of these distinctive features has been its smart hat, so neat and distinctive that it is worn with pride by those same Royal Canadian Mounted Police. Every Scout should be sufficiently proud of his Scout hat to use it only for proper purposes. Never use it for games at Troop or Patrol

meetings. Keep the strap polished brightly, and keep your hat brim neatly pressed. Use a damp cloth and iron over it. Never apply the iron direct to the hat brim. Be sure you iron it on a perfectly flat surface, or your brim will have a buckle in it.



Your Hat Dents.-Try this method of putting the dents in your Scout hat. Bash in the crown of the hat until it looks like a shallow basin. Fill this basin with water and let it stand in a sink or bath tub until most of the water has been absorbed into the hat and the balance has dripped through. Then push up

the crown, put in the dents and creases and the result will not only look smart but will never come out.

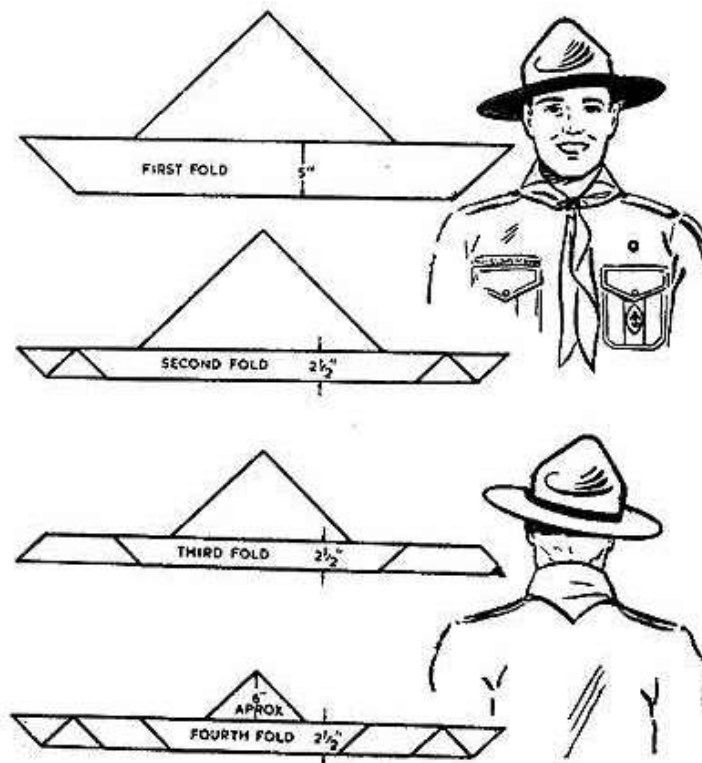
And a Smart Neckerchief

The neckerchief must be washed and ironed at frequent intervals; for no tidy Scout is ever seen in a neckerchief crumpled and soiled, as though it had been used as a dishrag. Tie a small knot in the ends of your neckerchief until your daily Good Turn is' done.

It will be unnecessary to speak of clean shirt, shorts (one and a half inches above the knee), neat stockings and shined shoes as a part of the Scout tradition of tidy dress.

Remember this chapter title-It's Smart to be Smart.

See chart for correct way to fold neckerchief.



Chapter XIII

MISCELLANY

Scout's Pace



One of the original outdoor Scout tests, and still being used by a number of Troops as a matter of tradition, and because of its popularity with boys, is "Scout's Pace." It was one of Baden-Powell's favourites, as a method of travel which permits of endurance when travelling long distances." African runners of certain tribes used it, and were able to travel for many hours without halting, except for a drink of water.

For Scouts however, it was not given as a trial of endurance or speed. The terms were "Go a mile in 12 minutes at Scout's Pace," and it was required that the mile be covered within a time error of 30 seconds.

The purpose of this test was to develop a sense of time and pace until a Scout could in 12 minutes know he had covered exactly one mile, or again that when he had covered a mile on the road, he knew that 12 minutes had passed.

If you think it is easy, try it! Put a watch in your pocket (to use only as a check at the end of each mile) and attempt it on the way home from school or in the evening out on the road.

Scout's Pace is approximately 20 steps running and 20 steps walking alternately. It may take quite a bit of practice before you are able to do it within the time limit.

Making Plaster Casts

Another of the several kinds of hike and camp souvenirs of which every Scout should have a collection is a display of plaster casts of the footprints of birds and animals, both wild and domestic, -marked with name, and place and date of taking.

It is not a difficult art, and the necessities are simple and inexpensive, -several pounds of plaster of paris (from a hardware or drug store), a medium-sized can, something to carry water in, a few collar-like strips of cardboard and some paper clips; or these can be improvised on the spot by half splitting a few twigs.

The Procedure.-Having found a distinctly made foot impression, preferably in clean, moist soil, sink a card collar around it and secure the overlapping ends with paper clips or split twigs. With a little water in the can, sift in plaster, stirring, until you have what you judge to be a sufficient quantity with the consistency of fairly thick cream. Pour this into the mould, with a circular motion if a large track.

Allow some 20 minutes for hardening. Remove the collar and lift the cast. Carefully brush off loose clinging earth. Later, when cast is quite dry and hard, wash clean with water and a soft brush.

With practice you will soon be able to record the footprints of anything from a sandpiper to a moose. It is fun also to have footprints and handprints of some of your boy friends. These can be made in a small sand-box at home.

If you wish to hang your print, make a loop of cord and place it half-way through the cast as you pour your plaster.

Camouflage and Stalking

One of the alternatives for the First Class swimming test, (only if a doctor certifies that swimming is dangerous to a boy's health), is the passing of one of the several Proficiency Badges, one being the **Stalker**.

This particularly scouty badge calls for the ability to stalk wild animals for observation and taking photographs.

The first principle of camouflage is the copying of Nature's colour protection scheme for wild animals. One of the first objectives is to "break-up" the natural lines of the figure- from the viewpoint of the observer. In a dark background you make sure of covering the high-light of your face.

With the same idea, when stalking a bird or animal you will give first attention to the colour of your clothes and your background and surroundings. Next, the wind direction. That is, you will make sure you are stalking up wind and not down wind towards your quarry.

Then you will be constantly alert to "freeze" the instant the deer, for example, suddenly stops feeding and raises its head.



Learn to walk lightly, on the balls of your feet (the thump of your heels may be heard), and practice balancing on one foot while carefully placing the other-to avoid sticks or dry weed stalks and that deadly "Snap!"

Learn to crawl like a cat. As you move bring your knee up to where you placed your hand, and at the same time do not let your feet make the slightest noise.

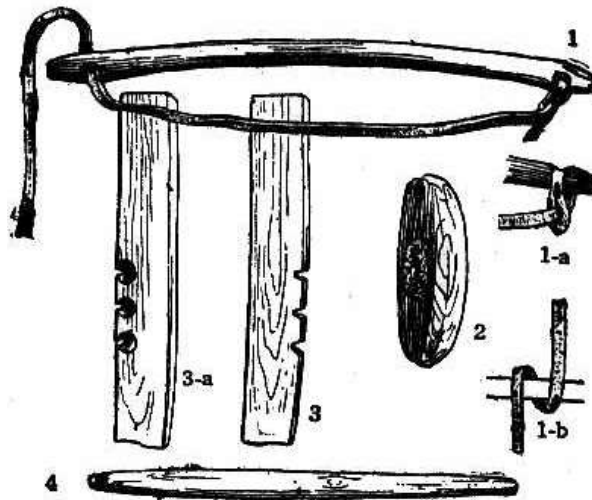
Indian Fire



Although the making of Indian fire, or fire with a fire bow, is not a First Class Scout Test, every Canadian First Class Scout should be able to go into the woods, find the necessary materials, and with his knife and leather thong (or a lace from his shoe) make an Indian fire set, and get his fire.

If close attention is given to details while learning, it is not difficult. The illustration shows the various parts of a fire set, -the bow, the fire-board, the fire-pan (this may be simply a flat chip), the hand-block (some Indians called it the "Thunder Bird"), the "bird's-nest" of tinder and the spindle or drill.

1. Drill bow; 1-a.
Applying the
thong; 1-b. position
of cord on spindle
2. Hand rest for top of
spindle
3. Hearth showing
slots; 3-a.
Hearth showing
pits and slots
4. Spindle of correct
form



How Fire Comes.-In

operation, the drill, whirling in the shallow round hole, or fire-pit, at the point of the notch in the fire-board, grinds up a brown wood powder, or wool, which works out into the notch. By the time the notch is full, the heat from the whirling spindle has ignited the powder, which begins to turn black and smoke. This developing coal is carefully placed in the bird's-nest, in the hand, swung briskly in a circle (like a baseball pitcher "winding-up") until the heat is well developed, placed on the ground and blown to a flame.

The Wood Used.-Indian fire (fire by friction) cannot be made with any kind of wood. Some woods grind up too easily, developing little heat; others are too hard, making little or no powder; while a resinous wood, such as hemlock "polishes", loses friction as it develops heat, and produces only spindle smoke.

It is a theory that in every section of Canada a native wood can be found that will make Indian fire. Testing of this theory offers a field of interesting experimenting by Canadian Scouts while on the hike. Indian fire sets made with different kinds of wood in different places at different times-with kind of wood, place and date burned or inked on both the fireboard and spindle-make one of the Scoutiest woodcraft souvenir collections.

Some introductory pointers. The production of smoke from the fire-pit is not necessarily a sign that the wood used will produce fire. Several woods, like hemlock, produces lots of smoke, but rarely bring a spark. The best wood test is the powder; after a few turns of the drill, feel it. It should be fine and soft, not gritty and coarse.

Varieties of Canadian wood with which you are most likely to succeed are: Basswood, Cedar, Elm, White Pine, Fir, Tamarack or Hackmatack, Soft Maple and the root of Cottonwood and Willow. Of course, all wood should be seasoned and dry.

Among fire-making experts there is some difference of opinion as to whether the spindle and fire-board should be of the same wood. This also offers Scouts an interesting field for experimenting.

Making an Indian Fire Set

The scouting stunt, with your hand-axe and knife, is to make a complete set in the woods from one tree branch; say, a dead branch from a live white pine. The branch butt should be three to four inches in diameter; the butt then providing the fire-board and hand-block, the next piece the spindle, and the smaller end the bow.

The Fire Board.-The handy size is four by 12 inches. It is best not thicker than three-quarters of an inch. The thicker your board is, the "slower" it will be; that is, there will be more low temperature to overcome. Thinner than three-quarters of an inch, your fire-pit wears through too quickly

The fireboard smoothed off both sides, and the edges squared, near one end cut a notch three-quarters of an inch wide and of the same depth. At the tip of the notch cut a shallow hole, or cup (such as would take the half of a marble), of a width just a little less than the diameter of your drill, when made; the outer edge of the cup being a quarter inch from the edge of the fire-board.

The Spindle.-The spindle, or drill, may be round or octagonal in shape, three-quarters of an inch in diameter, and preferably 9 or 10 inches in length. The shape of the lower or friction end is important. It should be rounded, like the half of a marble; the purpose being to secure the maximum grinding surface. The shape of the top is not important, except that it must not be too thinned down and pencil sharp; and must fit easily into the hole of the hand-block. When making a spindle of a section of a tree branch, shape it so that the year rings are as much off-centre as possible, to secure most friction.

The Hand-block.-This needs little describing. It should be of a size and shape to grasp firmly in the palm, and at the same time prevent any part of the hand touching the drill. When made from the butt of a branch it should, if possible, be cut so that the knot of a small branch stub lies in the centre; this then being bored for the socket. Lacking the centre knot, find and force a pebble into the hole. Otherwise the hole should be kept greased to reduce friction.

The Fire-Pan.-This is placed under the notch to facilitate the picking up of the smouldering "coal". While the fire-pan shown in the illustration has advantages, in the woods a small flat chip will serve as well if handled carefully.

Tinder.-The best tinder is shredded cedar bark, or dry pine or cedar pounded into wool between stones. This was the Indians' preference. Fine dry

dead grass, or an old field mouse nest make excellent "bird-nests." (Needless to say no Scout would be so unwoodsmanlike as to use gasoline or kerosene to hurry up a spark.)

The Bow.-This, actually a small bow with a stout thong string, should best be 20 to 36 inches in length. The longer bow gives a longer spin with each stroke, and perhaps a greater speed, but the shorter bow is easier to control-less likely to be rocked up and down under stroking; and is more convenient to carry, or stick in a corner of your rucksack.

The thong should be strong, pliable hide, a quarter inch in width. Strung, it should be of such a length when twisted around the spindle it grips snugly yet runs freely. It is knotted securely at one end of the bow, and the other end made adjustable, to permit of tightening if necessary.

To Operate.-Twist the bow thong once around the middle of the drill, so that the drill is on the outside of the thong,-not inside against the bow.

Kneel on the right knee and place the left foot firmly on the fire-board. (Study illustration at beginning of this chapter.) Hold the hand-block so that the drill is perpendicular, and adjust yourself so that your left wrist is pressed firmly against your left shin just below the knee.

Hold the bow as pictured-precisely at right angles to the drill. Now press down moderately on the hand-block, and with a rapid, even stroke, drive the bow backwards and forwards. Continue until the notch is well filled with powder, and the powder is smoking freely.

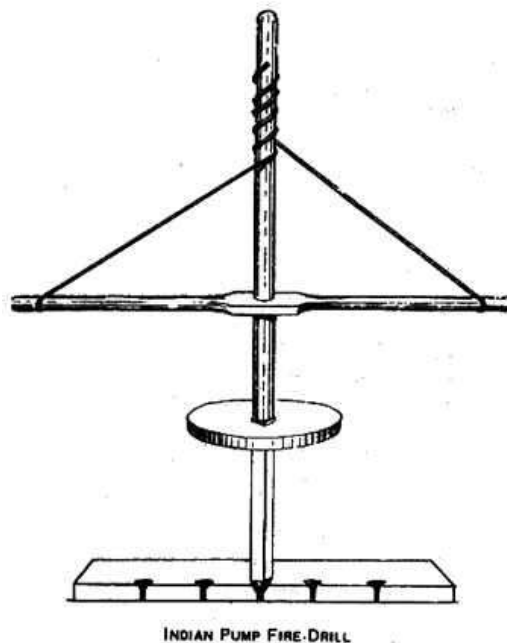
Being very careful not to move the fire-board (which might result in breaking up the little dust-ember) lay aside the bow and drill.

With the hand fan gently until a spark shows.

Place your right hand on the fire-board, to steady it while you remove your left foot. Carefully hold the fire board with your left hand, and with the finger tips of the right hand give the board a light tap (to break the coal from the sides of the notch).

Tip the fire-board up, toward you (as though on a hinge), and place it to one side.

Place the bird's-nest in your left hand.



Very carefully pick up the fire pan, anti tip the smoking “coal” into the nest.

Close your fingers loosely about the nest, and proceed to swing it in the air-very slightly closing in the fingers as the heat develops. When uncomfortably hot, place it on the ground, blow it into flame-and build up your fire.

The fire may be brought by placing tinder over the coal on the ground, and blowing directly upon it, but the hand coaxing method is surer and the flame, when it comes, is much stronger. While the “nest” is being held in the hand, the increasing temperature of the coal further dries and heats the tinder, so that the moment the flame comes, the tinder flashes into full blaze. The advantage of the hand method during wet weather is obvious.

If when beginning operations smoke does not come within a minute, it is useless to continue. Examine the end of your drill. You will probably find it is “polishing.” Perhaps it has developed a point, and is only grinding at the bottom of the hole. With your knife, pare the drill-end until it fits the hole snugly. If it again fails (where the wood is known to be suitable), drop a little dry dust into the hole.

The Time Required.-Your first attempt to make fire may fail. Keep at it, each time giving careful attention to every step and detail. When you have caught the knack practise until you can get your flame within the minute.

Off to the Woods.-If your first attempts have been made in the cellar or kitchen at home, or at Troop meeting, for your next try leave matches behind, stick a hide thong in your pocket or rucksack, and bike off to the woods for the “real thing”-to prove that you can do what the Indians used to do.

And when you can get your fire you can call yourself a real Canadian woodcraft Scout.

An Indian Ceremonial Fire Set.-Having mastered the fire bow you will find it fun to make a ceremonial fire drill set such as used by the Indians to make “new fire” at the New Year festival and in the important Sun Ceremony. A study of the illustration will give you the details.

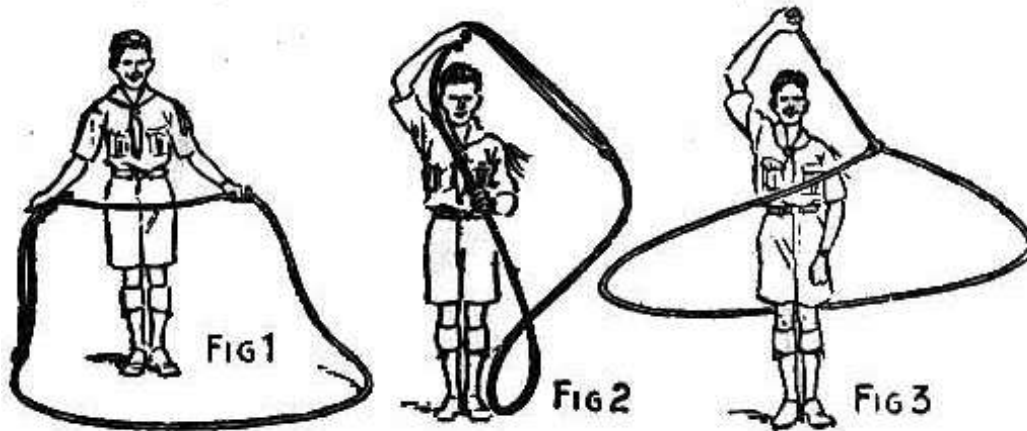
How to Spin a Lariat

One of the newer Scout Proficiency Badges is the Rope Spinner, but whether or not you wish to earn this badge, you’ll find there is endless good fun in lariat spinning, and fine exercise too. It is more easily demonstrated than explained, but a few hints, with illustrations, and regular practise on your part, will give you a start. You can go on from there and develop some of the rope tricks you have p r o b a b l y seen displayed by cowboys at rodeos and elsewhere.

First, the Rope: The best for spinning is a 16 or 18 foot length of braid-

ed spot cord No. 12, with an eye honda in one end. Of course you can begin with any fairly light, pliable rope of the necessary length.

First Trick-The Crinoline. Hold the rope as in Fig. 1, palms up, arms away from the body, the “spoke” or stem, in the right hand, the loop resting lightly on the fingers of the left. With a sweep, bring the right hand up in front of the face, around and over the head, until it comes above the right ear. Now let go with both hands, and continue the spin with your hand above your head, only twisting the wrist.



Important Points. Maintain the push-around wrist movement. Hold the rope loosely, allowing it to turn over in the hand.

Having mastered it, change the hold from right to left hand. Next have another Scout step in under and take over, you stepping out.

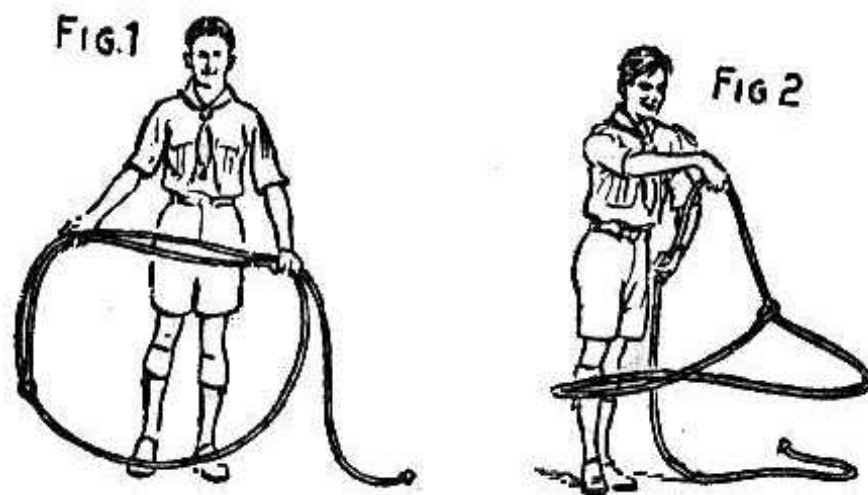
As another stunt, a second Scout crawls under and with his head between your legs hoists you, still spinning, into the air.

Next go after the “Corkscrew”-that is, “bouncing” the Crinoline. First slowly, then faster, send the hand up and down in a spiral movement that throws the loop higher and higher, until it stands almost straight in the air.

The Flat Spin. Hold the rope as shown in Fig. 1. With an easy, round swing move the arm out in a counter-clockwise circle, and in the same motion let go the loop and “stir the pot”. The loop must be flat.

Having mastered the right hand, spin, change to the left. Next try passing the spin around behind your back.

The Giant Spin. For this, use a rope 50 feet or more. Start as a Crinoline, and gradually feed out with a long, full arm swing.

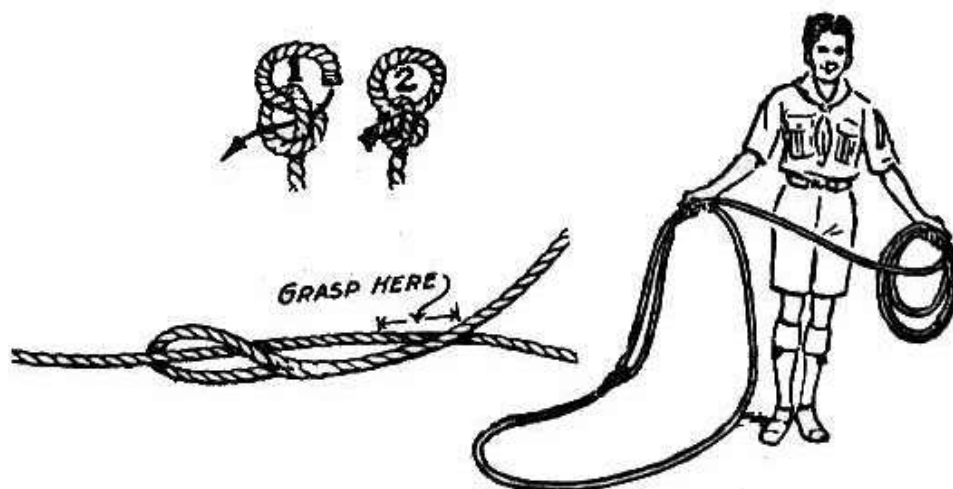


How to Throw a Lariat

Every Scout should be able to throw a lariat within reach of person in the ice, or over or within reach of the victim of a summer water accident in throwing distance of shore.

The Lariat.-While any light, pliable rope of suitable length may be used in first practise, to develop skill a 40 foot length of $\frac{3}{8}$ inch Manila rope should be acquired. Make an "eye" in one end. To render the lariat pliable pull it back and forth round a post.

Throwing.-Make a loop from your extended hand (above your head) to the ground. Hold the loop in the right hand, about two feet from the honda. Gather up the spare rope into coils and hold lightly in the fingers of the left hand, the knot at the end of the rope held in the crotch between the thumb and forefingers. Now circle the loop about the head in such a way as to keep



it open, the twirling hand being turned over each time it passes the back of the head. Aim a little high and to the right of your target, and with the same swing, but in a larger circle, let the loop go.

To catch an animal, throw the open loop on the ground in front, and jerk as he steps into it.

