

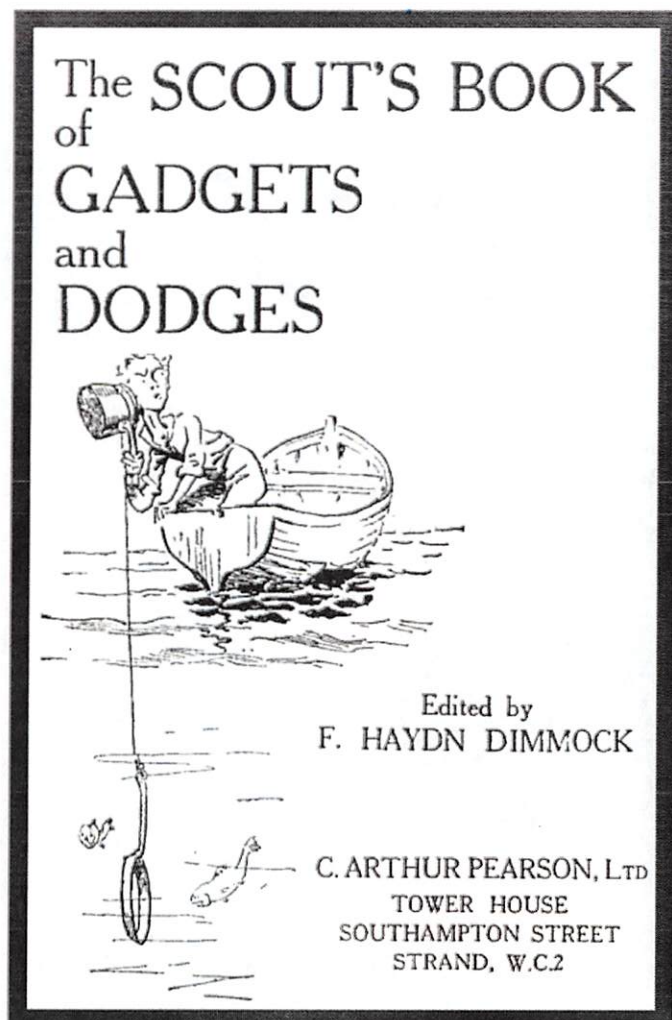
The SCOUT'S BOOK of GADGETS and DODGES

9d.
NET

Camp Gadgets
Clubroom Gadgets
Ideas for Decorating Dens
Hints for Scout
Pioneers
Observation
Helps
Dodges for
Hikers and
Cyclist
Scouts



FOR CUP AND COOKING



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Editor's Note:

The reader is reminded that these texts have been written a long time ago.

Consequently, they may use some terms or use expressions 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.

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FOREWORD

*THIS little book has won deserved popularity.
It is a treasure house of ideas and suggestions which the active outdoor
Scout will find a real help.*

*There are gadgets for camp and the Troop Room as well as much
sound information on campcraft and general Scouting.*

*I hope that all who use the book will feel encouraged to try their skill
and craftsmanship in making and inventing new gadgets.*

F. HAYDN DIMMOCK,
Editor of THE SCOUT.

BRUSH UP YOUR ROPEWORK

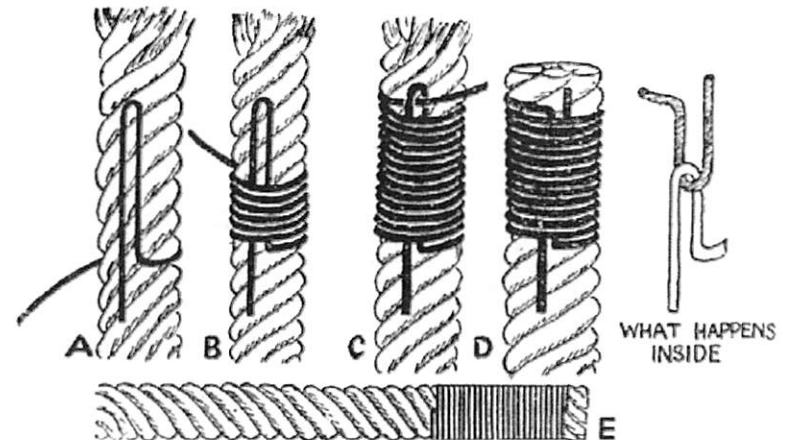
Ropework. - Knotting, Lashing, Splicing and Whipping - is the foundation of most gadgets, and every Scout should try to become a "top-hand" with rope or cord. You must practise constantly until you can handle them as deftly and surely as a skilled craftsman uses his tools. Always, if you possibly can, use rope or stranded cord - not ordinary string.

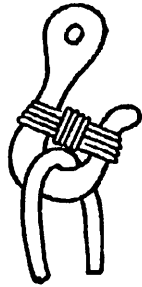


WHIPPING.

Whipping. I mention this first, as the appearance of so many cleverly-constructed gadgets is spoilt by the untidy frayed ends of the ropes or cords used in the making. And yet every Scout is supposed to know how to whip a rope before he is invested. Remember that whipping should be used to prevent fraying and not to cure it. So whip every rope or cord. It will lengthen its life and save you a load of trouble.

The diagram shows you clearly how it is done. Begin the whipping about two inches from the end of the rope. Pull each turn tight and take the last one through the loop. Finish by cutting short the loose ends.





Mousing a Hook

First cousins to whipping are "Mousing" and "Seizing." A hook is moused to prevent a rope or link of chain from slipping out. The method is quite easy. Finish off with a reef knot. A seizing is used to stop the end of a rope working loose and so causing the knot behind to slacken, or to secure it to another rope. For temporary purposes a few turns of a piece of twine finished off with a reef knot will do. For a more permanent job use a whipping.

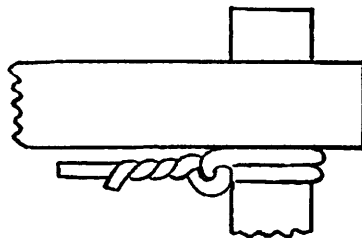
LASHINGS.

Lashings are lengths of rope used for tying spars together. Length is about fifteen feet. To roll up a lashing not in use, loop it into a hank, take a half hitch with the when free end round one end of the hank and pass it back through the loops.

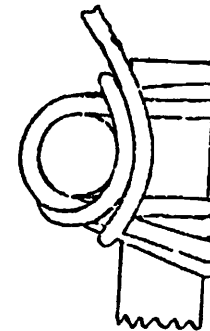
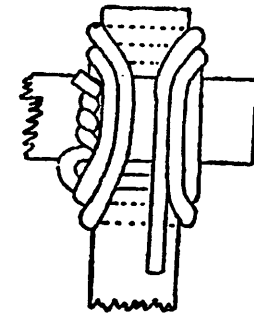
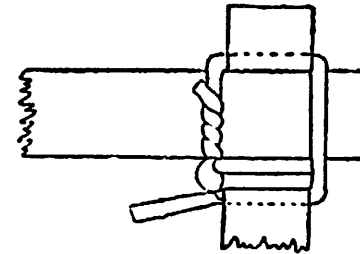
Square Lashing - used for spars crossing at right angles or early so. Start with a clove hitch just below where the spars cross. Take a few turns round the standing part. Now take one turn of the lashing round the spars as shown. Repeat complete horizontal spar and outside on the vertical. Then pass this three or four times, making each new turn inside the previous turns. On times completely round between the spars and over the first returns. This is known as frapping. One Scout should pull hard on the end of the lashing while another pounds in the returns at each corner with a frapping mallet. Finish off with a clove hitch round the horizontal spar.



A Lashing



Starting a Square Lashing

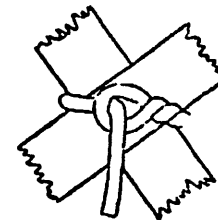


STAGES IN TYING A SQUARE LASHING

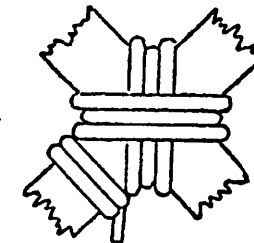


*Frapping
Mallet*

Diagonal Lashing - for use with spars likely to spring apart. Begin with a timber hitch round both spars. Take three or four turns round each fork, frap and finish with a clove hitch.

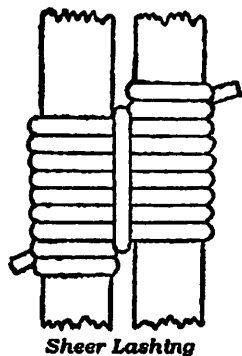


DIAGONAL LASHING



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Shear or Round Lashing - for lashing two parallel spars or two spars to be opened to form shear legs. Start with a clove hitch round one spar and twist running end round the standing end. Take several turns round both spars, then two frapping turns and finish off with a clove hitch round one spar. You will probably have to insert a small piece of wood between the spars to give you room for the frapping turns.



Shear Lashing

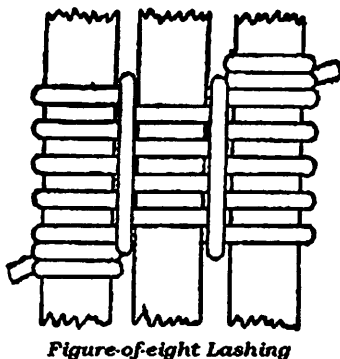


Figure-of-eight Lashing

Figure-of-Eight Lashing - for lashing three poles to make a tripod. Start with a clove hitch round one of the outside spars, twisting the running round the standing end. Take several turns round all three spars, alternately under and over. Frap between each pair of spars and finish with the usual clove hitch.

NO MORE SWITCHBACK HATS.

Here are some methods of avoiding a switchback brim to your hat. The first is to iron the brim over a damp cloth. The second is to soak the brim thoroughly in a solution of sugar and water and leave to dry on a flat surface.

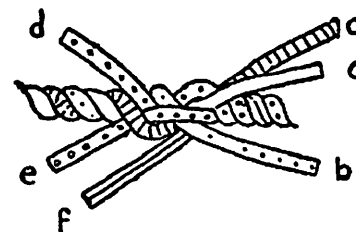
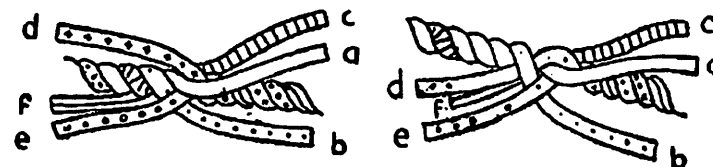
A more lasting effect will be gained by mixing two ounces of flake shellac with half a pint of methylated spirit in a glass jar. Let this stand for twenty-four hours until the shellac has quite dissolved. Brush the hat thoroughly with a stiff brush and then work the mixture thoroughly into the underside with a paintbrush. Don't apply it so freely that it will come through the felt. Then stand the hat on a flat piece of wood or cardboard, and when quite dry brush well again.

This method darkens the hat slightly but, as it is on the underside, this will not matter. The quantity given will do about nine hats.

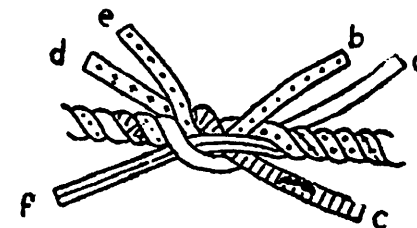
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SPLICING.

The Short Splice - To join permanently the ends of two ropes of equal thickness (when the joined rope has not to pass through the sheaves of a block). Unstrand the ends of both ropes for a length of about twice the circumference and lay them together, end to end, with the strands alternately interlaced. This is known as "marrying" them. Pass the middle strand of one rope *d* over the strand of the other on which it rests *a* and tuck it under the next on the left *b* working against the lay of the rope. In the same way pass *a* over *b* and under *c*, and *f* over *c* and under *a*, turning the work as you go. Now deal with the strands of the other rope in the same way, passing each over one strand and under the next, always working against the lay. Repeat the process at each end, cut the ends off and roll the work between your foot and the floor or a hard piece of ground.



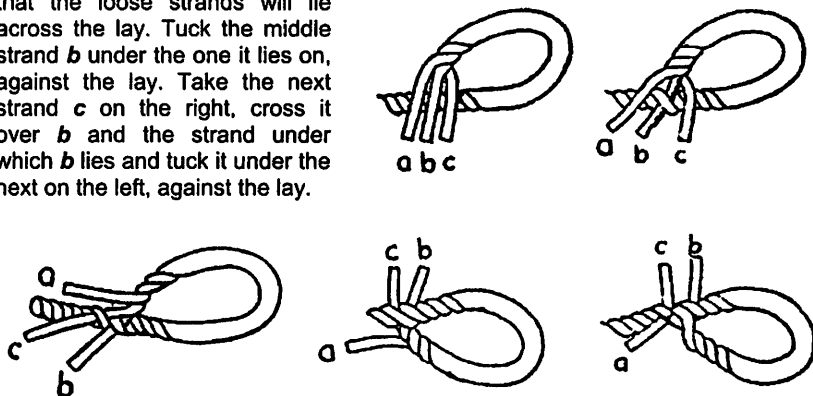
THE SHORT SPLICE.



The Finished Splice

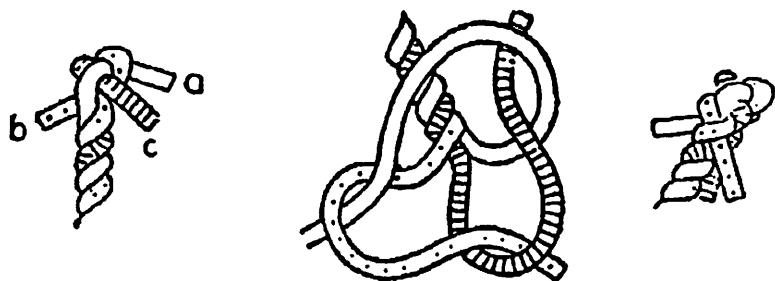
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To make an **Eye Splice**, begin by unstranding a few inches of the rope. Lay the unstranded part back along the rope sufficiently to form an eye of the size needed, bending the rope so that the loose strands will lie across the lay. Tuck the middle strand *b* under the one it lies on, against the lay. Take the next strand *c* on the right, cross it over *b* and the strand under which *b* lies and tuck it under the next on the left, against the lay.



Turn the work over and tuck the last strand *a* under the one which has not yet been used, *from right to left*. Now carry on and finish off as in the short splice.

The Back Splice - used to "point" a rope. Unstrand an end and pass each strand over and under the next loop as shown. This by the way, gives you a Crown Knot. Then take each strand in turn, against the lay, over one strand and under one. (This means that each strand will pass under itself.) Repeat this and finish as in the **Short Splice**.

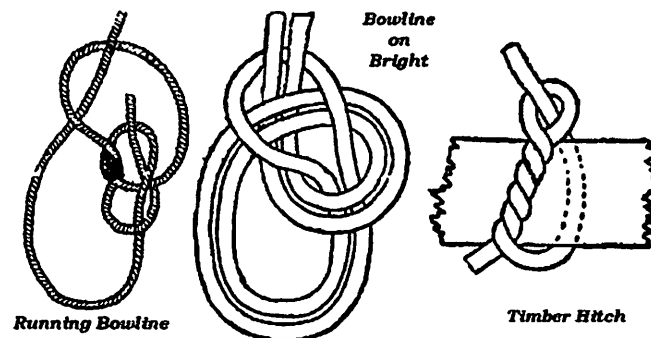


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SOME USEFUL KNOTS AND HITCHES.

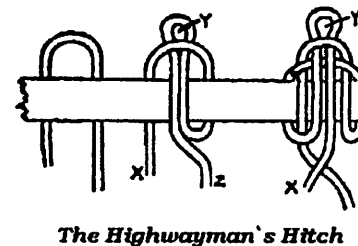
To make a noose, use the **Running Bowline**. Make a loop with the running end under the standing part. Bring back the running end over the standing part and tie your bowline as shown.

For a sling to lower a person, use the **Bowline on a Bight**. Make a long bight (or loop) and tie a bowline with the bight itself. Open out the bight, pass the whole knot through and pull taut.



The Timber Hitch, already mentioned under lashing, is used for securing the end of a rope to a spar or package. Turn the rope round the spar, make a half hitch round the standing part and twist round several times in the same direction as the half hitch.

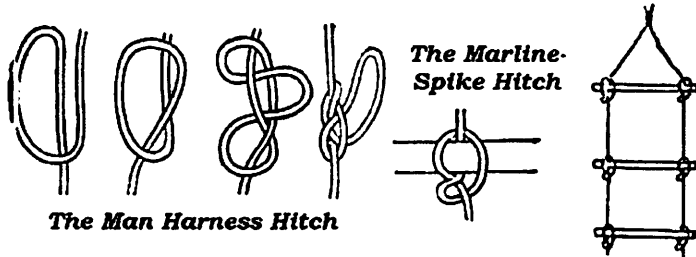
The Highwayman's Hitch - for instant release by a pull at the running end, as in unmooring a boat or for freeing a rope down which you have just climbed. (In this last case BE CAREFUL BY WHICH END YOU COME DOWN!)



The Highwayman's Hitch

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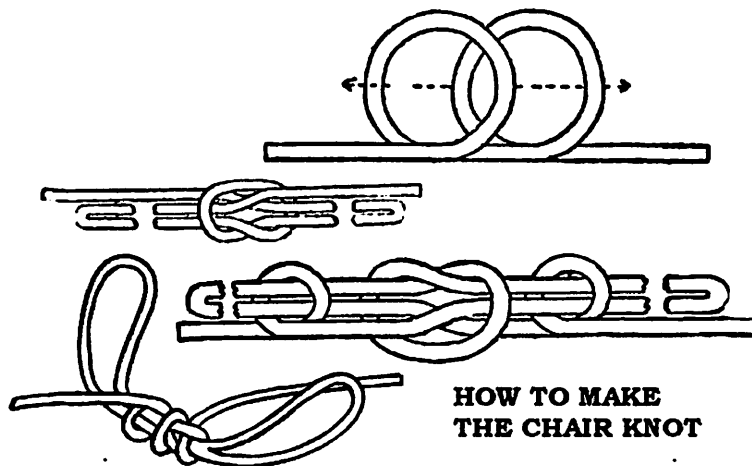
Next time you have a job of towing, use the **Man Harness Hitch** and get the full effect of your weight on the rope. The loop, of course, is slipped over one shoulder.



The Man Harness Hitch

A rope ladder is most useful and provides loads of fun. To make one you should know the **Marline-spike Hitch**. You can use staves for the rungs.

The Chair Knot provides two loops, one to go under the knees and the other under the shoulders of an unconscious person, in order to lower him from a height. Take two half bitches in the middle of the rope and lay them together. Pull the inner sides of the hitches outwards into two loops, one about two and a half feet and the other about three and a half feet long. Take a half hitch over each loop and pull tight.



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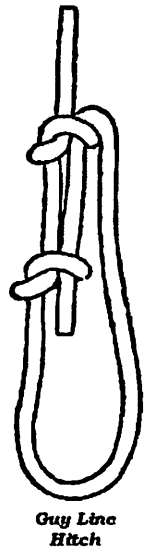
The Guy Line Hitch - to replace that missing guy? Just two thumb knots a little way apart and well up the rope. Take the running end back through them towards the loop. The guy can then be slackened or tightened as required.

KNOT BOARDS AND FRAMES.

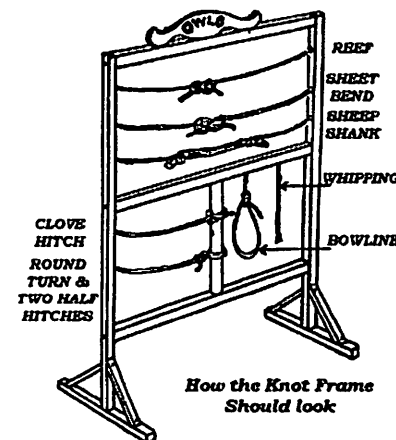
In order to keep the Tenderfoot Knots permanently before the Patrol you will find that the making of either a Knot Board or a Knot Frame, similar to the one shown below, are well worth the effort.

If you are making a Knot Board, you will find it is a help to users of it later on if you show each knot in its stages of tying, and also, particularly in the case of the Reef and Sheet Bend, if ropes of different colours are used.

A test of a patrol's ingenuity that is often set is to give it a length of rope and tell the fellows to tie all the Tenderfoot knots in it. This idea can be worked into a Knotting Board display and all the Tenderfoot Knots shown in actual use on a single length of rope which is securely fastened to the Patrol's Knot Board.



Guy Line Hitch



The Knot Frame, shown below, is a more ambitious effort. All the ropes used are whipped at the ends and are secured to the woodwork of the frame by round screw eyes.

But the most elaborate Knot Display I have seen was a "dramatised" one. Small, doll-like figures were dressed up in correct Scout uniform, and were taking part in a little scene which demonstrated the use of dozens of useful knots.



USES of the SCOUT SCARF

And when you're using your scarf "just for ornament" tie a knot in it to remind you of your Good Turn

When the Good Turn's done, untie the knot.

Can be used as a triangular bandage (but see the scarf never comes into contact with a wound the dye may cause blood-poisoning). Tourniquet.

Smoke mask for fires or gas out breaks.

A number scarves can be used as guide for finding way through fog or smoke. An emergency bag, by holding the corners.

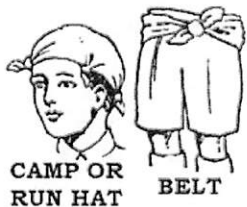
Lot of Scouts look on their Scarf as something just worn for ornament. It isn't!

It has some important uses. Here are some of them:

For use as a signal flag by attaching it to a stick.

A number of scarves tied together a life-line in an emergency.

It makes a good arm sling in First Aid work.



As a belt, in emergencies.

Good Turn Reminder (Knot tied in end).

In a crowded bathing place as a cap to identify Scouts.

Arm band in Team Games.



THE CARE OF KNIVES AND AXES



Knives and axes are tools and not playthings. The Scout knife is not made for throwing and trees are not made to be thrown at - while the aimless chucking of a knife into the ground that one too often sees is sheer useless ill-treatment of what should be one of a Scout's best friends. In my own Troop anyone who fools about with a knife or an axe is made to wear the empty sheath for a month.

The above remarks are all the more true because no Scout would carry an axe or knife that wasn't sharp. Sharpening is an art that is worth a deal of trouble to acquire. Bad sharpening is not only less lasting in its effect, but actually damages the precious cutting edge. When possible use a grindstone and finish off on an oilstone. For everyday use in camp, carry a carborundum or a small fine file.

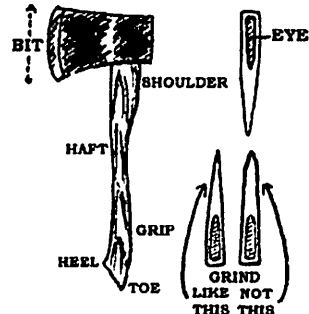
Always remember that a new axe requires grinding before use, unless it is to be damaged beyond hope of repair.

Don't sharpen an axe flat to the edge and don't apply the edge direct to the stone. Make a "bevel" of about a sixteenth of an inch on each side. When using a grindstone, turn the wheel away from you (and, of course, from the edge), keep a very gentle trickle of water flowing over the stone and apply the edge to the stone in a circular movement from point to point - always in the same direction.

In using a carborundum apply it over the edge with a circular motion. To remove a nick in the edge a flat file should be used.

Both head and haft should be oiled from time to time. When an axe is returned to store oil the haft, grease the head and wrap in a piece of canvas or hessian.

To tighten a loose head, temporarily hammer on the *HAFT* to get the head back into position and soak the head in a bucket of water or oil. To do the job permanently the axe must be rewedged.



The parts of an axe

Cut the wedge from hard wood and bake it. Then remove the head from the haft, take out the old wedge and replace the old haft so that it completely fills the socket. Soak the tip of the wedge and the end of the haft in oil and hammer the wedge home from the top.

In making gadgets most of the work done is with light wood taken from already felled timber, so that there is no need here to describe the use of a felling-axe.

Remember, however, that a hand-axe is just as dangerous as a felling-axe and requires just as much care in use. The edge should always be masked, either in its case or in a

log, so that the whole of the cuffing edge is covered.

In using see that you have a whole axe-length around you clear of human or other obstructions. Let the weight of the head do the work - in other words, swing from the wrist AND STOP AS SOON AS YOU BEGIN TO FEEL TIRED.

In cuffing a pole into smaller lengths rest the part to be cut on a solid base, to avoid danger from the ends flying into the air. Hold small branches in the left hand and rest the piece to be cut on the far edge of the block, chopping down and away.

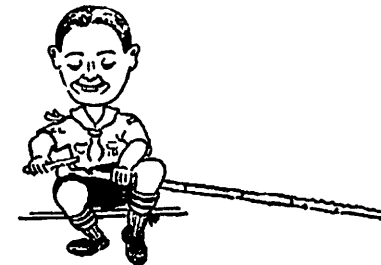
In whittling with a knife always work away from yourself.

Keep your knife oiled in the same way as an axe and keep it in its sheath when not in use. DON'T stick it in the ground. If you have a clasp knife (really quite as useful as a sheath knife) with marline-spike attached, remember that the marline-spike's chief use is for splicing, for which a sharp point is essential, so don't use it for opening tins or for anything else which may damage the point.

REMOVES THE CANDLE GREASE.

To remove candle-grease from your uniform, after you have scraped oil what you can with a knife, lay the material on a flat piece of wood and place a piece of brown paper or blotting-paper over the grease-spot. Then gently rub over the place with a hot stone or piece of metal until the grease appears on the paper. Repeat this until the spot has vanished from the material.

CAMP GADGETS AND DODGES

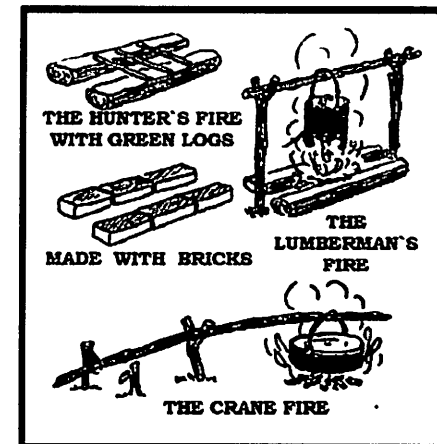


Camp, of course, is the gadgeteer's paradise - the place where he can really let himself go! But remember that the essence of

a good gadget is that it should be of real practical use. Avoid "eyewash" gadgets - elaborate dressers and sideboards and whatnot that are not used in case they should be damaged before the Commissioner visits you or because they are too complicated to bother with. Generally speaking, the simpler a gadget, the better. Neat lashings with well-whipped cords will give a good effect to the humblest effort.

FIREPLACES AND OVENS.

You can, of course, cook in any turfed hole in the ground, but a properly-made fireplace is well worth the effort it takes to make on account of the extra trouble it saves. Simply raising your billies off the fire will speed up your cooking by getting the full benefit of the heat underneath (far more important than heat round the sides), and it will also halve your wood consumption.



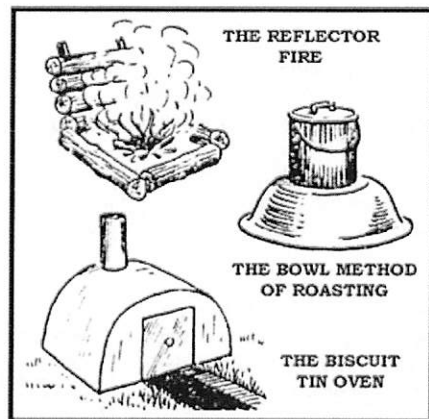
TYPES OF FIRES

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Three simple types of fireplace are shown on the previous page. The best for general use is the Hunter's Fire, which can also be made by digging a trench in the ground. It is better, however, with bricks or green logs, as the sides can be slanted to make a broad end to face the wind. This fireplace should always be covered at night; the hardest rain should present no terrors if your fireplace is dry.

I am not, personally, very keen on the Lumberman's Fire, unless it is only for a single meal. My own experience is that the flames burn anywhere but under the crosspiece.

The Crane Fire is better, as the pot support is more easily adjusted. It is, of course, of little use for a long camp, as it will only take one pot. Make sure that the wood is strong!



Most of the cooking done in camp is either stewing or frying. Fellows seem scared of roasting. Yet it's quite simple with the right kind of fire. You will see two in the pictures above. The reflector should be built of green wood, facing the wind so that the heat will be "reflected" back. The meat should be hung from a crane in front of the fire. Place a bowl, resting on an inverted billy, below the meat to catch the fat, and baste from time to time.

The bowl fire is easier to make and equally effective, although it bakes the meat instead of roasting it. Burn a fierce fire on a piece of hard ground for about half an hour. Then rake away the embers and place the meat in a tin dish on the hot ground. Place the iron bowl over the meat, making sure that it touches the

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ground all round. Then rake the embers back round the bowl **BUT NOT ON TOP OF IT**. Keep the fire fed and burning well. After half an hour, remove the bowl (first, of course, raking away the fire), turn and baste the meat and carry on as before for about another half-hour. By that time your meat should be done. Vegetables will cook in a dixie on top of the bowl.

The oven shown can be used for roasting a joint or baking a cake. Secure a biscuit-tin and fix a cotton reel to the lid for a handle. Lay the tin across the trench, as shown, resting on a couple of iron bars. At the back of the trench put a chimney made from a piece of rolled tin or piping. Then cover all round (except the door) with clay and mud, using a foundation of old bricks if possible. Light a fire in the trench and pop the cake into the oven.

AN OVEN MADE FROM AN OIL DRUM,

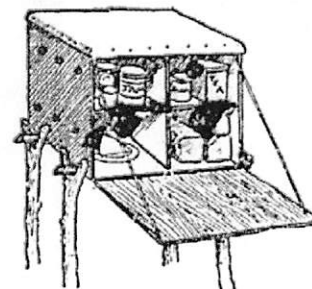
For a large oven use an Oil Drum -
Burn out oil. Place a flat sheet
iron bottom inside
on bricks.
Cut top away
& use for
door.



KITCHEN FURNITURE AND UTENSILS.

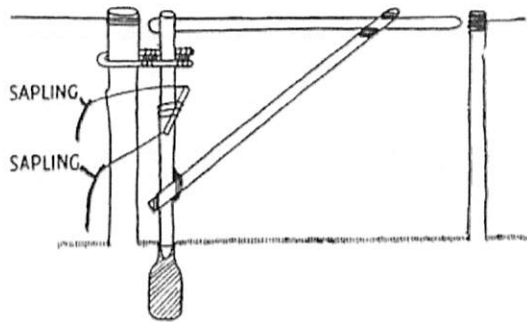
If you do not possess a food tent a portable larder is useful.

It is just an ordinary stout wooden box fitted with movable wooden shelves and partitions, made from three-ply wood, which fit into grooves. The door, when open, is held flat by two lengths of cord or thin chain. Pierce a few holes on each side and cover with butter muslin or wire gauze on the inside. Cover the top with a piece of oilskin. When the shelves are removed for packing, the larder can be used for storing cooking gear, etc.



A HANDY CAMP LARDER.

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Don't allow people to enter your kitchen by stepping over the fence. There's always some silly ass who will trip and bring half of it down and probably flatten your plate-rack. Make a gate and see that it is used.

A simple one is shown above. The upright post of the gate should stand in the neck of a bottle sunk in the ground.



COOKS WASHSTAND



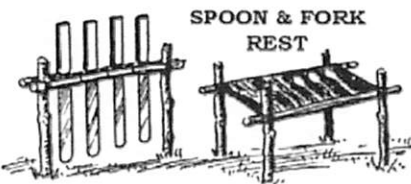
PLATE RACK



MUG TREE

Your cooks, of course, will want to keep their hands clean; so they will need a washstand. A nest for the soap can be made in the fork of the twigs. The plate and knife racks and the mug tree need no explanation. Personally, I like to put knives on a similar rest to the one used for spoons and forks. So many chaps take those thin-handled metal knives which won't "sit" well in the rack.

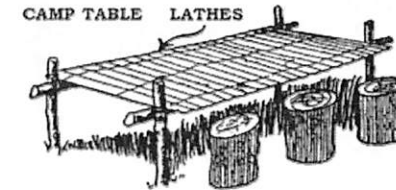
Remember to cover your cutlery at night. You can save yourself a lot of trouble with the grease pit if you place the thatch on a "racket." When you want to burn the thatch take the racket by the handle and shoot the thatch on to the fire. You can use the racket throughout the camp.



SPOON & FORK REST

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A roll-up table is a most useful gadget, not only in the kitchen but also for taking meals. Not only is it much more comfortable to eat sitting upright - it's also far better for your digestion, as your stomach can't possibly do its work properly if its muscles and organs are cramped by its being doubled up while you eat off the ground. If you select seasoned wood this is a gadget that will last for ever.



A good meat safe is essential. Meat should be hung in a cool and shady spot and, at the same time, kept safe from flies. A large piece of butter muslin tacked on to a wooden ring, as shown, and fastened at the four corners will do the trick.

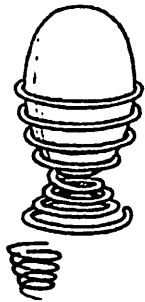
Put a plate to catch the blood, which would attract flies if allowed to foul the muslin. Talking of flies, a wasp trap is a good gadget NOT to make. It attracts all the wasps within miles and only catches about one in a dozen. The best way to keep off insects of any sort is to cover the things that attract them.



LARDER

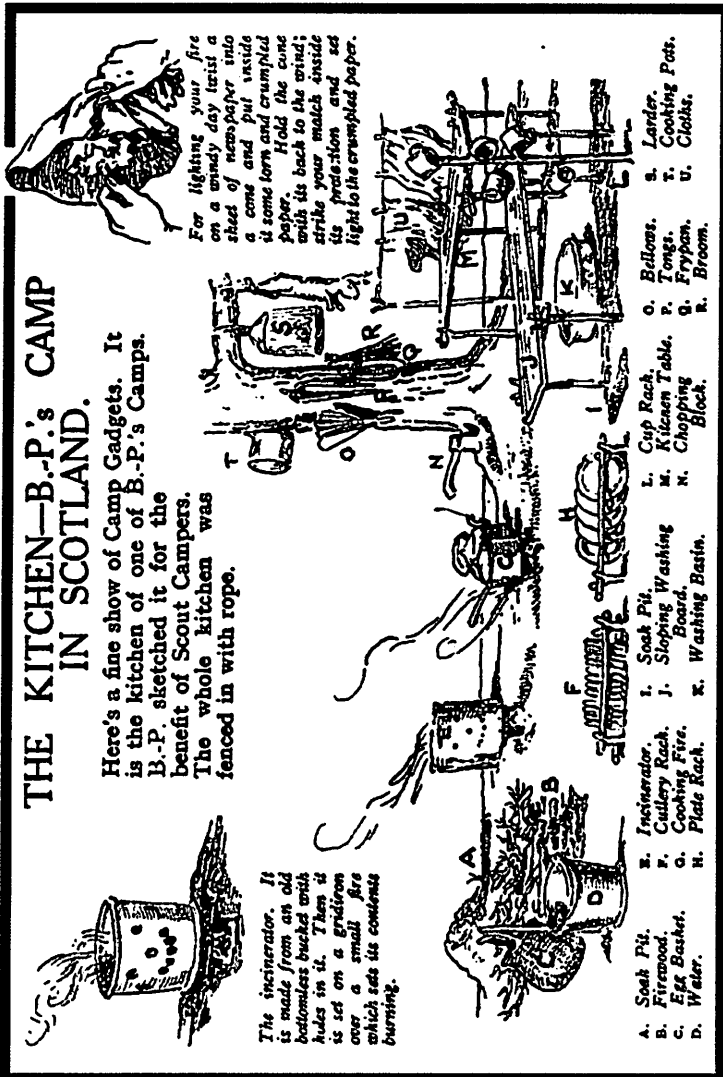
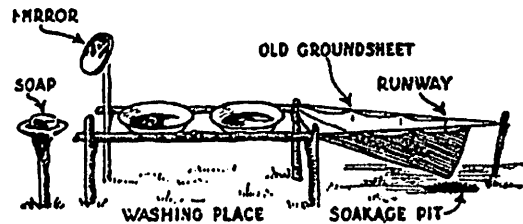
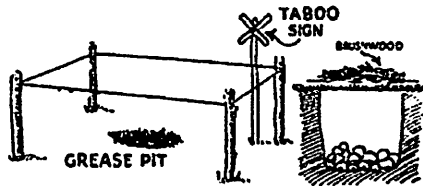
A useful egg-cup can be made by removing a hunk from a "door-step" of bread and standing the egg in the hollow. When you've finished the egg, eat the bread. This, however, is more of a "dodge" than a "gadget!" The picture here shows you a really posh affair. With a fret-saw cut out two pieces of wood (a bit thicker than three-ply. for choice) to the shape shown. Measurements - height 2 1/2 inches, base 2 1/4 inches. Cut out slots to the width of the ply and sandpaper the rough edges. When taken apart your egg-cup packs in the smallest possible space.





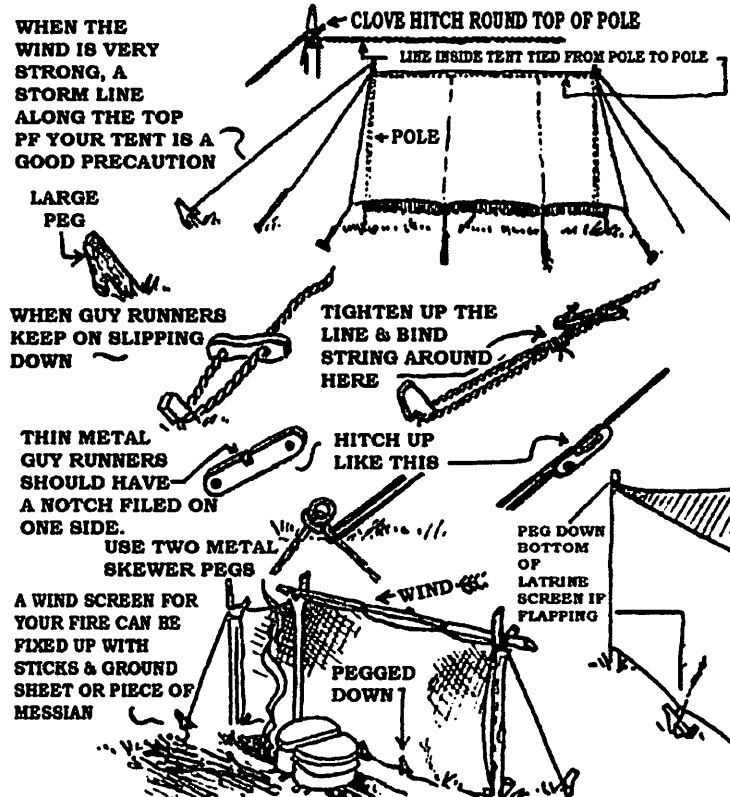
Another idea is to take a piece of wire and bend it into two tapering springs - one for the base and one for the cup. If made of compressed steel or piano wire it will pack almost flat.

GADGETS WITHOUT WORDS.



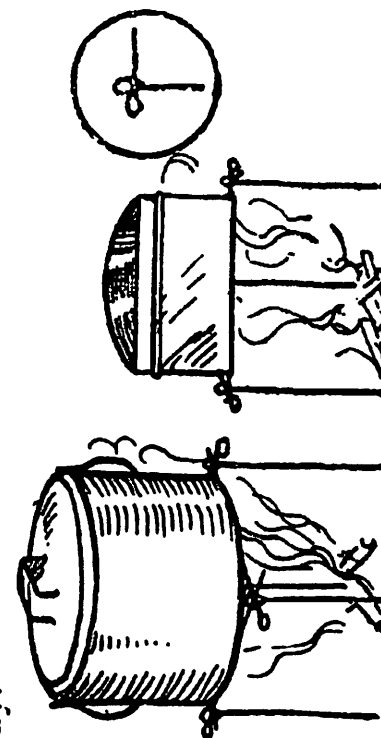
HOW TO BEAT THE WIND

WIND, LIKE RAIN, IS ONE OF THOSE THINGS WHICH A GOOD CAMPER MUST KNOW HOW TO DEAL WITH & WHEN SELECTING HIS SITE HE DOESN'T FORGET HE MAY POSSIBLY GET A VISIT FROM EITHER OF THESE AND HE CHOOSES A SHELETERED SPOT - WIND CAN PLAY HAVOC WITH YOUR TENT SO BE PREPARED & KNOW WHAT TO DO -



A BILLY-STAND FROM SKEWERS

Lightweight campers can easily rig up a stand over their fire for a billy by utilising eight spare hike-tent skewers as shown in the sketch below. If your billy is of the "D" type, then rig up a triangular stand in the same way.



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CLEANING THE BURNT DIXIE.

The best way to clean a burnt dixie is to fill it with a solution of salt and water. Let it stand overnight. In the morning bring the solution to the boil, let it boil for a few minutes and then empty the dixie. The burnt matter will have disappeared.

To clean the outside of your billy before stowing it in your pack, rub with a rag soaked in water and dipped in the ashes of your fire. Then wash the billy in clean water and dry thoroughly. DON'T clean the bottom of your billy.

Wood ash, by the way, particularly when it is used with soft water, is the best soap going for cleaning your hands. It makes the dirt disappear like lightning.

FOOD STORING TIPS.

There are a good many dodges it is as well to be up to in storing food. Don't keep paper bags or cartons on the ground. The damp will rot them and insects get in.

Keep all such packages in a biscuit tin with a tight-fitting lid. Don't keep cheese in close contact with other foodstuffs as it will flavour everything.

I fear the warning is not altogether unnecessary not to store candles, soap and soda with foodstuffs.

Keep bread off the ground and away from the sides of the tent and cover if possible. Always use "yesterday's" loaves in camp. They are more economical.

When you open a pot of jam wipe the outside carefully after use and tie two or three thicknesses of stout paper round the mouth - otherwise you will find it, and your grub tent, full of wasps.

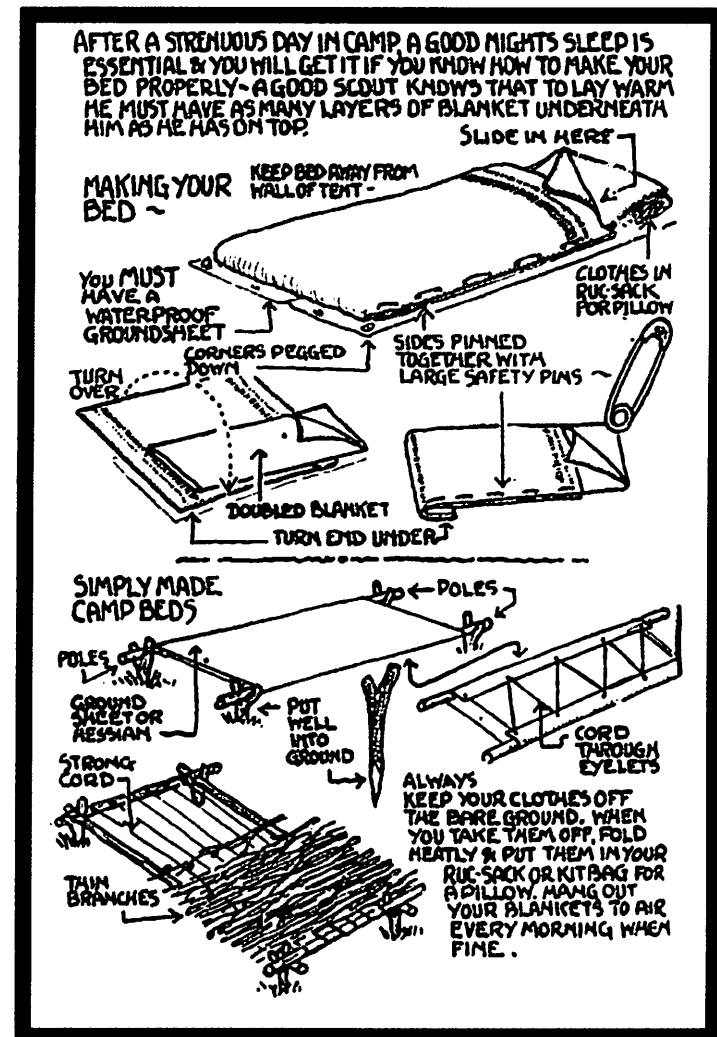
If you order potatoes in bulk don't keep them in the sack. Empty the sack, spread it out on the ground under cover and lay the potatoes on it. Meat should be the safe already described, hung in the shade. Ask the grocer to separate the rashers of your bacon before delivery and to notch the rind.

This prevents their curling in the frypan.

Milk should be stood in a billy of water, with a piece of muslin, weighted with small stones at the corners, over the mouth of the bottle. Butter should be kept either in a billy stood in running water - the top weighted down with a stone - or securely wrapped in its greaseproof paper, in a billy of water. Remember that you can't keep margarine like that. It will break into flakes.

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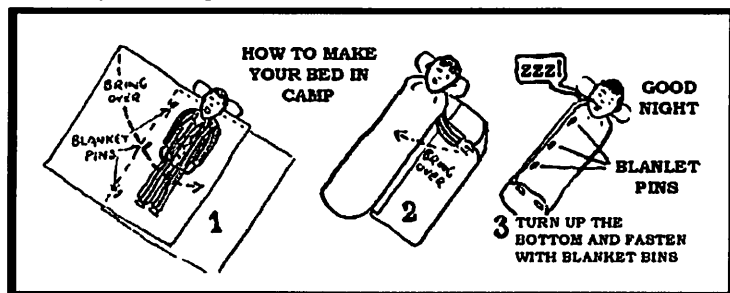
SEE YOU HAVE A GOOD NIGHT'S REST



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SLEEP WARM THIS WAY

There's any number of ways of making your bed in camp. Some people swear by blanket-pins others won't use 'em! But for those who do use pins this I consider, is the best way of making a bed. These sketches make it clear.



TYING THAT TARPULIN.

Many Troops take a piece of tarpaulin to camp, to cover over either the trek-cart, wood dump, or grub boxes.

This has one drawback. Not many "tarps" have eyelet holes round the edges, and rope or cord tied to the corners never seems to hold. This idea solves the problem:

Get a smooth, round stone and wrap the corner of the tarpaulin round it, then tie the rope to the tarpaulin as shown in the sketch. It will hold securely, and cannot slip.



RE-PROOFING A GROUND SHEET.

To re-proof a groundsheet give it a good coating with a mixture of one part of mutton suet and two parts of beeswax. Apply with a piece of rag.

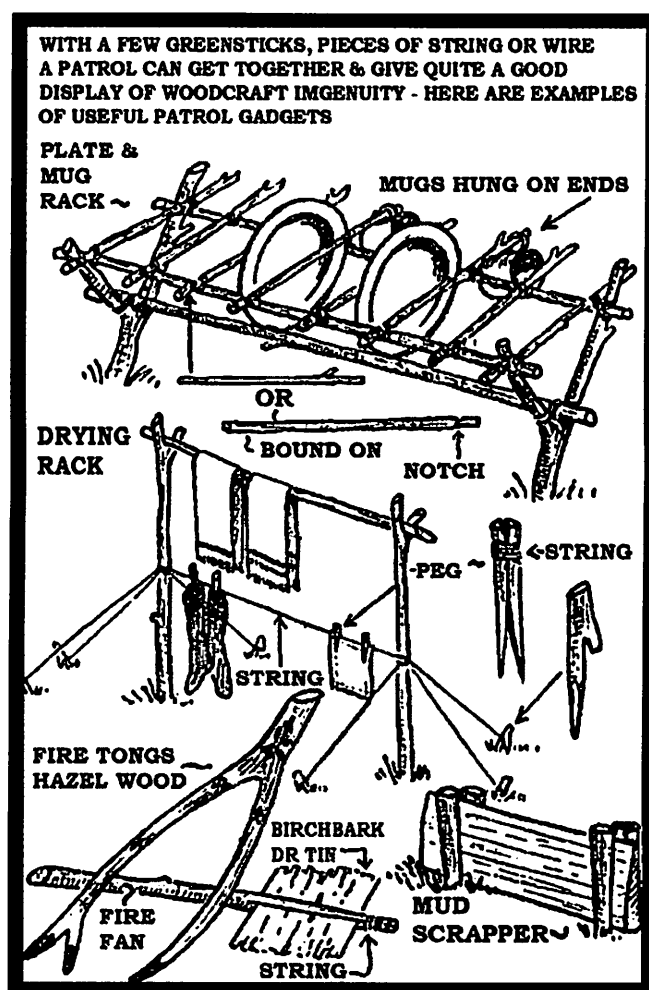
Always make sure that your groundsheet is quite dry before putting it away and dust with French chalk. Don't always fold in the same creases as this wears away the proofing. Even better don't fold at all but roll round a stick. When storing, if possible, hang it over a stick with the smooth surface outwards.

DO YOU CLEAN YOUR BADGE?

Scouts who clean their buttonhole Tenderfoot find that they stay bright for only a short time. If, however you first rub the badge with ammonia and then clean as usual with metal polish, you will get a brighter and longer-lasting shine.

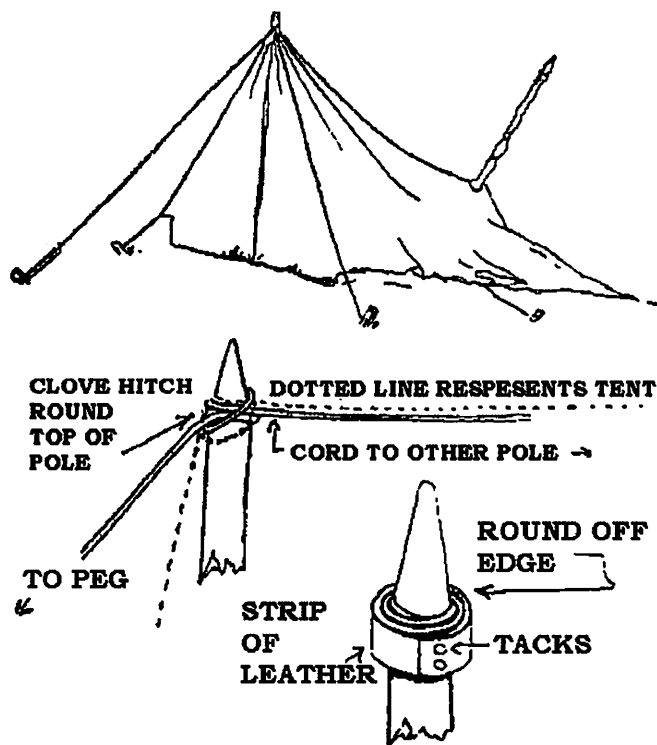
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GADGETS A PATROL CAN RIG UP



TEMPORARY REPAIR FOR YOUR TENT

If you are unlucky enough to have a pole go through your tent a temporary repair can be made with a length of rope. Make a clove hitch round the top of the pole and secure one end with a clove hitch, to the top of the other pole. Pass the other end through the hole in the top of the tent and peg down like a guy line. When you get a chance make the hole smaller by sewing it up. Get a strip of thin leather, bind it round the top of the pole and secure the end with one or two small tacks.

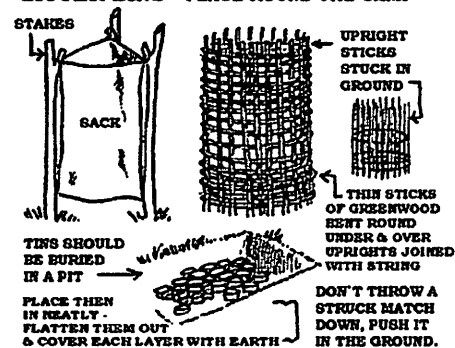


In a standing camp of any size it is as well to have an incinerator for burning your rubbish and so avoid unpleasant smells from your cooking fire. The pictures show you some good models - all simple of construction.

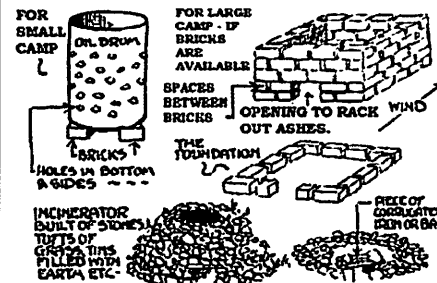
LITTER BINS AND INCINERATORS FOR SCOUT CAMPS

A SCOUT CAMP MUST ALWAYS BE CLEAN & TIDY & A CLEAN CAMP MEANS A HEALTHY ONE - - - ALL REFUSE WHICH WILL BURN MUST BE PUT ON THE INCINERATOR - TINS & OTHER SUCH EMPTIES SHOULD BE BURIED - - - EVERY CAMPER SHOULD KNOW HOW TO MAKE LITTER BINS, TIN PITS, INCINERATORS & ALL OTHER THINGS FOUND IN AN EFFICIENT CAMP - - -

LITTER BINS - PLACE ROUND THE CAMP



INCINERATORS - BUILD ON THE LEeward OF THE CAMP.



MAKE TOFFEE IN CAMP.

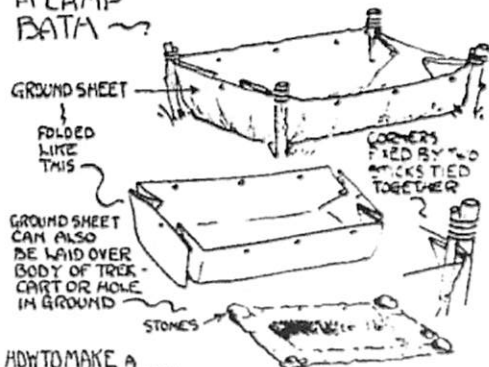
This is the recipe for camp-made toffee, which tastes fine: You need one tin of condensed milk, 2 lbs. of soft sugar, and $\frac{1}{4}$ lb. of butter. Place the whole lot in a billy and boil, stirring all the time. You may need to boil the mixture as long as half an hour.

Now grease a tin with butter and pour the mixture into it, and when the toffee has almost set, gently score it into slabs with a knife.

YOU CAN FIX UP A BATH AT CAMP

USUALLY A CAMP IS PITCHED WHERE EVERYONE CAN HAVE A DIP IN THE RIVER OR SEA, BUT SHOULD YOU NOT BE FORTUNATE ENOUGH TO HAVE THESE FACILITIES, ESPECIALLY ON HIKE, YOU CAN EASILY HAVE A BATH OR GOOD WASH DOWN BY FIXING UP ~ ~ ?

A CAMP BATH ~ ~



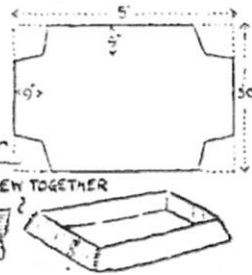
HOW TO MAKE A CANVAS BATH & WASH-BOWL FOR THE PATROL ~

BATH -

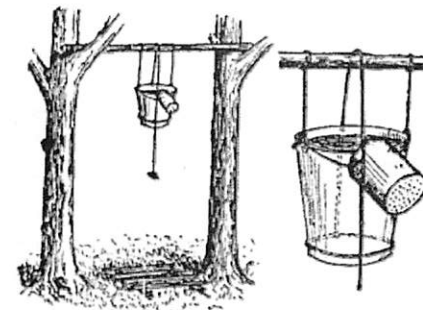
MADE FROM A PIECE OF CANVAS 5' X 3'6" - CUT OFF CORNERS LIKE THIS

WASH-BOWL -

MADE IN THE SAME WAY FROM A PIECE OF CANVAS 1'6" SQUARE BUT WITH 3" SIDES ~

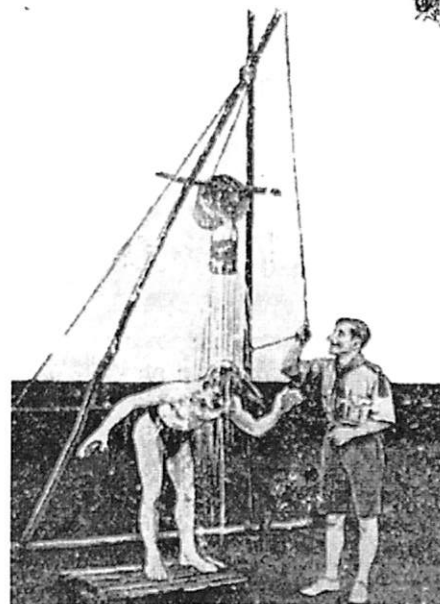


HOW YOU CAN RIG UP A SHOWER BATH AT SUMMER CAMP.



Should you be fortunate enough to have two trees close together on your camp-site, you may be able to rig up a shower on the lines of the one shown above.

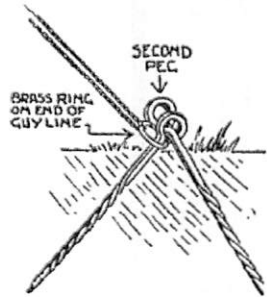
The sketches make all the workings clear.



What about a shower bath, fellows? O.K. Take a look at this arrangement. Make a triangle of two long poles and a shorter one, and fix a stout cross-piece near the top. Fasten a pulley to the end of one of the long poles. Then brace the whole structure by a rope to a stump or tent-peg. Secure the bucket to the top cross-piece by two clove hitches. The bucket is tilted by a rope fastened round the bottom and passed over the pulley and secured to one of the uprights. Before you make the holes in the sides fill the tin with earth. Then clean it out and bore two boles at the top, through which two ropes are passed. These are fastened on to the handle brackets of the bucket.

A WINDY DAY TIP.

Those Scouts who have a light-weight tent and use the metal meat-skewer pegs may have found it difficult to keep the main guy-line pegs firmly in the ground on a very windy day.



Here is a little tip which is worth knowing. For your main guy-lines use two pegs in each, placing the second one through the eye of the first after this has been pushed into the ground in this manner.

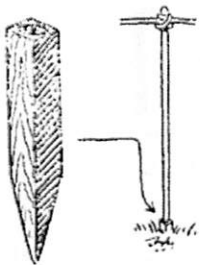
If you put a brass ring on the end of your guy-line for the peg to pass through, you will prevent a considerable amount of friction at the end, and, therefore, lengthen the life of your guy-line.

STOPS POLES "JAMMING."

Most of you campers must have at one time or another experienced difficulty in loosening the joints of light-weight and other tent poles. They will never jam or become stuck if you previously polish the inside joint with blacklead. Grease, such as vaseline, serves the same purpose, but blacklead is better.

ROPING-IN THE KITCHEN.

The handyman of the Troop would be doing the Troop a very useful good turn by making a few little gadgets as shown in the illustration.



The use of these will enable you to fix your Scout staves securely into the ground when roping off the kitchens without having to knock the staff itself into the earth.

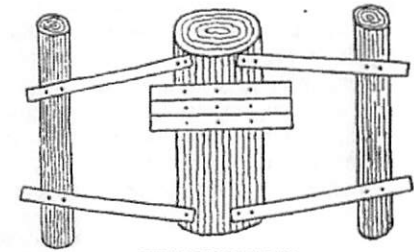
Just cut a few pieces of wood, 1 1/2 to 2 ins. square and about a foot long. Drill a hole in one end about 6 ins. deep to take the end of the staff and taper the other end.

All you have to do is to knock these into the ground with a mallet where you require a staff or stake, then insert the staff into the hole. The staff can then be readily

removed or replaced in the same position whenever necessary.

Room for these can easily be found in your trek cart, and they are well worth the trouble of taking with you.

RAFTS THAT ARE EASY TO MAKE



THE LOGAMARAN

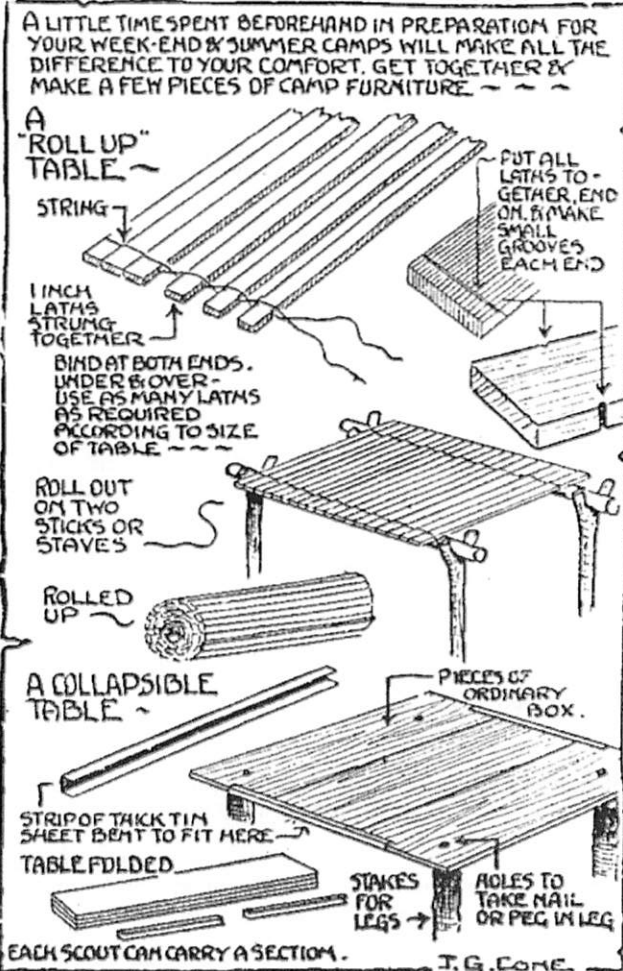


And now, what about a raft. Let's have some real fun! In raft-building remember that the lighter woods, particularly of the fir type, are best. First the sausage "raft." For these you must stuff some groundsheets with heather or straw. (Heather is best, because it can be drained, while straw gets sodden.)

Lash these up with string till they are like sausages, with the openings at the top. Lay six of them side by side and lash them to a light framework of staves. About a third of the way across secure a board for a seat. Don't step on the "sausages" and don't pull the raft with a rope, as this will cause the end "sausage" to become waterlogged.

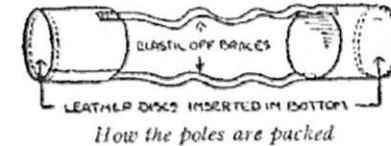
Another kind of raft is the "logamaran." Find a log of about ten feet in length and a foot in diameter. Secure a lighter and thinner one by crosspieces about five feet away on each side. These are your floats and will stop the raft turning over. Nail some footboards to the centre log and make yourself a punt pole. It might be as well to take off your shoes and stockings before casting off!

HOW THOSE "ROLL-UP" TABLES ARE MADE



STOP TENT DAMAGE!

Damage is often done to a light tent through the sharp ends of the poles piercing the canvas. Here is a good way of packing them. Make two small caps of canvas with a piece of leather sewn into the bottom of each. They are kept in position by two pieces of elastic stitched on as shown.



THE CAMP-FIRE BLANKET.

If you have not got a special camp-fire blanket here is the way to fold one of your other blankets so that it makes a good 'ceremonial dress'. Place the whole of the blanket lengthwise behind you so that the centres of the two sides come in front of you. Now the top end of the blanket is carried over your shoulders and the other ends tucked under the front of the blanket and held in place with a pin. The picture makes this clear.



SAVE THE PEGS.

Here's a useful tip about I should think thousands of perfectly good pegs are smashed every summer in trying to knock them out of hard ground with a mallet. Don't use a mallet at all for extracting pegs. If a peg won't come out with a good straight pull, lever it out with another peg.



WHAT TO LOOK FOR BEFORE INSPECTION.

Here are a few hints on what to look for before tent inspection to avoid dropping points:

Blankets neatly folded (if fine they should have been put out to air on a fence or hush on rising); towels hung up to dry; never packed in with the kit.

Sponges, toothbrushes, soap and flannels laid out - not packed; plates, mugs, knives, forks, and spoons thoroughly washed and placed on the racks (points are often secured for good gadgets); spare shoes cleaned and set out.

Tent walls brailed up neatly (tied with reef knots), pole upright and no slack guys, pegs firmly in; ground in and around the tent spotlessly clean. A tiny piece of paper will lose you a point.

Full uniform, unless "above the knees" has been announced by the SM. (In this case, stockings need not be worn). Sleeves rolled up, belt buckles "in the middle," and scarves straight.

LAYING OUT THE SITE.

Lot of the success of a camp depends on the care with which the site is laid out. Do this job with care.

On arriving at the site, set down your gear on a groundsheet, and then look around and plan your camp. Discover which way the wind is blowing. It will usually be south-west (the prevailing wind in England), and so the order of the camp will be - looking the way the wind is blowing - tents, stores, kitchen, refuse pits, washing-place, latrines. It may not always be possible to keep this order but the wind should always blow from the tents towards the fire and latrine, and not the other way.

Choose a spot that is high and dry, and get all the fellows on putting up the tent, or tents. Get the groundsheets down and the gear on to them.

Now divide into two parts - one to make a fire and get water, or whatever it is, on for the next meal; the other to dig the latrine. This done, and the first meal over, kitchen and gadgets can be made and rucksacks unpacked. Dishes washed, and all available billies and buckets filled with water, our camp will begin to look orderly and ship-shape. Then dig dry and wet rubbish pits and put up the washing place.

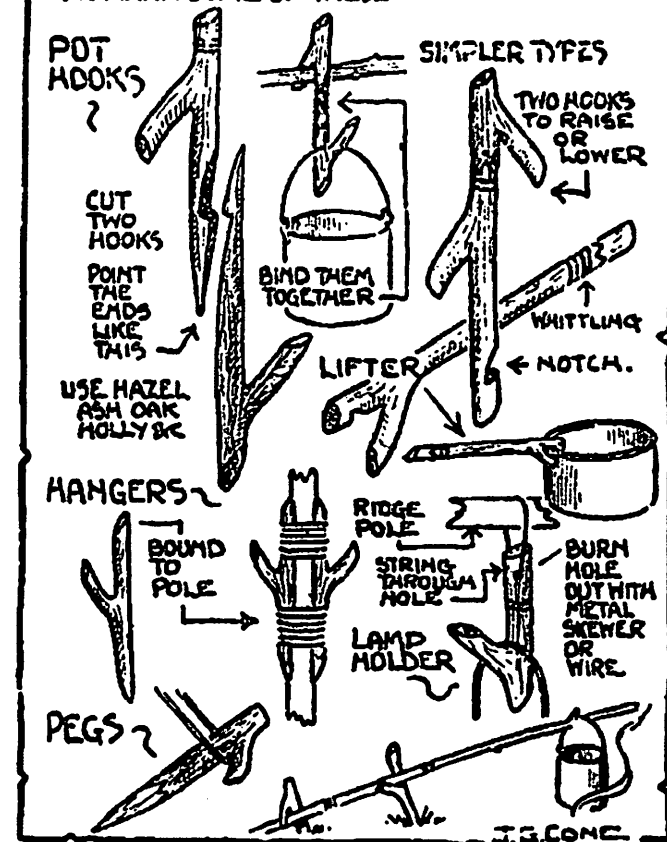
STRIKING CAMP.

First clear the kitchen and leave the fire burning to take all rubbish as you clear up. Then pack your gear and strike the tents (if it is wet leave one standing to take all the gear); fill in rubbish pits and latrine and replace turf.

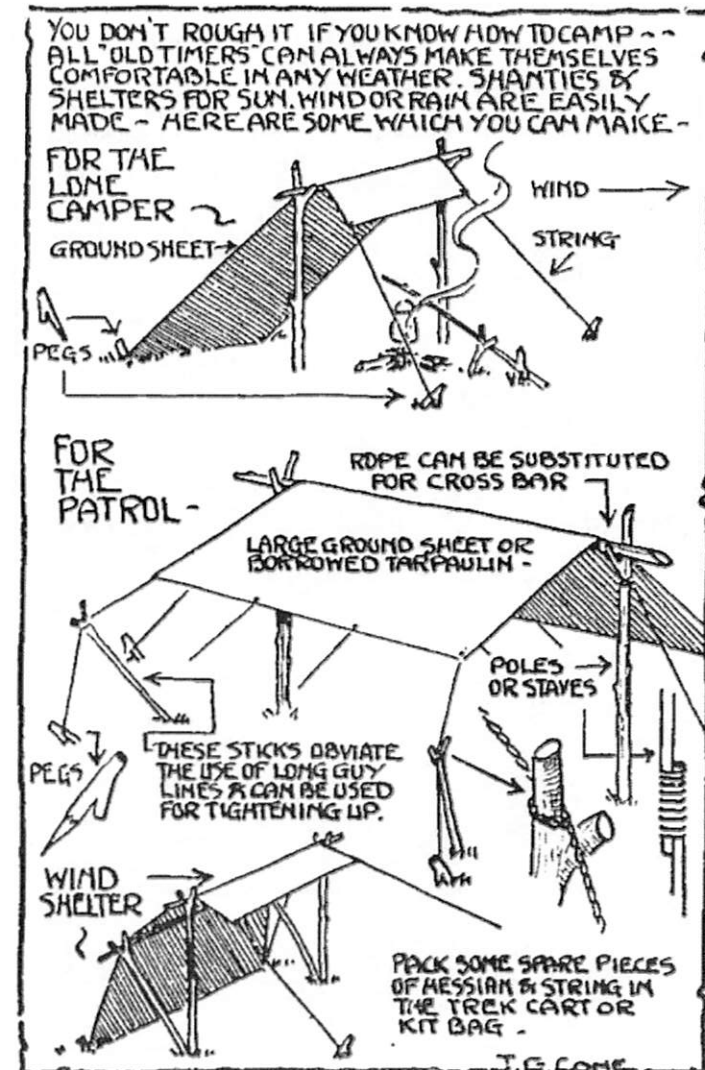
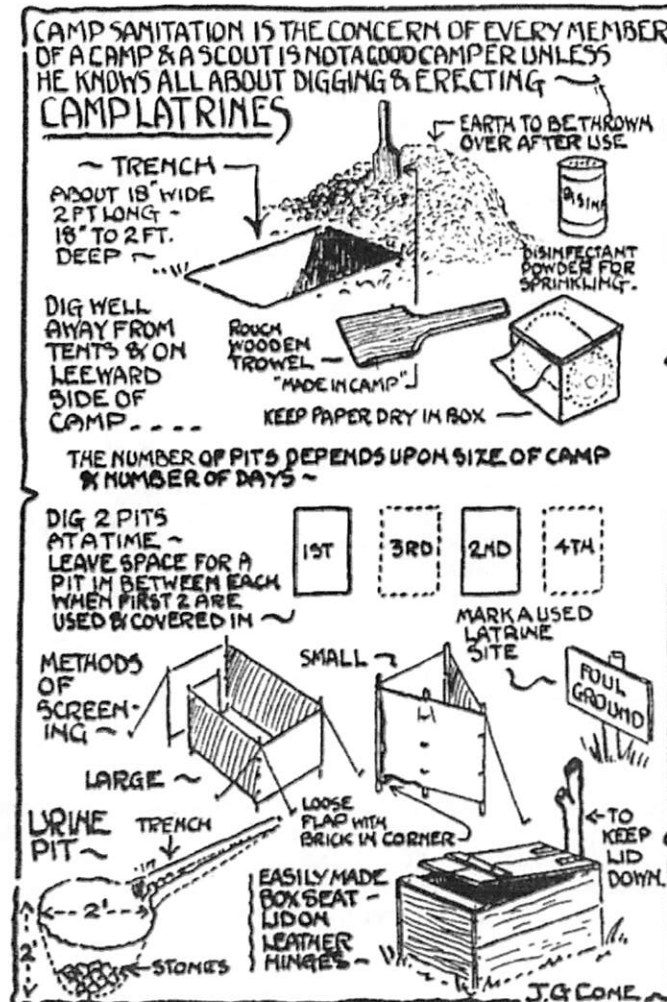
Finally, when all is clear, go over the whole camp-site and pick up and burn every piece of rubbish, paper or wood chips. Then when all is ship-shape, walk across and thank the owner of the ground.

WOODCRAFT COMFORT IDEAS

A SCOUT IS NEVER IDLE IN CAMP - THERE IS ALWAYS SOMETHING TO DO - YOU SOON KNOW A WOODCRAFT SCOUT BY THE KNICK-KNACKS & GADGETS HE HAS DEVISED - POT HOOKS & PEGS, HANGERS & HOLDERS CAN ALL BE MADE FROM GREEN STICKS. DON'T WEAR YOUR KNIFE AS AN ORNAMENT, LEARN HOW TO USE IT. MAKE SOME OF THESE ~ ~ ~ ~ ~



HOW TO PLAN CAMP LATRINES.



A DINING SHELTER IS A GOOD IDEA.

A rain screen will ensure punctual meals in the worst weather. For a long camp an overhead shelter can be erected on four uprights. Below is shown how to make a "Ritz Hotel" dining shelter.

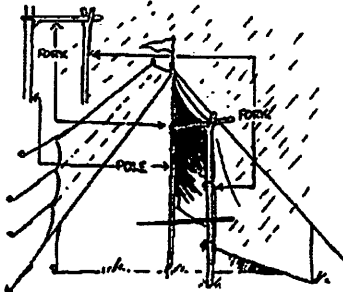
TAKING THE SOAP ALONG.

How to pack your wet soap when hiking, so as not to damage the rest of your kit, is always a problem. Here's the answer:- Cut a piece, about eight or nine inches long, from an old motorcycle inner tube. Close one end with rubber solution. Cut a flap to fold over three or four inches from the other end. Fasten with a ring of rubber.

KEEP THE RAIN OUT.

Using two forked sticks as shown in the sketch will be found a very effective method of keeping a tent door open without allowing the rain to come in.

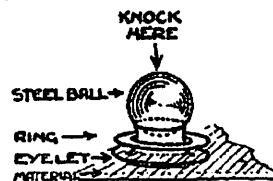
A short one is required to fit with its forked end resting on the tape which fastens one of the doors to the pole. The other end rests in the crutch of the long stick which is stuck in the ground.



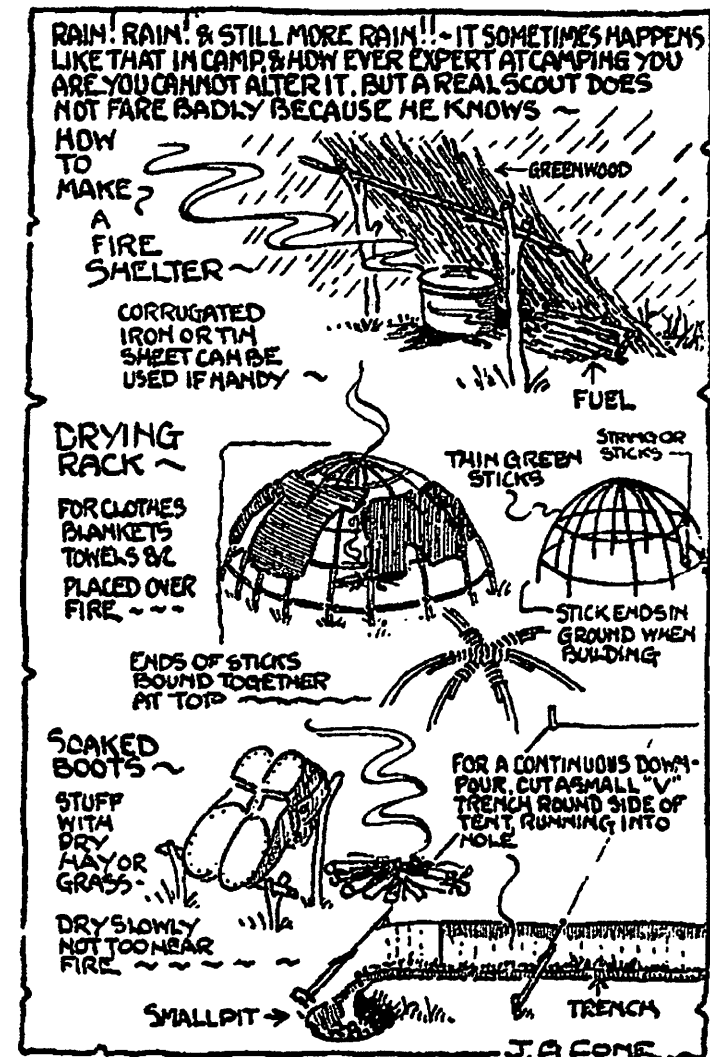
FIXING EYELETS.

Without a special tool the fixing of brass eyelets is not an easy task, but with the aid of a small steel ball-bearing this difficulty is easily overcome.

A suitable ball-bearing can be obtained from almost any garage. The size of this depends upon the size of the eyelet. The sketch shows the size in proportion to the eye-let.



All you have to do is to cut a small hole in the material, lay flat upon a hard surface (a flat iron held between the knees will do), and insert the eyelet from the underneath. Now place the securing ring in position, lay the steel ball on the top, and hit the ball square on the top with a hammer. This will open the edges of the eyelet evenly all round. Remove the ball and then flatten out the edge by gently tapping with the hammer.



SCARING THE "SKEETER."

Mosquitoes and midges can take all the enjoyment out of camp-life, but if you carry out the following tips they should not worry you over much.

First and foremost, don't leave food-scrap lying about, or patches of dirty water. These will attract the "skeeters" quicker than anything, and flies and wasps, too, into the bargain. Burn or bury any refuse, and keep the latrines scrupulously clean, too. If you are still troubled with the pests after these precautions, then here are a few things which will keep the insects away:

Oil of almonds, oil of lavender, oil of eucalyptus, white bark oil, and oil of citronella are all good, and a handkerchief or rag sprayed with one of these preparations and hung in the tent door will keep any mosquito or midge out of the tent.

Always attend to midge or mosquito bites at once.

Liquid ammonia, diluted with three parts of water, will lessen the pain and form a good disinfectant, while a curious yet efficient method of reducing the swelling is to dab it with a common nettle until it tingles. The lump will then cease to grow and will slowly go down.

As in the case of bee or wasp stings, the well-known remedy of applying the moistened blue-hag is very effective.

YOU CAN MAKE YOUR TENT FIREPROOF.

you wish to make your tent fireproof you can do so in the following way:- Coat the tent with a solution of either alum or borax and water mixed in the proportion of about half a pound of either ingredient to a gallon of water.

The canvas is soaked three times in the solution, and should be allowed to dry thoroughly between each soaking.

This is sufficient to make the tent almost unburnable.

BE CLEAN.

The disposal of washing and greasy water should be the object of some care. The next set of pictures will help you in this matter.



FOR WATER-CARRIERS.

This clever dodge enables you to carry two buckets of water without their bumping against your legs and wetting your clothes. Obtain a large hoop, about three to four feet in diameter, and when carrying buckets of water step inside the hoop. Now rest the hoop on the lip of the pails so that it pushes against the handles.

This stops the pails from bumping into your legs, and the hoop is held up on the buckets.



IS THE WATER PURE?

A good way of testing the purity of your water supply is to fill a glass with the water and drop in a lump of sugar.

Stand the glass in a moderately warm place and leave overnight. In the morning the water should be quite clear. If it is milky it is tainted.

A simple filter can be made in the following way: Mount a barrel on bricks or stones and fix a small tap to the bottom. Then cover the bottom with a six-inch layer of fairly large pebbles or well-washed gravel. Cover this with a six-inch layer of gravel about the size of a pea, then a three-inch layer of one part charcoal to two of sand. Top with a last layer of one inch of plain sand. When pouring in the water place a dish over the sand to prevent its being disturbed. The tap is left on with a large dish underneath in which to batch the water. This filter should last for about three months. After this time each layer should be washed out separately and re-made.

A COOKING KINK.

Rice is one of the most difficult things to cook in camp - you must stir it all the time. Here is a handy idea for getting the right quantity of rice and water. Place your hand into the billy, as shown in the sketch. The rice should just cover the finger-nail; the water should reach as far as the top of the thumb-nail.

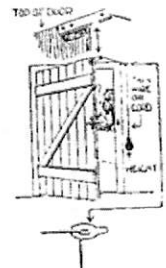


The Scouts Book Of Gadgets And Dodges CLUBROOM FURNITURE AND DECORATIONS.

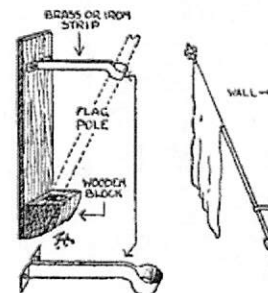


It's not much use having a fine headquarters for your Troop if people can't find it easily, so here's how to fix up a nobby illuminated nameplate. Cut out the letters of the name in thin paper on one side of a sheet of glass. (Large letters cut from old posters is an easy way of doing this.) Let them dry and give the glass a smooth coat of dark paint over them. As soon as the paint has dried wash off the letters, and there you are, except for another sheet of glass to protect the paint from scratches. Frame the whole thing and hang it where a light will shine through from the back.

A good way of keeping your den door closed is to fasten a weight or small sandbag to the end of a stout cord passed through an eyelet screwed to the frame and secured to a projecting piece of wood fastened to the top of the door itself.



Here is a neat little bracket to take your Troop flag. Get a smooth piece of wood, about one foot by three inches by half an inch thick. Screw a wooden block to one end of this. Into the block drill a hole at an angle of forty-five degrees, to take the end of the pole. Bend a thin piece of metal into the shape shown in the sketch and screw to the top of the flat piece of wood. When it is in position bend the ring downwards at the same angle as the hole in the block.



FLYING THE JACK.

In many Troops the Union Jack is flown or broken by means of a pulley on a beam, owing to the difficulty of finding a solid base for a flagstaff. A butter tub, however, filled with earth and with a layer of whitewashed stones on top, makes a fine base. The outside of the tub can be varnished and the hoops coated with gold paint.

The Scouts Book Of Gadgets And Dodges
MAKE THE MOST OF YOUR PATROL CORNER

FIXING A TEMPORARY CORNER.

One would think that lack of imagination was the last thing of which to accuse a Scout, and yet time and again one visits Troops where Patrol Corners are nothing hut rings of chairs.

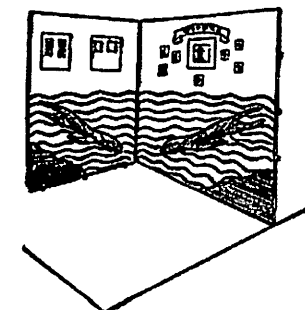
I admit it is difficult at times; for example, when you have temporary use of the Parish Hall, hut difficulties are made to be overcome.

There are two ways of defeating the Parish Hall. If you are allowed to drive nails or hooks into the walls, you can run wires across and curtain the hall up into sections; if not, two-part screens are very cheap and a couple of them make an ideal corner.

Having got the screens, the first job is to paint them. The exterior should be the Patrol colour, not the colour of the shoulder knot, hut if possible the colour of the lair or nest of the particular animal or bird.

At the door of the den fix a clip. This is for the Patrol Leader's staff and is put there to show that the Patrol is "in residence." The password for admission is always the Patrol call.

Before we consider the decoration of the inner walls, let's talk about the furniture. You will need seats and a table; the latter can be made by the Patrol carpenter; or if storage is a problem, you may have to be content with a folding table. Perhaps he is clever enough to make that.



A temporary corner for an otter Patrol

While we are on the subject of seats, let us consider the problem of getting in and out of the den, because of necessity the space is rather cramped, and without a system there is likely to be chaos when the Troop whistle goes.

Each member should have a definite number, with the Leader as No.1. His seat should be by the door, with his Second next to him and so on. When the whistle goes, the Patrol just files out in parade order. "On return, the Leader gives the about turn," and the last man out goes in first. A simple dodge that makes all the difference to a smart Patrol.

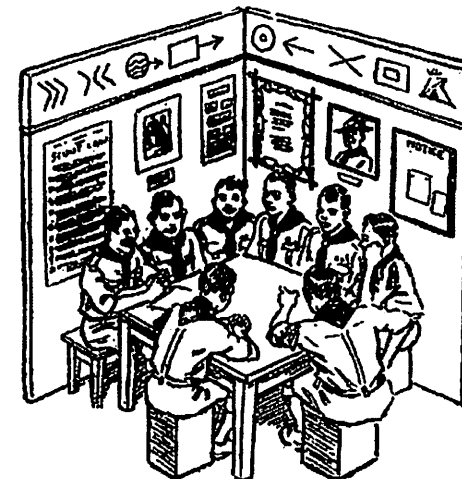
The Scouts Book Of Gadgets And Dodges

DECORATIONS FOR THE WALLS.

Now to the walls of the den. To save the top from looking unfinished, try a stencilled frieze with a Scouty design. Don't worry about painting the rest of the walls; you will have more than enough stuff to cover them.

Choose an out-of-the-way spot for clips and hooks for staves and coats, then consider the rest of the space available for decoration.

You will naturally leave the central spot for a copy of the Scout Law, specially done by the Patrol artist, who has also illuminated the Patrol Motto to go over it.



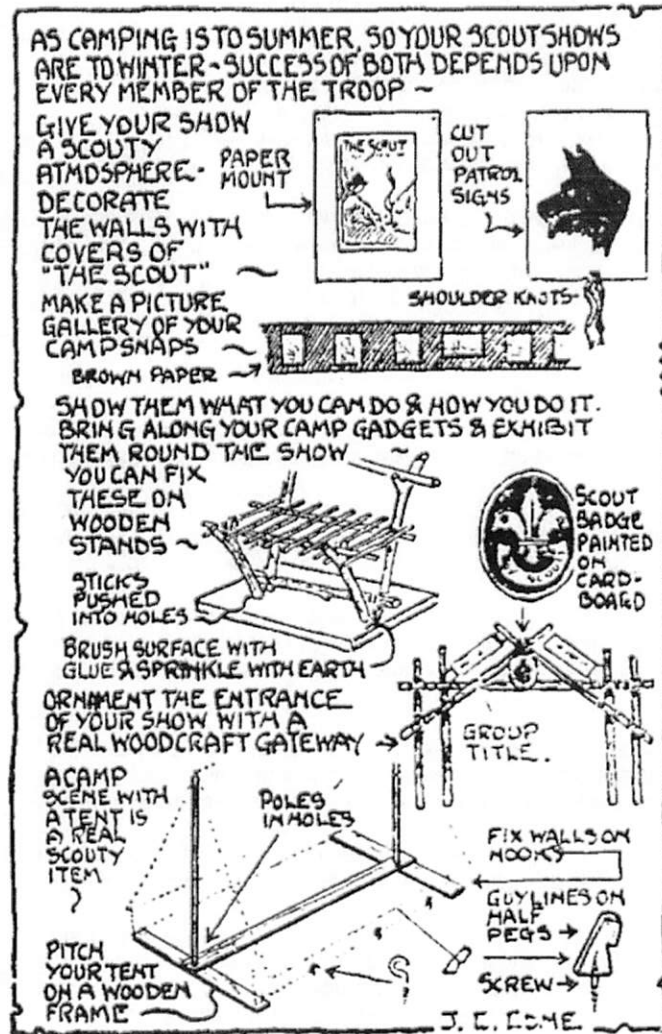
To the right of the Law should be the Wall of Honour, where the doughty deeds of past and present members, together with the Inter-Patrol Shield and any other successes, are recorded. and on the opposite side photographs of all past Patrol Leader. and Seconds should "tell the world" that the Patrol is an old-established firm.

The right-hand wall nearest the Wall of Honour should be devoted to photographs and letters from the foreign Scouts with whom the Patrol corresponds..

Opposite should be photographs, sketches and other detail. that you have collected concerning the Patrol Animal, and underneath should be the Progress Chart of the animal's human brothers.

If there is any space left over, there is plenty to fill it. A map of the district is almost essential, and a knot board is a great help to the tenderfeet as well as the Scout Charts of the various subjects in which the Patrol specialises.

GIVE YOUR SHOW THE SCOUTY ATMOSPHERE



CUTTING GLASS WITH A POKER.

A Poker can be used quite easily for cutting glass if you do not happen to have a diamond-cutter. First of all make a tiny notch in the glass at the point where the cut is to begin, and then place the glass over a sheet of ruled paper, so that you now have a guiding line to follow.

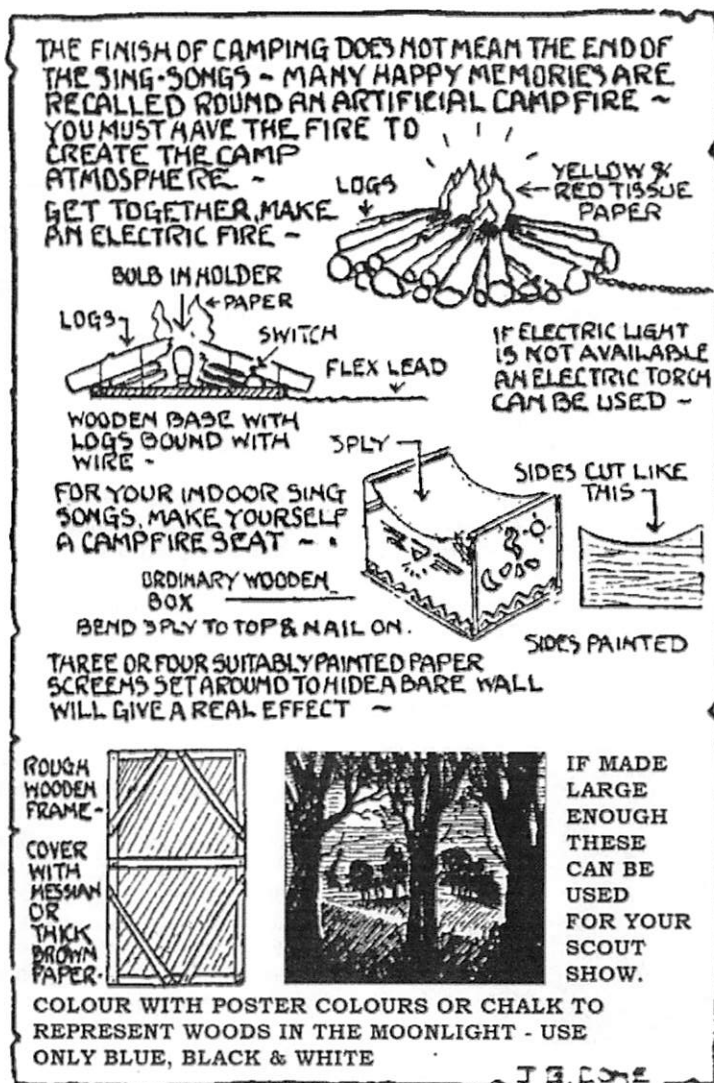
Then heat the poker and apply it to the notch. You will hear a faint crack, and the poker should be drawn across the glass. When you reach the opposite edge you will find that the glass has been cut quite cleanly.

CARVE IN CORK.

Fellows who have found it difficult to cut cork cleanly they can do so by the following method: before starting to cut, dip the blade of the knife into cold water. By keeping a cup of cold water beside you to dip into when needed, you will find that you can even chip carve in cork!

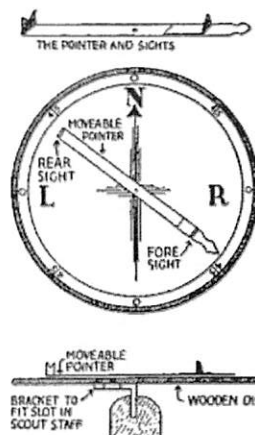
WINTER CAMP-FIRES.

Camp-Fires, and enjoyable ones at that, can be held indoors during the winter months. You can recapture some of the atmosphere of the backwoods if you follow the little pictures on the next page.



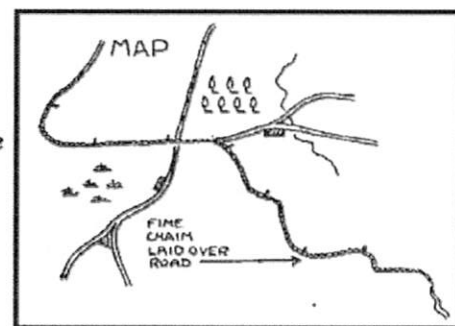
A Survey Disc is a useful little gadget to help you in mapping a district. Divide into halves a disc of cardboard, six inches in diameter. Then, with the help of a protractor, divide each half into 180 equal divisions or degrees.

Number every five degrees clockwise and anti-clockwise, starting from North (0 degrees) and ending at South (180 degrees). A movable pointer of tin is fixed to the centre of the disc. This pointer is really a pointer and two sights combined, so that the tip of the pointer - the fore sight - and the rear sight must be in exact alignment.



When you want to take the bearings of an object first turn the disc so that 0 degrees is pointing to the North. Keeping the disc in this position turn the pointer in the direction of the object. Look over the sights (keeping the left eye closed) so that the object and the tip of the foresight are in alignment with the "V" of the rear-sight. Then read off how many degrees right or left of North your object is and mark the position on your map, according to where you are standing. A handy little map measurer can be made which is simply a length of thin chain, bound at every inch with a piece of very fine wire. To measure the distance you simply lay the chain over the road, as shown in the sketch, straighten it out and compare the distance covered with the scale.

How you use
the chain
measure



FINDING THE NORTH.

Do know how the North without a compass? One way is to hold your watch so that the hour hand points to the sun. An imaginary line drawn between the hour hand and the figure twelve will point due North and South, South being towards the sun. Go *forward* to 12 in the morning and *back* in the afternoon.

Don't forget to allow an hour for the difference in summer time.



Churches are usually built to point East and West, with the altar at the East end.

On the stump of a recently-felled tree the rings on the centre are thickest on the South side. Notice which way trees are leaning. The slant is caused by the prevailing wind. If this is South-West the slant will be North-East.

From a full moon the North can be found by the sun-and-watch method. If the moon is not full allow fifty minutes more for every day after full, and the same time less for every day before full.

FINDING THE NORTH BY THE MOON.

When there is a full moon, it is quite easy to find the true North with a watch, following the method used for finding north by the sun.

Regarding the times when the moon is in its other phases, it is possible to find various points of the compass at certain times only. The following "fixed standards" may help you:

At 6 p.m. (Full Moon) and 12 p.m. (3rd Quarter), the moon is in the EAST.

At 12 p.m. (Full Moon), 6 p.m. (1st Quarter) and 6 p.m. (3rd Quarter), the moon is in the SOUTH.

At 6 p.m. (Full Moon) and 12 p.m. (1st Quarter), the moon is in the WEST. Having obtained these points of the compass, you can, of course, easily discover the North.

ESTIMATORS SHOULD NOTE THAT:-

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 partly 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.

Keep in Mind that:-

At 50 yards a person's mouth and eyes can be clearly seen.

At 100 yards a person's eyes appear like dots.

At 200 yards all parts of the body, badges, etc., can be seen.

At 300 yards the face is indistinct.

At 400 yards the movements of the legs can be made out.

At 500 yards the head and hat can be seen and colours distinguished.

At 600 yards the head is like a dot.

At 700 yards it is difficult to distinguish the head.

MAKES ESTIMATING SIMPLER.

A simple aid to height and distance judging can be made from an ordinary piece of broom-handle about two feet long.

Get a pal to hold your staff (of course, you know its length) upright, with one end on the ground, ten yards away. Close one eye and see how much of the stick it takes to cover the staff. (The old "squint and pencil" drawing-class stunt!) Mark off this distance with a band of paint. Repeat this at various other distances. Then, with your measurer, a pal and your staff, you can approximately judge any distance. To measure heights see how many times the portion representing a given distance "goes into" the tree or whatever it is whose height you want to find.

MEASURING YOUR PACE.

To measure your walking pace really accurately get a piece of string about 250 feet long and tie one end to a post. 44 feet from the post tie a piece of tape to the string. Repeat this each subsequent 44 feet.

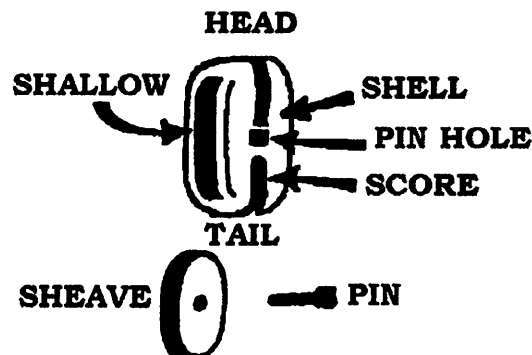
Then get a watch with a second hand. Starting from the post walk in a straight line, letting the string slip through your hand. The number of tapes that pass through your hand in half a minute is the same as the number of miles per hour you are walking. This is because 44 feet is 1-120 of a mile and thirty seconds is 1-120 of an hour. Therefore, if, for instance, you walk 38 tapes in half a minute, you will walk one hundred and twenty times 38 feet in an hour. That is two miles per hour.

FINDING A RIGHT ANGLE.

measure a right angle with your staff first drill a hole through the top and then another exactly at right angles to the first. To measure the right angle stick the staff firmly in the ground and "sight" another fellow through one of the holes, so that he is in a direct line with your eye. Then get another fellow to stand in a direct line with your eye through the second hole. There's your right angle.

THE PARTS OF A PULLEY BLOCK.

The outer part of a block or pulley is called the shell. The upper part is the head and the lower part the tail. The pulley-wheel is called the sheave, and it is secured by the pin in wooden blocks there is a groove cut in the shell to take the surrounding rope which holds the block, this rope being called the strop. The groove in the wood is called the score. The score is cut right across the block at the tail but not at the head. Hence you can easily see which way up the block should go.



Some people oil the frictional parts of blocks. But a better and more lasting method is to blacklead the pin and the sides of the sheave. Then the block will work sweetly and without squeaking for a very long time.

HOW TO DRAW AN ELLIPSE.

When cutting mounts, mounting photographs or cutting-out oval picture-frames, no doubt many have found it difficult to draw an ellipse. Here is a very simple method which will enable anyone to do this.

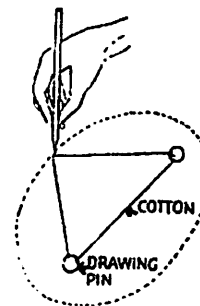
All you require is a piece of cotton, two drawing pins and, of course, a sharp pencil.

Place the two pins an equal distance apart from the centre of the picture, tie the two ends of the cotton together to form a loop, which is placed over the two pins.

Draw the cotton tight with the point of your pencil, which is held upright, the point touching the surface of the photo.

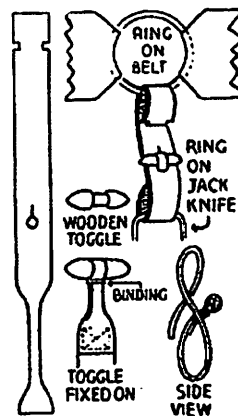
Now move the pencil round in a circular motion, keeping the cotton taut all the time. The wider the pins are apart, the narrower the ellipse.

Try this on a piece of rough paper first until you have obtained the required shape of ellipse.



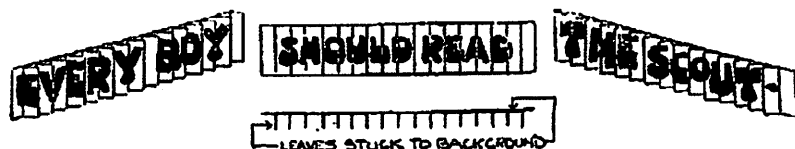
A SUBSTITUTE FOR SWIVELS

It is possible to fix up a neat substitute for the dangerous steel swivels found on many Scout belts. Cut a strip of thin leather about six inches long by half an inch wide. On each side, half an inch from one end, cut two slots an eighth of an inch long and the thickness of the leather in width. About an inch and a quarter from these cut a slot, in the centre, a quarter of an inch long and again the thickness of the leather in width. For a length of one inch the other end is cut down to a width of three sixteenths of an inch, with a small piece of the original width at the end for sewing down. A wooden toggle is now stitched into this part, the thin end of which is sewn down as shown. A quarter inch hole with a small slit at the top is made to take the toggle. The sketch shows quite clearly how the toggle is used.



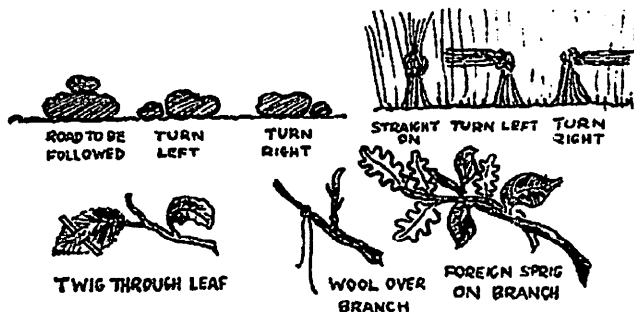
ADVERTISE!

An idea for advertising your next show, which cannot fail to attract attention, consists of a number of sheets of paper, fixed vertically and at right angles to a background poster, which give the effect of three different announcements on the one poster. Take three sheets of paper, preferably of different colours. Two are pasted on each side of one sheet of cardboard, the third on another.



This gives you one single and one double-sided card. First take the single-sided card and paint or ink-in your poster. Then take the double-sided card and print the second announcement on one side. Turn over and print the third announcement on the other side. The second side is printed the same way up as the first side *BUT THE WORDING MUST READ BACKWARDS*. When this has been done, cut the double-sided card into equal-sized strips from top to bottom. These are glued to the edge of the single-sized card at equal distances apart, in their correct order. Pins pushed through the back poster and the strips will strengthen the joints. Now place the poster in a position where people are bound to walk past so that, seen from the left, the first announcement will be read and, as the reader passes, the poster will appear to change.

Don't always keep to the old tracking signs, work out new ones which will not be obvious to every stranger who may come on them. The pictures here give you some ideas.



TENT CARE.

Tour tents should be the object of constant care and attention. When you buy a new tent notice carefully how it is packed, as it should always be folded in the same way. Note that the guy-lines are all rolled up and that the pegs are packed separately. (Always scrape the earth from the pegs when repacking.) Never pitch a tent absolutely taut, particularly when new, as shrinkage of canvas and of ropes must be allowed for. With a bell tent it is a good idea to make a small hole by the base of the pole into which it can be shifted in the event of a sudden shower, so immediately slackening all the ropes.

If you have to pack a tent while wet, unpack as soon as possible and hang it up. Hanging is, at all times, better than folding, as it keeps the tent aired and so prevents rot.

Erecting a Bell Tent.

In erecting a bell tent first peg out the 4th, 9th, 14th, and 19th guys, counting to the left from the central door guy. It is a good idea to paint the runners on these guys red, if this has not already been done by the makers.

Cleaning a Tent.

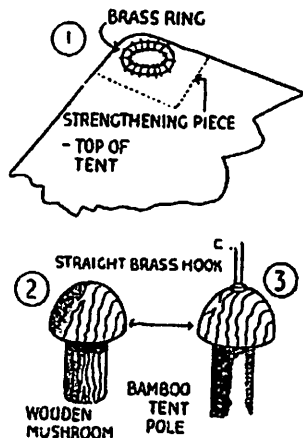
Generally speaking it is a risky business to attempt to clean a tent that has become soiled by hard wear, as the fabric may easily be damaged. It is usually safest to treat the grime as an honourable scar.

If, however, you are prepared to face the risk, wash with a solution of a teaspoonful of alum to half a pint of lukewarm water. Scrub gently in doing this. The tent will have to be waterproofed afterwards.

Waterproofing.

Here is a good recipe for waterproofing: Completely dissolve, by boiling in a pint of soft water, an ounce of isinglass and strain through a piece of clean linen. Dissolve a quarter of an ounce of white castile soap in a pint of water, strain and add to the first solution. Then dissolve an ounce of alum in two pints of water and again strain and add. Stir and heat the combined solution over a slow fire until it simmers. The solution is then applied hot to the outside of the tent with a small flat brush and worked well into the seams. It is best, of course, to erect the tent for this to be done. The quantity given is enough for about eighty square feet. *Be careful not to over-proof. it is worse then not proofing enough.*

FIXING LIGHT-WEIGHT TENT POLES.



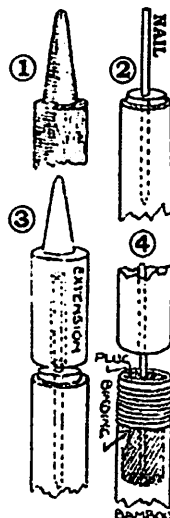
When making your own lightweight tent particular attention should be paid to the method of fixing the tent pole to the top of the tent, when pitched. Take a solid brass ring, about $\frac{3}{8}$ of an inch in diameter and sew into the material as shown. A small square of material sewn at the top of the tent before doing this will give added strength. If your pole is bamboo, make a wooden mushroom and fit this into the top. Into this screw a bran dresser-hook, afterwards filing off the angle piece.

WHAT TO DO WHEN FITTING A FLYSHEET.

Scouts often want to fit a flysheet to a light-weight tent. This means that the existing poles have to be specially dealt with. If the tent poles are of wood and tapered at the top, cut off the tapered portion to about half an inch from the shoulder. Then a small hole is drilled down the centre of the pole to take half of a five-inch wire nail. (First file off the head.)

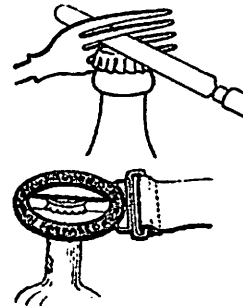
Then take another piece of wood, about the same thickness as the tent pole and four or five inches in length. Drill a hole down the centre of this to take the projecting portion of the nail. It should fit tightly enough to prevent it from wobbling.

The top is then shaped to take the flysheet. If your poles are of bamboo, plug the top tightly with a piece of wood, the outside being either "ferruled" or bound with stout twine. Then carry on as with an ordinary wooden pole.



FORK CAP REMOVER.

If an opener is not handy you will always have trouble in opening a bottle with a metal cap. Here is a way out of this difficulty.



Take a fork and hook it in the cap as shown, and, using a knife or the handle of a spoon as a lever, prise it off.

If you are miles from anywhere and without a bottle-opener, and you're just dying for a swig of lemonade, you can always use your Scout belt as shown in the picture.

DO THIS TO AVOID "HIKER'S FEET."

(1) Wear thick woollen stockings without darts. (2) Don't wear nailed boots. Better still, don't wear boots at all - wear shoes. (3) Thin-soled shoes are light, but you will feel every stone in the road if you wear them when hiking. (4) Keep your feet clean and wash them in warm water at the end of each day's march. (Don't soap the inside of your stockings. It's messy and serves no useful purpose.)

If you have the bad luck to get a blister, wash round it and then prick it with a needle that has been sterilised by holding over the flame of a match. Press out the fluid, dab with iodine and cover with a piece of boracic lint held on with plaster.

SPOOKS!

Here is a little stunt for the camp-fire. The next time you have eggs for breakfast in camp; save two halves of the empty shells for each of your Patrol. Got each pair as nearly as possible the same size.

Draw a black circle round the ends with a pencil and pierce a small hole in the centre of each. Now join each pair together with a small piece of sticking plaster. Every member of the Patrol wears a pair of these over his eyes, holding them in as he would a monocle. You will be able to see through the small holes.



If every fellow wears a blanket over his head you will be surprised at the gruesome effect which will be obtained.

DON'T LOSE YOUR BADGE.

Here is a way of preventing your Scout badge being lost. Wrap a small piece of thin wire round the back of the badge and carry it down to a safety pin on the back of the lapel.



The picture makes this clear.

THE BARREL ROBOT.

Most fellows have seen the waddling toys which will walk down slopes of their own accord. It is easy to make a barrel robot on this and it will "walk" principle, downhill.

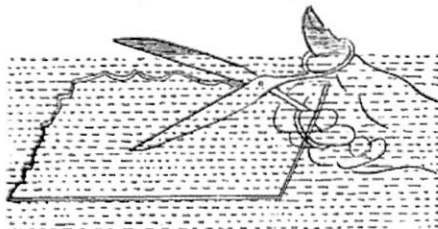
Any Troop which made a robot like this would find it an excellent means of advertising a concert or display.

A single metal rod, running through the barrel, carries both the arms and the legs. Our picture makes this part quite clear. The legs are pivoted to the rod at an angle so that as the robot stands on one foot the other is free to swing downwards.



CUTTING GLASS WITH SCISSORS.

If you do not possess a good glass cutter and have a piece of glass with jagged edges to trim, or want to cut a square-shaped piece into an oval to fit into a frame, try cutting it with scissors.

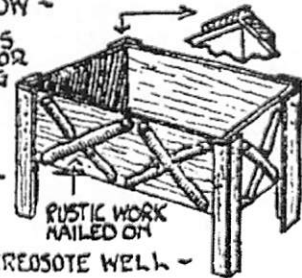


Just hold your piece of glass under water and bit by bit you will be able to remove all the large pieces protruding from the edges.

A GOOD SCOUT DOES NOT BEG - HE WORKS TO RAISE FUNDS FOR HIS TROOP - A PATROL CAN GET TOGETHER & DO MANY THINGS - IF YOU ARE KEEN YOU WILL NEVER BE AT A LOSS TO KNOW -

WHAT YOU CAN MAKE TO SELL

FOR A FEW COPPERS YOU CAN BUY ONE OR TWO GOOD STRONG BOXES - FROM THESE YOU CAN EASILY MAKE ORNAMENTAL FLOWER BOXES -



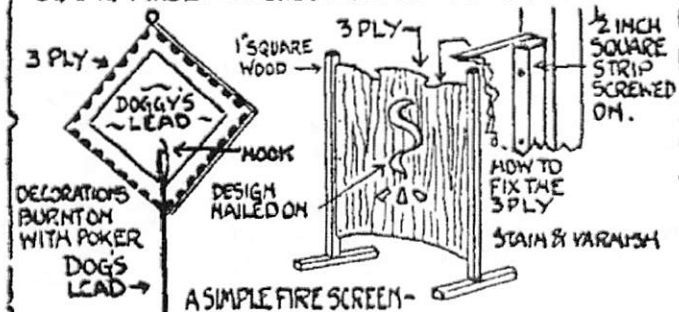
CHEAP EARTHENWARE VASES & BOWLS CAN BE MADE VERY ARTISTIC & FIND A READY SALE.



COAT THE ARTICLE WITH PUTTY THEN COVER WITH SMALL PIECES OF BROKEN COLOURED CHINA. THEN VARNISH -



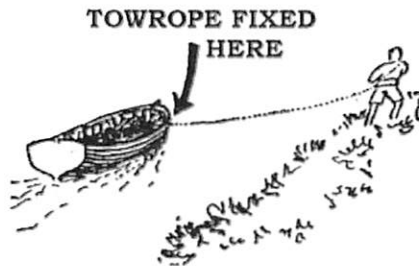
BOOT BRUSH BOXES, KNIFE BOXES, JIG-SAW PUZZLES MADE FROM SCOUT COVERS STUCK ON 3 PLY, WOODEN TOYS, LUTOUT CALENDARS, BOOKSHELF ENDS, & MANY OTHER SIMPLY MADE ARTICLES ARE ALL PROFITABLE -



J. G. CONE

TOW BOATS THIS WAY.

If you find it necessary to tow a boat from the bank because the current is too strong for rowing, or you want a rest from the oars, you will discover it an awkward job, even if someone is steering, if you tow from the nose or extreme forward end.



Fix your rope to some point on the boat a few feet in from the forward end. Then, when you pull on the tow-rope, the boat will sheer outwards away from the bank.

By regulating the strength of your pull - that is, by easing up occasionally - the boat can be kept going, even if there is no one in her steering, at a comfortable distance from the bank.

But when you are being towed by some other host, of course, you must have the tow-rope secured right at the nose of the boat. Otherwise the boat will sheer dangerously and overturn if the craft which is towing you is travelling at a fair speed.

When you are being towed by another boat and the tow-rope begins to take its first strain, make sure that you have some slack in the boat to ease it off gently till your boat has gathered maximum way. Then you can let the rope pull at the point where it is fixed. A slip, knot is advisable here. Or, if not that, then be sure to have a knife handy ready to slash yourself free in an instant in the event of any danger of sheering and capsizing.

DON'T HAVE BLISTERS ON YOUR HANDS.

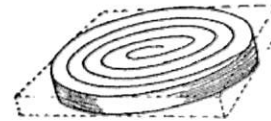
One good method of preventing blistered hands is to soak the hands in a solution of warm water and salt before starting. This should harden them and stop the painful blistering. Remember that spitting on the hands, though it may seem helpful at the time, helps to cause blisters on the hands of anyone who is not used to rough work.

STOPS WOOD SPLITTING.

Anyone who has had to drive nails into wood will know that certain kinds of wood are almost sure to split as soon as the hammering begins. If you rub a little oil on the nail before you begin you will find the chances of this happening are lessened.

MAKE YOUR OWN LEATHER THONGS.

Leather thongs for stave slings, firebows, spare laces and so on can easily be cut from a piece of square leather. First round off the corners, as shown in the illustration, then cut a spiral with the aid of a sharp penknife. Keep the knife horizontal and turn the leather round as you cut.



When a thong has been cut, rub it with either linseed oil or inflow to make it pliable.

TACKLING THE TIGHT LID.

Difficulty is often experienced in opening small round blacking and ointment tins where a special opener is not provided.

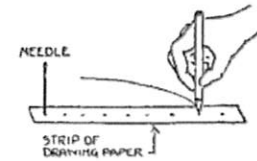


The opening is easily accomplished by placing the tin edge upwards upon the floor, putting your foot on the top, and with slight pressure rolling the tin forwards. The lid will then roll off.

A USEFUL COMPASS.

If you do not possess a drawing compass and want to draw circles, you can easily do it quite accurately with a strip of drawing paper or celluloid.

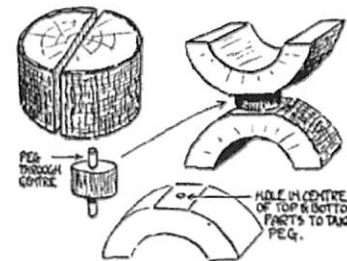
Just take the strip of paper and draw a line down the centre. Make a number of small pinholes along the line at various distances apart, say 1 in., 3 in., and so on, according to the size of circle required. These distances represent the radii of the circles. The strip is now used as shown in the sketch.



A NOVEL WOODCRAFT SEAT.

For a few coppers you can purchase a fairly good-sized log. A few hours spent chipping with your axe and you can make a fine camp-fire or garden seat.

Split the log in halves down the centre and then hollow out each half. Chop a "Flat" on the side of each, then drill a hole in the centre, of this, as shown in the sketch.



The two halves can be fixed together by a

The Scouts Book Of Gadgets And Dodges

stout wooden peg. You can raise the height of the seat by inserting a small log in between.

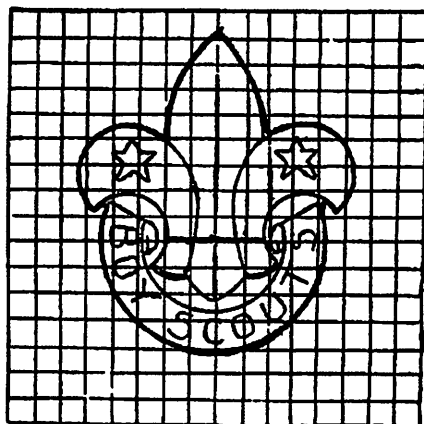
The peg in this case should run right through the centre log, the ends being knocked through the holes in the top and bottom parts.

Given a coat of creosote, the seat will make a fine piece of rustic work.

TO REPRODUCE A SCOUT BADGE.

Sometimes a large wooden, cardboard or paper Scout Badge is required for display purposes at your show or camp gateway.

Get a print of a Scout Badge (the one on the front cover of "THE SCOUT" will do). Draw a square round the outside of the badge, then divide the square up into small squares as shown in the sketch. For the Badge on THE SCOUT, an inch and a half square divided into one-eighth squares should be made.



Now take your wood or other material and draw a square on this.

The size of the square will depend upon the size of the badge required. If you require a badge ten times the size of the print, the square should be 15 ins, and the smaller squares 1 1/4 ins. When you have drawn the square and divided it up on the wood, draw in the badge, copying from the small print, noting where the parallel and horizontal cut the outline.

There is only need to draw one half of the badge. Lay a piece of thin tracing paper over this, trace round the outline with a pencil, turn the paper over to the other half of the wood, pencil aide downwards, and mark out the other side with a pencil. Press hard and you will find that the pencil line will transfer to the wood quite successfully.

You will notice that the scroll on the badge is circular. This can be drawn with a compass.

Now cut out the large-size badge with a fretsaw.

The Scouts Book Of Gadgets And Dodges

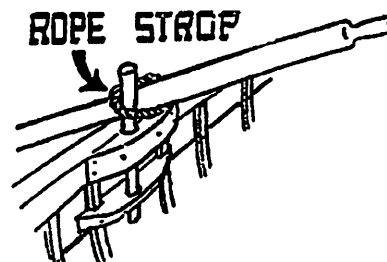
TACKLING HICCOUGH.

If ever you have an attack of hiccough, try this suggested remedy Drop a little vinegar on a lump of sugar and then eat it.

The hiccough should then immediately disappear.

A MAKESHIFT ROWLOCK.

If you lose one of your metal rowlock crutches and have no spares aboard, you can still get a boat along by *fitting* a thole pin into the rowlock hole in the gunwale and rowing the boat with the oar against this. A strop of rope - a loop of the painter will do - can be arranged to hold the oar in the backstroke.



The wood you use for the pin must be very tough and strong, for some rowlock holes are not very big. Oak is the best wood to use, but maybe you will not be able to pick and choose. Use the toughest and strongest bit of wood you can get. however, for the pressure when rowing is pretty heavy.

Don't forget that you are bearing the oar against a thin bit of wood. People don't realise how much strain really comes on oars and rowlocks when rowing. It is a very strong oar that cannot be broken by over-violent rowing. That's why there's a Rule that Sea Scouts must always have one spare oar in any boat they use.

IF YOU'RE "POSHING" UP YOUR BIKE.

Many cyclists who tackle the enamelling of their machines find the scraping off of the old enamel a difficult job.

This part of the operation is made easier if a pennyworth of potash is dissolved in water and applied to the old enamel, which will scrape off more easily.

A TIP FOR CYCLISTS.

Try placing the enamel fin into a basin of hot water before you commence to re-enamel your cycle. This causes the enamel to flow more freely, gives a bright, smooth finish, and also does away with those streaks which so often spoil the finished job.

REMOVES RUST.

If your cycle or billy is rusty, you can clean it by mixing a small quantity of powdered bath-brick and paraffin oil. Mix the powder and oil into a paste and apply to the rusty parts with a rag. After cleaning the article wash it in warm water.

PANNIER BAGS

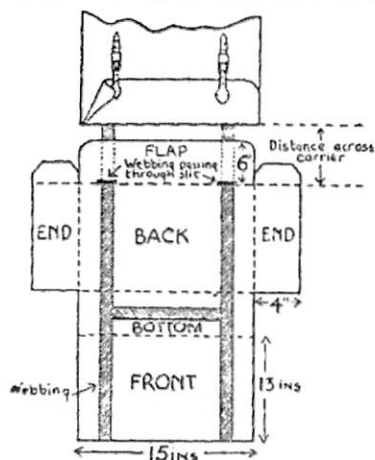
WILL CARRY THE
CYCLIST'S GEAR.

Here's How to Make
Them.

Cyclist campers will find pannier bags slung across the back carrier the most convenient means of carrying their gear.



Those illustrated here are large enough to hold all the kit, and a mackintosh or cape, which may be wanted in a hurry, is strapped to the top of the carrier.

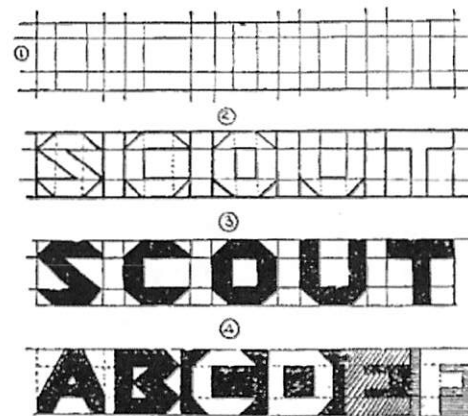


The bags are made of American cloth or waterproof canvas, strengthened by bands of upholsterers webbing. The material should be cut to shape and the webbing stitched into position as shown.

You will get best results by using a sewing machine set to a fairly wide stitch.

Sew the material up into bag-shape, and stitch a band of webbing round inside the top of each bag to make it quite strong.

Attach straps and buckles for fastening the flaps, and your bags are ready.



POSTERS
for the
SHOW

DRAWING IN THE LETTERS FOR YOUR
SCOUT-SHOW POSTERS.

If your Troop cannot afford to have posters printed to advertise your show, here is a way in which you can help by making the posters yourself.

Having decided upon the height of the large lettering required, draw two parallel lines this distance apart. Now draw two more lines inside these to represent the thickness as in Figure 1. Let us suppose you are going to write the word "Scout"; divide the lines up into five squares, leaving a small space between each square for the space between the letters. For the curved letters, such as "S" and "C," cut off the corners of the squares as shown in Figure 2. You will soon see how easy it is to form quite neat letters.

All the letters in the alphabet, and also figures, can be made in the same way with the exception of "l" and "1." These do not require squares but just two vertical lines to represent the width. Your word will of course be spaced out accordingly. The letters can either be filled in inside or outside the lines as shown in Figures 3 and 4, and when painted in bright colours look very effective. Try this for your next show.

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SCOUT – PIONEERING

GOOD, OL' FASHIONED, OUTDOOR, SCOUTING FUN FOR THE 21ST CENTURY!

Scout Stave Dish Washing Rack

Posted on April 22, 2014 by Larry Green

Scout Stave Dish Washing Rack

Background and History. Washing mealtime utensils on a camping trip can range from using paper plates (no washing) to “Philmont-style” (lick ‘em clean and sanitize in boiling water). Through the years, Scouting has come up with a variety of “dish washing assembly line” configurations. For a wide range of field applications, the three container method has proven itself tried and true:

- 1st container: Washing (hot soapy water)
- 2nd container: Rinsing (hot clean water)
- 3rd container: Sanitizing (very hot water containing an environmentally-friendly chemical agent)



(<http://scoutpioneering.files.wordpress.com/2014/04/dishwashing-assembly-line.jpg>)

A Scout Patrol Using a Ground Level Dish Washing Assembly Line

On many overnight camping and backpacking trips, this approach has been adapted, sometimes combining the second and third containers into one 8 quart pot, sometimes using wash basins. In all cases, the initial step is to clean or scrape off as much excess food as possible into a designated receptacle, before placing anything into the 1st container. Most often the final step, is to let all washed items air dry on a plastic sheet. Even when wash basins are used on "car-camping" trips, the whole production frequently takes place right on the ground. This is always the case when there are no picnic tables, limited table space, or when tables are being used for other things. Improving the campsite, making it more comfortable, making kitchen tasks more convenient, being resourceful and using one's ingenuity is what creating camp gadgets is all about. *That's why the Scout Stave Dish Washing Rack was devised!*

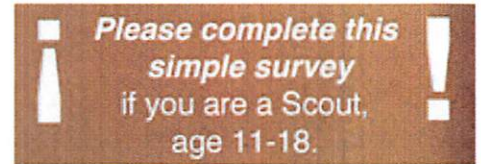


(<http://scoutpioneering.files.wordpress.com/2013/04/side-view-dish-washing-rack.jpg>)

The wash basins are supported underneath by two Scout Staves.

Two challenges. 1) Drawings for dish washing rack designs are common. But, until you make one and try it with full containers of water, it's difficult to realize what the main challenge really is—to keep the containers from crashing down because they're too heavy! Depending on the containers used, an average wash basin won't have enough of a lip to hold it in place or is just too flimsy to keep its shape when filled with water. That's why lashing together a framework alone usually won't suffice. Therefore, in addition to the framework, this design includes a bottom platform made up of two Scout Staves for

the basins to rest upon, which solves the weight issue. 2) The next challenge is one that's common to many a pioneering structure, be it large or small. How do we keep the rack itself from falling over? We overcome this basic concern by bringing into play the same stability solution used in making a simple camp table (<http://scoutpioneering.com/2012/12/29/simple-camp-table/>). It's exactly the same concept that keeps a monkey bridge erect. Like the table, we connect two upright A-frames with a rope, and using the same rope, we anchor them securely in place on either side. Here's what you'll need:



- (<http://survey.constantcontact.com/survey/a07e92j9m4mhs6k2vr/start>) 10 5' Scout Staves
- 14 6' x 1/4" lashing ropes
- 1 20' x 1/4" lashing rope
- 2 narrow pioneering stakes
- 3 wash basins (For convenience, the wash basins we used were very inexpensive and easy to find. Purchased were three 18 qt. Sterilite basins from Walmart.)



(<http://scoutpioneering.files.wordpress.com/2013/04/a-frame-on-ground.jpg>)

Make two identical A-frames.

Make the A-frames. Because the rack will be holding around nine gallons of water, approximately 18 pounds, the lashings for this project need to be especially tight. An easy way to assure you'll have well-lashed A-frames is to first square lash the tops at 90° and then the ledger to one leg, also at 90°. This will create some strain on the lashings when the other leg and the other end of the ledger are lashed together, yielding a nice tight A-frame. With these Sterilite wash basins, lash the ledger in place about 28" from the top of the legs. Since all we're using are Scout Staves, in this design one side of the ledger will purposely extend out much farther than the other on each A-frame—a place to hang some towels (or whatever).

Connect and stand up the A-frames. Tightly lash two staves to the outside of the legs of each A-frame, about 20" from the top. The front and back edges of the wash basins will rest on these staves. Hammer in two stakes about 12' apart where you want the rack to be located, and position the connected A-frames between. Halve the 20' lashing rope and approximating the midpoint between the A-frames, secure the rope to the top of one leg with a clove hitch, and pulling the rope to the other A-frame, repeat the process on the top of a leg on the other side. Tie the ends of the rope to the stakes on either side, securing the ends tightly with taut-line hitches. (You can use round turns with two half



(<http://scoutpioneering.files.wordpress.com/2013/04/clove-hitched.jpg>)

A rope attached to the legs and anchored to a stake on each side.

hitches if you like.)

Add the two-stave basin supports. The A-frame ledgers will now serve to do something more than keep the A-frames' legs from shifting. They'll now also support the two remaining staves that assure the basins stay put! Lash these two staves parallel to one another on top of the ledgers, on either side of the rack.

Place the basins on the rack. Once you check to see all the lashings are tight, and the central rope is secure and stabilizing the structure, then you're ready to bring on the basins. Position them side by side and fill them about 3/4 of the way up.



(<http://scoutpioneering.files.wordpress.com/2013/04/dish-washing-gadget.jpg>)

Scout Stave Dish Washing Rack

Categories: [Simple Campsite Improvement](#) | Tags: [Boy Scout Camp Gadget](#), [boy scout camping kitchen](#), [Boy Scout kitchen](#), [Camp Gadget](#), [dish washing assembly line](#), [Dish washing rack](#), [lashing project](#), [lashing scout staves](#), [scout dish washing](#), [scout kitchen](#), [Scout Lashing Project](#), [scout stave](#), [scouts doing dishes](#) | [Leave a comment](#)

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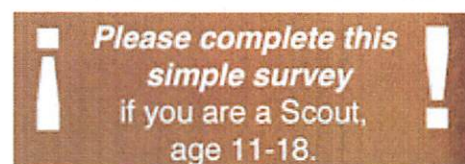
Wash Station

Posted on January 1, 2013 by Larry Green



(<http://scoutpioneering.files.wordpress.com/2012/12/ws-brandon-wash-station.jpg>)

Washing up before lunch.



(<http://survey.constantcontact.com/survey/a07e92j9m4mhs6k2vr/start>) This wash station is the ideal First Class Camp Gadget! It's sturdy, portable, and very useful when camping away from washroom facilities. Inherent in its design is a sound approach to a variety of pioneering concepts and skills. When this project's built with all the lashings tight and all the legs, cross bar, and support pieces properly positioned, it's a fine example of a well-engineered, highly functional camp gadget. Each of the three legs making up the tripod gets a lashed on support piece, and the wash station's stability stems from the fact the design contains three triangles.

To start, you'll need six good, straight sticks as follows:

- 2 2' x 3/4 to 1" for the leg braces
- 2 4' x 3/4 to 1" for the back leg and crossbar
- 2 5' x 3/4 to 1" for the front legs

For the lashings, you'll need:

- 1 10' x 1/4 manila rope for the tripod lashing
- 6 6' x 1/4" manila ropes for the square lashings

You'll also need

- bar of soap in a sock with a 3' cord
- small to medium-sized towel with a 3' cord
- No. 10 can with a bail or 4 qt. cooking pot with a bail.

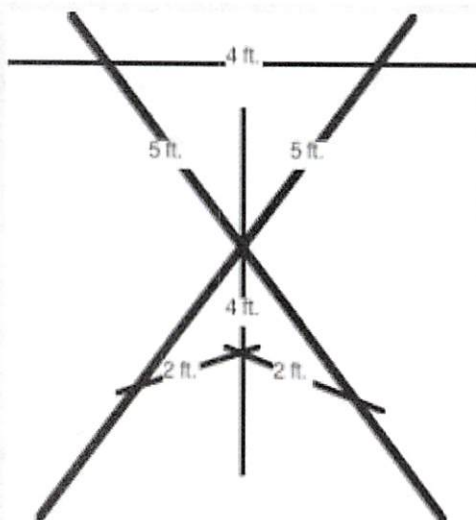
Here's the assembly procedure:

Make the tripod. Using the 10' rope, lash the two 5' sticks and one 4' stick together with a tight tripod lashing (<http://scoutpioneering.com/2013/02/22/simple-tripod-lashing/>). The 4' stick should be in the middle. *Make sure the "butt" ends of all three these sticks are even.* Separate the legs and set the tripod up. The success of this project relies on a well-tied, *tight* tripod lashing.

Lash on the braces. Using four tight square lashings (<http://scoutpioneering.com/2013/02/13/japanese-mark-ii-square-lashing/>), with the 6' ropes lash one end of the 2' sticks to the 5' legs and the other end of the 2' sticks to the four-foot leg.



Getting it done!



(<http://scoutpioneering.files.wordpress.com/2012/12/washstationdrawing.jpg>)

Position of the sticks.

Lash on the crossbar. Using two more square lashings, tightly lash the other 4' stick to the top extended sections of the two 5' sticks to make a cross bar for the towel and soap-in-a-sock.

Add the soap, water, and towel. Tie the end of one 3' cord to the soap-in-a-sock and the end of the other 3' cord to the towel, and hang them on either side of the 4' crossbar.

Hang the can filled with water to the end of the 4' stick extending from the front of the tripod.

During the camping trip, change the water as necessary. See that the soap-in-a-sock is not left in the can after use as it will melt.

One of the beauties of using metal containers is that in cold weather, the can of water can be heated in



(<http://scoutpioneering.files.wordpress.com/2012/12/heated-water-on-a-cold-morning.jpg>)

Washing his hands before breakfast on a cold, winter camping trip.

the fire.

Categories: [Simple Campsite Improvement](#) | Tags: [Boy Scout Camp Gadget](#), [Boy Scout pioneering project](#), [boy scout wash station](#), [bsa pioneering](#), [bsa pioneering projects](#), [Camp Gadget](#), [camp gadgets](#), [boy scout](#), [camp wash station](#), [campsite improvement](#), [first class camp gadget](#), [hand washing station](#), [tripod](#), [lashing activity](#), [lashing project](#), [making a useful camp gadget](#), [Pioneering for Boy Scouts](#), [pioneering projects for scouts](#), [scout engineering](#), [scout gadget](#), [Scoutcraft](#), [scoutcraft skills](#), [small pioneering project](#), [woodcraft](#) | [1 Comment](#)

One thought on “Wash Station”

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A Better Clothes Drying Rack

Posted on March 17, 2013 by Larry Green



(<http://scoutpioneering.com/favorite-projects/>)

A Sturdy Clothes Drying Rack with Six Sides

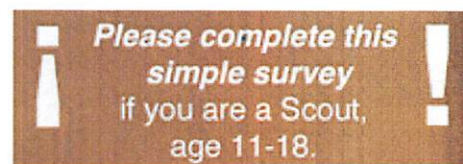
You've got to love this design. It's compact, it's sturdy, and it's ingenious!

This drying rack is based on suspending two concentric, equilateral triangles to make six cross sections for hanging

wet clothing or towels during a long term encampment, and there's no reason you can't put it up on an overnigher if there's a practical need. All that's been said before regarding the advantages of this kind of campsite improvement apply to this simple camp gadget:

- It takes up less space while drying more wet things.
- It eliminates the clutter of clothing and towels haphazardly strewn around on tables, tree branches, tent platforms, or overcrowded on a disorganized array of drooping clothes lines.
- It can be set up in a location where there is the most sunshine.
- It's especially useful when camping in an open area with few trees.

Materials (adapt these as you like)



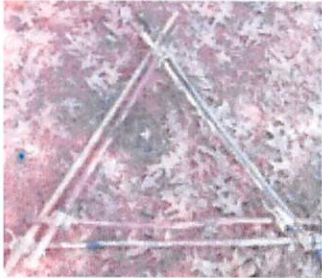
- (<http://survey.constantcontact.com/survey/a07e92j9m4mhs6k2vr/start>)3 4' x 1" sticks

- 3 5' x 1" sticks (Scout staves are ideal)
- 1 6' x 1-1/2" to 2" straight pole for the upright
- 1 30" pioneering stake
- 8 camp gadget lashing ropes (6' to 10')
- 3 15' lashing ropes
- 3 small stakes

Procedure

Lash the triangles.

Start by lashing together two equilateral triangles,



(<http://scoutpioneering.files.wordpress.com/2013/03/triangles.jpg>)

Two Equilateral Triangles

one smaller for the top (three 4' sticks), and the larger one for the bottom (three 5' staves). Use square lashings. One easy way is to lash two at 90° and then bend them in and tie the third square lashing to make the triangle. This yields a nice, tightly-lashed triangle.



(<http://scoutpioneering.files.wordpress.com/2013/03/pioneering-stake.jpg>)

Pioneering Stake

Erect the upright. Pound in a pioneering stake and lash the 6' pole to it securely with two tight strop lashings

(<http://scoutpioneering.com/2013/02/23/lashing-information/>) or round lashings

(<http://scoutpioneering.com/2013/03/28/three-different-lashings-to-extend-the-length-of-a-spar/>).

Making this upright stand up vertically without moving or wobbling at all is a key to a good and sturdy clothing dryer. So, solidly pound in the stake and make sure it's as straight as possible. Also, make sure the lashings are well-tied and tight.

Attach the



(<http://scoutpioneering.files.wordpress.com/2013/03/rolling-hitches.jpg>)

Rolling Hitches

triangles. Lay the triangles on the ground over the upright, first the larger triangle, and then the smaller one on top.

ing rolling hitches (<http://scoutpioneering.com/2013/01/29/rolling-hitch/>), tie the three 15' support ropes to the top of the upright.

Tie each corner of the smaller triangle to a support rope so it will be suspended about 5' above the ground. Use clove hitches which can be adjusted as necessary to assure the triangle hangs evenly and the 4' sticks are horizontal. Continuing with each of the three support ropes, repeat this process for the larger triangle so that it will hang about 4' above the ground.



(<http://scoutpioneering.files.wordpress.com/2013/03/square-clove.jpg>)

Clove Hitch

Anchor
the

**support
ropes.**

Hammer in a
small stake a
couple of feet
out, in line
with each
corner of the
bottom
triangle. Using
the remaining



(<http://scoutpioneering.files.wordpress.com/2013/03/tautline.jpg>)

Taut Line Hitch at Stake

length of the support ropes, attach them to the stakes with a simple taut line hitch (http://www.netknots.com/rope_knots/tautline-hitch). This will further stabilize the clothing dryer and enable you to make fine-tune adjustments to the way the triangles lay. (You can also just make them fast to the stakes with a roundturn with two half hitches (<http://scoutpioneering.com/2013/02/20/favorite-pioneering-knots-roundturn-with-two-half-hitches/>), or another clove hitch.)



(<http://scoutpioneering.files.wordpress.com/2013/03/betterclothesdryingrack.jpg>)

An assembled clothes drying rack at the 2013 Jamboree gets the once over.

Categories: [Simple Campsite Improvement](#) | Tags: [Boy Scout Camp Gadget](#), [Boy Scout lashing project](#), [BSA Camp gadget](#), [bsa pioneering](#), [Camp clothes dryer](#), [camp clothes line](#), [camp clothes rack](#), [Camp Clothing Dryer](#), [camp drying rack](#), [Camp Gadget](#), [Clove hitch](#), [lashing camp gadget](#), [Pioneering project](#), [rolling hitch](#), [scout clothes line](#), [scout engineering](#), [useful camp gadget](#) | [2 Comments](#)

2 thoughts on “A Better Clothes Drying Rack”

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SCOUT – PIONEERING

GOOD, OL' FASHIONED, OUTDOOR, SCOUTING FUN FOR THE 21ST CENTURY!

Double Fire Bucket Holder

Posted on December 25, 2012 by Larry Green



(<http://scoutpioneering.files.wordpress.com/2012/12/dscn0100.jpg>)

Functional AND good-looking.

One of the essential mandates in the BSA's Outdoor Code is: BE CAREFUL WITH FIRE.

- I will prevent wildfire.
- I will build my fires only where they are appropriate.
- When I have finished using a fire, I will make sure it is cold out.
- I will leave a clean fire ring, or remove all evidence of my fire.

In addition to being the height of simplicity, the Double Fire Bucket Holder makes an invaluable contribution towards safety around the fire circle. In our campsites, since it's always a safe bet to have a supply of water right near our cooking and campfires, why not add some convenience and accessibility, especially because when fire buckets are on the ground, they're frequently knocked over, inadvertently kicked, and even stepped in!

The

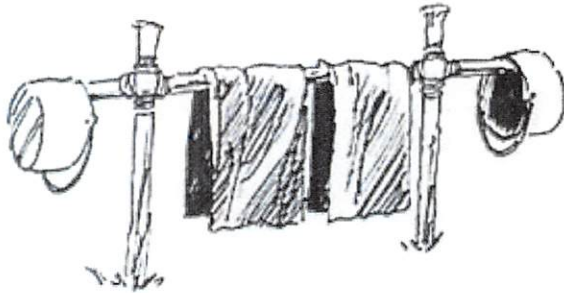


(<http://scoutpioneering.files.wordpress.com/2012/12/fire-bucket-holder-2.jpg>)

Very Useful Camp Gadget

materials needed for this ultra simple campsite improvement are two pioneering stakes, a solid stick about 30" long with a notch on either end to hang the buckets, and two short 1/4" manila lashing ropes, 6 to 10'

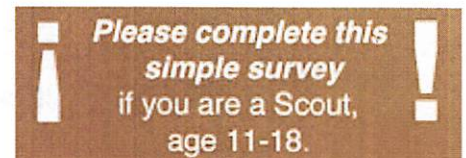
long. In a sensible place near the fire circle, simply pound in the pioneering stakes, approximately 1 and 3/4' apart. Then, making sure the notches on the 30" crossbar are facing up, lash it to the two stakes with tight square lashings (<http://scoutpioneering.com/2013/02/13/japanese-mark-ii-square-lashing/>). Fill the fire buckets and hang them on either side. That's all there is to it. As illustrated in the drawing below, the same design can be used in a variety of ways. **Single Fire Bucket Holder.** (<http://scoutpioneering.com/2014/05/05/single-fire-bucket-holder/>)



Towel Rack

(<http://scoutpioneering.files.wordpress.com/2012/12/towel-rack.jpg>)

Whatever the doctor orders.



(<http://survey.constantcontact.com/survey/a07e92j9m4mhsw6k2vr/start>)

Categories: [Simple Campsite Improvement](#) | Tags: [easy camp gadget](#), [fire bucket holder](#), [outdoor code](#), [simple camp gadget](#), [useful camp gadget](#) | [3 Comments](#)

3 thoughts on “Double Fire Bucket Holder”

Pingback: [Single Fire Bucket Holder | SCOUT - PIONEERING](#)

January 15, 2014

N

I love you.

[Reply](#)

January 15, 2014

Larry Green

Indeed N. It's such a lovable and simple little way to improve a Scout campsite.

[Reply](#)

SCOUT – PIONEERING

GOOD, OL' FASHIONED, OUTDOOR, SCOUTING FUN FOR THE 21ST CENTURY!

Simple Camp Table

Posted on December 29, 2012 by Larry Green

This small camp table is completely functional and provides a convenient raised surface for personal, patrol, or general use. It's simple design provides for quick and easy set up, and it is surprisingly stable.



Simple Scout Stave Camp Table



**Please complete this
simple survey**
if you are a Scout,
age 11-18.

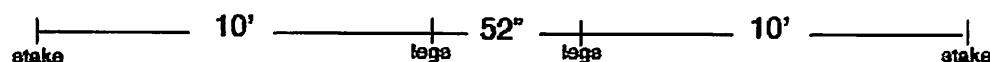


(<http://survey.constantcontact.com/survey/a07e92j9m4mhsw6k2vr/start>)

Make the table legs. Start by lashing four 6' staves with Two Spar Shear Lashings (<http://scoutpioneering.com/2013/02/23/lashing-information/>), to make the table's legs.

Lash on the table top supports. Next, to support what will become the table top, lash a straight 4' x 1" stick to connect each set of shear-lashed legs at about 3 -1/2 feet from the bottom of the 6' stave. Use square lashings (<http://scoutpioneering.com/2013/02/13/japanese-mark-ii-square-lashing/>). This will form two A-frames, one for each side of the table. Make sure the 4' stick is the same distance from the bottom of the legs on both sides.

Get ready to hold up the table. Now it's time to hammer in a narrow pioneering stake on either side, 10' away from where the legs will stand (about 52" apart).



Stretch out a 50' length of 1/4" manila rope so the middle of the rope will lay where the middle of the table will be. Put two half hitches (open-ended clove hitch (<http://scoutpioneering.com/2013/04/01/the-misunderstood-clove-hitch/>)) around the top of one leg at each A-frame, about 52" apart.

Attach the ends of the rope nice and tight to each pounded-in stake using a roundturn with two half hitches (<http://scoutpioneering.com/2013/02/20/favorite-pioneering-knots-roundturn-with-two-half-hitches/>). Tightening this rope is what keeps the A-frames from shifting and makes this table very stable. If you secure the table nice and tight from the beginning, you shouldn't ever have to adjust the tension. Situating the stakes ten feet away from the table will provide optimum stability, but for practical purposes, much shorter distances between the clove hitches and the stakes can also work very effectively.

Make the table top. Lay 5' staves across both 4' sticks and attach them with a floor lashing (<http://scoutpioneering.com/2013/01/14/improved-floor-lashing/>) using binder twine. If you're using Scout Staves, twelve work well.



(<https://www.facebook.com/media/set/?set=a.129905473821037.35269.100004047567008&type=3>)

Rear View of Camp Kitchen at Troop Site during Boy Scout Summer Camp

Categories: [Involved Campsite Improvement](#), [Simple Campsite Improvement](#) | Tags: [Boy Scout Camp Gadget](#), [Camp Gadget](#), [camp gadgets using lashings](#), [camp table](#), [campsite](#), [lashing activity](#), [Pioneering project](#), [Scout Lashing](#), [small pioneering project](#), [table made with lashings](#), [useful camp gadget](#) | [2 Comments](#)

2 thoughts on “Simple Camp Table”

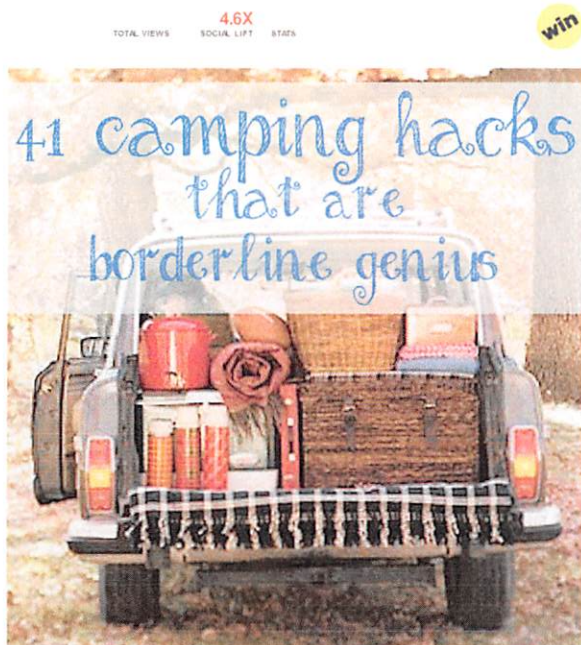
Pingback: [Scout Stave Dish Washing Rack | SCOUT - PIONEERING](#)

Pingback: [Camp Clothing Drying Rack « SCOUT – PIONEERING](#)

[Blog at WordPress.com.](#) [The Adventure Journal Theme.](#)

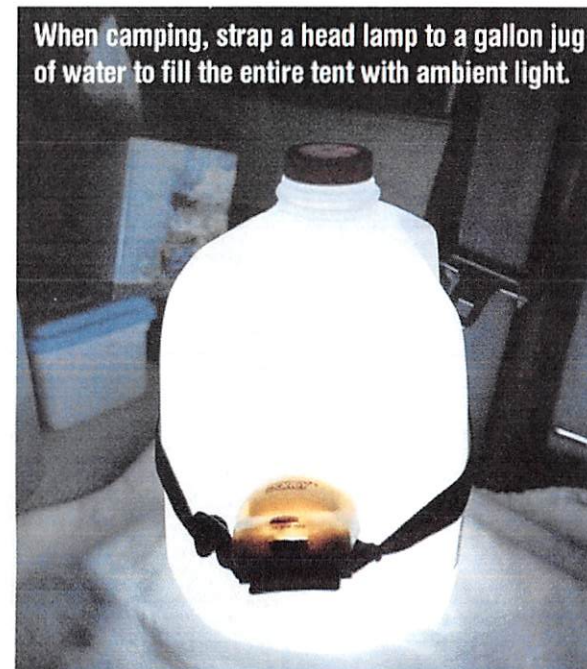
 Follow

Follow “SCOUT - PIONEERING”



1. Use foam floor tiles for a softer, more comfortable tent floor.

2. Point a head lamp into a jug of water for an instant lantern.

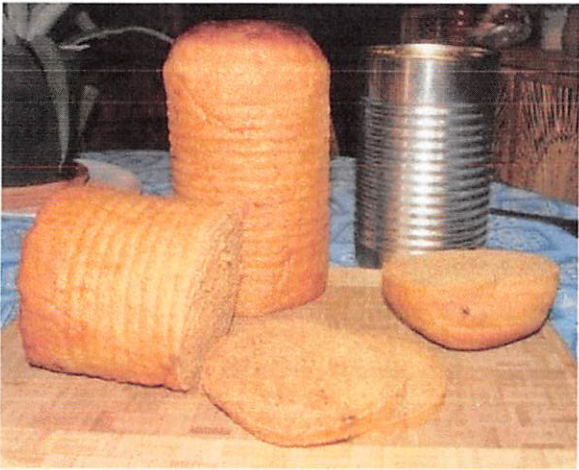


3. lantern.



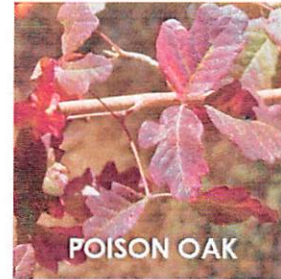
[pinterest.com](#)

4. Make tin-can sandwich bread as a portable food option.

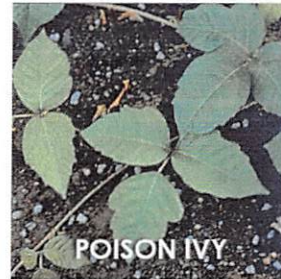


Get the recipe [here](#).

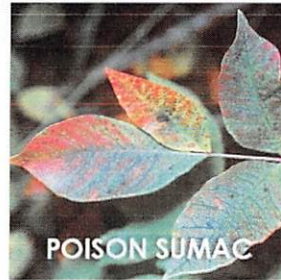
5. Familiarize yourself with what the poisonous plants look like.



POISON OAK



POISON IVY



POISON SUMAC

6. Bring a tick deterrent.

Bread-In-A-Can Recipes

Believe it or not, there are a few recipes specifically for baking inside of a can.



Banana Bread

Ingredients

- 2 cups all-purpose flour
- 1 teaspoon baking soda
- $\frac{1}{4}$ teaspoon salt
- $\frac{1}{2}$ cup butter
- $\frac{3}{4}$ cup brown sugar or turbinado sugar
- 2 eggs, beaten
- 1 teaspoon vanilla
- 2 $\frac{1}{3}$ cup mashed bananas

Directions

Preheat oven to 350°. Lightly grease 4 soup or vegetable tin cans with cooking spray. In a large bowl combine flour, baking soda, and salt; stir. In a separate bowl, cream together butter and brown sugar. Stir in eggs, vanilla, and mashed bananas until well blended. Stir banana mixture into flour mixture, until just moistened. Pour batter evenly into 4 greased soup or vegetable tin cans. Bake for 30-35 minutes or until skewer inserted in middle comes out clean. Allow bread to cool in cans. After cooling, pour bread out of the can, slice, smear with butter (optional), eat, and enjoy. Or wrap and give away. (If not giving away the same day as having baked, you will need to store in a sealed container or bag in the refrigerator to maintain freshness. Can store up to 3 days in refrigerator or 2 weeks in the freezer. If placing in freezer, take bread out of can to freeze and return to cleaned can when presenting.)

Tin Can Sandwich Bread

Ingredients

Dough/Bread machine
1 cup warm water
1 tablespoon olive oil
1 egg, slightly beaten
salt to taste
1/4 cup finely minced sun-dried tomato
1/3 cup finely grated Parmesan cheese
1 cup whole wheat flour
2 cups all purpose flour
1 package (or 1 tablespoon) yeast

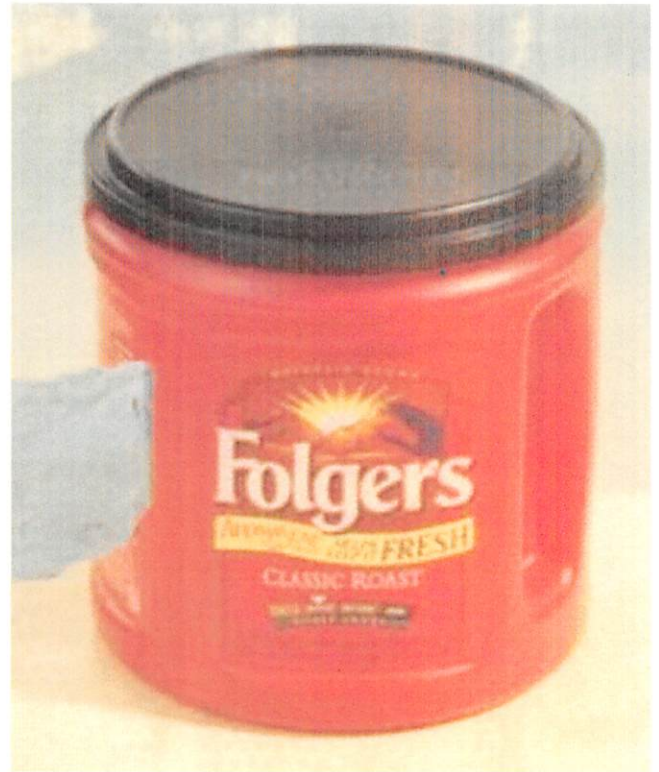
Directions

Mix all ingredients to create dough
Spray insides of two tall tomato-juice-size cans
Divide dough and place in cans
Cover cans and let rise for an hour
Place cans in cold oven
Turn oven on to 400 degrees and allow bread to heat inside oven for 15 minutes
After 15 minutes, turn oven down to 350
Let bake for 15 more minutes at 350
Let cool and enjoy!

Camping Toilet Paper Keeper and Dispenser

Supplies:

- Plastic coffee container with handle (lid needed)
- Sharp knife



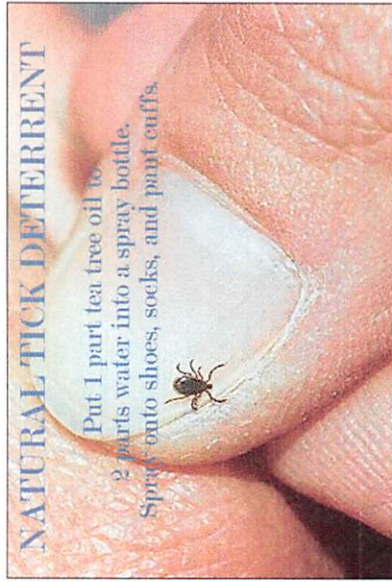
With a tent, shovel, and a few things that I'm not really able to make, I feel no reason to visit the camping store. I feel as though I can make just about anything that my family needs for a weekend of camping. From the sleeping bags, to backpacks, to night lights, I feel like I can make something comparable to what's sold at the store. And, I save lots of money to afford those things that I can't make. So, I've made an egg carton fire starter, a milk jug tent light, and a camping washing machine. If you love camping, forget going to the camping supply store, and make most of the things that you'll need - even down to the smallest thing. One of the smallest things? A toilet paper keeper and dispenser.

It's important to keep bathroom tissue dry, and to not lay it on the ground or table, so you'll need a way to protect it. Before leaving home, do a two-minute project, and you'll have a bathroom tissue dispenser and protector; it'll last for many years.

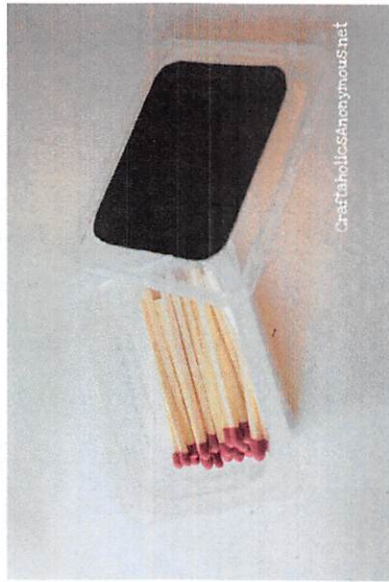
A coffee can is the perfect solution for keeping toilet paper clean and dry. Whether it rains, or dew collects, the bathroom tissue won't be affected. Just put it in a coffee can and take it camping. The ideal can is not metal; use a plastic [container with a handle](#). That type of coffee container is easy to cut, so that you create the toilet paper protector, and it's easy to carry.

To make the dispenser lay the coffee container on its side. With a sharp knife, cut a slit down a side of the container that is adjacent to the handle. The slit should be a couple of inches longer than the toilet paper is wide. With the slit in place, remove the lid, and drop the roll into the clean container. Feed the end of the toilet paper through the slit so that one or two squares are showing.

The toilet paper dispenser is one of those things that is so easy to and so handy to take camping with you. You will probably only make one; it will last for many years. It does the important job of keeping the toilet paper dry and clean but the coffee container makes it easy to spot the roll no matter where it has been left.



7. Glue sandpaper to the top of your match holder.



Be sure to buy strike-anywhere matches

8. Repurpose a coffee can to hold and protect TP.



9. Make crescent rolls over the campfire.



For maximum yumminess, fill them with stuff like marshmallows and Nutella. Or wrap hot dogs with them.



Get the directions [here](#).

10. Use Tic-Tac boxes to store spices.



skruken.blogspot.ca

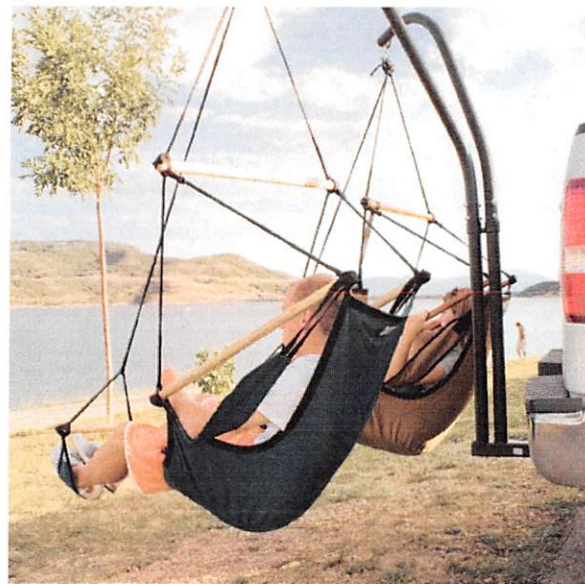
11.



cabelas.com

This one is \$84.99 from Cabelas.

12.



Buy from [here](#).

13. Cut up a straw and fill the pieces up with antibiotic ointment or toothpaste for single-use packets.



Steven's Amazon.com Today's Deals Gift Cards Sell Help

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-1/4-Inch by 4-1/4-Inch Bead Container with 24 Flip Top Canisters

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★★★★ 35 | 30 reviews

3:28
\$4.43 Free shipping for Prime members when buying this Add-on Item. [Details](#)
85 (57%)

Product sold by Amazon.com. Gift-wrap available.
From May 29, 2014 to May 29, 2014 Add it to a qualifying order of \$25 or more and choose One-Day Shipping at checkout.

Large organizer box that holds 24 smaller containers that hold seed beads and other tiny items. Containers are easy to locate and other small items easy to locate and textures separate.

Click to open expanded view

- Easy to store and extremely portable
- 6-1/4-Inch by 4-1/4-Inch, clear plastic

Add-on Item

This item is available because of the Add-on program. The Add-on program allows Amazon to offer thousands of low-priced items that would be cost-prohibitive to ship on their own. These items ship with qualifying orders over \$25. [Details](#)

12 new from \$1.86

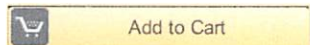


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- ☒ One Box of 12 Containers Darice JD Bead Storage System \$8.56

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Page 1 of 17





briangreen.net

Use a lighter to seal up the ends.

14. Make travel coffee bags out of coffee filters and dental floss.



acjohnson.com

Place a scoop of coffee grounds into a coffee filter and tie it up with dental floss. When you're ready to brew, just make it like you would make tea in a teabag!

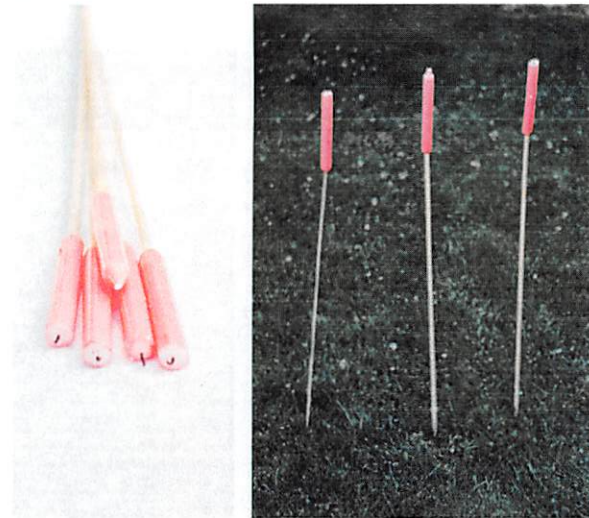
15.



pinterest.com

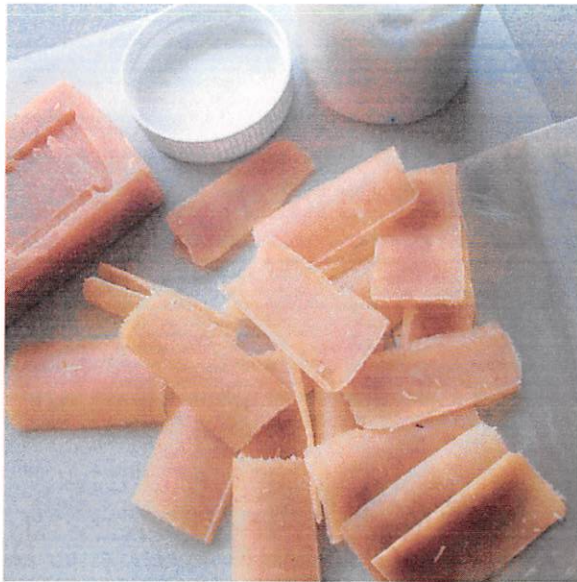
They'll keep you from going into caffeine withdrawal.

16. Make candle stakes for romantic nighttime lighting.



Get the directions [here](#).

17. Make single-use soap leaves from a bar of soap and a vegetable peeler.



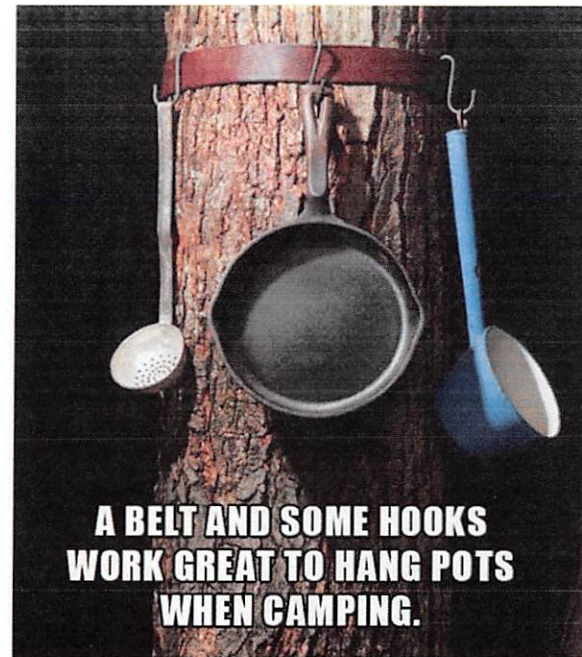
You can also rub soap on mosquito bites to relieve the itchiness.

18.
hand-washing station.



greatwildoutdoors.com

19. Use a belt and hooks to hang up pots and pans.



**A BELT AND SOME HOOKS
WORK GREAT TO HANG POTS
WHEN CAMPING.**

pinterest.com

20. Make campfire cones!

Campfire Cones



21. Pack a mini first-aid kit into an old prescription

bottle or Altoids tin.



chasinggreen.org

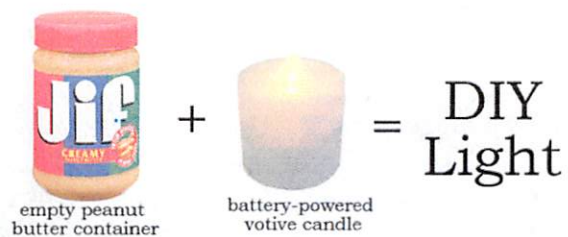
22. shortening and dry milk, which don't need to be refrigerated.



onegoodthingbyjillie.com

Get the full recipe [here](#). You can also find powdered eggs at most grocery stores (if you don't shudder at the thought).

23. Put a battery-powered votive candle into an empty peanut butter container to make portable lanterns.



24. Make a portable washing machine with a plunger and a bucket.



Get the directions [here](#).

25. Make an easy-to-carry fire starter with a cardboard-only egg carton and match light charcoal.



sevmaynays.blogspot.com

You just have to light the carton and the fire will catch on to the charcoal.

26.



macbrosplace.com

27. Make pocket-sized oil lamps out of travel-size or hotel toiletry shampoo bottles.



Get the directions [here](#).

28. Forgo the meat marinade and put the rosemary right on the coals.



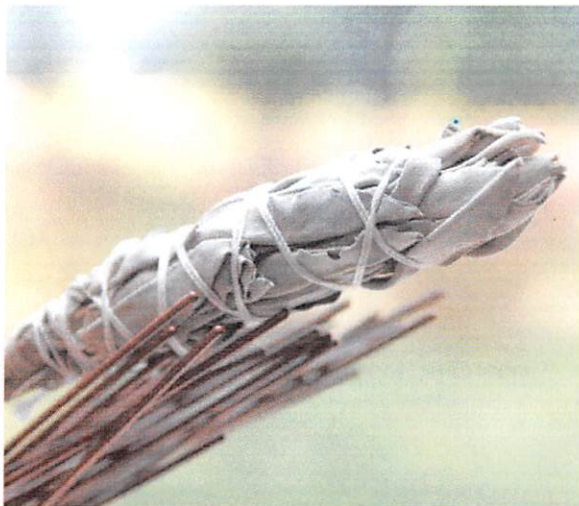
Once the coals are uniformly gray and ashy, cover them with fresh rosemary branches. Your meat and vegetables will be flavored with the taste of savory herbs.

29.
cheeses.



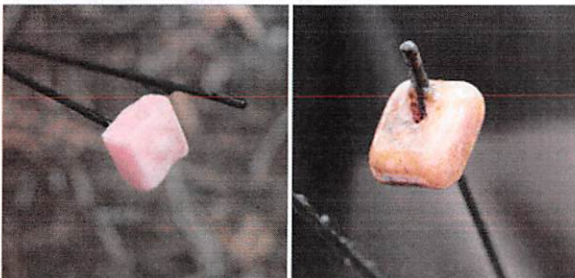
Aged cheddar, Parmigiano, and/or Gruyère will keep for at least a week unrefrigerated.

30. Add bundles of sage to a campfire to keep mosquitoes away.



google.com

31. Try roasting Starburst.



clarkandsuz.blogspot.com

clarkandsuz.blogspot.com

Sounds crazy, but it's actually delicious. Crunchy on the outside, warm and gooey on the inside. Roast it until it's bubbling.

32.
polenta, quinoa, or couscous.



bonappetit.com

Polenta is especially versatile because it can be shaped into patties and pan-fried for a sweet or savory meal. Get a recipe for

33. Cook cinnabuns (the canned kind) in a hollowed-out orange over a campfire.



trulysimple.com

Get the full details [here](#).

34. If you're going to be hiking, use this biodegradable trail-marking tape.



Buy it [here](#).

35. Keep the kids busy with a scavenger hunt.



thetaylor-house.com

pinterest.com

Write the items down on a paper bag so they have a receptacle for the items.

36. Use a bucket and a milk crate as an emergency toilet.



notample.com

Get the directions [here](#).

37. Cotton pads dipped in wax are a crazy easy way to make portable fire starters.



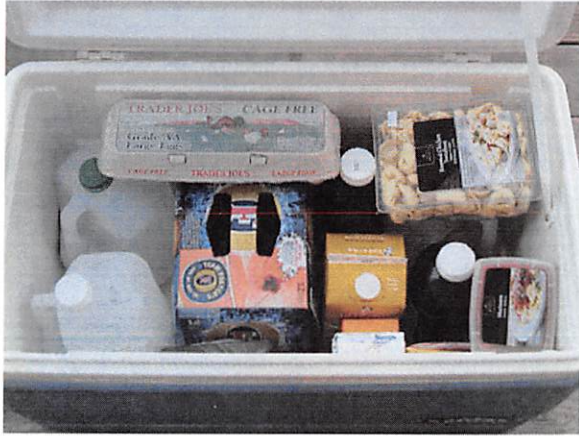
pinterest.com

38. Bring microfiber towels. They're super absorbent and lightweight.



amazon.com

39.
your cooler.



They keep your food cold, and you have plenty of water to drink for later.

Other things you can freeze to use for later: pasta sauces, chili, and pesto.

40. Make emergency light sources out of an Altoids tin, cardboard, and wax.



Get the instructions [here](#).

41.



campsever.com

No matter how far you have to carry this thing, YOU NEED IT. Get it [here](#) for \$25.95.

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SCOUT - PIONEERING

GOOD, OL' FASHIONED, OUTDOOR, SCOUTING FUN FOR THE 21ST CENTURY!

Posts Tagged With: camp gadgets using lashings

Double Tripod Chippewa Kitchen

Posted on February 2, 2013 by Larry Green**CLICK HERE FOR INSTRUCTIONS, FURTHER INFORMATION AND ILLUSTRATIONS!**(<http://scoutpioneering.com/2012/12/27/chippewa-kitchen/>)

After assembling the tripods and lashing on the braces and crossbars, Scouts attach the cooking platform.

(<http://scoutpioneering.com/2012/12/27/chippewa-kitchen/>)



Scouts cut a couple of burlap bags to cover the platform before adding a layer of mineral soil to make the cooking surface.

[\(http://scoutpioneering.com/2012/12/27/chippewa-kitchen/\)](http://scoutpioneering.com/2012/12/27/chippewa-kitchen/)

CLICK HERE FOR INSTRUCTIONS, FURTHER INFORMATION AND ILLUSTRATIONS!

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(<http://scoutpioneering.com/2012/12/27/chippewa-kitchen/>)

Categories: [Involved Campsite Improvement](#) | Tags: [big pioneering project](#), [Boy Scout pioneering project](#), [Boy Scout Poneering](#), [boy scouts building pioneering projects](#), [bsa pioneering](#), [bsa pioneering projects](#), [camp gadgets using lashings](#), [charcoal chimneys](#), [Chippewa Kitchen](#), [Double Tripod Chippewa Kitchen](#), [outdoor skills challenge for scouts](#), [Pioneering in the Boy Scouts](#), [pioneering projects for scouts](#), [Prioneering Project](#), [scout pioneering](#), [scoutcraft skills](#), [useful camp gadget](#) | [3 Comments](#)

Simple Camp Table

Posted on [December 29, 2012](#) by [Larry Green](#)

This small camp table is completely functional and provides a convenient raised surface for personal, patrol, or general use. It's simple design provides for quick and easy set up, and it is surprisingly stable.

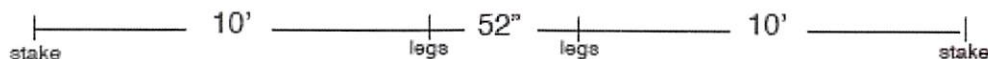


Simple Scout Stave Camp Table

Make the table legs. Start by lashing four 6' staves with Two Spar Shear Lashings (<http://scoutpioneering.com/2013/02/23/lashing-information/>), to make the table's legs.

Lash on the table top supports. Next, to support what will become the table top, lash a straight 4' x 1" stick to connect each set of shear-lashed legs at about 3 -1/2 feet from the bottom of the 6' stave. Use square lashings (<http://scoutpioneering.com/2013/02/13/japanese-mark-ii-square-lashing/>). This will form two A-frames, one for each side of the table. Make sure the 4' stick is the same distance from the bottom of the legs on both sides.

Get ready to hold up the table. Now it's time to hammer in a narrow pioneering stake on either side, 10' away from where the legs will stand (about 52" apart).



Stretch out a 50' length of 1/4" manila rope so the middle of the rope will lay where the middle of the table will be. Put two half hitches (open-ended clove hitch (<http://scoutpioneering.com/2013/04/01/the-misunderstood-clove-hitch/>)) around the top of one leg at each A-frame, about 52" apart.

Attach the ends of the rope nice and tight to each pounded-in stake using a roundturn with two half hitches (<http://scoutpioneering.com/2013/02/20/favorite-pioneering-knots-roundturn-with-two-half-hitches/>). Tightening this rope is what keeps the A-frames from shifting and makes this table very stable. If you secure the table nice and tight from the beginning, you shouldn't ever have to adjust the tension. Situating the stakes ten feet away from the table will provide optimum stability, but for practical purposes, much shorter distances between the clove hitches and the stakes can also work very effectively.

Make the table top. Lay 5' staves across both 4' sticks and attach them with a floor lashing (<http://scoutpioneering.com/2013/01/14/improved-floor-lashing/>) using binder twine. If you're using Scout Staves, twelve work well.



(<https://www.facebook.com/media/set/?set=a.129905473821037.35269.100004047567008&type=3>)

Rear View of Camp Kitchen at Troop Site during Boy Scout Summer Camp

Categories: Involved Campsite Improvement, Simple Campsite Improvement | Tags: Boy Scout Camp Gadget, Camp Gadget, camp gadgets using lashings, camp table, campsite, lashing activity, Pioneering project, Scout Lashing, small pioneering project, table made with lashings, useful camp gadget | 1 Comment

Chippewa Kitchen

Posted on December 27, 2012 by Larry Green

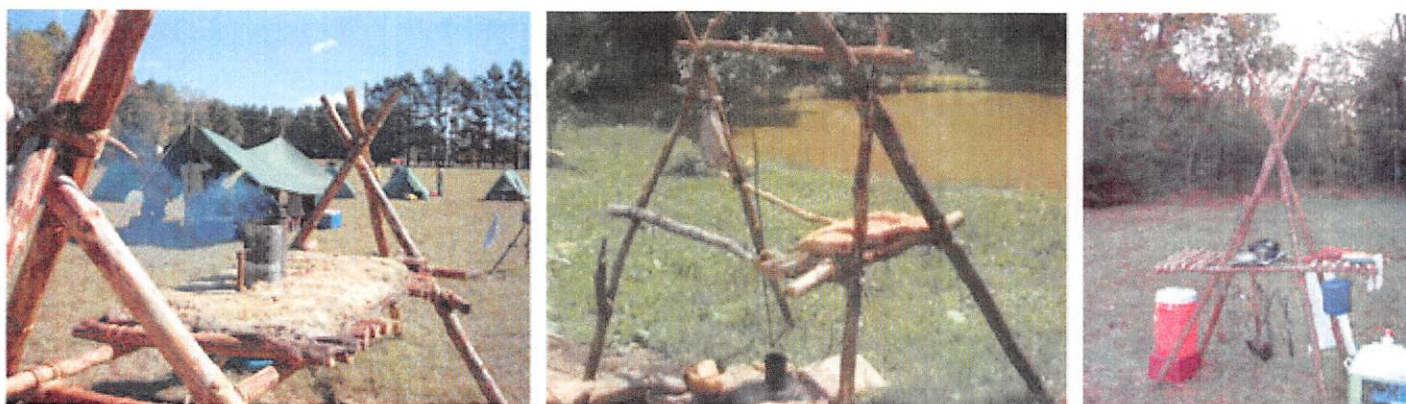


(<http://scoutpioneering.com/2013/02/02/double-tripod-chippewa-kitchen/>)

The Three Phases of the Chippewa Kitchen Cooking Experience

The Chippewa Kitchen can be seen as the indisputable KING of all “camp gadgets.” It’s the ultimate camp kitchen pioneering project, providing a huge element of convenience to a wide range of camp cooking operations. The Chippewa Kitchen can provide a raised surface for food preparation, a nifty place to hang tools and utensils, a framework from which a pot can be safely suspended over a cooking fire, and primarily, a convenient, raised cooking surface for cooking over hot coals.

There are all kinds of Chippewa Kitchens. They come in all sizes and shapes.



Chippewa Kitchens can be built in many ways. They all lead to more convenience for the cook.

When our troop first started making Chippewa Kitchens, we built them with one 10' tripod, with one 6' crossbar, and two 8' crossbars each of those extending out so that a shelf could be constructed where we'd pour the coals and do the cooking. We'd tie a rope from the top of the tripod and hang an 8 qt. pot over a fire built on the ground in the middle between the three legs of the tripod. This always worked well, but with all the weight from the earth, coals, food, and dutch ovens, it was a lot less stable. That design tended to make it difficult to keep the tripod from leaning and the crossbar extensions from shifting lower.

DOUBLE TRIPOD CHIPPEWA KITCHEN (<http://scoutpioneering.com/double-tripod-chippewa-kitchen/>). Our more recent constructions consist of two 8' tripods connected with two parallel 8' or 10' platform supports over which we lash the cooking platform. With this design, you can build a cooking fire under one or both tripods and suspend a pot over each. Of course the platform is superb for Dutch Oven use and ideal for foil cooking.



Looking good and feeling good at Playcard Environmental Education Center during Swampfest.

Materials needed for a Double Tripod Chippewa Kitchen

- 2 10' x 3" platform support spars (For a smaller Chippewa Kitchen, 8' spars work great.)
- 6 8' x 3" tripod leg spars
- 6 6' x 2.5" tripod braces
- 20-40 3' to 4' x 2" floor spars (depending on the size of the cooking surface required)
- 16 15' x 1/4" manila lashing ropes for square lashings
- 2 20' x 1/4" manila lashing ropes for tripod lashings
- binder twine for floor lashing
- piece(s) of burlap or canvas to cover cooking platform

Here's a procedure to make a Double Tripod Chippewa Kitchen:

Build the tripods. Lay three 8' tripod legs side by side and lash them together with a tight tripod or figure eight lashing. Make sure the butt ends are at the bottom and even.

Stand the tripod up by crossing the outside legs underneath the middle leg.

Repeat this process for the second tripod.

Lash on the tripod braces. Connect the two outside legs with one of the 6' tripod braces. Using tight square lashings, lash the brace so it is perpendicular to the ground and three feet high. Lash another 6' tripod brace to each outside leg and connect them to the middle leg with square lashings, about two feet and two and a half feet high respectfully.



(<http://scoutpioneering.files.wordpress.com/2012/12/chippewa-kitchen-labels1.jpg>)

Labelled Chippewa Kitchen Spars (Click on the photo for a larger view.)

Repeat this process for the second tripod, making sure the brace connecting the outside legs is again, three feet high.

Position the tripods. Place the tripods so the 6' tripod braces lashed to the outside legs (the ones that are three feet off the ground) are facing each other. These braces are the ones that will hold up the long platform support spars, which in turn will support the cooking platform. The distance between the two tripods should be close enough so the long platform support spars can extend over each brace by at least six inches.

Lash on the platform support spars. Place the long platform support spars parallel to each other on top of the three foot high tripod brace on each tripod. Space them apart so the shortest floor spar will extend over their edges by six inches on either side. Lash them in place with tight square lashings.

Lash on the floor spars. The cooking surface is made up of 3' to 4' x 2" floor spars, depending on how wide a cooking area will be required. These are lashed onto the parallel platform supports with a floor lashing (<http://scoutpioneering.com/2013/01/14/improved-floor-lashing/>) using binder twine.

Prepare the cooking surface. Prior to adding mineral soil, and to keep the mineral soil from falling through spaces between the floor spars, spread pieces of burlap or canvas over the platform.

Finally, cover the platform with a layer of mineral soil thick enough to protect the floor spars from the intense heat that will be generated from the coals during cooking.



(<http://scoutpioneering.com/2013/02/02/double-tripod-chippewa-kitchen/>)

Construction is logical and easy. Burlap is a practical layer between the platform floor spars and the mineral soil.



(http://scoutpioneering.files.wordpress.com/2012/12/184247_215320068612910_1361467553_n.jpg)

A Covered Double Tripod Chippewa Kitchen during an American Legion Open House

Categories: Involved Campsite Improvement | Tags: boy scout pioneering projects, bsa pioneering project, Camp Gadget, camp gadgets using lashings, Chippewa Kitchen, Double Tripod, dutch oven, lashing activity, Pioneering in the Boy Scouts, Spars, useful camp gadget | 2 Comments

SCOUT – PIONEERING

GOOD, OL' FASHIONED, OUTDOOR, SCOUTING FUN FOR THE 21ST CENTURY!

Wash Station

Posted on January 1, 2013 by Larry Green



(<http://scoutpioneering.files.wordpress.com/2012/12/ws-brandon-wash-station.jpg>)

Washing up before lunch.

This wash station is the ideal First Class Camp Gadget! It's sturdy, portable, and very useful when camping away from washroom facilities. Inherent in its design is a sound approach to a variety of pioneering concepts and skills. When this project's built with all the lashings tight and all the legs, cross bar, and support pieces properly positioned, it's a fine example of a well-engineered, highly functional camp gadget. Each of the three legs making up the tripod gets a lashed on support piece, and the wash station's stability stems from the fact the design contains three triangles.

To start, you'll need six good, straight sticks as follows:

- 2 2' x 3/4 to 1" for the leg braces
- 2 4' x 3/4 to 1" for the back leg and crossbar
- 2 5' x 3/4 to 1" for the front legs

For the lashings, you'll need:

- 1 10' x 1/4 manila rope for the tripod lashing
- 6 6' x 1/4" manila ropes for the square lashings

You'll also need

- bar of soap in a sock with a 3' cord
- small to medium-sized towel with a 3' cord

- No. 10 can with a bail or 4 qt. cooking pot with a bail.

Here's the assembly procedure:

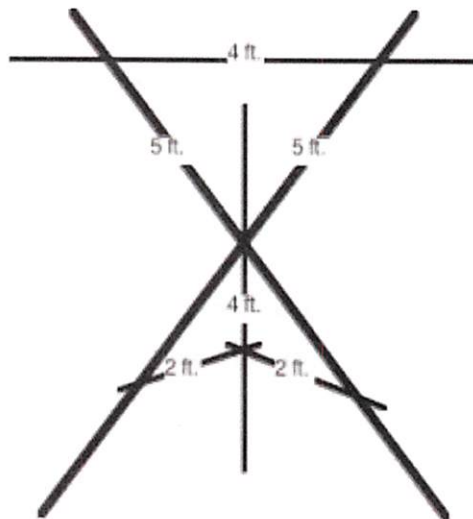
Make the tripod. Using the 10' rope, lash the two 5' sticks and one 4' stick together with a tight tripod lashing (<http://scoutpioneering.com/2013/02/22/simple-tripod-lashing/>). The 4' stick should be in the middle. *Make sure the "butt" ends of all three these sticks are even.* Separate the legs and set the tripod up. The success of this project relies on a well-tied, *tight* tripod lashing.

Lash on the braces. Using four tight square lashings (<http://scoutpioneering.com/2013/02/13/japanese-mark-ii-square-lashing/>), with the 6' ropes lash one end of the 2' sticks to the 5' legs and the other end of the 2' sticks to the four-foot leg.

Lash on the crossbar. Using two more square lashings, tightly lash the other 4' stick to the top extended sections of the two 5' sticks to make a cross bar for the towel and soap-in-a-sock.



Getting it done!



(<http://scoutpioneering.files.wordpress.com/2012/12/washstationdrawing.jpg>)

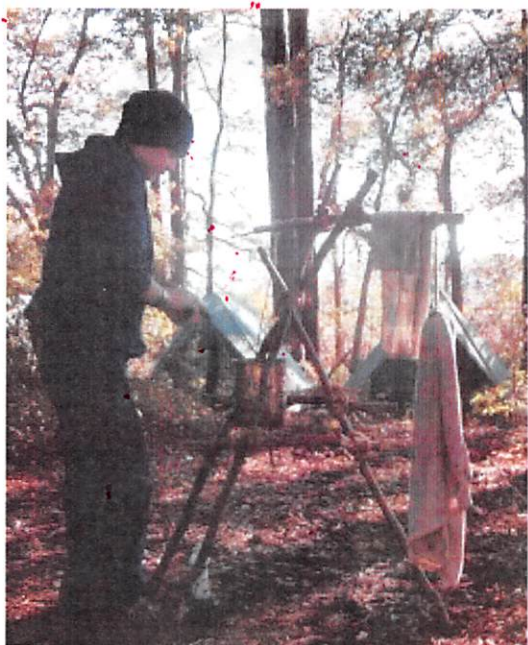
Position of the sticks.

Add the soap, water, and towel. Tie the end of one 3' cord to the soap-in-a-sock and the end of the other 3' cord to the towel, and hang them on either side of the 4' crossbar.

Hang the can filled with water to the end of the 4' stick extending from the front of the tripod.

During the camping trip, change the water as necessary. See that the soap-in-a-sock is not left in the can after use as it will melt.

One of the beauties of using metal containers is that in cold weather, the can of water can be heated in the fire.



(<http://scoutpioneering.files.wordpress.com/2012/12/heated-water-on-a-cold-morning.jpg>)

Washing his hands before breakfast on a cold, winter camping trip.

Categories: [Simple Campsite Improvement](#) | Tags: [Boy Scout Camp Gadget](#), [Boy Scout pioneering project](#), [boy scout wash station](#), [bsa pioneering](#), [bsa pioneering projects](#), [Camp Gadget](#), [camp gadgets](#), [boy scout](#), [camp wash station](#), [campsite improvement](#), [first class camp gadget](#), [hand washing station](#), [tripod](#), [lashing activity](#), [lashing project](#), [making a useful camp gadget](#), [Pioneering for Boy Scouts](#), [pioneering projects for scouts](#), [scout engineering](#), [scout gadget](#), [Scoutcraft](#), [scoutcraft skills](#), [small pioneering project](#), [woodcraft](#) | [1 Comment](#)

One thought on “Wash Station”

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SCOUT – PIONEERING

GOOD, OL' FASHIONED, OUTDOOR, SCOUTING FUN FOR THE 21ST CENTURY!

Fire Bucket Holder

Posted on December 25, 2012 by Larry Green



(<http://scoutpioneering.files.wordpress.com/2012/12/dscn0100.jpg>)

Functional AND good-looking.

One of the essential mandates in the B.S.A.'s Outdoor Code is: BE CAREFUL WITH FIRE.

- I will prevent wildfire.
- I will build my fires only where they are appropriate.
- When I have finished using a fire, I will make sure it is cold out.
- I will leave a clean fire ring, or remove all evidence of my fire.

In addition to being the height of simplicity, this basic camp gadget makes an invaluable contribution towards safety around the fire circle. In our campsites, since it's always a safe bet to have a supply of water right near our cooking and campfires, why not add some convenience and accessibility, especially because when fire buckets are on the ground, they're frequently knocked over, inadvertently kicked, and even stepped in!

The



(<http://scoutpioneering.files.wordpress.com/2012/12/fire-bucket-holder-2.jpg>)

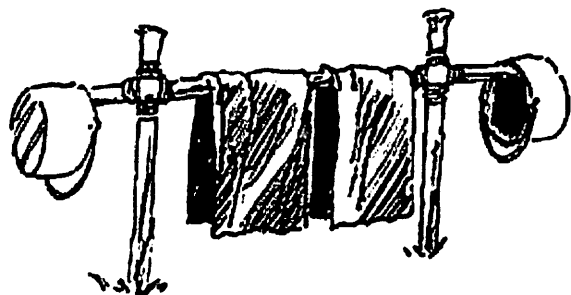
Useful Camp Gadget

materials needed for this ultra simple campsite improvement are two pioneering stakes, a solid stick about 30" long with a notch on either end to hang the buckets, and two short 1/4" manila lashing ropes, 6 to 10'

long.

In a sensible place near the fire circle, simply pound in the pioneering stakes, approximately 1 and 3/4' apart. Then, making sure the notches on the 30" crossbar are facing up, lash it to the two stakes with tight square lashings (<http://scoutpioneering.com/2013/02/13/japanese-mark-ii-square-lashing/>). Fill the fire buckets and hang them on either side. That's all there is to it.

As illustrated in the drawing below, this same design can be used in a variety of ways.



Towel Rack

(<http://scoutpioneering.files.wordpress.com/2012/12/towel-rack.jpg>)

Whatever the doctor orders.

Categories: [Simple Campsite Improvement](#) | Tags: [easy camp gadget](#), [fire bucket holder](#), [outdoor code](#), [simple camp gadget](#), [useful camp gadget](#) | [2 Comments](#)

2 thoughts on "Fire Bucket Holder"

January 15, 2014

N

I love you.

[Reply](#)

January 15, 2014

[Larry Green](#)

Indeed N. It's such a lovable and simple little way to improve a Scout campsite.

[Reply](#)

[Blog at WordPress.com.](#) [The Adventure Journal Theme.](#)

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(/editinstructable/)

#mikehacks

some out of summer.

start hacking ▶



(<http://cdn.instructables.com/FJBJ35/G0KQP2XV/FJBJ35G0KQP2XV.LARGE.jpg>)

I was looking for a hand grip for my hiking stick which would not be expensive and also would work well rain or shine. The leather grips are nice, but sweaty hands or rain make them slippery.

About This Instructable

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Oct 13, 2009

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bearmitzvah
(/member/bearmitzvah/)

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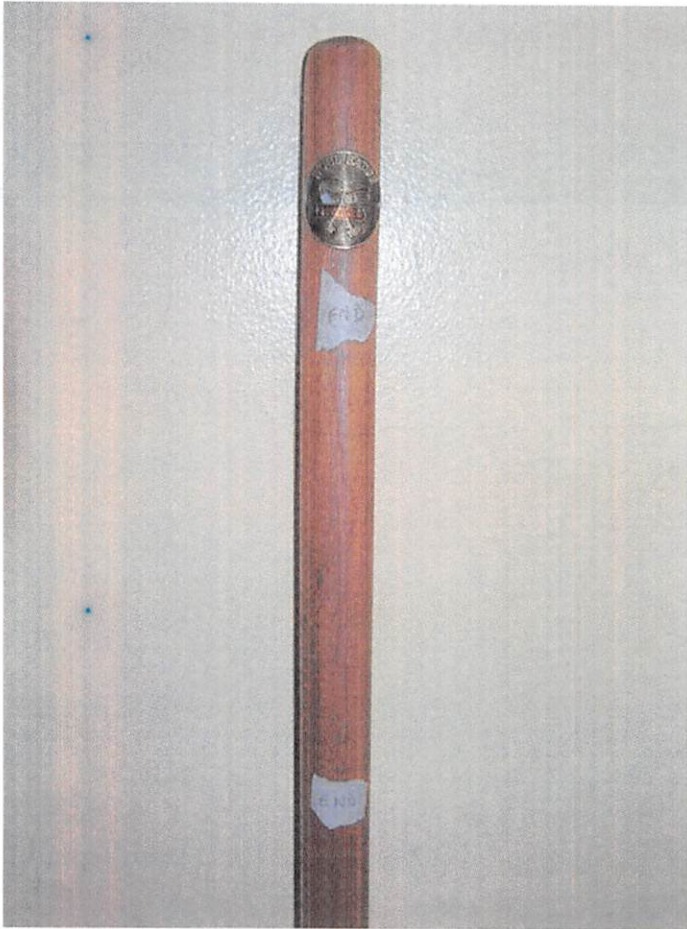
[rope \(/tag/type-id/category-outside/keyword-rope/\)](/tag/type-id/category-outside/keyword-rope/)

Add instructable to:

The bonus here is you have a long rope to use in an emergency.

The length of the rope you use is going to depend on the width of your hiking stick and the length of the hand grip you create.

Step 1:



(<http://cdn.instructables.com/FZF06EN/G0KQM8OB/FZF06ENG0KQM8OB.LARGE.jpg>)

Determine where the rope hand grip will start and end.

(Labeling is not necessary - it's just been used for illustration purposes.)

Step 2:

Group

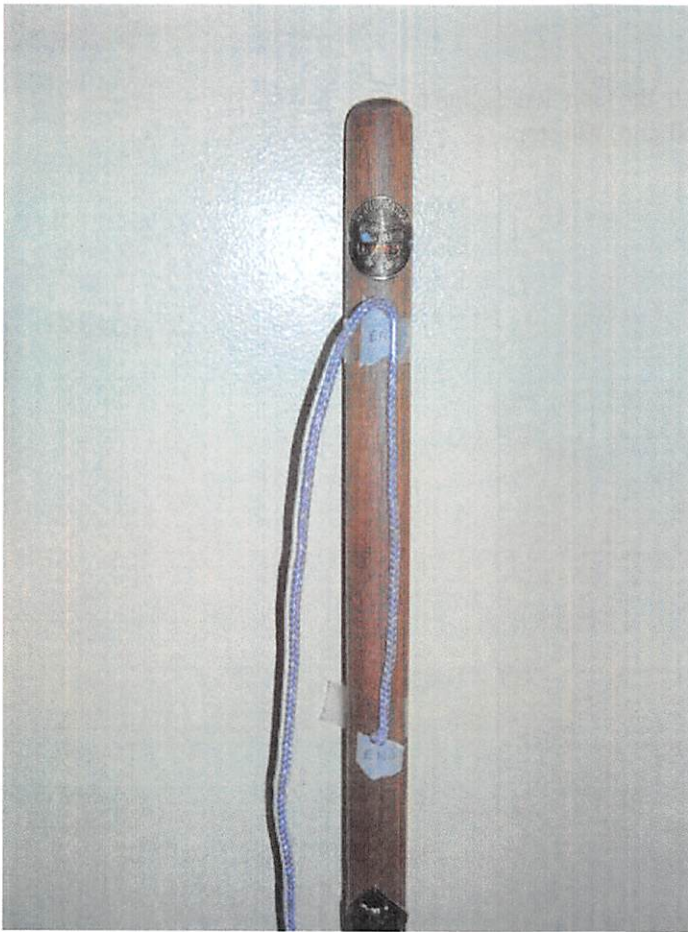
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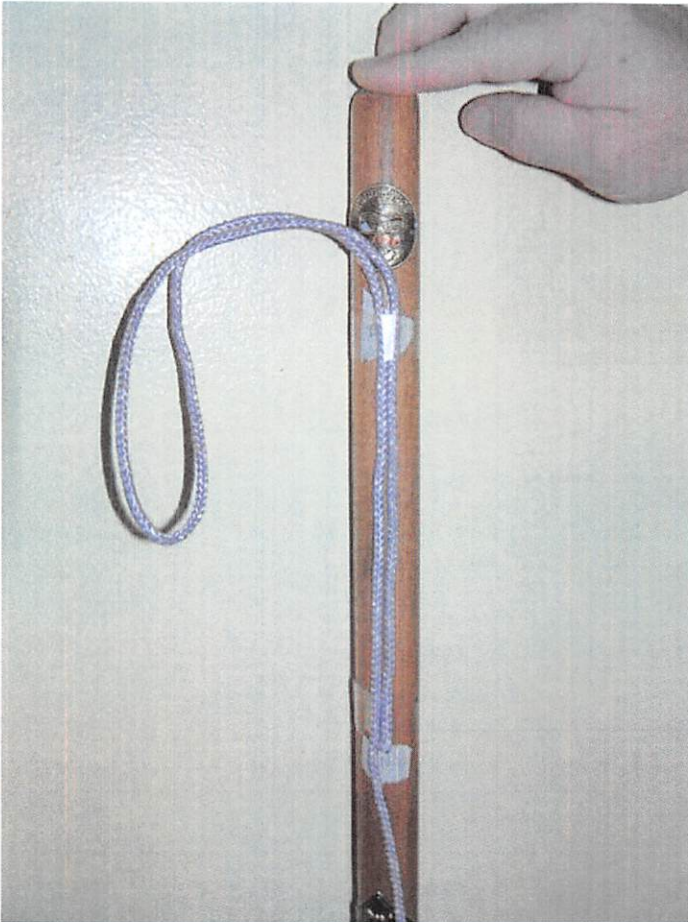
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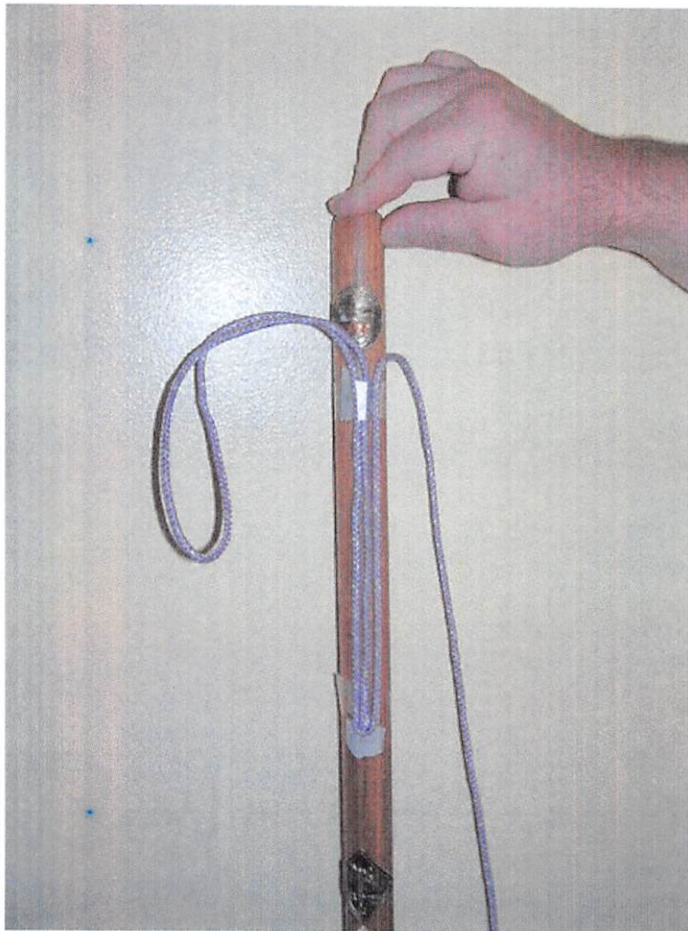


(<http://cdn.instructables.com/FMY/8NXI/G0KQC8V9/FMY8NXIG0KQC8V9.LARGE.jpg>)

Lay the rope against the stick heading toward the top.

From the top "end point", measure out more rope to create the loop and double back down the stick to the bottom of where the whipping (hand grip) will stop.

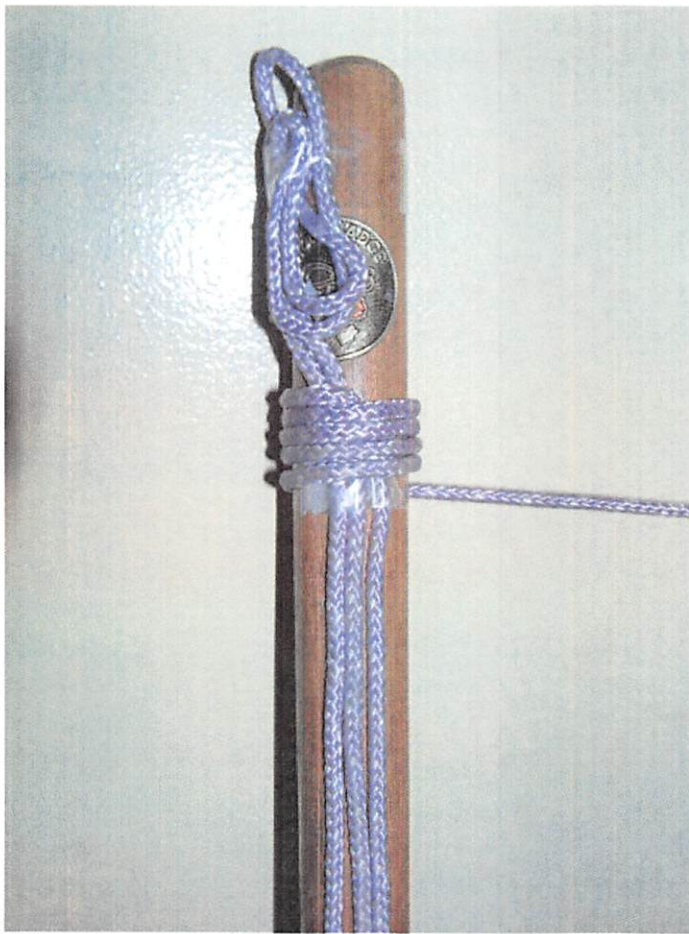
Step 3:



(/files/deriv/F817EOU/G0KQFME7/F817EOUG0KQFME7.LARGE.jpg)

Turn the rope and follow the outer 2 times back to the top to the point where you want the whipping to end at the top.

Step 4:



(<http://cdn.instructables.com/F02J7EL/G0KQM8PJ/F02J7ELG0KQM8PJ.LARGE.jpg>)

Start wrapping it down the stick -- crossing over at the beginning to lock it. (the hand loop has been taped down to keep it out of the way).

Wrap and wrap TIGHTLY.

Step 5:

Rope Handgrip for Hiking Stick by bearmitzvah (/member/bearmitzvah/)

[Download \(/id/Rope-Handgrip-for-Hiking-Stick/?download=pdf\)](#)

[\(/id/Rope-Handgrip-for-Hiking-Stick/\)](#)

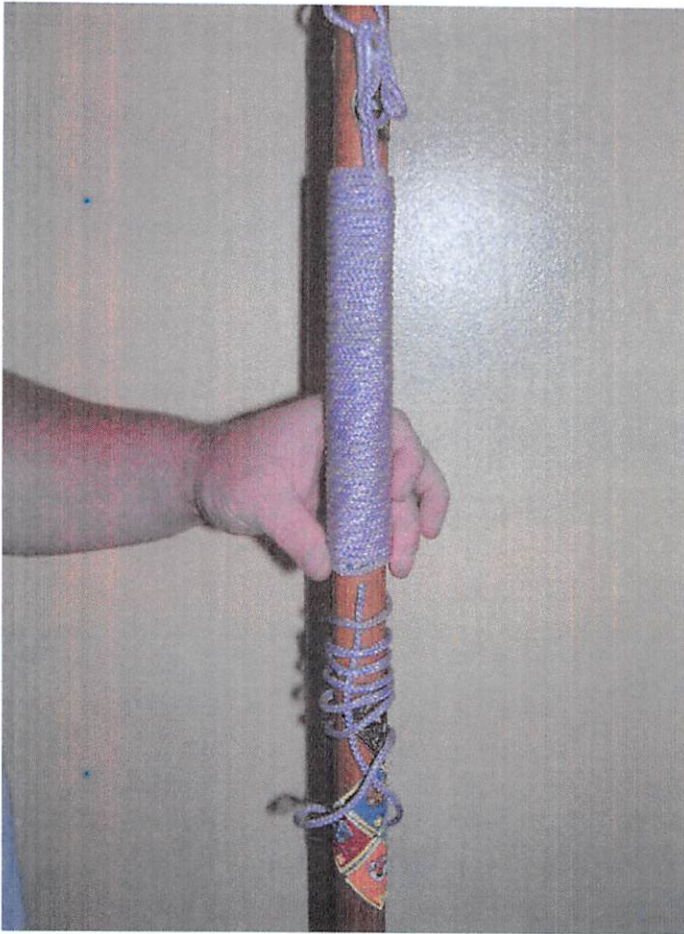
7 Steps

+ Collection

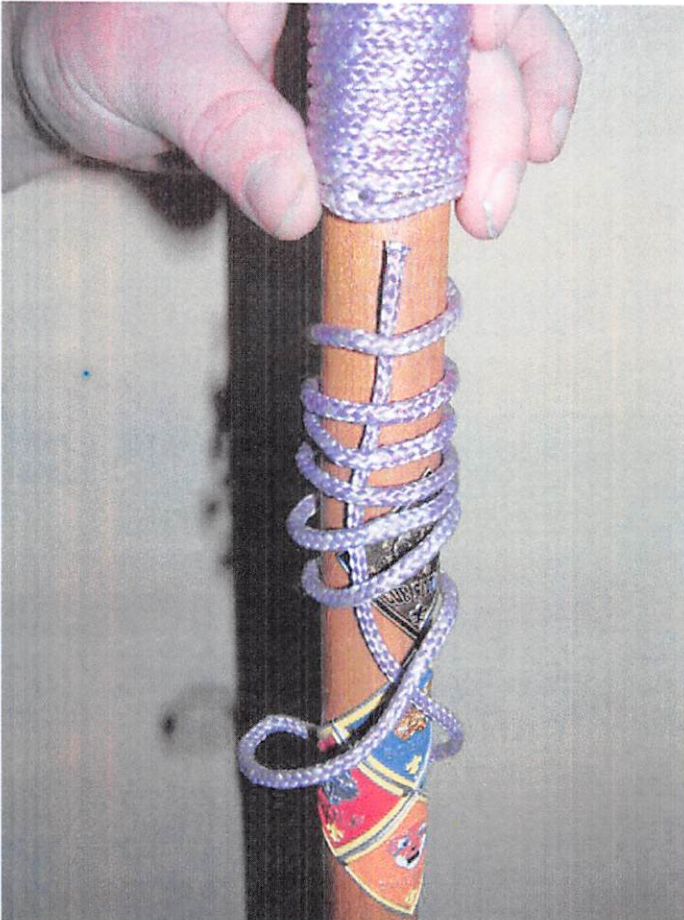
I Made it!

Favorite





(<http://cdn.instructables.com/FG777BO/G0KQC8VH/FG777BOG0KQC8VH.LARGE.jpg>)

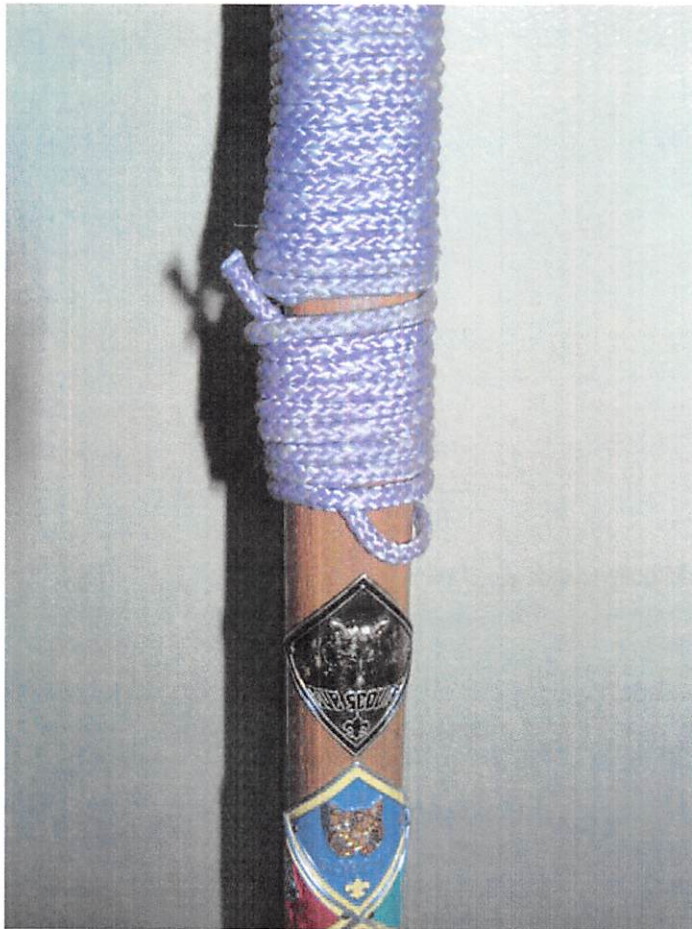


(<http://cdn.instructables.com/F6I/ABDA/G0KQFMEI/F6IABDAG0KQFMEI.LARGE.jpg>)

Continue wrapping to bottom end point.

Then, loosen the last 6 or so wraps and thread the end under. Tighten the wraps by twisting and pulling the end as necessary.

Step 6:

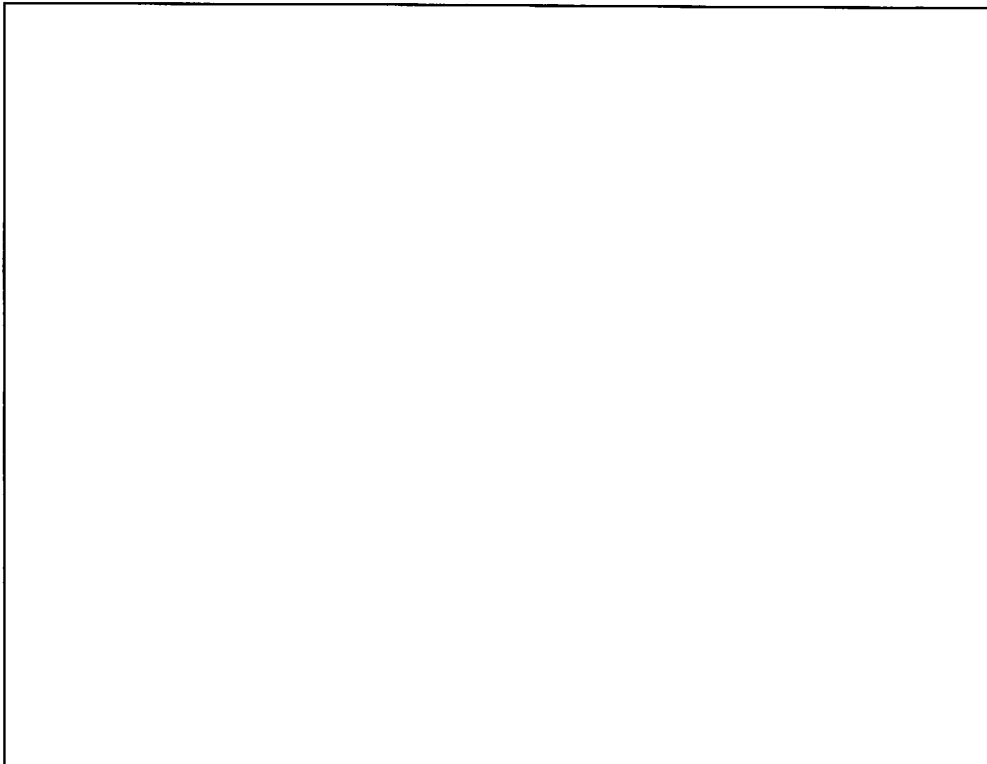


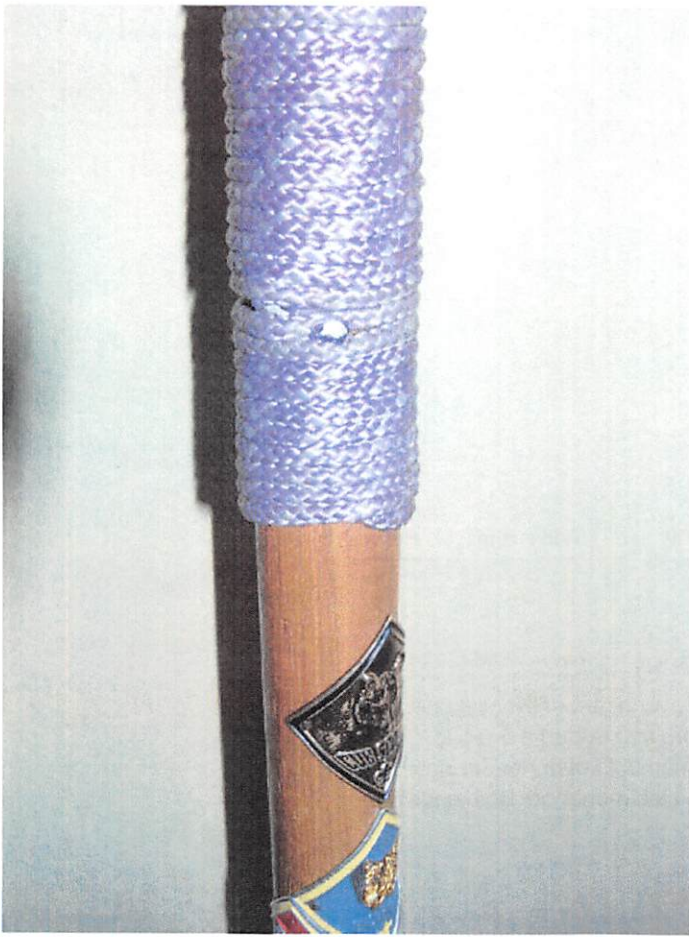
(<http://cdn.instructables.com/FPA89PX/G0KQM8QF/FPA89PXG0KQM8QF.LARGE.jpg>)

(<http://cdn.instructables.com/F8Q/L2FJ/G0KQC8W4/F8QL2FJG0KQC8W4.LARGE.jpg>)

Put the end out so that the wraps remain tight against the stick.

Step 7:





(<http://cdn.instructables.com/F16ZQER/G0KQFMHK/F16ZQERG0KQFMHK.LARGE.jpg>)

(<http://cdn.instructables.com/F2A70CE/G0KQP39T/F2A70CEG0KQP39T.LARGE.jpg>)

Cut and fuse the end of the rope to keep it from fraying.

Finished!



We have a **be nice** comment policy.
Please be positive and constructive.

I Made it!

Add Images

Post

 **wrobe999 (/member/wrobe999/)** 3 years ago [Reply \(C6KMIMLG06SZZ6\)](#)

(/member/wrobe999/) Very nicely done. On mine, which I made long before I ever heard of this website, I did not make a loop at the end. Instead, I left a length of cord and added a bead to represent each of my scouts. It has been a treasured memento of my leader days. I also put in a bolt in the top end to fit my camera to use as a monopod. Both ends are covered with rubber feet from a walker.

flag

 **itslisa (/member/itslisa/)** wrobe999 3 years ago [Reply \(C4VJ2QHGF06ZUFU\)](#)

(/member/itslisa/) Thanks! I posted it because I had quite a few Scout parents asking how I made mine. I prefer it over the leather handgrips they sell at the store. And, I like the loop because I can hang it to keep it from falling. Also, I can clip on a carabiner to attach stuff if I need to.

flag

 **itslisa (/member/itslisa/)** itslisa 3 years ago [Reply \(C3IG6A2GF06ZUG3\)](#)


(/member/itslisa/) oops -- guess I replied as my alter ego!

flag

 **l8nite (/member/l8nite/)** 4 years ago [Reply \(CZLS6P5G0KQFNJF\)](#)

(/member/l8nite/) I did pretty much the same thing but using recycled twine from haybales. I didn't think about adding a loop though, I'll have to remember that for the next one.... nice ible


flag

 **bearmitzvah (/member/bearmitzvah/)** (author) l8nite 4 years ago [Reply \(CWO5IVYG0KQFNKF\)](#)

(/member/bearmitzvah/) Any idea what I did wrong in the steps? Why is all the junk there?

(Yeah - it's my first Instructable)

flag

 **kelseymh (/member/kelseymh/)** bearmitzvah 4 years ago [Reply \(CZAW98QG0KQFNL5\)](#)

(/member/kelseymh/) You didn't do anything. If you click on the individual steps, you'll see that your text is there, just as you'd expect. This appears to be