



"PACK UP YOUR TROUBLES"

By **GREEN BAR BILL**

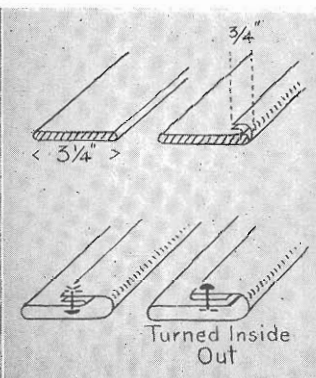
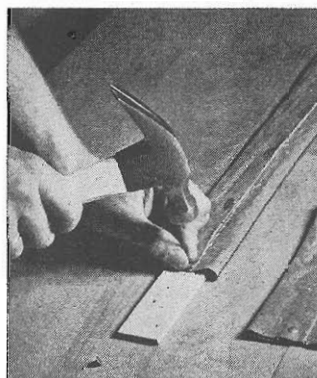
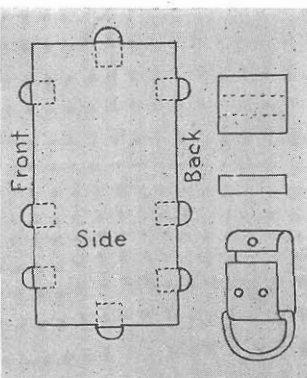
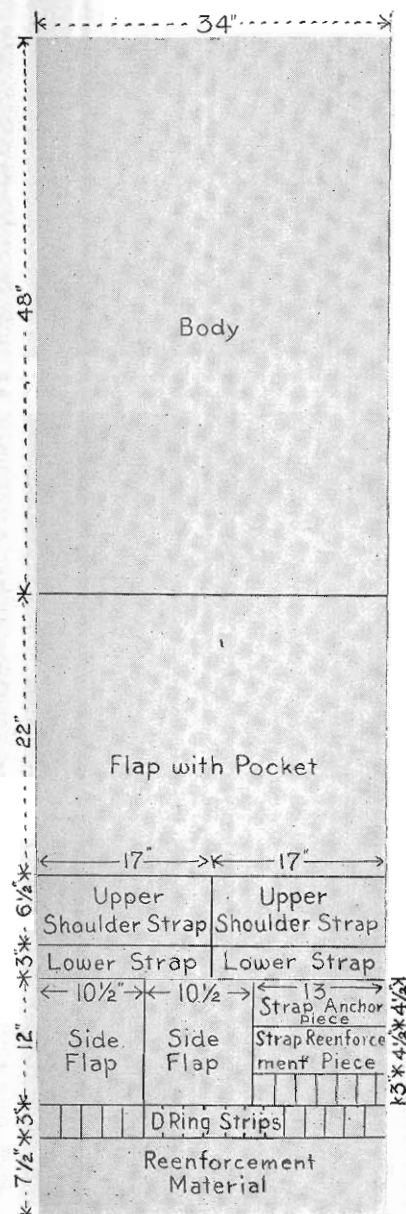
WELL, here it is—the pack you can easily make yourself, without having to borrow the family's valuable sewing machine. As a matter of fact, the **GREEN BAR BILL PACK** isn't sewed at all—it is riveted!

The material required is 6½ feet olive drab or brown 12 oz. duck or canvas, 34" wide. If you can't get material of that measurement, you can, of course, use another width, but in that case you'll have to change the pattern to fit your material. You also need 24 D-rings. In case you have trouble getting D-rings, one-inch galvanized rings will do as well. The pack is riveted together with four boxes of assorted No. 9 split copper rivets (about

200). There aren't many on the market just now, but you should be able to get them locally at a hardware store. Fourteen feet of thin rope or sash cord are used to lace the pack. For tools, use a hammer and a small screw driver.

The **GREEN BAR BILL PACK** is big enough (18"x16"x8") to contain the complete duffle for a long camping trip. For an extra large amount of equipment, the pack can be extended upward another 9 inches.

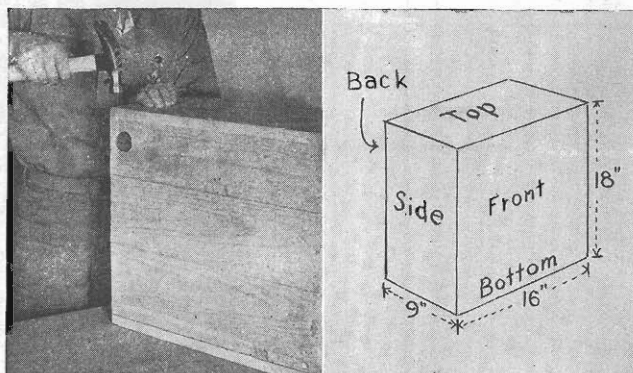
On the other hand, if you are only taking a small amount of gear, the side lacings tighten it into a compact pack, that adjusts to an even size to fit smoothly on the back.



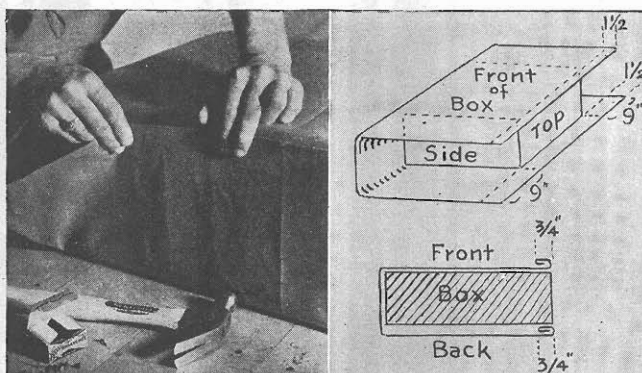
Rivet eight D-rings onto sides of pack, one at bottom, one at top, three at each edge, held in position with pieces of canvas, 2" by 3", folded into ¾" straps.

Make upper shoulder straps over wood strip. Each is 17" by 6½". Fold lengthwise. Fold over ¾" from free edge. Rivet with rivet heads on inside. Turn inside out.

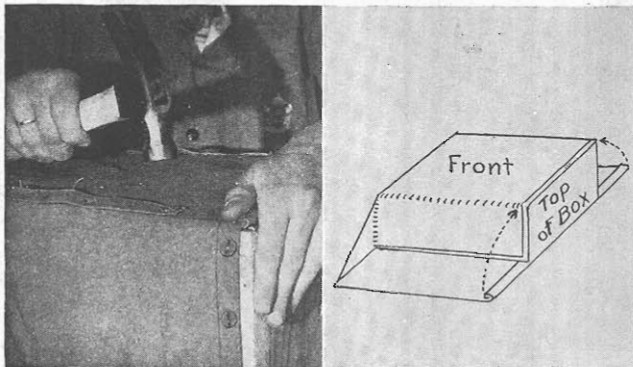
This is one of many reprints of "how-to-do-it" features and program helps that appear regularly in **BOYS' LIFE**, one of your **THREE ASSISTANTS—SCOUTING** and the **PROGRAM NOTEBOOK** help you plan programs, **BOYS' LIFE** helps to put the program into action. A complete list of reprints can be found in your **PROGRAM NOTEBOOK**. They are available only from **BOYS' LIFE** at the cost-of handling price of two cents per copy. Minimum order—ten, of one issue or combination.



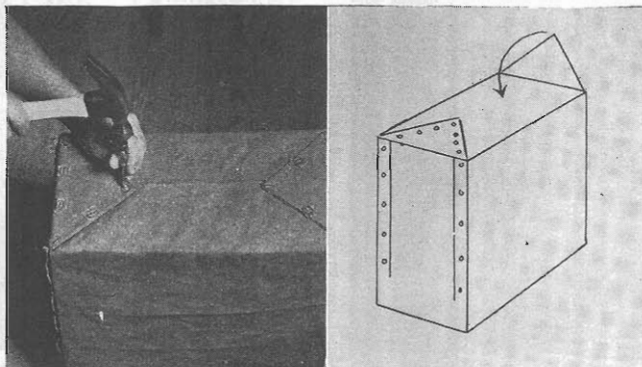
First step is making a form, good for as many packs as the whole Patrol cares to make. The form should be a rather solid wooden box, 18" high, 16" wide, 9" deep.



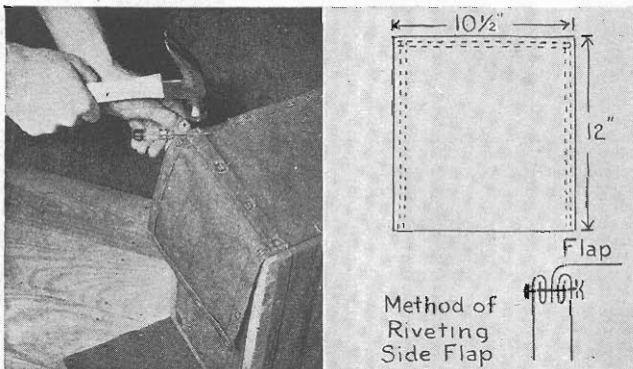
Tack 48" of canvas to box, to protrude 1 1/2" front and back. Fold front forward, back inward, into 3/4" hems. Put rivets in front hem, 3" apart, with the heads on inside.



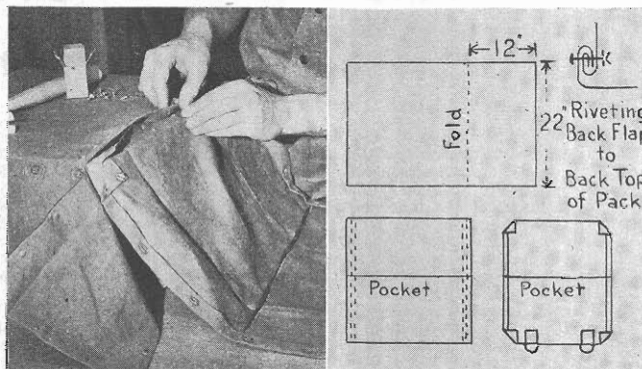
Fasten sides together with two rows of rivets, near edges of form, heads on inside. Place reinforcement strips under burrs. Pack is made inside out, around box form.



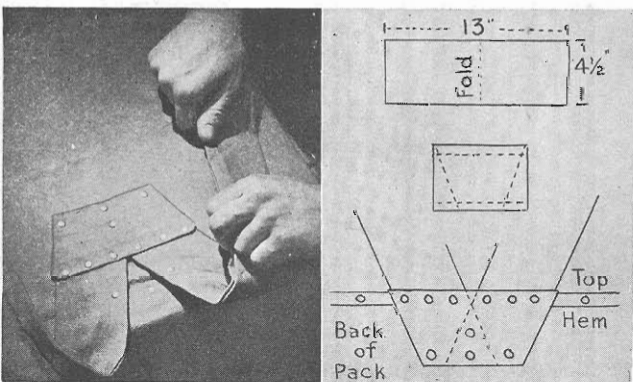
Rivet folds on bottom. Make rivet holes with nail, bring up rivets from below, re-enforce with canvas strip, place burrs. Open rivets with screwdriver, hammer flat.



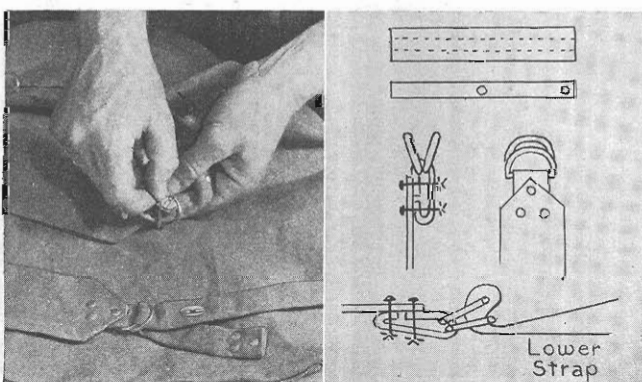
Side flaps are 12" by 10 1/2". Rivet 3/4" double hem on both 12" sides and on one 10 1/2" side. Place unhemmed edge between two side pieces of pack at top, and rivet.



Back flap is 22" by 34". Turn back 12" pocket. Rivet 3/4" side hems. Fold and rivet corners. Rivet free edge into folded top on back of pack. Attach two D-rings.



Cut two patches, 4 1/2" by 13". Fold one 3" wide, 6" at top, 4" at bottom. Rivet over straps, placed at 45 degrees, with other piece, doubled, as inside reinforcement.



Lower straps are 3" by 17". Fold edges to center, then fold together. Rivet. Fasten two D-rings at end of each upper strap. Lead lower strap through D-rings.

The BOYS' LIFE subscription rate is \$3.00. You can subscribe to BOYS' LIFE on the CONCESSION PLAN at half price—\$1.50—Ask your Commissioner or Scout Office for details.



By **WILLIAM HILLCOURT** National Director of Scoutcraft

PHOTOGRAPHS BY MARSHALL SPAAN

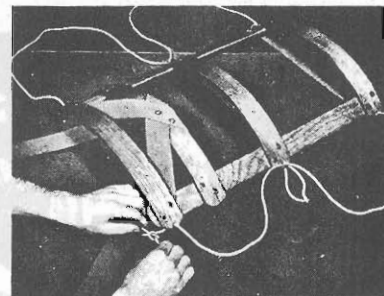
SOME campers swear by pack frames—others swear *at* them. It seems to be a matter of temperament and locality. Pack frames do have these advantages: They are easy to make, inexpensive, can be built to fit the individual backs of longfellows, shortfellows and oddfellows, and can be used for light or heavy loads as the occasion demands.

The **GREEN BAR PACK FRAME** shown on these pages is one of the most efficient of the lot and about the simplest to produce. You will need the following materials for making it:

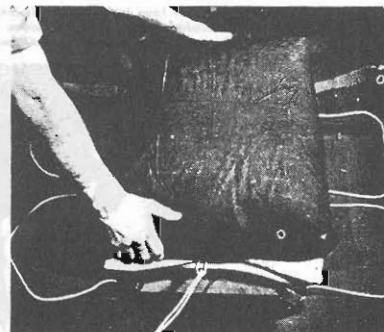
- | | | | |
|-----------------|--|------------------|--|
| WOOD: | 2 uprights 24" long, 1 1/2" wide, 1/4" thick | HARDWARE: | 19 slotted stove bolts 3/4" long |
| | 4 cross pieces 17 1/2" long, 1 1/2" wide, 1/4" thick | | 28 washers to fit the bolts |
| WEBBING: | 2 cross straps 18" long, 1 1/4" wide | | 2 D-rings (or 1" iron rings) |
| | 2 shoulder straps 34" long, 1 1/4" wide | | 2 copper rivets with bars, 1/2" long |
| | | ROPE: | 2 pieces 1/4" rope or sashcord, 5' long |
| | | | 2 pieces 1/4" rope or sashcord, 8' long |
| | | | 2 pieces 1/4" rope or sashcord, about 10' long |

Get some kind of tough wood for the uprights and cross pieces, such as oak, ash or hickory. Pine and spruce split too easily. The strips for the packs in the photographs were cut from left-over scraps of oak flooring.

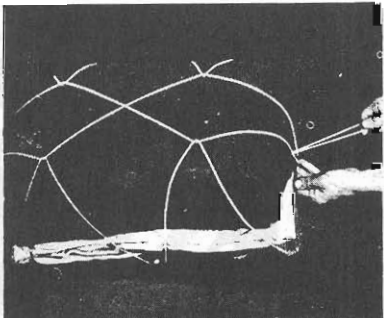
If you have an ambitious Patrol, you'll find it hard to beat pack frame making for a Patrol project. And when you're through, you'll have something you can all be proud of. Then, when every Scout in the gang has his own pack frame, divide the Patrol into a Tenting Crew and a Cooking Crew, as suggested in the *Handbook for Patrol Leaders*, distribute the Patrol equipment among the fellows along the line indicated below—and you're all set to move out and show the world what a smart camping Patrol you are!



Bore holes near the ends of the cross pieces. Fasten the two 5' pieces of 1/4" rope so that they form two loops on either side of frame.



Attach another piece of rope, 8' long, to hip piece, with a girth or a clove hitch. Place pack load. Throw side loops up over the pack.



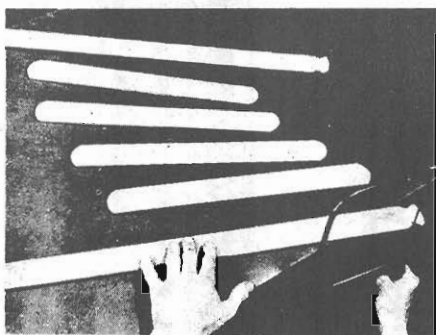
Lace the two ends of the 8' rope into the loops of the other ropes, tightening all ropes around the pack. Finally tie ends to top piece.

<p>Assist. Patrol Leader heads Cooking Crew. Has cook kit.</p> <p>PERSONAL EQUIPMENT COOK KIT (2 POTS-1 PAN) SPADE PROVISION BAGS</p> <p>1</p>	<p>Another Scout of Cooking Crew has other Patrol cooking kit, also brings an axe.</p> <p>PERSONAL EQUIPMENT COOK KIT (2 POTS-1 PAN) AXE PROVISION BAGS</p> <p>2</p>	<p>Two more Cooking Crew members carry rest of equipment including all cloth table cover and canvas pails and basins. The Patrol's signal man takes his signal kit along.</p> <p>PERSONAL EQUIPMENT UTENSIL BAG OIL CLOTH FIRST AID KIT BREAD BAGS</p> <p>3</p>	<p>Two more Cooking Crew members carry rest of equipment including all cloth table cover and canvas pails and basins. The Patrol's signal man takes his signal kit along.</p> <p>PERSONAL EQUIPMENT CANVAS PAIRS CANVAS BASINS SIGNAL KIT SCREW-TOP JARS</p> <p>4</p>
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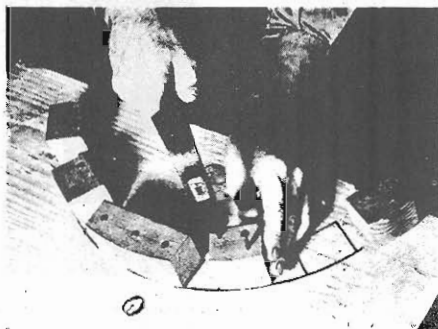
Pack frame has four cross pieces. To be sure that frame will fit you, shoulder piece and hip piece must be spaced correctly. So get your measurement from shoulders to hip.



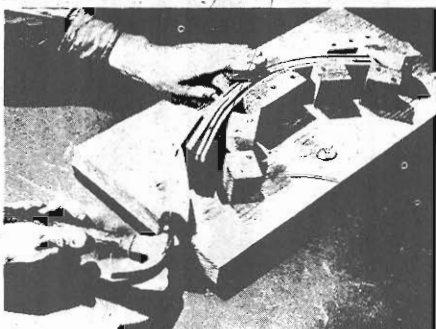
Cut two frame uprights 24 inches long and four cross pieces 17½ inches long. Round all edges, then smooth them with rasp and sandpaper. Cut notches at bottom of the uprights.



Soften the cross pieces for bending by soaking them in water. It will take about 24 hours in cold water, a few hours only if water is hot.



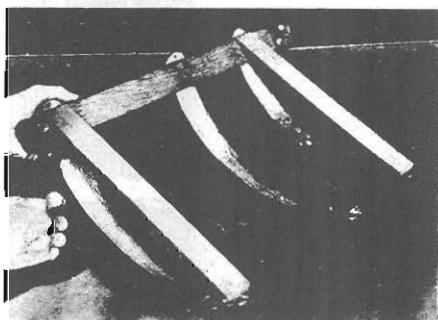
Make a form for bending the cross pieces, by drawing an arc of a circle with a 7½-inch radius on a piece of board. Nail on five blocks, rounded to match the circle's outline.



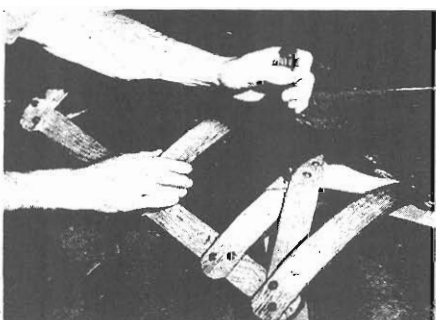
To bend cross pieces, nail three extra blocks to the board, place soaked pieces between these and the original blocks, then wedge cross pieces to shape. Let them dry thoroughly.



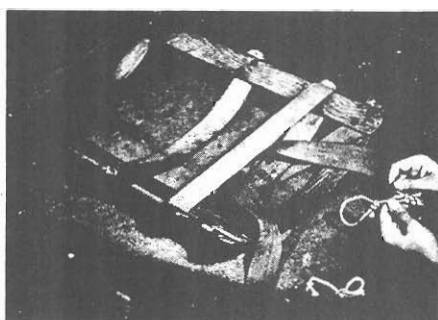
Simpler way of bending is with "C" clamps. A piece of thin wood between clamp and cross pieces keeps clamp from marking them.



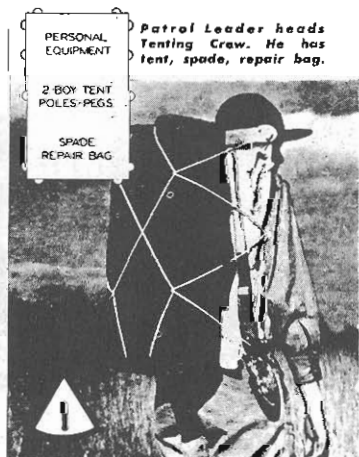
Tack the two 18" pieces of web strap to the uprights, with 2" overlaps, in places where hip and shoulder piece, are to go. Bolt each cross piece to uprights with four bolts, with ½" protruding at sides. Fasten hip piece so that notched



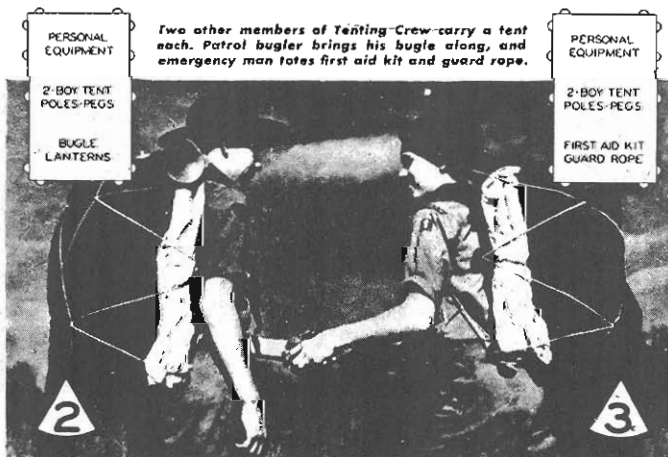
ends of uprights protrude 1½" below it, shoulder pieces next, at right distance above hip piece. Place center piece half way between hip and shoulder pieces. Bolt ends of web straps for carrying under top piece. Cross straps



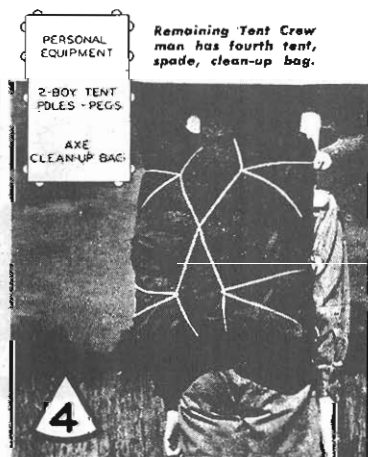
and bolt them to shoulder piece. Rivet D-rings to ends of straps. Attach to rings pieces of thin rope with bowline loops for slipping into notches of uprights. Varnish finished frame.



Patrol Leader heads Tenting Crew. He has tent, spade, repair bag.

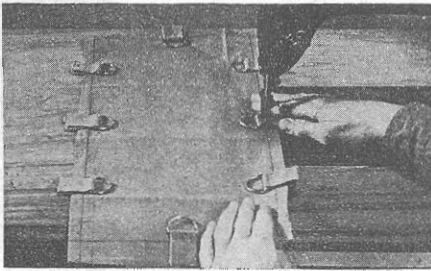


Two other members of Tenting Crew carry a tent each. Patrol bugler brings his bugle along, and emergency man totes first aid kit and guard rope.

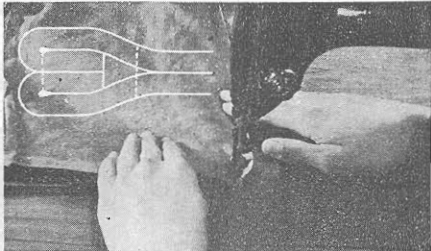


Remaining Tent Crew man has fourth tent, spade, clean-up bag.

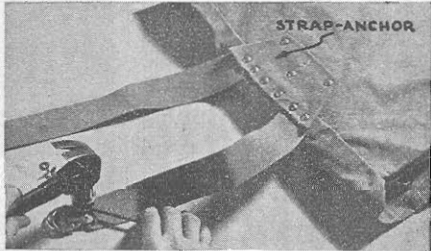
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Lay pattern on canvas, cut out pieces. Fold 2" x 3" pieces into 1" straps. Baste 8 1" D-rings to each side piece.



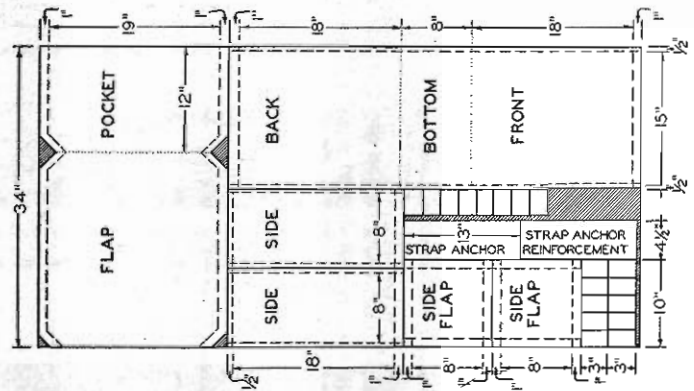
Sew side to main piece with French seam. Rivet seam tops. Fold flap, form pocket. Hem flaps, and sew to top.

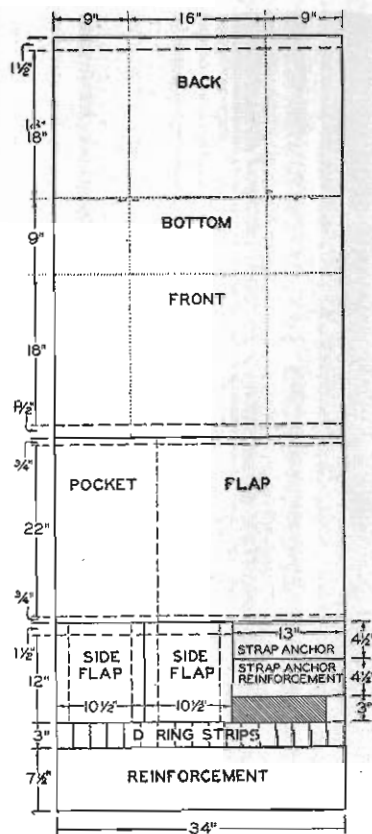


Strap-anchor piece is 3" wide, 6" at top, 4" at bottom. Reinforcement goes inside. Rivet two 2" back straps in place.

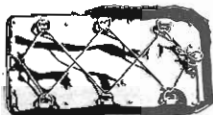


Rivet D-rings to end of back straps. Rivet 2 33" pieces of 1" webbing to bottom, 2" from edge. One end to back strap rings, other to 2 rings at flap corner.





Directions on this page are for riveted pack.



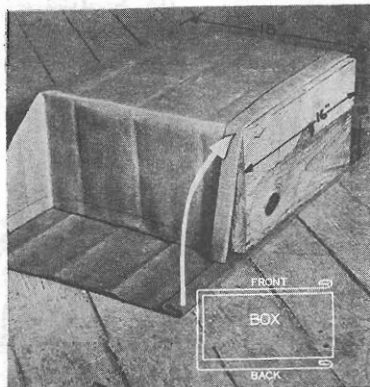
For overnight camping open the lacing, fill your pack, then tighten the lacing.



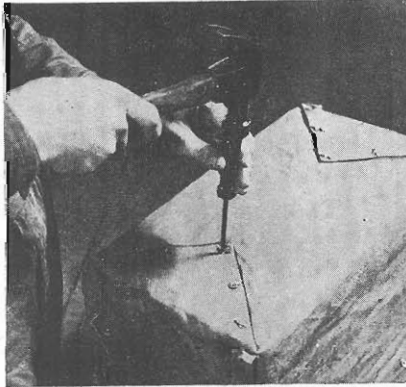
For long camping trips fill pack to capacity, then fit blanket rolls around top.



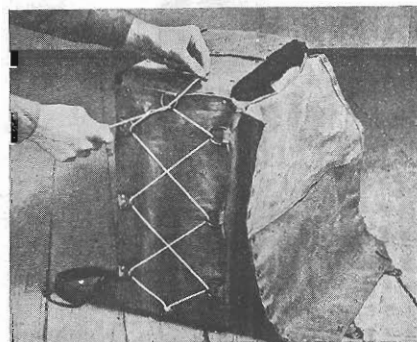
By lacing the sides close together you can turn your Jamboree Pack into a hike pack.



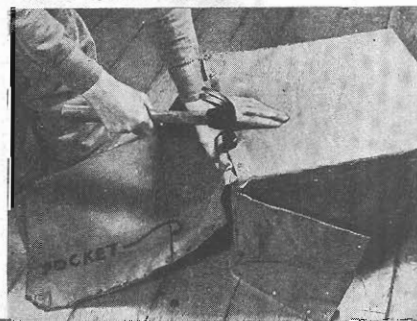
With main piece of canvas over a box, fold 3/4" hems at top and bottom. Fold upper sides down, lower sides up. Rivet front hem.



Rivet triangular bottom folds from inside, place burs, open rivets, hammer flat. Rivet 3/4" hems at three sides of side flaps. Rivet flaps to body.



Rivet straps as for sewed pack. Then rivet eight D-rings to each side. Lace with 1/4" line to desired tightness. Your pack is now completed.



Fold main flap piece to make pocket. Rivet 3/4" hem at sides. Fold, rivet corners. Rivet free edge to folded top edge of back. Attach two D-rings with strap to each flap corner. Turn inside-out.

JAMBOREE CRAFT

*How to make your own
camping outfit for the
Valley Forge Jamboree*

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CAT. NO. 6-70



Lay your route in advance—but don't follow it slavishly. You may run into things that should be explored. Consult, and revise plans.



Leave the main roads as soon as possible, and head cross-country. That's the way to have the most fun and adventure from a hike.



Learn Scoutcraft on your hike. The best place to train in first aid, for instance, is outdoors where you can stage some real-looking "accidents."



If you don't manage to get home before dark, be doubly careful on the highways. Tie white handkerchiefs on right legs, use flashlights.

Hiking Hows

Do you fellows talk about hiking, but do very little about it? Here's the way to get going in your gang.

By **WILLIAM HILLCOURT**
National Director of Scoutcraft

IT'S A CINCH TO turn a Patrol into a hiking Patrol—if you have the ambition to be one!

It starts with a determination, and with pinning down the gang to specifics: "We're going hiking once a month—on every first Saturday, starting from the den at 9:00 A.M., winding up at 4:00 P.M." When that's settled, the next step is to carry through, whatever the weather—and in a short while you'll have built up a tradition of hiking that'll make every fellow proud.

Pick a "big idea" for each of your monthly hikes. Your choice may be a *Scoutcraft Hike*, with the gang setting out to

finish up some of those Second and First Class Requirements. Or maybe a *Tracking Hike*, with a "hare" sent ahead to lay a track, the rest of you following about five minutes later like a pack of bloodhounds. Or what about an *Exploration Hike* into territory where you haven't been before? Or an *Orienteering Hike*, laying the route on the map in advance, and giving each Scout a chance to use map and compass.

Eventually, increase the length of your hikes. Get going on ten-mile hikes for the Hiking Merit Badge. And finally, the big twenty-mile effort—streaking along with an even speed of about three-and-a-half miles an hour and keeping it up!

Then, to get home, tired, but happy, and into a hot tub and clean clothes—what a grand and glorious feeling!



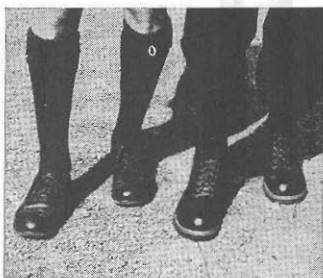
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Preparation and Equipment . . .

Get yourself in good hiking shape by taking short hikes before undertaking a long one; care for your feet; and use well-fitting stockings (wool) and sturdy shoes or boots. In addition to items shown below, your gang will want to bring along equipment for training in some Scoutcraft skill: Signal flags, tracking irons, pioneering rope, or whatever you choose.



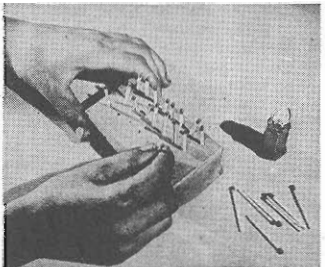
Care of feet is important. The night before a long hike, wash feet, then dry thoroughly. Use talcum or foot powder.



Wear clean socks and sturdy shoes. For average hike, Scout oxfords are fine; for rough going, Scout hike boots.



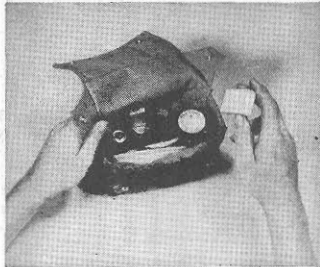
A single pack will take all Patrol hike supplies. Take turns carrying it.



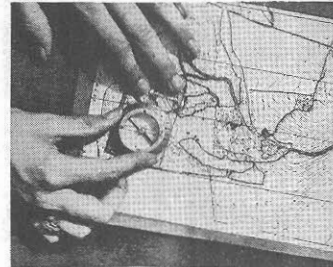
Make a supply of waterproof matches. Cover "strike-anywhere matches" with nail polish. Push 'em in box lid to dry.



Dehydrated hike foods cut down the weight. "Trail Packet" supplies for Patrol take up corner of pack only.



Bring along a first aid kit to take care of possible hike emergencies: Blisters, cuts, scratches, and burns, especially.



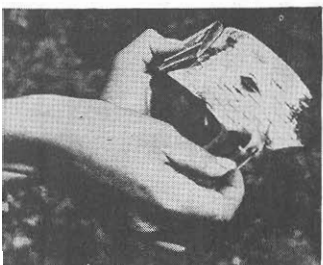
Map and compass are necessary for cross-country. Use official Pathfinder Compass.

Food and Drink . . .

If you're an ambitious Patrol, you'll get out of the sandwich or frankfurter-on-a-stick class as quickly as possible. Plan for a substantial luncheon meal (see your HPL), and experiment with some good new cooking tricks.



"Squaw wood" is dead, dry branches still on the tree. You'll usually find enough to give you the fuel you need.



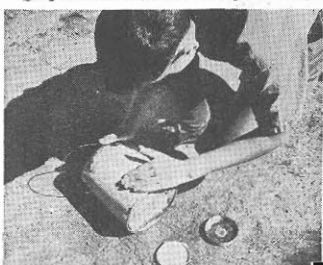
The bark of a DEAD birch makes fine tinder. So also do cedar bark flakes, grapevine bark, dead evergreen twigs.



Safe water is a MUST. Use only tested spring or purify with Halazone.



To get coals for broiling or baking, build a criss-cross fire. It burns down quickly into a pile of glowing embers.



Cover outside of pot (for hot drink or stew) with soap-and-water paste before putting on fire. It is then easy to clean.

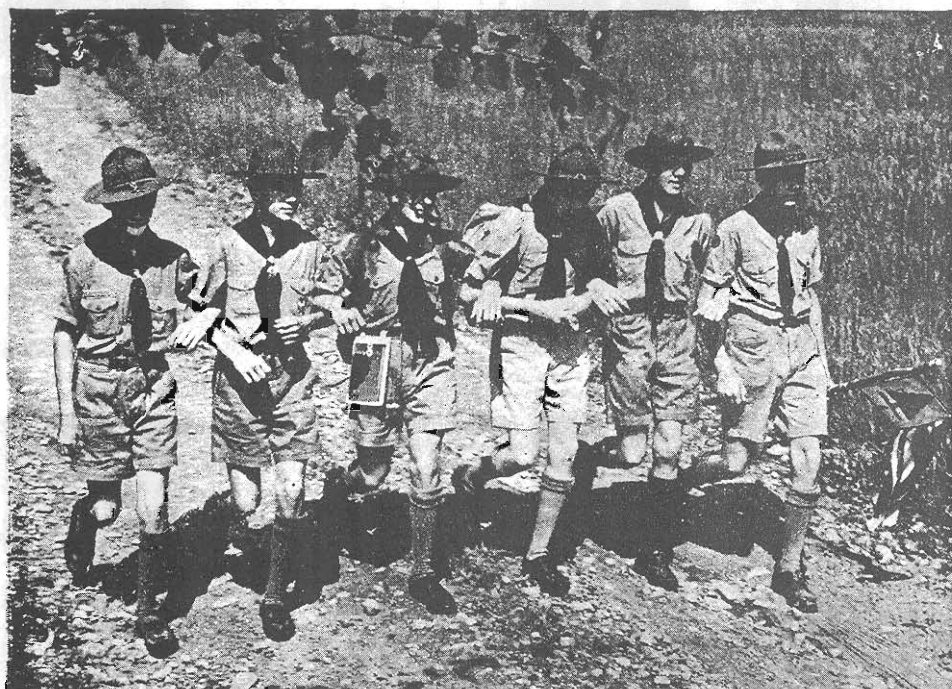


For a single-pot meal, don't build an elaborate fireplace. You can get along with a simple three-stone fireplace.



Try aluminum-foil cookery for biscuits, meats, vegetables, apples or bananas.

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Here is the gang, the famous Lone Pine Patrol, on the last lap of its recent Ten-Mile Hike. From left to right: Bill 2, John (APL), Leo, Bill 1, Bill 3, and Ralph (PL).

Hiking with

Green Bar



FELLOWS, meet the famous Lone Pine Patrol of Troop One! "Troop One of where?" you ask. Sh-h-h-h—that's a secret.

As I was starting to say when I was so rudely interrupted: That Lone Pine Patrol is justly famous. Three of its members are Bills, very confusing, but rather appealing to me, being a Bill myself. But it is famous for more than that—famous for being a real hiking Patrol. Four of its members are on the verge of getting the Hiking Merit Badge (which I consider one of the most desirable in Scouting), and the other two are getting there, too.

Well, the Lone Pines invited me along the other day so that I could see how a real Patrol goes about its hiking. Smart little Emerald Stripe Willie took his camera along, and presents herewith his account of the hike in words and pictures.

Preparing for the Hike

We met at Troop Headquarters—all of us, of course, in full uniform. After all, the Scout Uniform was designed specifically for the out-of-doors, and you really can't beat it for hiking comfort.

Ralph, the Patrol Leader, checked up with John, his Assistant, on the program for the day, and with Leo, the Patrol Hikemaster, on the route that had been planned.

Bill 1, the Grubmaster, and Bill 2, Quartermaster, checked off their lists of foodstuff and equipment and saw to it that everything was there. They had brought two packs along, and all the stuff was put in these packs, to be carried by the fellows in turn.

On the Way

The Lone Pines knew their hiking safety. When a car approached, the gang immediately fell in about

twenty-five feet behind Ralph, at the very edge of the left side of the road, facing the oncoming car. John, APL, was the rear guard.

I also liked the Lone Pine attitude toward signs. "No Trespassing" and "Keep Off" and "Private" meant exactly that to the fellows.

From roads and lanes we soon struck cross-country. The fellows figured out from the map the compass directions ("magnetic azimuth," mind you) they had to take to get from point to point, and each Scout had a chance at leading the rest of the gang. We went through brambles and brush, climbed steep inclines, hiked over high, open fields that gave us a magnificent view of the countryside.

Resting on the Hike

After about an hour of hiking, they took a rest, and made it a real one, lying down flat on the ground, with legs up to get the blood away from the feet. The rest period was short, only about five minutes, but it was thorough, and the fellows were on their way again before a long rest had stiffened up their leg muscles.

There wasn't much drinking of water on the hike. The Scouts knew that too much sipping makes you more thirsty. They had brought Halazone tablets along in their first aid kit for disinfecting doubtful water (two tablets to a quart; let stand 30 minutes before drinking), but they came to a spring of tested water, and didn't have to do the Halazone job.

Time Out for Lunch

We finally arrived at our luncheon spot, and all of a sudden the whole gang was busy.

Two of the fellows unpacked and got the food lined up, two others made a simple fireplace and lighted the fire, two more collected firewood and fetched water. It was a joy to see the speed with which things happened.

What they served was my favorite hike dish, smothered hamburgers—yu-u-um!—(¼ lb. hamburger per person, made into small balls, fried; then smothered with ½ can of undiluted vegetable soup, and heated thoroughly) with bread and butter, followed by a dessert of fresh apples and cookies and fruitade.

You can't beat that for a quick hike meal!

After lunch everything was cleaned up. Paper cups and dishes (no dish washing, yippee!) and other burnables were burned; cans smashed, burned out and buried. Embers and smouldering sticks were doused with water, then dug down. Not a trace was left to show that a Patrol had cooked there.

Returning Home

On the return trip we went in for observation games and nature lore. We identified a few more trees, studied the vegetation at the edge of the lake, discovered what looked like the entrance to a fox's lair, found a box turtle.

And all the time we were clicking off miles. Eight miles—nine—then the home stretch.

The Lone Pines knew that dawdling on those last miles would simply tire them out even more, so they got into Patrol columns, set up a steady marching tempo, and moved along to one of their innumerable hiking songs. We reached headquarters, and the equipment we had used was put back in its place. We lined up for a final quick check by Ralph.

And now, coming right back to you, Mr. Patrol Leader—When is YOUR next Patrol hike?



When they rested, they really rested. They got down flat on the ground with their feet up, for about five minutes.



They played safe with drinking water. They had Halazone with them, but found a tested spring.



The Lone Pine organization for cooking worked smoothly. All hands were at work in a moment, and lunch was soon ready.

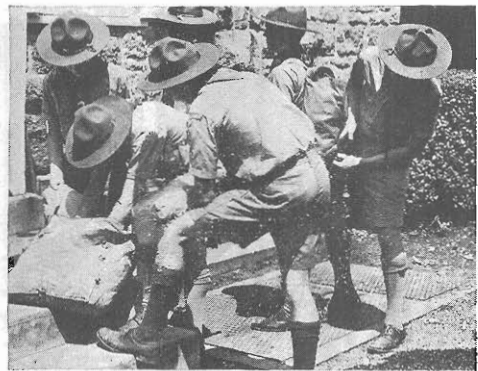
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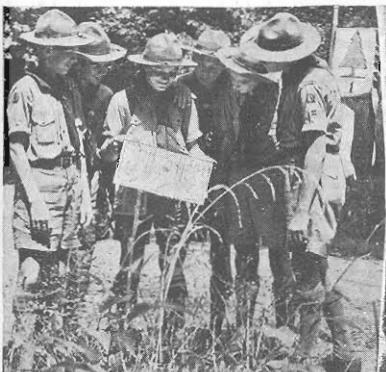
Before the hike, Ralph, the Patrol Leader, checked over the hike route with Leo, Patrol Hikemaster.



The Quartermaster and the Grubmaster were busy laying out equipment and food stuff that was to be taken along.



Equipment and food were packed in two pack-sacks, which were carried by the fellows in turn.



After they had left town, much of the hiking was done by topographic map.



The Lone Pines were careful in observing rules of hike safety. The fellows got into Patrol formation when a car approached.



Signs of "No Trespassing" and "Private" meant exactly that to the Lone Pine Patrol. Ralph was strict on that point.



As soon as possible the Patrol got off main roads and struck out cross-country, finding their way by compass.



The bee line routes took them into wild territory where the boys had to help each other in climbing.



From a high, windswept hilltop the Lone Pines had a marvelous view for miles over the surrounding countryside.



There was time for a few games. The Lone Pines liked games that involved stalking and ambushing.



Nature lore was a favorite. At the lake shore they found sweet flag, pulled some of the roots to chew on way home.



The last mile is the hardest on a Ten-Mile Hike, but the Lone Pines finished up in grand style, singing.

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