

PUTTING STICKS TO WORK IN THE CLASSIC CAMP

Part 1 - Cranes and Hooks

By Steve Watts and David Wescott



Campers of the Golden Age applied their field tested knife skills to the manufacture of a wide variety of camp and trail stickcraft items - from tent pegs and gear hooks, to fire cranes and pot hangers. It's a tradition as old as woodcraft itself.

The woodsmen of old had at their command a large manual inventory of strokes, grips and holding positions

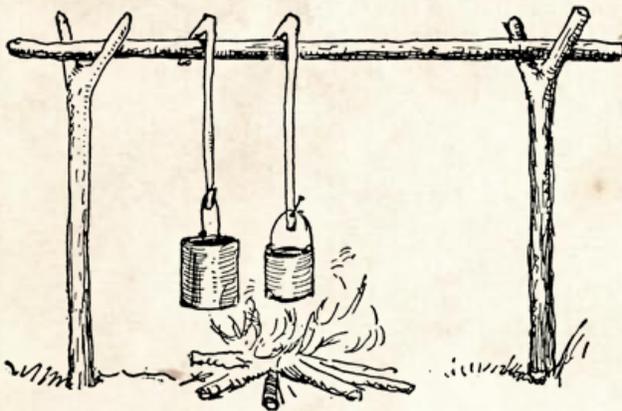
which they applied to a vast array of campcraft projects. And, nowhere is the stickcrafter's work more visible than around the cooking fire. Every woodsmaster of the classic period devoted attention to the carving of pot suspension and hanging devices (from simple to complex). The names for these rigs read like a lexicon from the Tower of Babel.

It's not about the stick.

Fuzz-sticks are items made without end in college camping courses, institutes, and organized camps, but curiously enough are rarely employed in the woods. For they are seldom necessary and always take time. The bountiful forest offers too much easily ignited tinder, to be had for the taking, to justify a fuzz-stick at any time except in wet-weather emergency. The principle of the fuzz-stick is sound and a well-made one is a sample of good craftsmanship, but the objective is to produce a fire in the shortest possible time rather than to display one's whittling ability. Only in parks and semi-civilized areas where conditions are admittedly different than in the wilds would a fuzz-stick be needed under normal conditions. But to knowing how to make one is nevertheless important: ... Quicker and more bush-like than taking time to make fuzz-sticks is merely to use

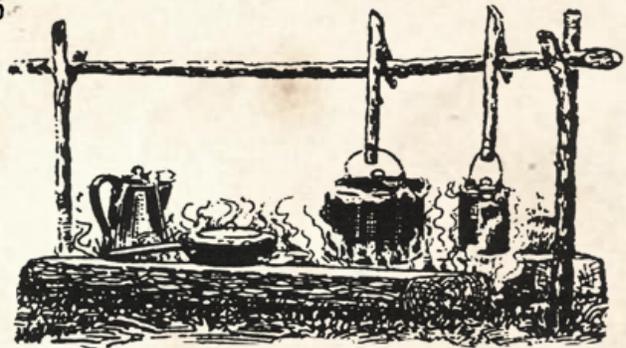
fuzzed-up sticks...This can be done in a fraction of the time required for the complete textbook fuzz-stick. Bernard Mason, 1947.

When viewed in perspective, the renaissance of traditional knifecraft seems to focus more on form than function. Fuzz and Try Sticks are classic examples. Many that are presented via modern media display works of art that surely took a long time to produce. A Try Stick should take no longer than 1-2 minutes per notch to create, and the purpose of the Fuzz Stick is to aid in creating a fire as quickly as possible. The purpose of this article is to create a historic context for the tools used around the cooking fire, as well as locate places that the notches practiced on the Try Stick can be actually applied in camp.



Left: Crane from Ernest Thompson Seton's (Black Wolf) *The Book of Woodcraft*, 1917.

Right: Crane from George Washington Sears' (Nessmuck) *Woodcraft*, 1884.



The Campfire Cooking Crane

The skill of the woodser can be tested in many ways by the simple construction of a cooking crane and its associated pot hangers. There is nothing more worrisome than entrusting ones meal to tools created from sticks. Making a cooking set that will not only support containers, but also last for the duration of not only one, but many meals, requires

the camper to apply every concept of this woodcraft genre to the best of his ability. When creating a suspension system to hang food over the fire, one creates a rig that falls into the category of "Cranes:" all rigs are cranes, but can range from the simplicity of the one stick spit to the complexity of the Australian suspension rig.

Make it properly

When hungry campers want grub, they want it in as short a time as possible with all the character and flavor that only the open hearth can produce. The cook wants to be sure that these trail-made appetites are fed in a timely manner and the rig used to cook the meal won't dump the whole thing into the coals because it was poorly made – even the old masters had stories of disaster created by a poorly made cook set.

While the author was on an extended trip in the blustering North land his party had a pot-claw as crooked as a yeggman [burglar], and as knotty as a problem in higher mathematics. While there can be no doubt that one of the party made this hoodoo affair it has never yet been decided to whom the credit belongs - because of the innate modesty of the men no one claims the honor. This misshapen pot-claw was responsible for spilling the stew on several occasions, not to speak of losing the boiled rice. Luckily one of the party was a stolid Indian, one a consistent member of the Presbyterian church, one a Scout and one a member of the Society of Friends, consequently the air was not blue and the only remarks made were, "Oh my!" "Bless my soul!" and "Gee willikens!"

The cook in despair put the wicked thing in the fire with muttered hints that the fire might suggest the region where such pot-hooks belong. While it burned and its evil spirit dissolved in smoke, the Indian made

a new pot-claw, a respectable pot-claw with a straight character, and a more secure notch. This one by its benign presence brought peace and good will to the camp and showed the necessity of taking pains and using care in the manufacture of even so lowly a thing as a pot-claw. Dan Beard, 1920.

Qualities of a Good Crane.

- Design the set with available resources in mind - straight sticks vs forked sticks, hard vs soft ground conditions, etc.
- Make it quickly
- It must be stable and safe to use
- Make it high and wide enough so it won't catch fire
- You should be able to easily adjust pots up and down and side to side
- Design allows pots to be placed and removed easily
- High enough to be used comfortably without having to stoop over

Etymology of the Cooking Crane / Trammel

How such terms arise and wither they vanish is a problem for the wise; but some are Indian, some few Scotch, some come from the Provinces, and some, with all the savor of their original saltiness, are sea terms, completely naturalized in the forest.

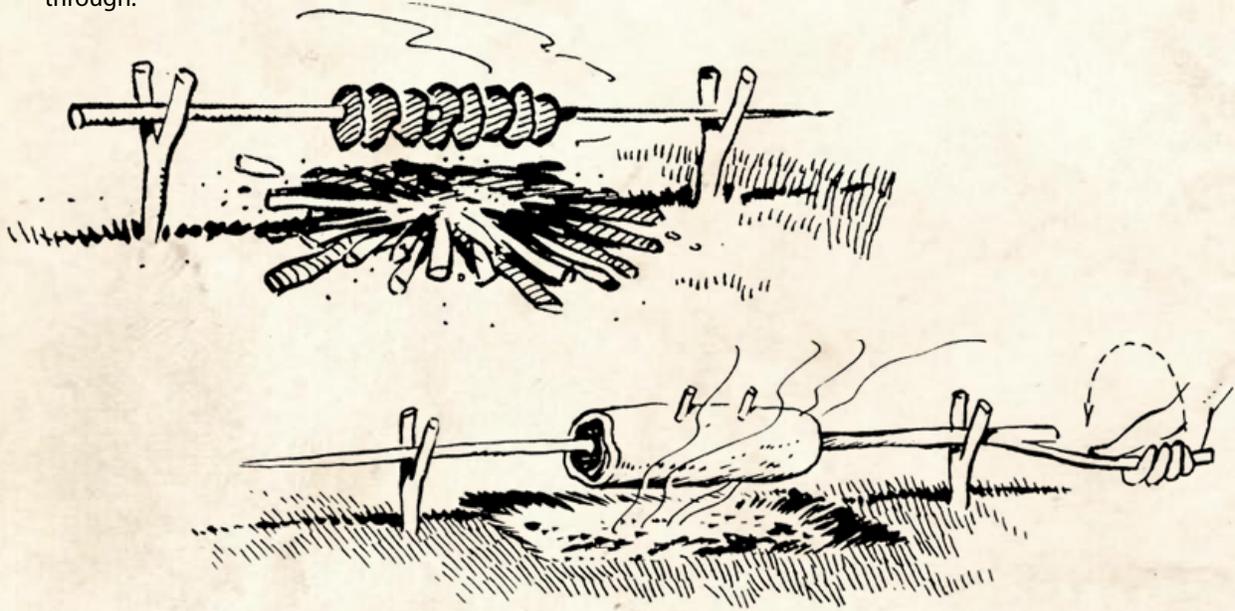
The woods have not so much an idiom as a vocabulary of their own, whose peculiarities are shibboleth to the ignorant, whether they talk or write. And yet for us who speak by nature of "drives," "jams," "peavies" and "wangans," because we know them by no other names and could not express the idea in other terms, there are not wanting those who accuse us of using too technical language.
Field and Stream, 1890.

With a review of historic campcraft books we can create a working language for the parts of the crane system. "Set up a crane and get that water t'bilin' fer our lunch," was the order from the cruster to the greenhorn. After about 10 minutes of feverish crafting, the old salt looked over at the fire and screamed, "That's not what I meant, you useless tenderfoot. All I wanted was a simple saster for a tea stick and you're building a lug pole that would cook enough grub for an army for week."

So, to look at this amazing field of stickcraft and the techniques of working a knife to create our tools, let's start by creating a common language for the notches, hangers and devices used to cook a simple campfire meal.

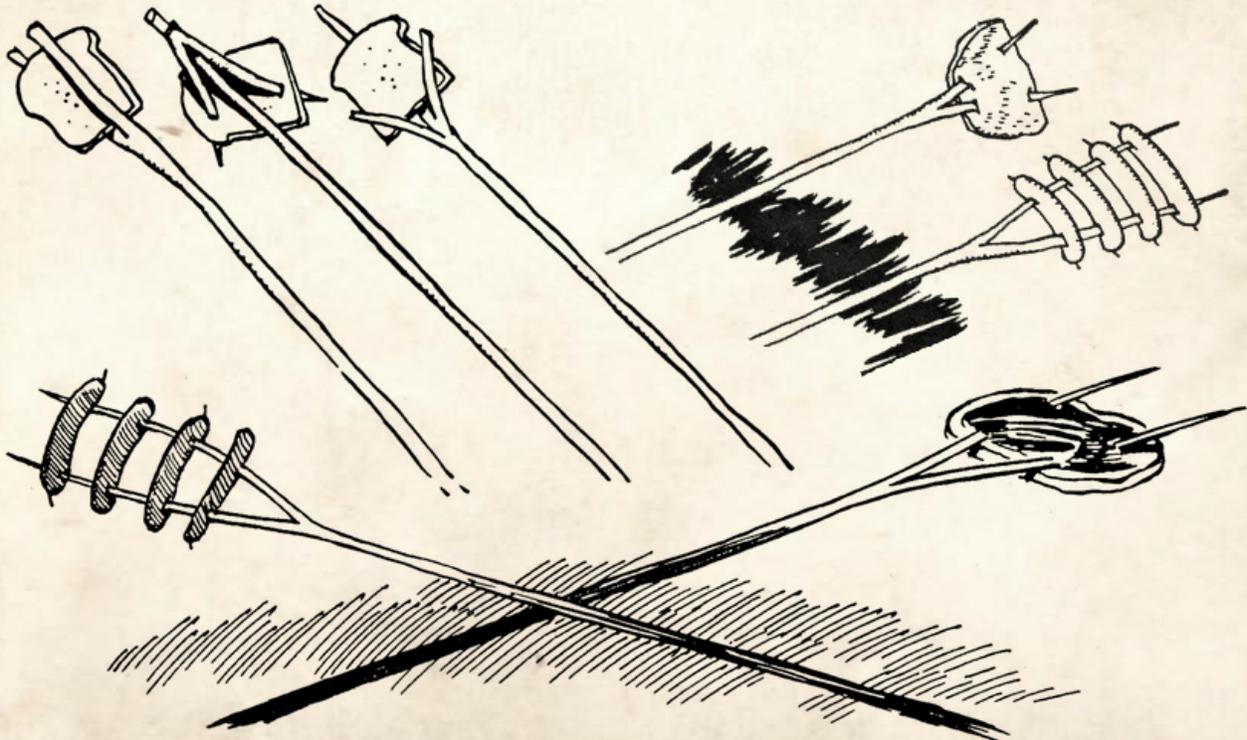
Single Stick Spit

The simplest are the single or forked stick spits. They can be hand-held or suspended over low forked uprights, are quick and easy to make, and if made from green sticks will cook most meals before they burn through.



The Forked Stick Spit

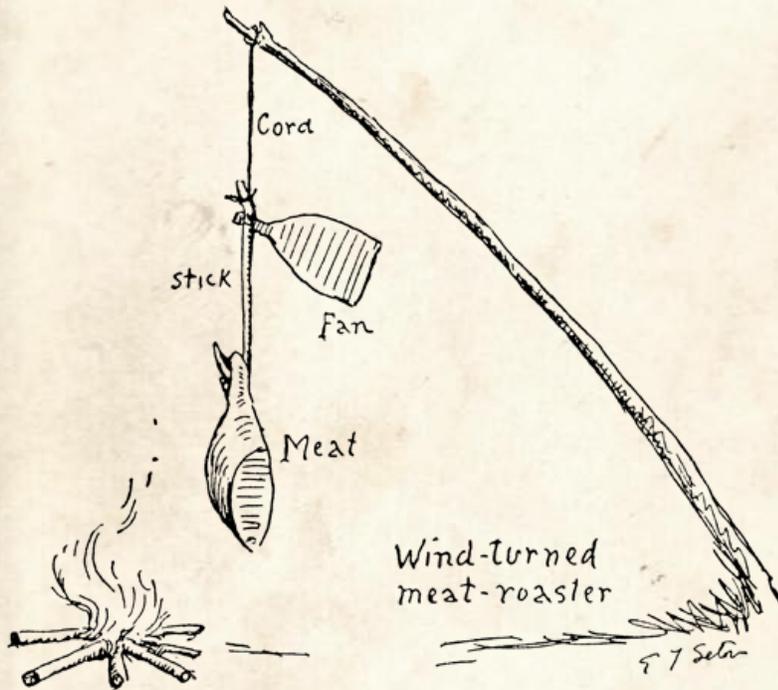
Besides cookers, The Good Old Forked Stick can be used to make countless other camp gadgets, but we'll save those for Part 2.



Illustrations - Bernard S. Mason. The Junior Book of Camping and Woodcraft, 1943

Dingle Stick

A single stick used to suspend meat over coals. It's regularly illustrated by many, including Mason, and Beard. Seton even adds a wooden fan to help rotate the food over the fire. It can be suspended from a single pole using the same anchor system as those shown in the Stew Pole photo, or a horizontal lug pole.



Left: Ernest Thompson Seton's dingle stick. *The Book of Woodcraft*, 1917.

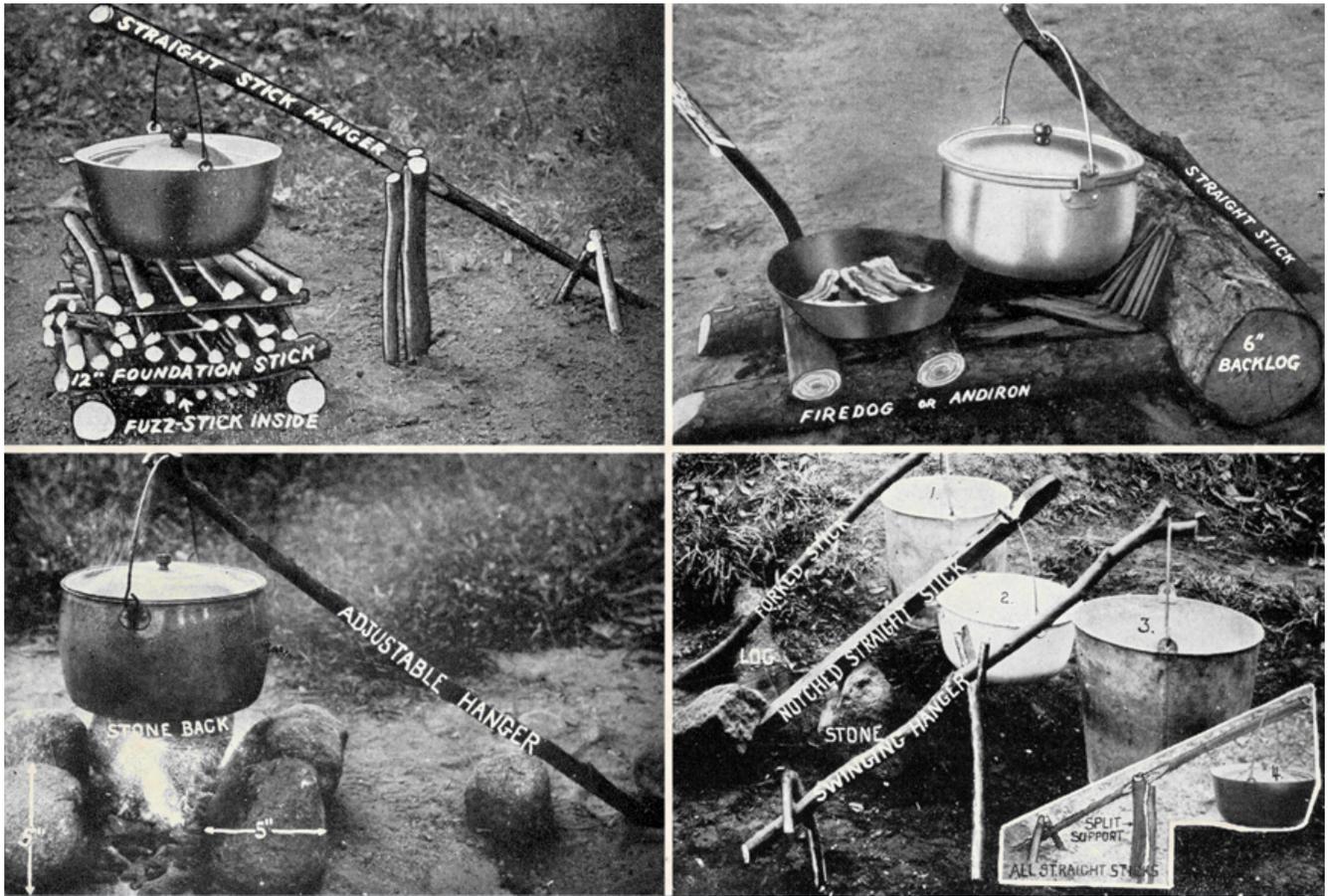
Right: A dingle string hung from a lug pole. *F.H. Cheley and G. Cornelius, Camp and Outing Activities*, 1917.

Tea Sticks

Ellsworth Jaeger classified single stick hangers as Tea Sticks. Whether the sticks are short and rigid or long and flexible, subdivides them even further as Stew or Saster Poles.

Stew Pole - This is the short/rigid pole that suspends a single pot. The literature calls them by a variety of names, including **Wambeck** and **Waugan** sticks, originating from northeastern lumbermen. The term **Spygelia** has native roots in the northeast as well, but hasn't been reinterpreted by Anglos as much as the previous two. Beard spells it **Speygelia**, and says it's a long name for a short implement. He refers to it as the tool that cowpunchers used as a cooking rig where wood was scarce. It could have a forked or notched tip.



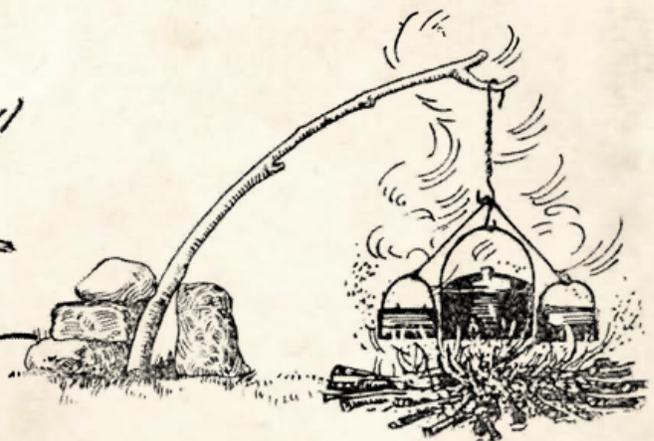


Photos of various Stew Poles
Games and Recreational Methods; Fires and Fire Making by Charles F. Smith, 1953.

Saster Pole - Sasters are the long/flexible pole rigs used to suspend a single pot popularized by modern Bushcrafters. Kephart tells us the term comes from Romany Gypsy: modern iron Gypsy hooks can be adapted to suspend 3 pots at once. The tip can be forked, notched or tapered with a depression carved into it, such as the one found in the **Burtonsville Rig** (see next page).



Saster propped on a waigan stick.



A Gypsy Saster with a modified pot hook.



Saster poles – one with a hook and one with a stone weight. Both suspended on prop sticks.
Bernard S. Mason – The Junior Book of Camping and Woodcraft, 1943.

The Burtonville Rig.

So popular with modern Bushcrafters, it was first published by Mors Kochanski in 1987. When asked where it came from, Mors said he camped a lot on Burtonville Island located in the north fork of the Saskatchewan River, east of Edmonton. It was a popular site for Scout troops to camp, and this rig was one that was left erected (bad form according to Kephart – “it brings bad luck to leave

the waugan or spygelia standing” and Mason – “the Night-spirits will trail you with ill luck the rest of your days.”). Mors was so impressed with it he started using the design in his own camps and included it in *Northern Bushcraft*.



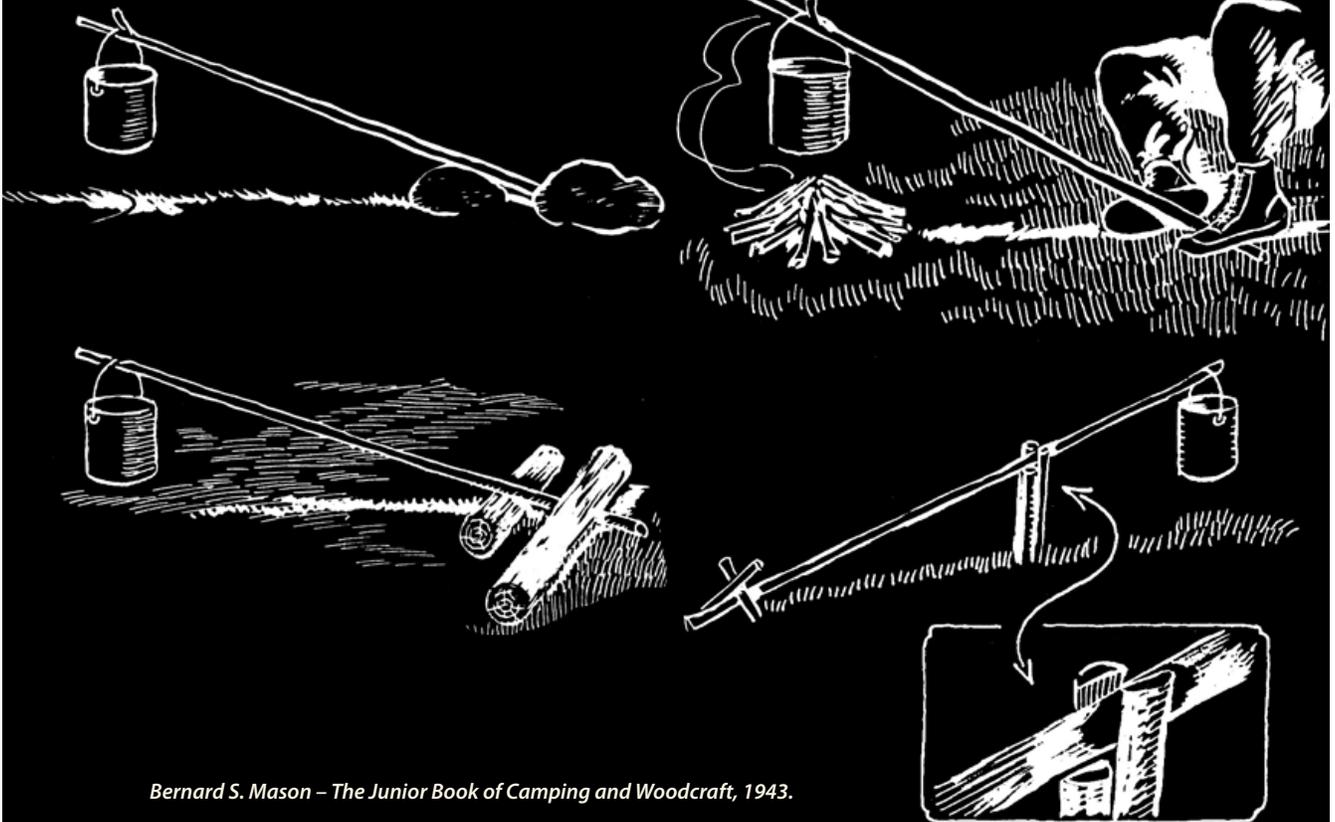
Left: The Burtonville Saster ready to boil up a pot. The pot is low and close to the fire for a quick boil, and raised up for simmering.



Right: Steve Watts explaining the use of the Burtonville Rig.

Tea Stick Anchors.

Use rocks, logs, forked or branched prop sticks, hooked sticks (Down Hooks), crossed stakes or a waugan/lug pole on fire dogs or uprights. A log on the fire side of the stick can be moved in and out to raise and lower the pole.



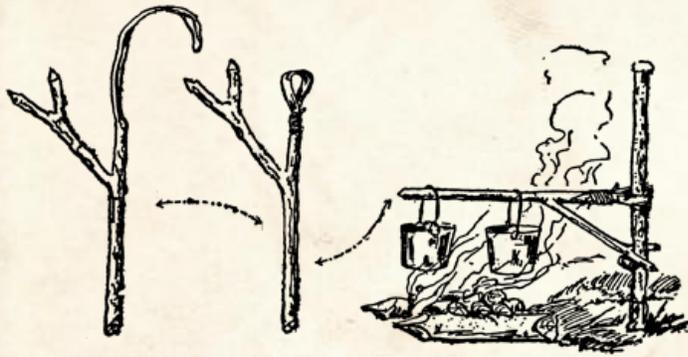
Bernard S. Mason – *The Junior Book of Camping and Woodcraft*, 1943.

Swing-Arm Cranes

These are the old-fashioned pivoting fireplace cranes that are seen in many classic woodcraft illustrations. It's romantic, but hardly more practical than any other rigs, unless displaying your woodcraft skills is the goal.

It is listed in the literature as, "a rustic method – not the most practical or safest."

The Vic Aures Crane (Victor Aures studied at the Buffalo School of Fine Arts with Dan Beard),
The Gantry and **The Fireplace Crane** are examples of Swing-Arm Cranes.



Above: The Aures Crane from *The American Boy's Handy Book of Camp-lore and Woodcraft*, by Daniel Carter Beard, 1920.



Right: A Swing Arm Crane from *Games and Recreational Methods; Fires and Fire Making*, by Charles F. Smith, 1953.

Lug Pole Cranes

This is the iconic rig shown in most books from Nessmuk to Mason. It's designed to accommodate multiple pots at varying heights. The uprights may be fashioned with straight, tapered or forked poles, or tripods on each end of the horizontal pole. (See *'Tripods and Uprights'*, right.)

The most common name for the horizontal bar is the Lug Pole, but more currently it's called the crossbar or cross stick – practical but unromantic.

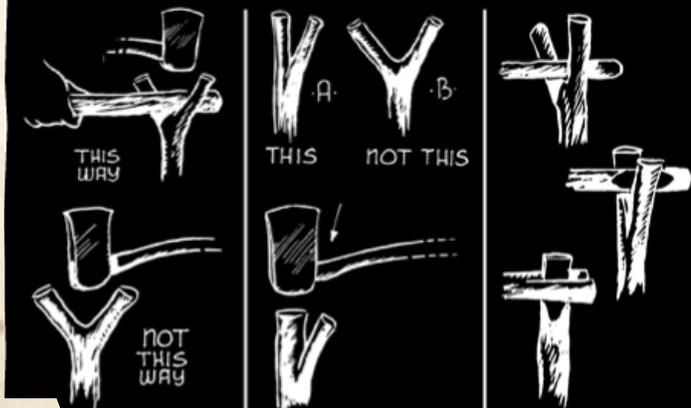
Spunk-Hugans or Waugan Stick are what Mason says are an obvious corruption of native language made by Allagash rivermen, from words like *kitchi-plak-wagn* or *chiplok-waugan* that were used in older texts.

The Billy Stick used by Graves reflects the hanging system used for the Australian Billy Can. The Rackan is a horizontal bar or chain that hooks onto the lug, providing an adjustment rig similar to a trammel hook.

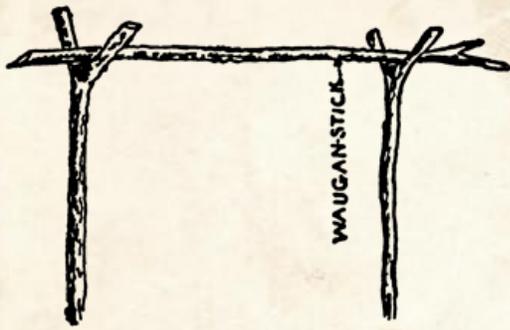
Lug Poles and Waugan Sticks may also be suspended across tripods or laid on Fire dogs/andirons/hand-junk providing a pole to balance the handle of the bannock pan.

Tripods and Uprights.

- Tripods may be used for hard ground, and upright posts can be driven into soft ground. Prep the ends and trim the point while the stick is cut to length.
- When 2 tripods are used, the weight from the pole and pots will lift one leg of each tripod off the ground and make the rig unstable and tippy. Clip the top of the center leg to stop it from tipping.
- Upright ends may be forked, split, notched or tapered. The ends of the lug pole are prepared to match the type of upright end used. All of the old works recommend using forked rather than Y-shaped posts so they can be driven into the ground. Bind split ends to prevent additional spitting.



Bernard S. Mason – *The Junior Book of Camping and Woodcraft*, 1943



Above: The Lug Pole Crane and horizontal Waugan. *The American Boy's Handy Book of Camp-lore and Woodcraft*, by Daniel Carter Beard, 1920.



Right: The Lug pole with split-end uprights. *Games and Recreational Methods; Fires and Fire Making*, by Charles F. Smith, 1953.



Photo - Jennifer Mancke

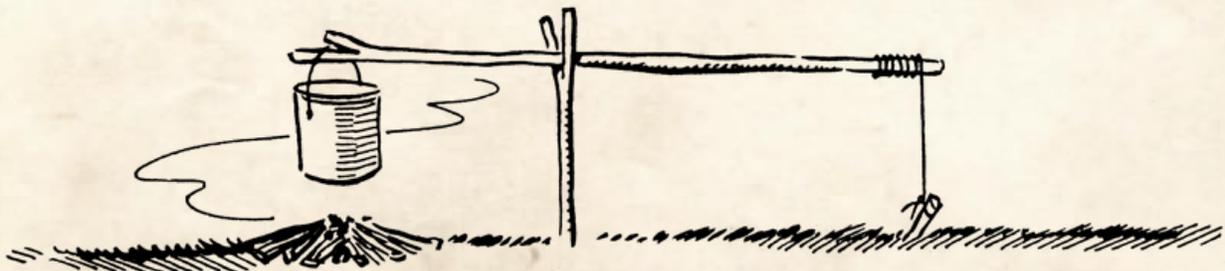
Left: Crane end using two well-known notches. The Lug Pole has a mid-shaft square taper, and the upright has been split using the Hafting Notch.

Even a simple item like a stake or a peg must be cut properly, and if it is to be driven into the ground it must have the head beveled and the toe properly pointed.
Richard Graves, *Bushcraft*, 1972.

When preparing the end of a stake to be driven – like an upright stick for a crane – Mors recommends that the bevel on the edge takes about two thirds of the diameter of the stick, with the remaining third being the flat spot for pounding.

“Poles” are for horizontal bars.
“Sticks” are for vertical hangers or uprights.

Suspension Rigs



Australian Cooking Rig.

Suspension Rigs - These are well represented by what Graves and Kochanski call:

Australian Cooking Rigs - They are primarily used for large, heavy pots needed for group cooking. They are great for producing large amounts of food for as many as 30+ people and allow the height to be fully adjustable in a safe manner.

They consist mainly of long poles laid across forked sticks, split sticks or lug poles. Their rear ends are anchored by adjustable ropes or hooks, and moved up and down to raise and lower pots – hence the name “rig”. A safety point to consider is that the closer the balance point is to the anchor, the more stress is created on the anchor.

Tripod Rigs – Chippewa Kitchen or Ojibway Cooking Tripod - Hooks can be suspended from the apex of the tripod or from lug poles that are connected to 2 of the legs. Tripod or quad-pod bases can be made with horizontal lugs. Functional examples of this design are used regularly by Jack Mountain Bushcraft.”

The Pothook

The carving of pothooks (both the notched and forked varieties) is a good place to start the application of practiced knifecraft to real-world camp situations. With the use of these basic cuts, many other woodsy projects can be manufactured. A few additional cuts and notches then opens the door to the crafting of many more.

Efficiency of effort can be achieved by combining sizing and shaping cuts together. For example: when cutting a pothook to length, the severing cuts can also be the shaping cuts (on one end) and

the crowning cuts (on the other). Practiced techniques applied to specific needs result in fewer strokes.

Mostly you will want sticks, either for pegs, stakes, forks or hooks and these generally can be cut from windblown branches close to the site of your camp. It is always preferable to use dead timber rather than growing wood. By using dead (but not rotten) wood you are clearing the forest floor of debris, and by avoiding cutting green wood you are helping to conserve the forests. Richard Graves, Bushcraft, 1972.

Making the all-important pot-hook cut.

Photo - Jennifer Mancke

Etymology of the Pot Hook / Hanger / Crook

It is curious how many different names have been bestowed upon the hooks by which kettles are suspended over a fire. Our forefathers called them pot-hooks, trammels, hakes, hangers, pot-hangers, pot-claws, pot-crooks, gallows-crooks, potchips, pot-brakes, gibs or gib-crokes, rackan-crooks (a chain or pierced bar on which to hang hooks was called a rackan or reckon), and I know not what else besides. Among Maine lumbermen, such an implement is called a lug-stick, a hook for lifting kettles is a hook-stick, and a stick sharpened and driven into the ground at an angle so as to bend over the fire, to suspend a kettle from, is a wambeck or a spygelia — the Red Gods alone know why! The frame built over a cooking-fire is called by the Penobscots 'kitchi-plak-wagn', and the Micmacs call the lug-stick a 'chiplok-waugan', which the white guides have partially anglicized into waugan-stick. It is well to know, and heresy to disbelieve, that, after boiling the kettle, it brings bad luck to leave the waugan or spygelia standing.

Right: Assorted hooks on a lug pole ready for cooking.

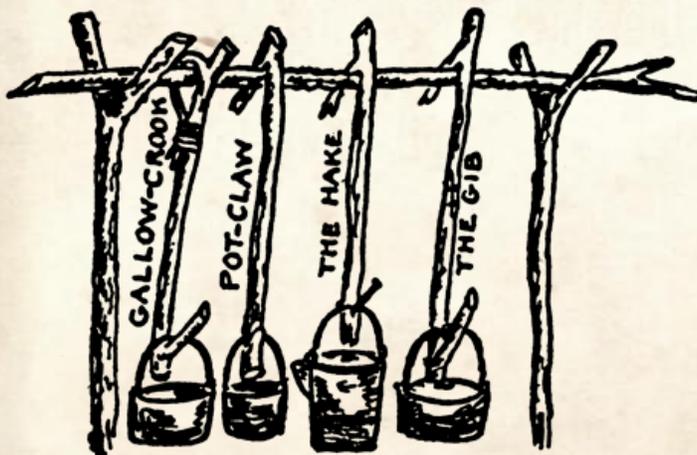
If this catalogue does not suffice the amateur cook to express his ideas about such things, he may exercise his jaws with the Romany (gipsy) term for pot-hook, which is 'kekauviscoesaster'. Horace Kephart, 1917.



Photo - Jennifer Mancke

With a little bit of creative categorizing, and going back to the classics, all of the terms used to define a pothook can be boiled down to 4 primary types; Notched Hooks – single and multiple, Pegged Hooks,

Lap-Joint Hooks, and Wrapped Hooks. Kephart, Beard and Mason all call them *The Claw, The Hake, The Gib* and *Gallow Crook*. Beards and Mason's illustrations are included.



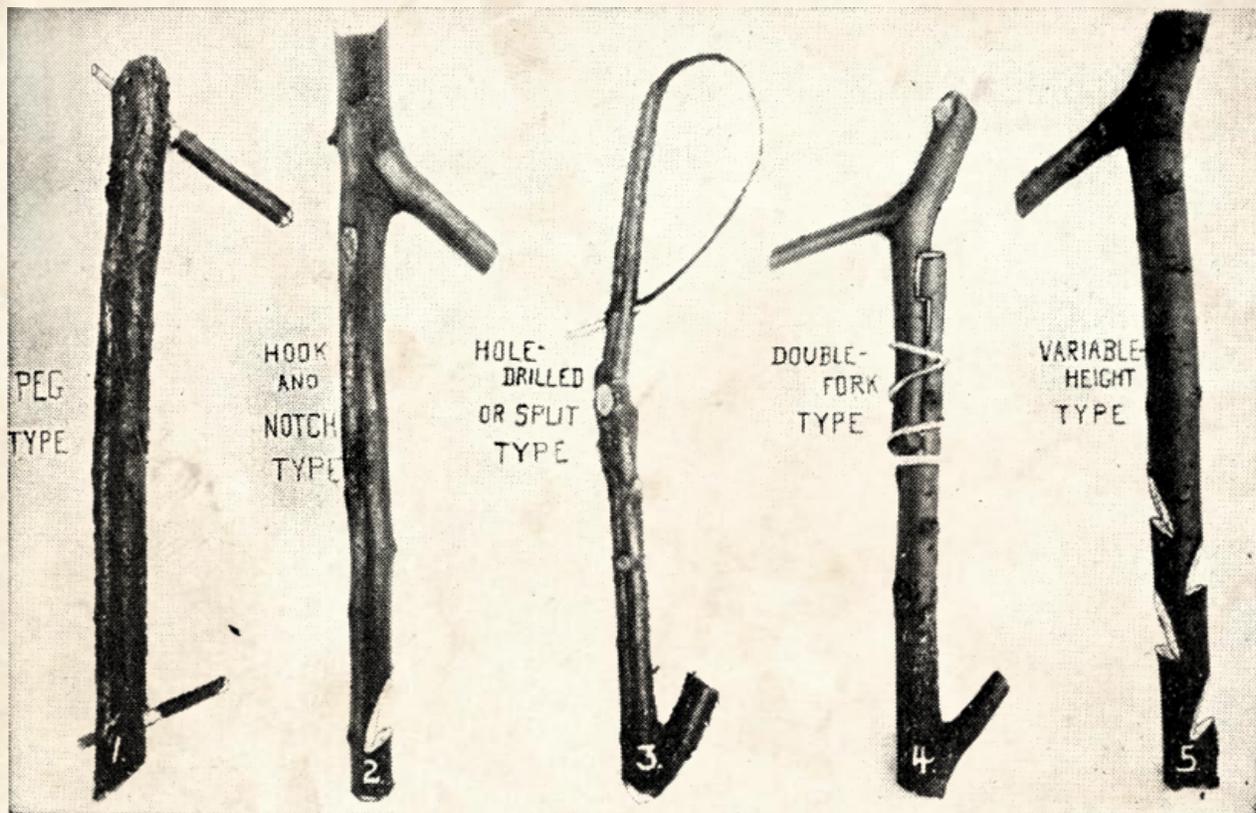
Left: The Lug Pole Crane with assorted pot hooks

The American Boy's Handy Book of Camp-lore and Woodcraft by Daniel Carter Beard, 1920.

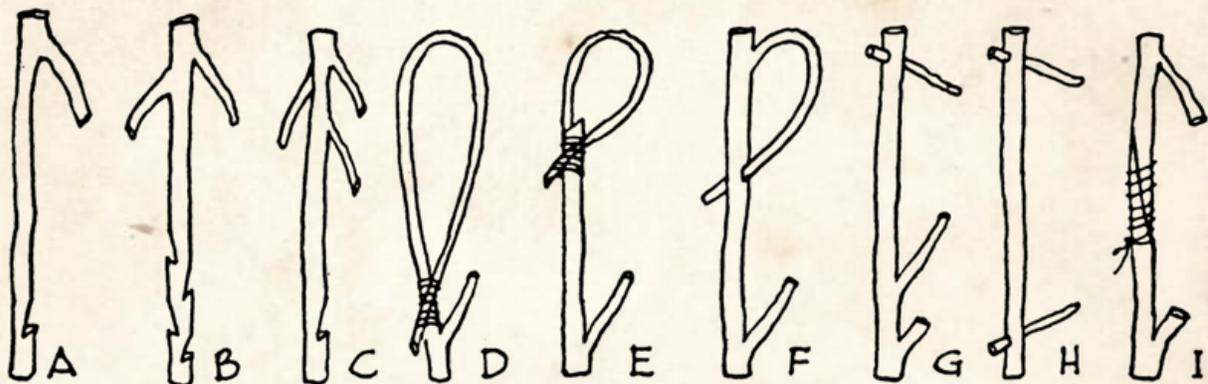


Right: The Lug Pole with a variety of hooks and pot arrangements.

Games and Recreational Methods; Fires and Fire Making by Charles F. Smith, 1953.



Above: Pot Hook Categories:
 1 - Hake/Pegged, 2 - Claw/Hook, 3 - Gallows, 4- Gibbet, 5 - Multi-Notch.
Games and Recreational Methods; Fires and Fire Making by Charles F. Smith, 1953.



Above: A - Claw/Hook, B - Multi-Notch, C - Multi-Hook, D, E, F - Gallows Crook,
 G, H - Hake or Pegged Hook, I - Gibbet or Lap Joint Hook.
Bernard S. Mason - The Junior Book of Camping and Woodcraft, 1943.



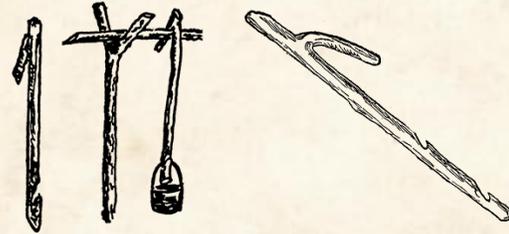
Notched Pot Hook / Hanger / Crook

Lug Stick – most commonly used term by far.
Wangan Stick – corruption of Waugan or chiplok-waugan.
Pot Claw – the real buckskinner and sourdough hook.
Pot Brake, Billy Sticks, Bail Hooks, Spunk-Hungan.

Double Boiler Hook – 2 notches will accommodate 2 pots, one inside the other, maximum 3 notches.

Multiple Notch Hooks – Bartonsville hook with a saster or top attachment loop rig.

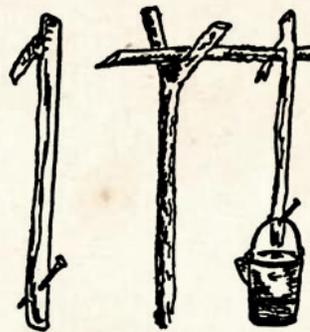
Trammel also Rackan Crook – some primitive chimney rigs were called trammels. It generally refers to an adjustable rig, not a fixed bar.



Pegged Hooks

Hake – uses a nail as the bottom hook. From old world languages referring to a hook or hooked jaw.

Pot Chip, Chip Hook – this is the Pegged hook. A hole is cut through the reduced branch to accept the angled peg. Possibly referring to Chippewa.

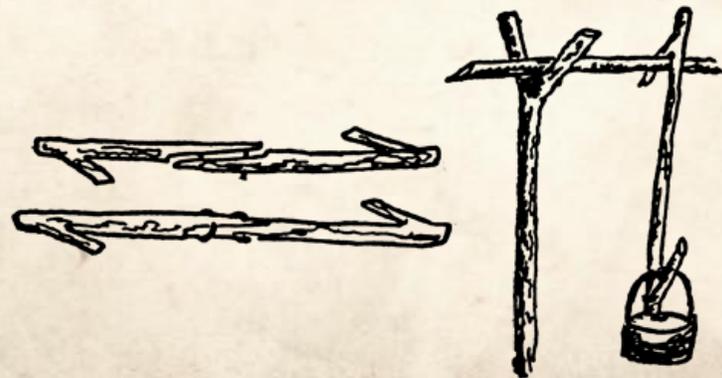


Lap-Joint Hooks



A Gibbet and Lap-Joint hook.

Left: The one on left will be nailed or lashed together. If it's tied, there needs to be a reduction section for the lash in each shaft so that they can't be pulled apart under load. **On the right,** the Lap-Joint hook, still needs a notch for the cross shim that will hold them together.



Gig or GibCroke – from Gibben which includes a variety of executioners devices. The tapered ends overlap and are nailed or lashed together.

Lap-Joint Hooks - wedged or notched joint ends. Overlapping ends are lashed or friction-wedged in place.

Scandinavian Pot Hook – wedged Lap-Joint. Lap-joint ends – notched and lashed or friction wedged.

Wrapped or Pierced Hooks

Gallows Crook or Hook - tapered end is bend and wrapped around the hook shaft.

Split Loop Hook – end tapers and is flexible - tip loops and pierces the shaft. Used mainly when sticks are smaller and more flexible.

Split Y Hook - the shaft splits and is pierced by a horizontal peg.

Even though wrapped hooks have the advantage of being made without tools, the main problem with them is that they need to be made well or they can come apart. They are also difficult to adjust as they cannot be taken off the fire without removing the lug pole.

Hook Arrangements – The fork may be on top with notches pointed up, or the fork may be on bottom with notches pointed down – the later requires the hook to be attached by a wire or string loop wrapped around the Lug Pole (see below).

A straight-stick pothook eliminates the need for hooks of various lengths. Multiple upper notches face downward and one pot notch at the bottom faces upward. This also requires a wire or rope loop around the lug pole.

Wire Loop – slides easily on the pole.

Rope Prussic Loop – works better than tying a loop in place.

A straight-stick pothook suspended on a tilted pole with a depression carved in a tapered end with multiple notches for adjustment is called the Bartonsville Rig.

Pots for hot water, stews, coffee, and so on, are more manageable when hung above the fire. The heat can easily be regulated, the pots hanging low at first to boil quickly, and then being elevated or shifted aside to simmer. These pot-hooks are to be of different lengths so that the kettle can be adjusted to different heights above the fire, first for hard boiling, and then for simmering. If kettles were hung from the lug-pole itself, this adjustment could not be made, and you would have to dismount the whole business in order to get one kettle off.

Horace Kephart



The great thing about classic skills is that when you do them you are recreating the past. You are making the same motions to create the tools needed to solve the same problems encountered by campers in the past. Recreating the cranes and hooks from this article is important because it keeps the skills alive. Knowing their history is important because it gives them context – who were the originators, who used them, who documented them and kept them alive for you to learn so you may use and teach them to a new generation. These skills did not come from

nowhere, and few are contemporary inventions. When asked, Mors Kochanski said, *“When I wrote Northern Bushcraft, I drew on all of the best books from the past and collected the best ideas I could find in order to create the most comprehensive book possible. This would make it hard for the next person to come along to outdo what I had compiled. In regards to the skills, if I did anything original it was to make them as practical as possible for use in the bush under real conditions; but I have always credited those who originated them.”* We should learn from that example.

Pot Hook Dogma.

Do the hook and notch belong on the same or opposite sides of the stick?

Graves – *“It is preferable to suspend the billy on the side opposite to the hook.”*

Beard – Referring to the Gallows Hook – *“You will notice that the lower fork is upon the opposite of the main stick from which the switch prong of the upper fork springs. This arrangement is not necessary to make the pot balance properly over the fire: the same rule holds good for all the other pot-hooks.”*

But, then he says in a footnote – *“The pots will balance better if the notches are on the same side.”*

Also, all of Beard’s, and many other illustrations except Jaeger (he has them on the same side) have the hook and fork on opposite sides. Mason has them drawn on either side, but stresses on same side in *Junior Camping and Woodcraft*.

Confusing?

The votes are in...

Same Side

Kochanski
Mason
Jaeger
Beard
Green Bar Bill

Opposite Side

Graves
Nessmuk
Seton
Kephart

Either Side

Beard
Mason

Mors’ point is that if they are on the same side, it is easier and safer to place a hook on the pole without having to reach across the fire or walk to the far side of a fire.

Some fires may only be accessed from one side, so hooks on the same side are easier to use.

He thinks “balance” has little to do with it.

The issue is debatable – sort of like the C-hook vs the S-hook with iron or wire hooks.



An Interesting Bit of History.

*Transcribed from Field and Stream:
A Weekly Journal of the Rod and Gun
New York, Feb. 6, 1890 – p. 42-43.*

Out-Of-Doors Papers.

Nevertheless, though the details differ, there are prevailing fashions in camp-fires. A woodsman of the old school stands agape, seeing for the first time one of the double fires which has become the mode of late. Intended to stand between two tents, pitched to face each other, these fires are long, narrow and made without back-logs. The hand-junks, which in the woods take the place of andirons, stand at a freezing distance apart, and wood of more than cord-wood length is piled upon them: two forked sticks, one at each end of the fire, support a long green pole, which takes the place of the old-fashioned crane and gives attachment to pot-hooks of various lengths and rude contrivance. These are generally made of a small green tree, cut below a fork and hung inverted over the fire, one prong being trimmed short, the other cut at a convenient length and finished with a reverse hook for hanging the kettle, by driving a nail near the end; for lack of a name they might be called spunk-hungans after the now obsolete "lug-stick" or "spunk-hungans" of the lumbermen, which served the same purpose in the old days when every camp was heated by an open fire. When deserted, camp-fires of this sort have a gallow-air which is not reassuring; and encountered on a carry with their blackened stakes and half-burned brands, they are hideously suggestive of Indian tortures and pictures of martyrdoms.

The regular hunter's fire is quite another order. Its hand junks approach each other socially, and a couple of back-logs of some wet or slow-wasting

woods, staked up behind to reflect the heat, increase the air of coziness. The cooking arrangements which accompany are aboriginally simple. Of course a "hook-stick" for lifting kettles on and off – which is only a miniature spunk-hungan without the nail – is always a necessity, but in addition, one or more straight green poles are all that is wanted. These, stuck into the ground or under a stone or tree root at such an angle as to bring the other end above the fire, support the kettle and may be adjusted at pleasure by placing a stone beneath the further end to rise upon it to depress the pole. It is the sign of a careful hunter always to remove his stew-pole from the fire when his cooking is finished. "Stew-pole" is the common name, but sometimes it is called a "spygelia" – yet never that I knew by any one who had not heard the word on the Pa-sadumkeag.* How such terms arise and wither they vanish is a problem for the wise; but some are Indian, some few Scotch, some come from the Provinces, and some, with all the savor of their original saltiness, are sea terms, completely naturalized in the forest. The woods have not so much an idiom as a vocabulary of their own, whose peculiarities are shibboleth** to the ignorant, whether they talk or write. And yet for us who speak by nature of "drives," "jams," "peavies" and "wangans," because we know them by no other names and could not express the idea in other terms, there are not wanting those who accuse us of using too technical language.

* Tributary of the Penobscot River in Maine

** A custom, principle, or belief distinguishing a particular class or group of people, especially a long-standing one regarded as outmoded or no longer important.

i READ STEVE'S & DAVID'S FULL BIO NOW AT
THEBUSHCRAFTJOURNAL.COM

Photos and Illustrations from:

Daniel Carter Beard

1920 *The Boy's Handy Book of Camp-lore and Woodcraft*

F.H. Cheley and G. Cornelius

1917 *Camp and Outing Activities*

Bernard S. Mason

1972 *The Junior Book of Camping and Woodcraft*

George Washington Sears (Nessmuk)

1884 *Woodcraft*

Ernest Thompson Seton

1917 *The Book of Woodcraft*

Charles F. Smith

1955 *Games and Recreational Methods:*

Part IV- Fire Construction Work and Handicraft

**By Steve Watts
& David Wescott**



www.woodsmokeusa.com

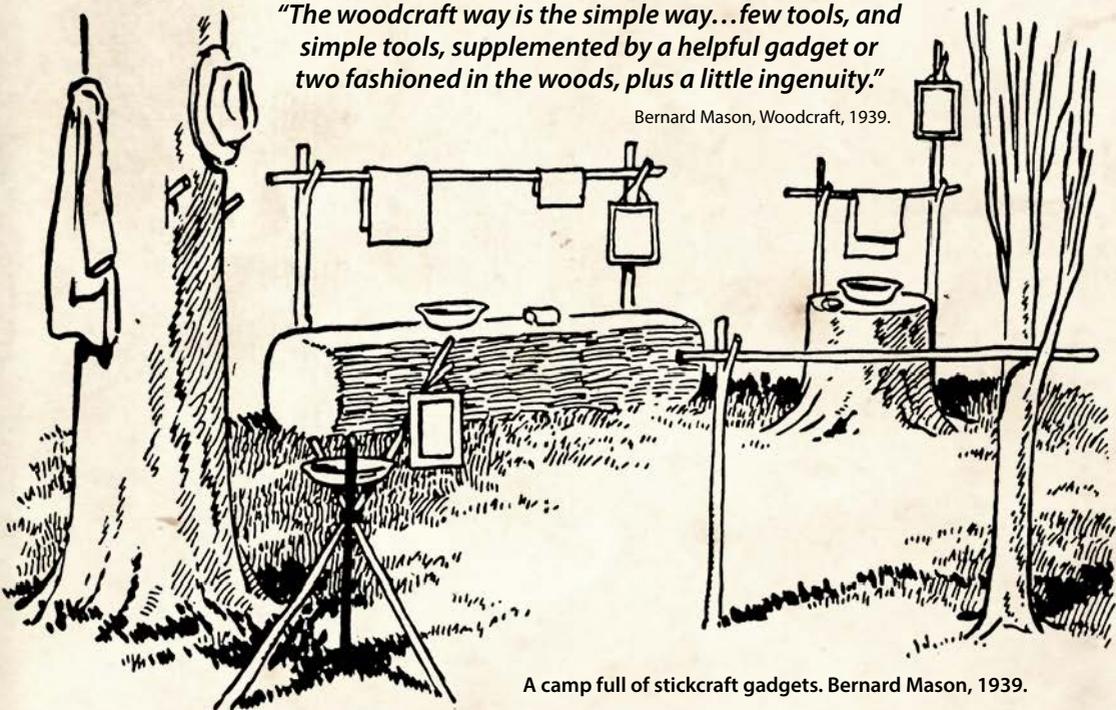
PUTTING STICKS TO WORK IN THE CLASSIC CAMP

Part 2 - From Try to Apply

FIND PART 1
IN ISSUE 3

"The woodcraft way is the simple way...few tools, and simple tools, supplemented by a helpful gadget or two fashioned in the woods, plus a little ingenuity."

Bernard Mason, Woodcraft, 1939.



A camp full of stickcraft gadgets. Bernard Mason, 1939.



**By Steve Watts
& David Wescott**
Woodsmoke USA





A typical camp gadget that uses a simple forked stick and a single bail hook is the **pot tipper**. This gadget has been around for years, but is rarely shown for the genius of its simplicity and utility. This is a "must have" addition to any camp hearth.

The purpose of the 'Try Stick' is to allow the practice and display of practical notches that one may regularly use in camp. Once practiced on the try-stick, the goal should be the application of the notches in the creation of a variety of camp gadgets. This practice piece is intended for more than just the creation of the piece itself – it should be more than a "sampler." Once the movement and techniques needed to

effortlessly create the notches are mastered, the woodcrafter should move on to find direct application for his new skills in the camp setting.

Let's take a look at the typical stick project and use it to see where these notches can be applied in camp. It's time to put those tested skills to work and move from the "try" stick to "apply" stick.



Typical "Try Stick" Samplers.

Knife Projects Using Notches

The Original Try Stick

"The purpose of the try stick is to practice and demonstrate the skillful use of the knife as a wood carving tool, as well as to learn some of the practical operations that may be used in wilderness living. Some of the carving operations may be of very practical application, others are meant to tax the skill of the carver, and some may be used for decorative purposes."

Mors Kochanski, Northern Bushcraft, 1986.

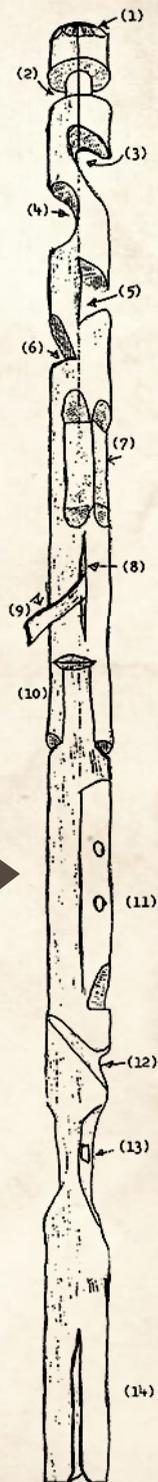
My friend Mors Kochanski has never taken credit for the creation of the 'try stick'. Instead he is currently on a mission to locate the source of his inspiration – what he thinks was an old Canadian Boy Scout magazine article. However, no one can argue the fact that Mors is responsible for the current infatuation with the scheme that we see in the world of woodcraft/ bushcraft today. Mors' original try stick, first illustrated in *Wilderness Arts and Recreation* (Vol. 2 No. 4, pp. 34-40) in the early 1980s has developed somewhat of a cult following.

"The prospective bride would do a sampler of all the embroidery stitches she knew how to do. This display was called a 'Try Piece', Mors tells us. His original try stick article listed about 20 notch options, all of which had real field applications. A follow-up sheet was created with a completed stick illustrated to the right of the page. This handout illustrated 15 notches and applications that a typical student should know. These are the most common notches repeated today." Mors tells us.

Mors' original Try Stick illustration identifying the 15 common notches and applications.

- (1) Trimmed end
- (2) Round Reduction – toggles, pack frame construction
- (3) Pot Hook
- (4) Saddle Notch - pack frame construction
- (5) Dovetail Notch - pack frame, cooking crane, deadfall trigger
- (6) 90° Latch - deadfall trigger
- (7) 90° Planed Edge - deadfall trigger
- (8) Split
- (9) Bark inserted in split
- (10) Hafting Notch
- (11) Flute or whistle
- (12) Bow Nock
- (13) Hole thru stick - bow-drill, Ojibway bird snare
- (14) Root Stripper
- (15) Peel bark for cord

In a recent video created by Randy Breeusma at Karamat Wilderness Ways - https://www.youtube.com/watch?v=sS_IP18_nQ8 - Mors can be seen in action explaining and demonstrating the various try stick notches. The film was created for a winter camping symposium Mors was scheduled to attend, but had to cancel due to health issues.



The Try Piece Sampler

Ten In Ten [10 notches in 10 minutes]

Here is what Mors recommends as starter skills:

- 1) Cut thru a stick.
- 2) Trim the end of the stick – taper, point or rounded .
- 3) Trim the end with thumb opposing blade.
- 4) Create a sphere or “Turk’s Head” on the end.

- 5) V-notch – width is equal to stick thickness.
- 6) Pot or Bail Hook – give it the swing test.
- 7) Reduce the thickness of the stick and remove feathers.
- 8) Hole thru a stick – 1/3 thickness.
- 9) Create a nock or hafting notch.
- 10) A series of saddle notches – round, square, butterfly.

Mors in action for the Winter Camping Symposium: https://www.youtube.com/watch?v=sS_IP18_nQ8

“My ideal camp is where everyone is cheery and busy, where the patrols are kept intact under all circumstances, and where every patrol leader and Scout takes a genuine pride in his camp and his gadgets.”

Lord Robert Baden-Powell

Most of the stick illustrations one sees are based on Mors Kockanski’s original design. So, just like Uncle Dan, let’s share ideas on projects that can be created with the notches we already know and teach. (see below)

How are they used in your camp?

Send in your “postal cards” and let’s share ideas on how to put our try stick knowledge to work in the field.



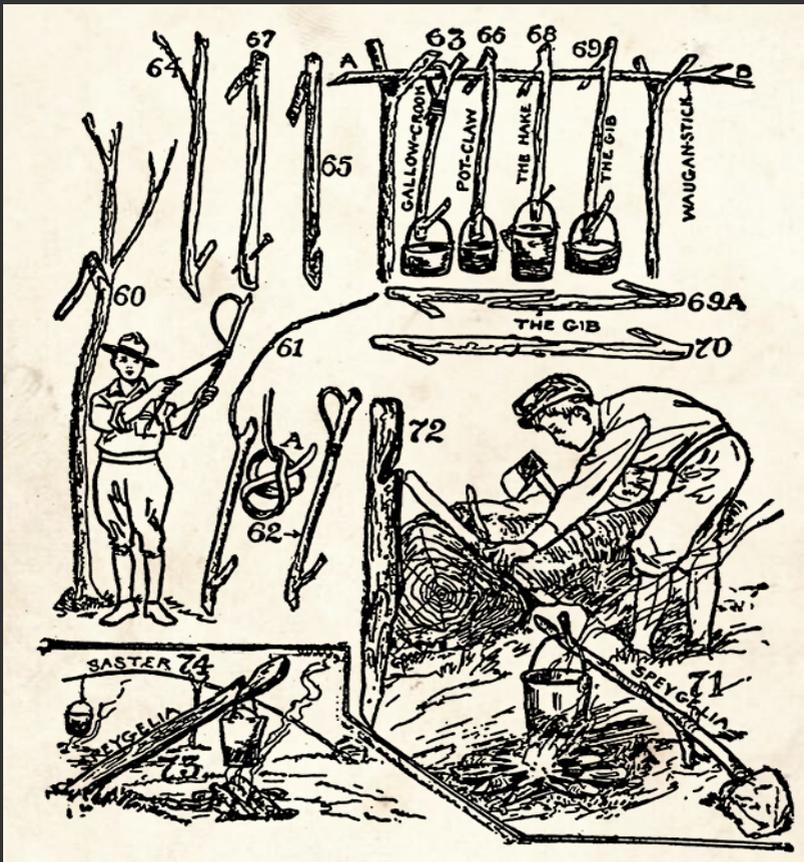
www.facebook.com/thebushcraftjournal

More Hooks From Uncle Dan

After completing Part 1 of this article, another magazine article was found in *Boy’s Life* (May 1915, pp. 18-19), an official publication of the United States of America. The article was called *Dan Beard Tells You How To Make Trammels For Campfire Use*. The article featured the same illustration found in Beard’s later book, *Camplore and Woodcraft* (1920), but the illustration in the article is numbered differently than the one in the book (See illustration on next page). Also, there are no names listed for the various hooks; but he does explain the use of the tea stick – “a notched stick, driven diagonally, or as the boys would say, ‘slanting dickularwise.’ In fact, in the next paragraph, Uncle Dan tells us, “None of these trammels have any names, and they are all used by campers. We should have some name by which to designate each one. You can call them the Boone, Kenton, Lincoln, Washington, Crockett, etc, or you can call them after modern woodcrafters in our movement... But we want to decide upon a name for each one of these sticks, and we are going to leave it to the readers to name these sticks, so campers

everywhere in the world will know them by the names you give them...I am not going to select a name for you...The main point is to get a move on and send the name in right away. Send in a postal card with the names you want for each of these sticks.”

In the next months *Boy’s Life* (June, 1915, pp. 19 & 39), Beard lists the winners of the contest. They range from the Boy Scout, the David Abercrombie, and the Adirondack Murray to the Handy Jack, and the Dan Beard. It’s very interesting to note that none of the names quoted from Beard’s book were in this original piece, but many of the names he added to his text were similar to or identical to names Kephart listed in *Camping and Woodcraft*. Coincidence? Could be, but this illustrates how names, once they are added to the literature, can migrate from place to place without reference to source or origin and get lost in time. Hopefully by reintroducing the names in Part 1, we can again lay claim to a camping heritage that is rich in tradition and history.



Camplore and Woodcraft, 1920.

5 Categories of Stick Tests

End Treatments, Shaft Reductions, Lap Joints, Notches and Holes.

"Traditional crafts are more a personal discipline, a way of life, than a systematic technology. Technology breaks a process down to principles that can be widely applied, but crafts rely on distilled experience passed on by concrete example."

The Edo Craftsmen.

End Treatments - Round, Point, Taper, Notch, Split, Forked.

One of Mors' first challenges is to prepare the end of the stick in some manner. Some cuts are simply to prevent splitting - rounding the end - while others are to create specialized tools - root splitter, hafting notch, etc. Here are a few projects that can be created on the end of the stick.

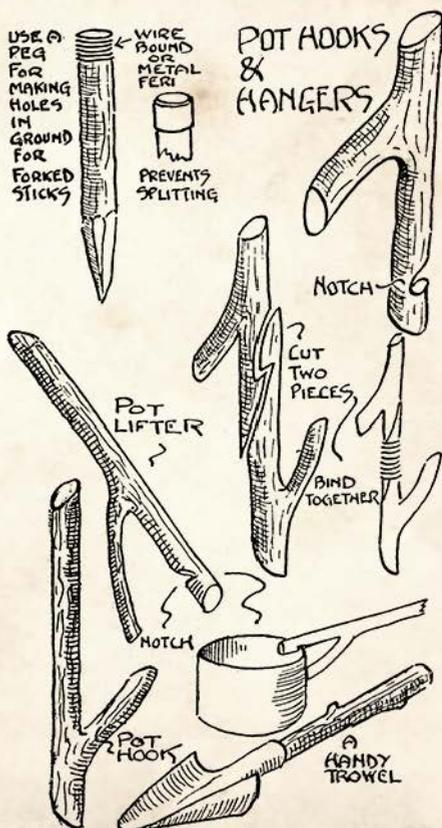
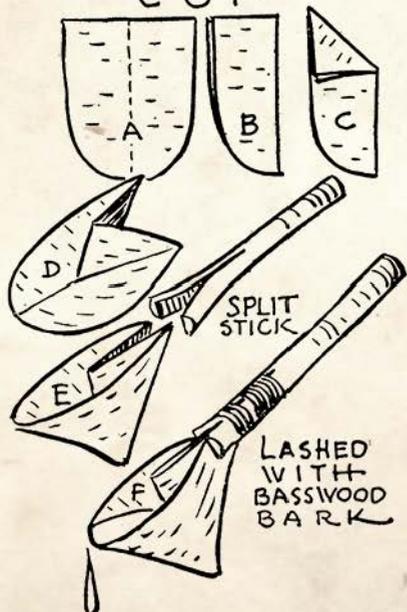
This illustration by Ellsworth Jaeger has been the inspiration for many variations of this same candle holder. A piece of tin can replace the birch wrapper and make it more fireproof.



Lower left:
Another Jaeger project featuring the simple split stick.

Lower right:
J.G. Cone uses a variety of simple notches and end treatments to create useful camp gadgets.

OJIBWAY DRINKING CUP



ROUND - Toggle Tops, Turk's Head Knob, Round Tenon ends.

SQUARE - Square Tenon Ends, Propeller Shafts.

POINTED - Tent Stakes, Lug Pole Upright Ends.

TAPERED/BEVELED - Waugan Stick Ends, Digging Sticks, Thinning for Mortising Hole, Feather Sticks, Saster Tip for the Burtonsville Rig, Wedges, Tapered Hammer Handles, Propellers, Spatula, Butter Knife, Broom Binding End, Frying Pan Handle.

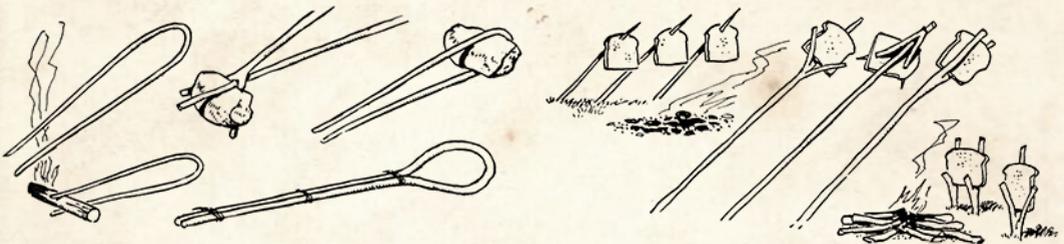
HAFTING NOTCH - Crane Upright Tops, Clothes Pin, Knife Handle, Arrow Point Haft.

CONTROLLED SPLIT - Hoko Knife, Twig Figures, Frog Gig, Candle Holder, Birch Cup Holder, Torch Fastener, Pitch Fork

FORKED - The Good Old Forked Stick as described in Outing Mag 1919 - Thumb Stick, Prop Sticks for tent lines, Sock Dryer, Cooking Forks, Tripod - Interlock tips, Hot Rock Forked Tongs, Dipper Fork - fasten can inside, Camp shovel - flatten can and fasten to forked stick.



A Turk's head knob added to a pin end.



Mason's great selection of useful options for the pointed, forked and bent stick.

"Generally the correct sort of fork to select is one with a perfectly straight drive from the head to the toe and with the forked stick coming off at an angle. A fork which is to be driven into the ground must have the head beveled and the toe pointed."

Most beginners think that the wrong way will work out all right... everyone does... the first time; then you learn that it pays to spend five minutes finding the right shaped stake or fork, rather than trying to make do with a poorly selected stick.

This fork is correct - there is a perfectly straight drive from the beveled head right through to the toe. This fork will drive into the ground and stand securely.

Clothes pegs - Clothes pegs are quickly made by taking a number of half-green sticks, about 7" [17.5 cm] long, and splitting them, first binding the end so that they will not split right along their length. A better way is to use a forked stick, hooking the hook part on to a branch."

Richard Graves, Bushcraft Handbooks

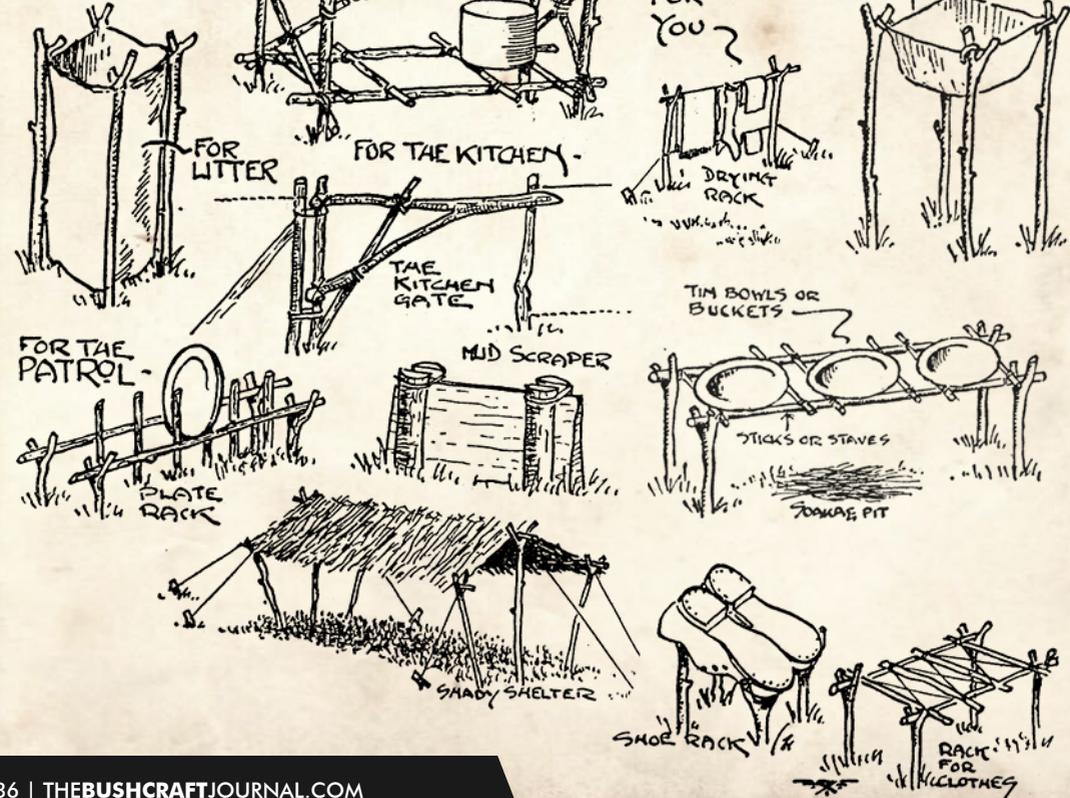


Cookin' with the simple pointed stick.



Photos - Jennifer Mancke

GADGETS FOR THE CAMP IN GENERAL -



J.G. Cone illustrations of forked stick camp gadgetry.



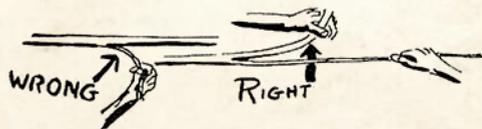
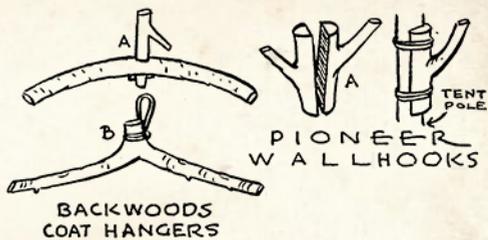
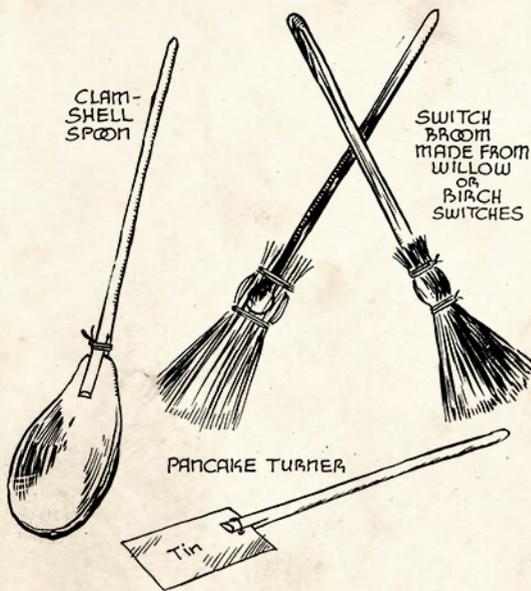
Forked sticks used as prop stick to add tension to tent lines.

Controlled Splitting

Another great stick technique to learn and apply is the controlled split. Since not all woods split equally well, start off with a simple willow to gain mastery. Using your knife to safely initiate the split, the knife is gently pressed inward and wiggled as you go. Once the split starts, tilt the blade to open the split. When the split is open enough to use the fingers, put your knife away. Holding the stick away from you - so you can watch the split as it travels - gently start to pry the halves apart. At this point the tips of your fingers support the split while your thumbs apply outward pressure.

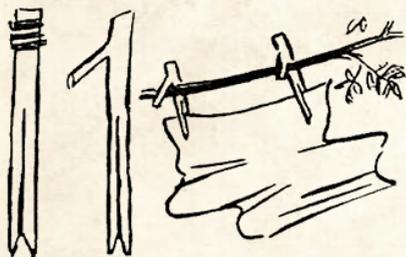
Now here's the trick - the split will naturally start to run to one side making the halves uneven. To correct this, ease up on the side that it is running to (the thinner side), and start to exert a bit more force on the fat side - bending it gently away while still supporting the split with the fingers. The split will start to return to the center. Even pressure should keep it there, but if it starts to wander again, simply remember to always bend the fat side away and the split will return to the center.





Pulling the split stick to the fat side of the split brings the split back to center and creates an even split.

The controlled split allows unlimited ways to fasten tools and materials together without sophisticated methods.



The hafting notch can also be used to create a wide split for functional clothes pins/pegs.



"The great danger with rustic work is the temptation to which most builders yield, to make it too fancy and intricate in place of practical and simple...one can make them without incurring the danger of being overdone, too ornate, too fancy to be really appropriate."

Daniel Carter Beard, Shelter, Shacks and Shanties, 1914

Mid-shaft Reductions - Square, Round, Rectangular, Planed.

Many times a stick is perfect on the ends, but is too thick or the wrong shape in the middle. When this happens, reduction or shaping cuts need to be made to create a stick that meets your needs perfectly. On other occasions, a specific shape is needed in the middle of a twig to get the job done. Here are a few cases.

SQUARE - In order to carve a round branch straight - like for a fire spindle - the stick should be carved to a square first. It's easier for a beginner to see a straight line on a square stick than it is a round one. Squared cuts can also be made on the downward cuts used to make a spoon handle narrower.

ROUND - Toggle Center, Pack Frame Lash Points, Clothes Hanger - 1/2 round reduction for lashing the hook.

RECTANGULAR - Waugan Stick Ends.

V REDUCTION - 90° Planned Edge - Figure 4 Trap Trigger Post Stick, Whimmy Diddle.

THINNED - Fire Tongs, Broilers, Club Head Wrap, Feather Sticks, Gypsy Flowers.

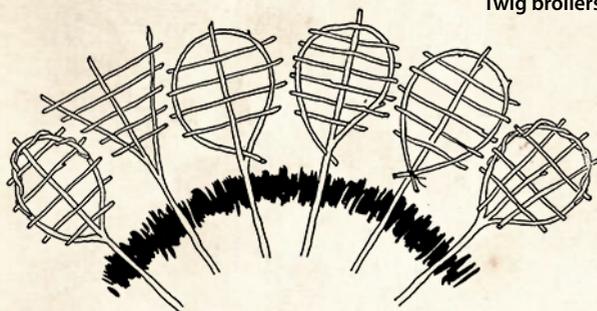
FLATTENED - Clothes Hook.



Mid-shaft reductions can be round or v-shaped to create toggles.

Illustration - Bernard Mason

Twig broilers



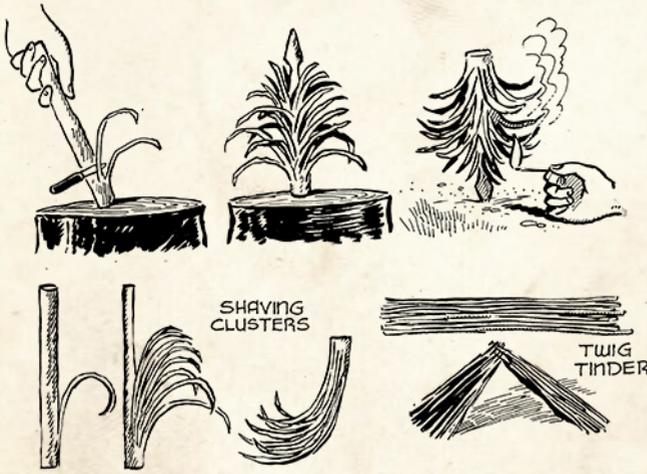
Branches can be thinned in places to be bent, then heated over the fire to make them more flexible.



Above:
Mid-shaft thinning cuts are used to reduce the width of a spoon handle as well as produce feather sticks or Gypsy Flowers.

Left:
Gypsy flowers created by shaving down a twig.





Bernard Mason's Fuzz Sticks.



The shaft of a twig coat hook is flattened on the back with round reductions top and bottom for a secure lashing point.



The Figure 4 trap trigger uses the 90° bevel to hook the bait stick in place. Latch notches and beveled tips create the other tension points on the trigger.



The haft notch and the rectangular shaft reduction combine to create this lug-pole attachment.

Photo - Jennifer Mancke

Photo - Jennifer Mancke

"Perhaps it was Caesar who said, "Beware of Impedimenta." At any rate, it is good advice to follow in the out of doors. But do not be scornful of comfort, for a true woodsman does not rough it; he makes himself as comfortable as possible with the means he has at his command."

Ellsworth Jaeger, Wildwood Wisdom, 1945

Lap Joints, Lapped Splices – Tapered or Flat, Notched, Mitered, Friction.

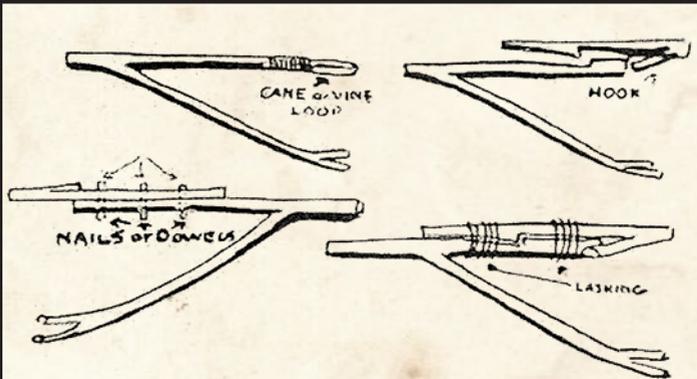
Lap joints are used to join two pieces without creating a thickened spot at the joint. This can be done to make sticks longer, to join 2 hooked ends to create a pot hook, or many other tasks requiring a strong joint.

TAPERED OR FLAT - Pot Hooks, Simple Bound Laps.

NOTCHED - Making a stick longer, Simple latch notch laps.

MITERED LAPPED NOTCH - Notch ends are angled. Shafts bound or pinned.

FRICITION-PINNED - Much like above, but a spacer is forced between the laps to create a friction fit that holds the splice together.



Richard Graves has invented many gadgets involving hooks, holes, bindings and more to take the "rough" out of roughing it. A trammel or gantry set-up.

"If you were a real old-timer, a backwoodsman, pioneer, trapper – or yes, even an Indian – your dug-out or lone camp would not have metal tripods, folding chairs and tables, patent saucepan holders and primus-stoves.

I'll admit that many of these things may be an advantage when a whole Troop is camping, but these men of the woods knew how to improve and make all these things for themselves from only the resource available – the woods. A real Scout does the same."

J.G. Cone, Make and Do the Woodcraft Way, 1940

Notches – Latch, Bail Hook, Dovetail, Saddle, V, Butterfly, Whistle, Bow.

There is a world of possibility for the creation of camp gadgets by using just a few simple notches. Notches can be adapted for use in something as simple as a fishhook or as large as a log cabin. Notches are used to hold things fast under direct pressure or through the use of opposing forces.

LATCH NOTCH - 90 degree trigger latch, Fig 4 Deadfall Notch, Whistle Notch, Pot or Bail Notch for inclined tea sticks.

POT/BAIL HOOK - adjustable - Pot Hooks, Tent Stakes, Notched Hearth Sticks, Forked Billy Tipper.

DOVETAIL NOTCH - slide in - Lantern/Sign Holder, Pot Cooking Gantry.

DOVETAIL SOCKET - drop in - Allows sticks to be joined at right angles.

SADDLE - round - straight or diagonal - Roycroft Pack.

SADDLE - square - straight or diagonal - Lantern Holder, Clothes Hanger.

V NOTCH - Beveled Edge Cuts, Toggle Center, Whimmy Diddle.

BUTTERFLY OR CROSS NOTCH - Clothes Hanger - stops rotation.

WHISTLE NOTCH - Whistle/Flute.

BOW NOCK - Bow-drill Bow, Long Bow.



A simple branch can be turned into a hanging system that is always in demand in camp. A display of classic packs hangs on the Yellowstone Chapter Hut (Idaho), and multiple hooks provide a place to store ones kit close to the tent door where it's needed

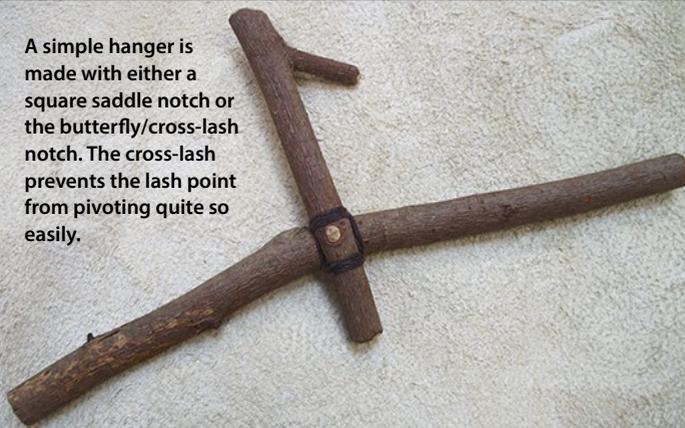




The Whimmy Diddle is a camp toy you can make for your kids or use to annoy your friends. The beveled edge and a series of v-notches are all it takes.

Read more about these here, including an animation: https://en.wikipedia.org/wiki/Gee-haw_whammy_diddle

A simple hanger is made with either a square saddle notch or the butterfly/cross-lash notch. The cross-lash prevents the lash point from pivoting quite so easily.



The same notches are used to create lash points for a lantern hanger.





Lantern hanger

This rig was cut with 2 diagonal square saddles and a dovetail pin notch at the top of the main post. The notches were so tight, the rack held together without any lashing – at least until it dried out and fell apart when it shrank.

A locking tent peg.
Two stakes with
latch notches are
stacked so as to
anchor the
roped stake
in place.



Coat Hangers - Usually in camp, one's travelling clothes become crushed and soiled. This can easily be prevented by making a simple coat and trousers hanger. If you take off your good clothes immediately you arrive in camp and put them on this coat-hanger, they will remain fresh and uncreased.

Billy Hooks - All of these methods of suspending billys over a fire are improved with the use of billy hooks, and these can be easily made by cutting a few hooked sticks about $\frac{1}{2}$ " in diameter, and varying in length from, say, 6" to 10" [15 to 25 cm]. At the end farthest from the hook, a single deep nick is cut into the wood, so that the direction of the cut is away from the hook. The wire handle of the billy will sit safely in this nick and the billy stick from which the billy hooks hang will be sufficiently far from the flames so that there will be little chance of it being burnt through. It is preferable to cut the nick on the side opposite to the hook.

Richard Graves, Bushcraft Handbooks



A proud saw owner. The frame is made from a combination of sticks and simple notches.

"Woodcraft - the art of finding one's way in the wilderness and getting along well by utilizing Nature's storehouse...half of woodcraft, as of any other art, is in knowing what to avoid. Woodcraft is for those who travel light, in the wilderness, rove about a good deal, and sometimes scatter, every man for himself, with his life in his own hands."

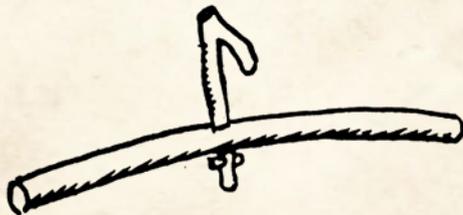
Horace Kephart, Woodcraft and Camping, 1917

Holes - Knife Mortise, Dimples.

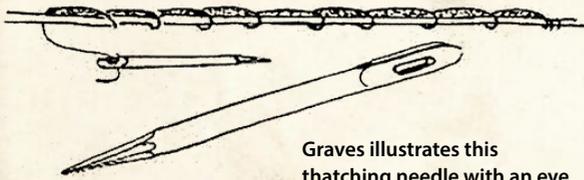
At some point the knife tip must be used to penetrate or create a depression in the stick. Holes clear through the stick are harder to make than a simple divot.

KNIFE-TIP MORTISE - Pins, Pegs, Propeller Shaft, Cord Lock, Thatch Needle Eye, Rope Hooks, Chip Pot Hook, Pegs for Hangers, Fishing Pole.

KNIFE-TIP BORED DIMPLE - Burtonsville Rig.



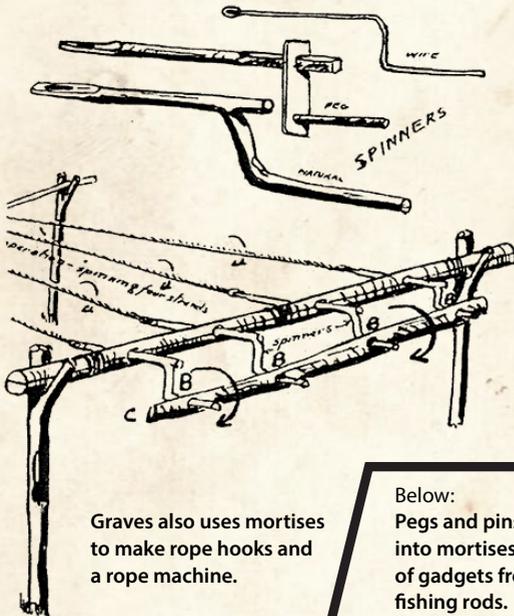
A hole through the hanger hook allows for a pin rather than a lash to hold the gadget together.



Graves illustrates this thatching needle with an eye made with a knife-tip mortise.



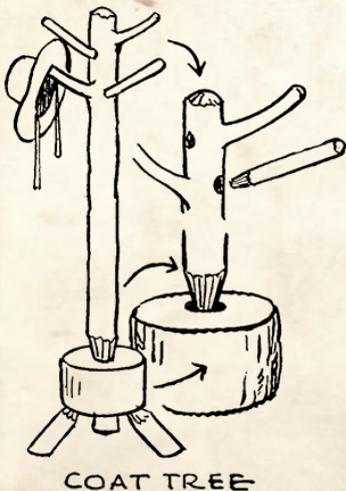
Sticks can be pierced or mortised to create pot hooks.



Graves also uses mortises to make rope hooks and a rope machine.

Below: Pegs and pins can be inserted into mortises to create a variety of gadgets from coat racks to fishing rods.

Below: The knife-tip dimple used to suspend a pot hook on a Burtonsville rig.



COAT TREE



THE ONE MINUTE RIG

Done as a test piece, this hook and tapered tip were made as quickly as possible – still paying attention to safe, efficient work. From the time the branch was cut, until the pot was ready to hang over the fire, the time elapsed was just over one minute. Try stick samplers are designed to help you master the notches that they teach. This practice creates speed and efficiency that can be applied in the field setting.

PRIMITIVE APPLICATIONS

Stone age crafts can use the same techniques to create simple or compound tools. A controlled split – a stone flake was used to initiate the split – can be used to split a branch into which a Hoko knife can be hafted by wrapping withes in place. The basalt hammerhead is wrapped with a twig that was thinned at the top of the wrap and then heated to make it more flexible. Withes once again secure the stone in place. The pump-drill combines the hafting notch to attach the drill point, a drill-tip mortise to start the hole for the pump bar, and thinning and shaping strokes to make the shaft and pump bar.



Hoko knives, a hammer and pump-drill all made with stone tools, applying common try stick techniques.

A FEW BASIC SKILLS

- Removal – Cuts trimming the stick from a bush, trimming twigs from the stick.
- Cut through the stick to make it the right length.
- Peeling – Remove the bark from the stick without cutting into the wood.
- Scraping – use a knife edge or cabinet scraper to clean the stick.
- Trim or taper the ends of the stick.
- Reduce the stick thickness by carving with the grain.
- Make a round stick square. It's easier to see if a stick is straight when it is square than when it is round.
- Split a stick its full length using only hand pressure.
- Make clean, crisp stop cuts across the grain and carve to them.
- Work towards efficiency first, then speed.
- Master knife grips and stokes and material holding positions.



Photo - Chris Noble

Steve gettin' excited 'bout sticks.

A simple branch can be harvested, trimmed and sharpened to a point. This can be a kitchen or toiletries stand that is always a great addition to camp and takes minimal effort to create.





Crafts can be simple or complex - they all use basic skills common to stickcraft



Whistles are a good way to practice making clean, crisp stop cuts for the whistle notch.

A NOTE ABOUT TENT STAKES

"Tent Stakes - A fork which is to be driven into the ground must have the head beveled and the toe pointed....Even a simple item like a tent stake or a peg must be cut properly, and if it is to be driven into the ground it must have the head beveled and the toe properly pointed."

Richard Graves, Bush Campcraft

Efficiency of effort can be achieved by combining sizing and shaping cuts together. For example: when cutting a tent peg to length, the severing cuts can also be the point-sharpening cuts (on one end) and the crowning cuts (on the other). Practiced techniques applied to specific needs result in fewer strokes.

The carving of tent pegs (both the notched and forked varieties) is a good place to start the application of practiced knifecraft to real-world camp situations. With the use of these basic cuts, many other woody projects can be manufactured. A few additional cuts and notches then opens the door to the crafting of many more.

Kochanski stresses that when preparing the top of a tent stake, the top should be beveled in a way that leaves the center 1/3 of the stake end flat - bevel the edges only. This increases the chance of the stake being driven without the top mushrooming or splitting.



Illustrations from:

Daniel Carter Beard
1914 - Shelters, Shacks and Shanties.
1920 - The Boy's Handy Book of Camp-lore and Woodcraft.

Bernard S. Mason
1939 - Woodcraft.
1972 - The Junior Book

of Camping and Woodcraft.

Cone, J. G.
1940 - Make and Do The Woodcraft Way.
1952 - Woodcraft Wisdom.

Jaeger, Ellsworth
1945 - Wildwood Wisdom.

Graves, Richard
1979 - The Bushcraft Handbooks

Photograph Credits
David Wescott
Steve Watts
Jennifer Mancke
Chris Noble

By Steve Watts & David Wescott

i READ STEVE'S & DAVID'S FULL BIO NOW AT THEBUSHCRAFTJOURNAL.COM

www.woodsmokeusa.com

PUTTING STICKS TO WORK IN THE CLASSIC CAMP

Part 3 - Carving Techniques For Camp

FIND PART 1
IN ISSUE 3

FIND PART 2
IN ISSUE 6

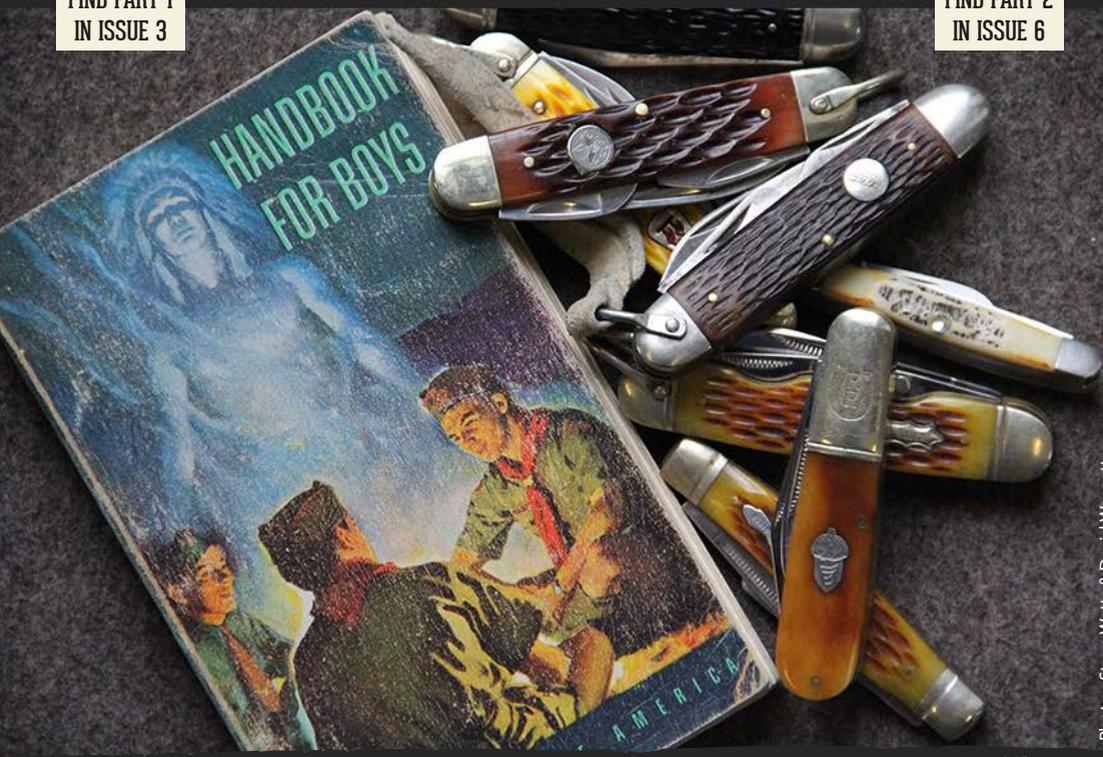


Photo - Steve Watts & David Wescott



By Steve Watts
& David Wescott
Woodsmoke USA



"Every outdoor person should know how to use a pocket knife, a jack-knife or a hunter's knife with the greatest efficiency and the least danger...To those of us who grew up in the whittling age, it may seem odd or even funny that anyone should deem it necessary to tell how to open a pocket knife. But today I fail to recall to my mind a single boy of my acquaintance who knows how to properly handle a knife or who can whittle a stick with any degree of skill."

Daniel Carter Beard, Camp-Lore and Woodcraft, 1920

The Knife

"The knife is the smallest and most portable of all the cutting tools. Light and unobtrusive, the knife is readily available for hundreds of everyday tasks in bush living."

Mors Kochanski, Northern Bushcraft, 1987

We were pocketknife kids. As Boy Scouts in the late 1950s/early 60s we looked to the American camping masters of our tradition for our knifecraft skills. Our pocketknife heroes were men like Daniel Carter Beard, W. Ben Hunt ("Whittlin' Jim") and William Hillcourt ("Green Bar Bill"). With their books and Boy's Life magazine columns as our guides, we somehow learned how to choose, sharpen, use and care for our Scout/camper folders. We also had good living role models - our fathers, grandfathers, uncles and scoutmasters - men from a generation where almost every male carried (and used) a pocketknife on a regular basis.

There were sheath knives around of course - ranging from heavy, thick-bladed military surplus "fighting knives", to the fine thin-bladed American

classics like Marbles "Woodcraft" and "Expert" models. But, we understood these to be mostly "hunting knives" often just out of our reach, or our budget. Besides, we believed Horace Kephart, "The Dean of American Campers", when he said, "a common jack knife will skin anything from a squirrel to a bear." We were mostly interested in crafting the tent pegs, pot hooks, broilers and the other necessities of camp and trail life - interests that have continued throughout our lives and careers. I'm pretty sure that our fondness for smaller, thinner blades in our sheath knives today comes from our basic training as pocketknife kids so long ago.

The Nessmuk Edge

The hatchet and knives shown in the engraving will be found to fill the bill satisfactorily so far as cutlery may be required. Each is good and useful of its kind...

"Nessmuk", Woodcraft and Camping, 1884



George Washington Sears ("Nessmuk") certainly knew a thing or two about camp gear. In his classic, Woodcraft and Camping, he lays a trail that many will attempt to follow for decades. Interestingly enough, even though Sears was a confirmed minimalist (traveling for weeks with a twenty pound pack), he includes three different edged tools in his basic kit: a hatchet, pocket knife and a fixed-blade sheath knife. Though some would argue that either a knife or an axe would suffice, Sears understood the supreme worth of edged tools in camp. This collection of blades (when combined with skill and knowledge) allows the traditional camper to prepare food, fire and shelter. The "Nessmuk Trinity" still stands as a well-thought-out combination from the mind and experience of one of the true Elders of the Camping Tribe.



Left to right: Three-bladed Stockman's Knife, Swedish Camp Hatchet, Norwegian Sheath Knife

The modern version of Nessmuk's kit is not an attempt to replicate the old woods runner's tools bit for bit, but rather to combine his functional wisdom with my own experiences and choices. I choose a single-bit axe over Sears' double-bitted version. This choice is based on familiarity and more than a little bit of caution. Although the size of the axe may vary from a camp hatchet to a three-quarter length axe (depending on the season and trip location), I'll most often choose a Swedish tool. My pocket knife selection also varies (from "scout" models to multi-bladed "stockman" varieties) - usually German or older American brands. For a fixed blade, Scandinavian craftsmanship wins out again. So, it's usually a Swedish, Norwegian or Finnish bush knife with a three to four inch blade. Occasionally, out of nostalgia, I'll carry my dad's old "Western" sheath knife with its worn leather washer handle. The dark patina of this well used tool is a comforting reminder of camping with my father in days gone by. I can still see and feel his own hand upon it. He was my first woodcraft teacher, my first mentor - and in my child's mind, my own personal "Nessmuk".

"A camper needs a jackknife in his pocket and a sheath knife on his hip... Wise old campers always select one with a thin blade [and] smooth on the sides."

Bernard Mason, Woodcraft and Camping, 1939

Rigid Knives and Big Batons: A Modern Trend



In the modern North American bushcraft movement there seems to be a contest among its aficionados as to what is "the best" single knife available for life outdoors: "What if all you had was one tool" - a rather self-limiting way of thinking. They even have a set of standard tests that can be used to address the functionality of the "best knife." The consensus seems to be toward a rigid 4-inch blade with a drop point and single bevel - the parang and kukra have also recently come into their own as well. Mors Kochanski prefers one that is strong enough to withstand the rigors of batoning, yet is fine enough to be used in the fashioning of a netting shuttle.

After 45 years of being in the field, my standard response to the question, "Which is the best knife?" is, "Whatever knife I happen to have when I need one. Anything's better than nothing." I suppose this comes from my primitive technology background and a tradition of making and using stone tools for just about everything. Then, along comes a wonderful metal edge, and everything seems to get better very quickly.

I will, however, have to admit that my preference has grown toward a knife with a slightly flexible and narrow blade. This past year I challenged myself to complete every project I required for my university students using only a Mora 106 carving blade that I hafted in a handle of stacked leather and wood. I used it to make fire sets, shave wood, gut fish, even batoned it to make a variety of notches, and it's still going strong.

Image: The Mora 106 blade compared to typical contemporary bushcraft knives.



Creating a simple notch with a light baton

The trend toward batoning everything also needs to be addressed. There is precious little mention of such a tradition in the historic literature. I tend to think that it became popular with the publication of *Northern Bushcraft* in 1987. I do admit that light batoning is useful to create 90° stop cuts or cross-grain cuts and trimming branches. If you need to do heavier work than that, go get your axe or a machete. I also think that it was at this point the simple fixed-blade knife – the “one knife that will do everything” idea – replaced the jackknife as a tool of choice for light work combined with heavier tools for heavier work. We need to get back to the adage of picking the right tool to do the right job?

The Nessmuk Edge

A young camper's first pocket knife was a token of passage into a world of craftsmanship and responsibility. With the knife, came instruction in use, care, handling and stewardship. These tools might be carried for life, or passed on to a new generation of woodsmen.

Traditional Pocket Knife Types:

(top) Trapper (left to right) Congress, Canoe, Scout/Camper, Barlow, Peanut, Stockman, Muskrat.

The Pocket Knife – The Jack-Knife – The Sheath Knife

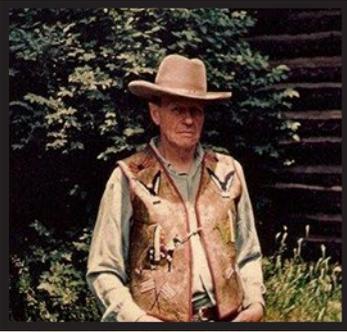
Some say the term “jack-knife” has historic roots from the Scottish “jockteleg” knife. Others say it is derived from when sailors, who were called Jack-Tars, carried a multi-blade knife from a lanyard tied at the waist. Others say it is part of the full house – The Axe is the King, the Saw is the Queen, and the Knife is the Jack-Of-All-Trades. Regardless of the source, this traditional tool is finding its way back into favor among the outdoor set.



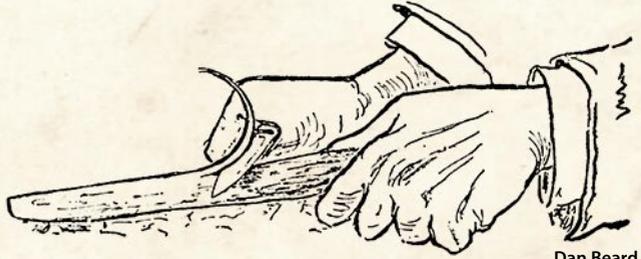
The Age of Whittling

"The age of whittling began with the invention of the pocket knife and reached its climax about 1840 or '50, dying out some time after the Civil War, probably about 1870. All the old whittlers of the whittling age whittled away from the body. If you practise whittling that way it will become a habit."

Daniel Carter Beard, Camp-Lore and Woodcraft, 1920



Ben Hunt



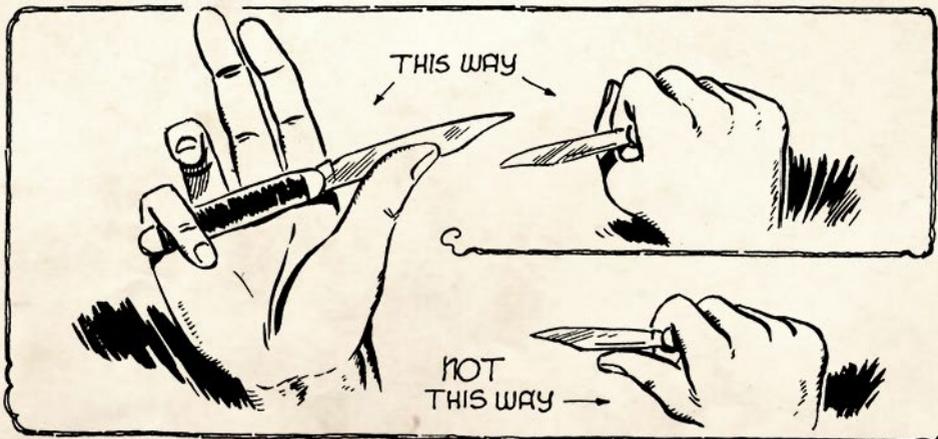
Dan Beard

According to Ben Hunt, "Whittling really is carving with a knife. The word itself is used more in this country than in others, where it is referred to as *carving*." *Ben Hunt's Whittling Book, 1944.*

I asked Lisa Fenton of Woodsmoke UK, if the term "whittling" was used in the UK and she said most assuredly "Yes." It would be interesting to see how long it has been in worldwide use, since Hunt is a pretty well-researched and dependable source on most woodcraft subjects.

"The ability to handle a jackknife is one of the most valuable skills of camping. Like everything else, it takes practice...When you have nothing else to do, get your knife out and whittle. It's fun and good practice."

Bernard Mason, Woodcraft and Camping, 1939



Mason, 1939

Knifecraft Principles

"I have come to recognize that there is an enormous lack of understanding and skill in using hand tools – knives and axes in particular... The use of the knife, ax and other hand tools, an important part of our cultural heritage, is about to be lost in only two generations."

Wille Sundqvist, 1999

The historic literature is lacking in its teaching of good knifecraft. When looking at Beard's Camp-lore and Woodcraft, he dedicates 3 pages to knife use and an entire chapter to axe and saw use. Mason's master series on Woodsmanship, doesn't address knife use at all. The reason? Most likely it's because every kid grew up with a knife in their pocket. So, to reintroduce the skills to a modern world, we start with the basics – research shows that at the university level, fewer than 15% of students have ever made anything with their hands, let alone used a knife in the process.

The two best sources on the subject are :

- *Swedish Carving Techniques* by Wille Sundqvist, 1999 (*Fine Woodworking*)
- *Northern Bushcraft* by Mors Kochanski, 1987 (*Lone Pine Publishing*)

These are both great resources for teaching and learning knifecraft. Our goal in this article is to help clarify some points made in Sundqvist's book by defining the terminology, and organizing both Wille's and Mors' writing into a teaching format that can be used to develop the novice's skills quickly and safely.

Part of the problem is that "grip" and "stroke" are sometimes used interchangeably to describe not just the blade orientation, but the movement of the knife as well. In addition, these terms are used to describe what the knife hand is doing in combination with the project hand...what should be called "holding positions" (from our flintknapping influence where grip, angle of blow and holding position are all well defined). The "cut" is the result of the application of the other three. In the end, we mean no disrespect to either author – referring back to the Swedish terminology for reference and reverence – but simply want to build on what they have started.

Of course, all of this is about a combination of knife grips, stroke movements and holding positions... any of those by themselves do not cut wood; they just leave you holding a knife, or moving or holding your hands in funny positions. So, it is these three together - knife grip, stroke movement and holding position, as well as the resulting cut - that constitute knifecraft.

Basic Terminology

Grip is how you hold the knife and the orientation of the blade.

Stroke is how the blade is moved/controlled in relation to the project.

Holding Position is how the project is stabilized in relation to the stroke being applied.

Cuts also need to be considered, since what you want is accomplished with the application of the other terms. See *Part Two of this series – The Bushcraft Journal Issue 6*.

Grip

Forehand grip – For strokes where the edge moves away from the body (power stroke, cutting to the block [or stop], thumb push stroke, etc.)

Backhand grip – For strokes where the edge moves towards the body (pull stroke, draw stroke, reinforced draw stroke, squeeze stroke etc.)

Side grip – For strokes where the edge moves laterally to the body (the chest-lever or scissor stroke) – the “wrist side stroke” and the “thumb push side stroke”, etc. See, it’s already getting crazy.

Power Grip

Forehand Grip – Blade away

Reverse or Backhand Grip – Blade towards

Dagger Grip – Reverse grip with tip pointed down

Plane Grip – Used for scraping as edge is held perpendicular to the project.

Finger or Squeeze Grip – Knife handle is held in a loose reverse grip and force is applied with the closing of the hand.

Blade Grip – The blade is enclosed in the hand, allowing only the tip of the blade to be exposed for use.

Reinforced Grip – The thumb may apply added pressure and control, or the project hand may assist in gripping both the project and the blade.



Forehand Grip



Backhand Grip



Blade grip



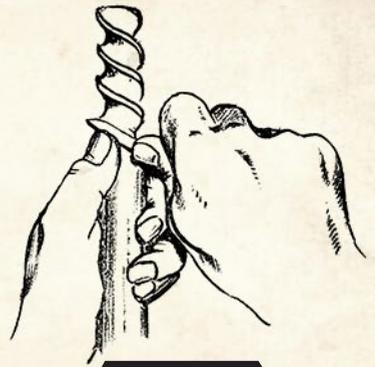
Side Grip



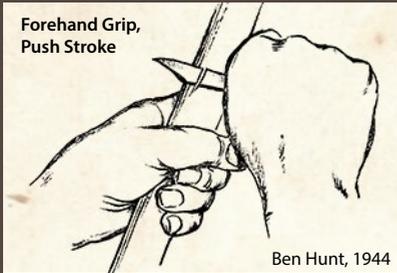
Dagger Grip



Squeeze Grip



Reinforced Grip



Forehand Grip,
Push Stroke

Ben Hunt, 1944

Applying Force - Push vs Slice

Knives and other edge tools cut far better if you slice with them at the same time as you move them forward [tip to handle or handle to tip]. If you take a razor-sharp knife, or any other edge tool and push the edge straight down on the inside of you fingertip or thumb, you will be able to press quite hard without cutting through the skin. But if, while maintaining that pressure, you make the slightest slicing movement, you will surely cut yourself.

Wille Sundqvist, 1999

Stroke

When discussing strokes, there must be a consideration of what body parts are moving:

- Full arm movement for power strokes.
- Wrist movement only for shorter and or more delicate strokes.
- Hand/finger movement only for squeeze strokes and some reinforced or thumb push strokes.

Push Stroke – Using the Power Grip, the wrist is locked and the arm applies the force away. Called a Punch Stroke by some.

Pull Stroke – Using the Backhand or Reverse Power Grip, the wrist is locked, and arms are held tightly to the body to stop the inward force

Chest Lever or Scissor Stroke – (NOT A GRIP)
Using the Reverse Power Grip, blade and material are pulled away from each other to opposite sides of the body as the chest expands.



Push Stroke

Photo: Steve Watts & David Wescott

Ben Hunt, 1944



Pull Stroke



Chest Lever Stroke

Reinforced Strokes – Finer strokes used with both hands close to the project – one controlling the knife, and the other supporting the projecting and/or assisting the knife hand.

Away

Reinforced Push – Thumb Push

Towards

Reinforced Pull – The hand moves

Squeeze Strokes – Straight and Rolling – The fingers rather than the arm apply the force for a straight cut, or the wrist is rotated in a rolling motion to pivot the angle of the blade, creating a curved or sweeping cut.

Shaping/Smoothing/Finishing Strokes – Thin shavings or shear cuts used to thin or shape the final project – feather cuts, swooping or rolling cuts, etc. finger or thumb supported.

Splitting and Drilling Maneuvers – Refer to Northern Bushcraft as Mors gives an excellent description of both skills.

Stop Cuts (Latch Notch) – Actually a cut, but a rocking motion is applied to the force in order to cut through the grain, or multiple small cuts are made. This is where a light baton comes in handy.



Reinforced Push



Ben Hunt, 1944

Reinforced Pull



Shaping/Smoothing Stroke

Shaping/Smoothing Stroke



Stop or Latch Cut



Holding Position

Holding in reference to how the project is stabilized in relation to the stroke being used. It is applied in a way that the blade and the project are always under control.

Body Holds – Under arm, behind the knee for long sticks.

Chest Hold – Held between the chest and the holding hand.

Thumb Hold – or Thumb-Joint Grip.

Reinforced Holds – Modified/Reinforced Thumb-Joint Grip – also an Opposing thumb grip.

Lever

Knee – The knife hand is held against the knee and the material is pulled into it, allowing for greater force for those with less strength.

Stump – (Drive tip into stump and pull project) – same as above, but the knife is driven into a stump and the material is pulled into it.

Mechanical Clamps and Wedges – Hands free vices, shaving horses, etc.

When you use a knife a lot, you do all of these things “naturally” and you switch back and forth quickly and hopefully smoothly... it’s just when you stop and try to describe it that it gets so confusing. At least Mors and Wille gave it a good try.



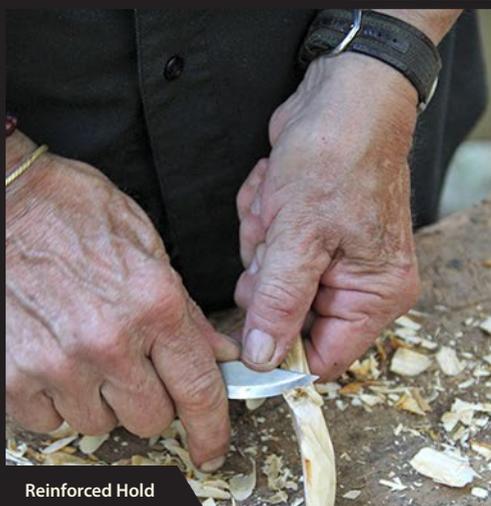
Thumb Lock Hold

Thumb Supported Pull

Ben Hunt, 1944



Thumb/Body Hold



Reinforced Hold

Chest Hold



Photos - Steve Watts & David Wescott



Knee Lever – The knife hand is braced against the knee and the material is pulled into the blade.



Stump Lever – The blade is driven into a stump, and the material is pulled into the blade.

Knifecraft Applied

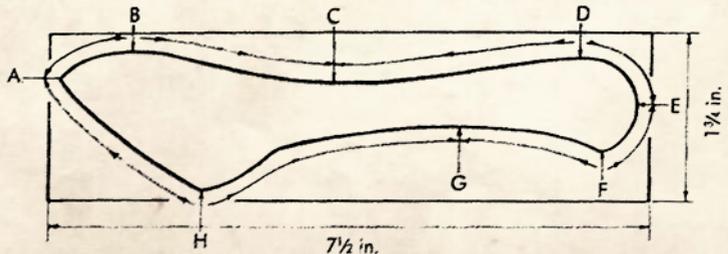
“It is safe to say that when the old-timers were boys themselves, there was not a lad among them who could not whittle with considerable skill and many a twelve year old boy was an adept at the art. I remember with the keenest pleasure the rings, charms and knickknacks which I carved with a pocket knife before I had reached the scout age of twelve. Today, however, the boys handle their knives so awkwardly as to make the chills run down the back of an onlooker.”

Daniel Carter Beard, *Camp-Lore and Woodcraft*, 1920

“Carving Down The Grain”

Part of the genius of Kochanski and Sundqvist is illustrated in how much they have been copied intellectually (ripped-off); Mors for maintaining the tradition of the Try Stick and popularizing its use, and Sundqvist for defining useful carving grips and strokes – including his popular chest lever method. But it's the use of a most unique approach to teaching how to carve with the grain, the introduction of the Butter Paddle, that is a master stroke. By practicing the project, one comes to a rapid appreciation for “coloring inside the lines.” In other words, the nature of wood and knife combined requires one to work within limits – grain perhaps

being most misunderstood by the novice. The project applies grips, holding positions, strokes and cuts, all in one simple package. A good spoon carving class will do the same thing, but this elegant little paddle has style.



The Butter Paddle

Swedish Carving Techniques by Wille Sundqvist, 1990

In the US, the term “woodcraft” has become synonymous with the use of power tools. One of the great benefits to learning working wood by hand is that the craftsman must work with, rather than in spite of, the material. With a powered saw, drill, plane or router, the wood can be overpowered by the technology and bent to its desires. With a knife, the craftsman works with some of the limits the wood demands we follow. There is a distinct difference in the outcome of working wood by hand – both in the project, and in ourselves.

SAFETY PRINCIPLES

KNIFE ETIQUETTE

- REMOVING KNIFE FROM SHEATH
- PASSING A KNIFE

SAFE STOP OR FOLLOW-THRU

- CARVING TO THE BLOCK
- PREPARED STOP CUTS BATONING - 90 DEGREE STOP CUTS

INSIDE-OUTSIDE - BEYOND THE KNEES, PLEASE

- CARVE OFF THE THIGH
- CARVE BEYOND THE KNEES

WHERE'S MY THUMB?

- POSITION OF THE OPPOSING THUMB



Carving to the block. The stump controls the follow-thru.



The thumb is held behind the material where it is safe from cuts.



Whittling Safety

"Cobblers use a wicked sharp knife and cut towards their person and often are severely slashed by it, and sometimes dangerously wounded, because a big artery runs along the inside of one's leg near where most of the scars on the cobbler's legs appear. When you whittle do not whittle with a stick between your legs, and always whittle away from you."

Daniel Carter Beard, Camp-Lore and Woodcraft, 1920



Carving Projects

"Things you make are of lasting value."

Wille Sundqvist, 1999

Projects

- Tent Pegs
- Butter Paddle
- Spatula
- Spoon
- Buttons
- Hooks and Cranes

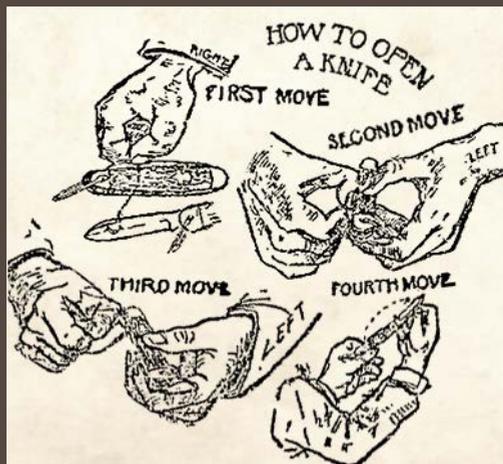
Whittling Skills

1. Peel the bark off
2. Scrape the stick – cabinet scraper-style
3. Learn to make shavings
4. Trim the end of a stick
5. Reduce a stick
6. Trim off branches - begin at the butt end
7. Cut a branch in two with diagonal cuts
8. Trim a stick to a point
9. Thin an end
10. Round an end

How To Open a Knife

"In order to properly open a knife, hold it in your left hand, and with the thumbnail of your right hand grasp the blade at the nail notch in such a manner that the line of the nail makes a very slight angle; that is, it is as near perpendicular as may be (First Move), otherwise you will bend back your thumbnail until it hurts or breaks. Pull the blade away from your body, at the same time drawing the handle of the knife towards the body (Second and Third Moves). Continue this movement until the blade is fully open and points directly from your body (Fourth Move)."

Practice this and make it a habit; you will then never be in danger of stabbing yourself during the process of opening your knife you will open a knife properly and quickly by what is generally termed intuition, but what is really the result of training and habit."



Daniel Carter Beard, Camp-Lore and Woodcraft, 1920



Crafting Knives

i READ STEVE'S & DAVID'S FULL BIO NOW AT
THEBUSHCRAFTJOURNAL.COM



By David Wescott
& Steve Watts

Photos - Steve Watts & David Wescott