WOODCRAFT AND CAMPING

by
"Nessmuk"



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Preface

Woodcraft is dedicated to the Grand Army of "Outers," as a pocket volume of reference on woodcraft.

For brick and mortar breed filth and crime,
With a pulse of evil that throbs and beats;
And men are withered before their prime
By the curse paved in with the lanes and streets.
And lungs are poisoned and shoulders bowed,
In the smothering reek of mill and mine;
And death stalks in on the struggling crowdBut he shuns the shadow of oak and pine.
NESSMUK.

CHAPTER I

OVERWORK AND RECREATION--OUTING AND OUTERS--HOW TO DO IT, AND WHY THEY MISS IT

IT DOES not need that Herbert Spencer should cross the ocean to tell us that we are an over-worked nation; that our hair turns gray ten years earlier than the Englishman's; or, "that we have had somewhat too much of the gospel of work," and, "it is time to preach the gospel of relaxation." It is all true. But we work harder, accomplish more in a given time, and last quite as long as slower races. As to the gray hair—perhaps gray hair is better than none; and it is a fact that the average Briton becomes bald as early as the American turns gray. There is, however, a sad significance in his words when he says: "In every circle I have met men who had themselves suffered from nervous collapse due to stress of business, or named friends who had either killed themselves by overwork, or had been permanently incapacitated, or had wasted long periods in endeavors to recover health." Too true. And it is the constant strain, without let-up or relaxation, that, in nine cases out of ten, snaps the cord and ends in what the doctors call "nervous prostration"--something akin to paralysis--from which the sufferer seldom wholly recovers.

Mr. Spencer quotes that quaint old chronicler, Froissart, as saying, "The English take their pleasures sadly, after their fashion"; and thinks if he lived now, he would say of Americans, "they take their pleasures hurriedly, after their fashion." Perhaps.

It is an age of hurry and worry. Anything slower than steam is apt to "get left." Fortunes are quickly made and freely spent. Nearly all busy, hard-worked Americans have an intuitive sense of the need that exists for at least one period of rest and relaxation during each year, and all--or nearly all--are willing to pay liberally, too liberally in fact, for anything that conduces to rest, recreation and sport. I am sorry to say that we mostly get swindled. As an average, the summer outer who goes to forest, lake or stream for health and sport, gets about ten cents' worth for a dollar of outlay. A majority will admit--to themselves at least--that after a month's vacation, they return to work with an inward consciousness of being somewhat disappointed and beaten. We are free with our money when we have it. We are known throughout the civilized world for our lavishness in paying for our pleasures; but it humiliates us to know we have been beaten, and this is what the most of us know at the end of a summer vacation. To the man of millions it makes little difference. He is able to pay liberally for boats, buckboards and "body service," if he chooses to spend a summer in the North Woods. He has no need to study the questions of lightness and economy in a forest and stream outing. Let his guides take care of him; and unto them and the landlords he will give freely of his substance.

I do not write for him, and can do him little good. But there are hundreds of thousands of practical, useful men, many of them far from being

rich; mechanics, artists, writers, merchants, clerks, business men--workers, so to speak--who sorely need and well deserve a season of rest and relaxation at least once a year. To these, and for these, I write.

Perhaps more than fifty years of devotion to "woodcraft" may enable me to give a few useful hints and suggestions to those whose dreams, during the close season of work, are of camp-life by flood, field and forest.

I have found that nearly all who have a real love of nature and out-of-door camp-life, spend a good deal of time and talk in planning future trips, or discussing the trips and pleasures gone by, but still dear to memory.

When the mountain streams are frozen and the Nor'land winds are out;

when the winter winds are drifting the bitter sleet and snow; when winter rains are making out-of-door life unendurable; when season, weather and law combine to make it "close time" for beast, bird and man, it is well that a few congenial spirits should, at some favorite trysting place, gather around the glowing stove and exchange yarns, opinions and experiences. Perhaps no two will exactly agree on the best ground for an outing,...or half a dozen other points that may be discussed. But one thing all admit. Each and every one has gone to his chosen ground with too much impedimenta, too much duffle; and nearly all have used boats at least twice as heavy as they need to have been. The temptation to buy this or that bit of indispensable camp-kit has been too strong, and we have gone to the blessed woods, handicapped with a load fit for a pack-mule. This is not how to do it.

Go light; the lighter the better, so that you have the simplest material for health, comfort and enjoyment.

Of course, if you intend to have a permanent camp, and can reach it by boat or wagon, lightness is not so important, though even in that case it is well to guard against taking a lot of stuff that is likely to prove of more weight than worth--only to leave it behind when you come out.

As to clothing for the woods, a good deal of nonsense has been written about "strong, coarse woolen clothes." You do not want coarse woolen clothes. Fine woolen cassimere of medium thickness for coat, vest and pantaloons, with no cotton lining. Color, slate gray or dead-leaf (either is good). Two soft, thick woolen shirts; two pairs of fine, but substantial, woolen drawers; two pairs of strong woolen socks or stockings; these are what you need, and all you need in the way of clothing for the woods, excepting hat and boots, or gaiters. Boots are best--providing you do not let yourself be inveigled into wearing a pair of long-legged heavy boots with thick soles, as has been often advised by writers who knew no better. Heavy, long-legged boots are a weary, tiresome incumbrance on a hard tramp through rough woods. Even moccasins are better. Gaiters, all sorts of high shoes, in fact, are too bothersome about fastening and unfastening. Light boots are best. Not thin, unserviceable affairs, but light as to actual weight. The following hints will give an idea for the best footgear for the

woods; let them be single soled, single backs and single fronts, except light, short foot-linings. Back of solid "country kip"; fronts of substantial French calf; heel one inch high, with steel nails; countered outside; straps narrow, of fine French calf put on "astraddle," and set down to the top of the back. The out-sole stout, Spanish oak, and pegged rather than sewed, although either is good. They will weigh considerably less than half as much as the clumsy, costly boots usually recommended for the woods; and the added comfort must be tested to be understood.

The hat should be fine, soft felt with moderately low crown and wide brim; color to match the clothing.

The proper covering for head and feet is no slight affair, and will be found worth some attention. Be careful that the boots are not too tight, or the hat too loose. The above rig will give the tourist one shirt, one pair of drawers and a pair of socks to carry as extra clothing. A soft, warm blanket-bag, open at the ends, and just long enough to cover the sleeper, with an oblong square of waterproofed cotton cloth 6x8 feet, will give warmth and shelter by night and will weigh together five or six pounds. This, with the extra clothing, will make about eight pounds of dry goods to pack over carries, which is enough. Probably, also, it will be found little enough for comfort.

During a canoe cruise across the Northern Wilderness in the late summer, I met many parties at different points in the woods, and the amount of unnecessary duffle with which they encumbered themselves was simply appalling. Why a shrewd business man, who goes through with a guide and makes a forest hotel his camping ground nearly every night, should handicap himself with a five-peck pack basket full of gray woolen and gum blankets, extra clothing, pots, pans, and kettles, with a 9-pound 10-bore, and two rods--yes, and an extra pair of heavy boots hanging astride of the gun--well, it is one of the things I shall never understand. **My own load, including canoe**, extra clothing, blanket-bag, two days' rations, pocket-axe, rod and knapsack, **never exceeded 26 pounds;** and I went prepared to camp out any and every night.

People who contemplate an outing in the woods are pretty apt to commence preparations a long way ahead, and to pick up many trifling articles that suggest themselves as useful and handy in camp; all well enough in their way, but making at least a too heavy load. It is better to commence by studying to ascertain just how light one can go through without especial discomfort. A good plan is to think over the trip during leisure hours, and make out a list of indispensable articles, securing them beforehand, and have them stowed in handy fashion, so that nothing needful may be missing just when and where it cannot be procured. The list will be longer than one would think, but need not be cumbersome or heavy. As I am usually credited with making a cruise or a long woods tramp with exceptionally light duffle, I will give a list of the articles I take along--going on foot over carries or through the woods.

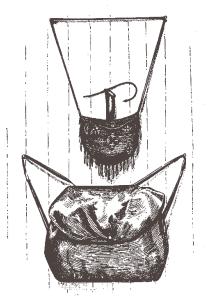
CHAPTER II

KNAPSACK, HATCHET, KNIVES, TINWARE, FISHING TACKLE, DITTY-BAG, RODS,

THE clothing, blanket-bag and shelter-cloth are all that need be described in that line The next articles that I look after are knapsack (or pack basket), rod with reel, lines, flies, hooks, and all my fishing gear, pocket-axe, knives and tinware. Firstly, the knapsack; as you are apt to carry it a great many miles, it is well to have it right, and easy-fitting at the start. Don't be induced to carry a pack basket. I am aware that it is in high favor all through the Northern Wilderness, and is also much used in other localities where guides and sportsmen most do congregate. But I do not like it. I admit that it will carry a loaf of bread, with tea, sugar, etc., without jamming; that bottles, crockery, and other fragile duffle is safer from breakage than in an oil-cloth knapsack. But it is by no means waterproof in a rain or a splashing head sea, is more than twice as heavy--always growing heavier as it gets wetter--and I had rather have bread, tea, sugar, etc., a little jammed than water-soaked. Also, it may be remark~d that man is a vertebrate animal and ought to respect his backbone. The loaded pack basket on a heavy carry never fails to get in on the most vulnerable knob of the human vertebrae. The knapsack sits easy, and does not chafe. The one shown in the engraving is of good form; and the original--which I have carried for years--is satisfactory in every respect. It holds over half a bushel, carries blanket-bag,

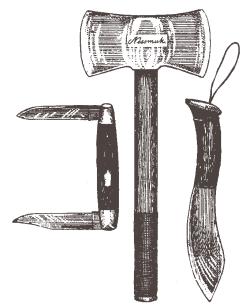
shelter tent, hatchet, ditty-bag, tinware, fishing tackle, clothes and two days' rations. It weighs, empty, just twelve ounces.

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, the hatchet especially, being the best model I have ever found for a "double-barreled" pocket-axe. And just here let me digress for a little chat on the indispensable hatchet; for it is the most difficult piece of camp kit to obtain in perfection of which I have any knowledge. Before I was a dozen years old I came to realize that a light hatchet was a sine qua non in woodcraft, and I also found it a most difficult thing to get.



KNAPSACK AND DITTY-BAG

I tried shingling hatchets, lathing hatchets, and the small hatchets to be found in country hardware stores, but none of them were satisfactory. I had quite a number made by blacksmiths who professed skill in making edged tools, and these were the worst of all, being like nothing on the earth or under it--murderous-looking. clumsy, and all too heavy, with no balance or proportion. I had hunted twelve years before I caught up with the pocket-axe I was looking for. It was made in Rochester, by a surgical



HATCHET AND KNIVES

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instrument maker named Bushnell. It cost time and money to get it. I worked one rainy Saturday fashioning the pattern in wood. Spoiled a day going to Rochester, waited a day for the blade, paid [\$3.00 for it, and lost a day coming home. Boat fare \$1.00, and expenses \$2.00, besides three days lost time, with another rainy Sunday for making leather sheath and hickory handle.

My witty friends, always willing to help me out in figuring the cost of my hunting and fishing gear, made the following business-like estimate, which they placed where I would be certain to see it the first thing in the morning. Premising that of the five who assisted in that little joke, all stronger, bigger fellows than myself, four have gone "where they never see the sun," I will copy the statement as it stands today, on paper yellow with age. For I have kept it over forty years.

A WOODSMAN.

	DK.
To getting up one limber-go-shiftless pocket-axe:	
Cost of blade	\$3 00
Fare on boat	1 00
Expenses for 3 days	3 00
Three days lost time at \$1.25 per day	3 75
Two days making model, handle and sheath, say	2 00
Total	12 75
Per contra, by actual value of axe	2 00
Balance	10 75

Then they raised a horse laugh, and the cost of that hatchet became a standing joke and a slur on my "business ability." What aggravated me most was, that the rascals were not so far out in their calculation. And was I so far wrong? That hatchet was my favorite for nearly thirty years. It has been "upset" twice by skilled workmen; and, if my friend "Bero" has not lost it, is still in service.

Would I have gone without it any year for one or two dollars? But I prefer the double blade. I want one thick, stunt edge for knots, deers' bones, etc., and a fine, keen edge for cutting clear timber.

A word as to knife, or knives. These are of prime necessity, and should be of the best, both as to shape and temper. The "bowies" and "hunting knives" usually kept on sale, are thick, clumsy affairs, with a sort of ridge along the middle of the blade, murderous-looking, but of little use; rather fitted to adorn a dime novel or the belt of "Billy the Kid," than the outfit of the hunter. The one shown in the cut is thin in the blade, and handy for skinning, cutting meat, or eating with. The strong double-bladed pocket knife is the best model I have yet found, and, in connection with the sheath knife, is all sufficient for camp use. It is not necessary to take table cutlery into the woods. A good fork may be improvised from a beech or birch stick; and the half of a fresh-water mussel shell, with a split stick by way of handle, makes an excellent spoon.

My entire outfit for cooking and eating dishes comprises five pieces of tinware. This is when stopping in a permanent camp. When cruising and tramping, I take just two pieces in the knapsack.

I get a skillful tinsmith to make one dish as follows: Six inches on bottom, 6 3/4 inches on top, side 2 inches high. The bottom is of the heaviest tin procurable, the sides of lighter tin, and seamed to be water-tight without solder. The top simply turned, without wire. The second dish to be made the same, but small enough to nest in the first, and also to fit into it when inverted as a cover. Two other dishes made from common pressed tinware, with the tops cut off and turned, also without wire. They are fitted so that they all nest, taking no more room than the largest dish alone, and each of the three smaller dishes makes a perfect cover for the next larger. The other piece is a tin camp-kettle, also of the heaviest tin, and seamed water-tight. It holds two quarts, and the other dishes nest in it perfectly, so that when packed the whole takes just as much room as the kettle alone. I should mention that the strong ears are set below the rim of the kettle, and the bale falls outside, so, as none of the dishes have any handle, there are no aggravating "stickouts" to wear and abrade. The snug affair weighs, all told, two pounds. I have met parties in the North Woods whose one frying pan weighed more--with its handle three feet long. However did they get through the brush with such a culinary terror?

It is only when I go into a very accessible camp that I take so much as five pieces of tinware along. I once made a ten days' tramp through an unbroken wilderness on foot, and all the dish I took was a ten-cent tin; it was enough. I believe I will tell the story of that tramp before I get through. For I saw more

game in the ten days than I ever saw before or since in a season; and I am told that the whole region is now a thrifty farming country, with the deer nearly all gone. They were plenty enough thirty-nine years ago this very month.

And don't neglect to take what sailors call a "ditty-bag." This may be a little sack of chamois leather about 4 inches wide by 6 inches in length. Mine is before me as I write. Emptying the contents, I find it inventories as follows: A dozen hooks, running in size from small minnow hooks to large Limericks; four lines of six yards each, varying from the finest to a size sufficient for a ten-pound fish; three darning needles and a few common sewing needles; a dozen buttons; sewing silk; thread, and a small ball of strong yarn for darning socks; sticking salve; a bit of shoemaker's wax; beeswax; sinkers, and a very fine file for sharpening hooks. The ditty-bag weighs, with contents, 2 1/2 ounces; and it goes in a small buckskin bullet pouch, which I wear almost as constantly as my hat. The pouch has a sheath strongly sewed on the back side of it, where the light hunting knife is always at hand, and it also carries a two-ounce vial of fly medicine, a vial of "pain killer," and two or three gangs of hooks on brass wire snells-of which, more in another place. I can always go down into that pouch for a water-proof match safe, strings, compass, bits of linen and scarlet flannel (for frogging), copper tacks, and other light duffle. It is about as handy a piece of woods-kit as I carry....

[Editor's note: Many of the techniques described in the following pages involve the use of green logs, boughs, and browse. The book was written in a day when men were far more concerned with clearing land for farming than in preserving the forest.

Today, as in all times, the wise woodsman will avoid unnecessarily killing healthy trees. If you <u>need</u> a green log, go out of your way to find a live tree that is deformed or has been blown over. Also, only in a severe emergency is it necessary to fell a healthy tree for its boughs or browse. Instead, gather the lower limbs from many trees. This will improve the health of the forest rather than injure it. It takes longer, but vastly reduces the impact.

In remote areas where there is an over-abundance of deadwood, it can be used freely, both as needed in the campfire, and in making whatever your imagination, time, and resources indicate. You are helping clean up the landscape, reduce fire danger, and prevent disease. But if there is any shortage, such as when in or near a public campground, be frugal. Someone else may need it far worse than you do.

Finally, for the modern-day bark-eaters—don't damage a healthy tree by peeling the bark off of its trunk. Instead, cut off a branch, and peel the branch.

CHAPTER III

GETTING LOST--CAMPING OUT--ROUGHING IT OR SMOOTHING IT--INSECTS--CAMPS, AND HOW TO MAKE THEM

WITH a large majority of prospective tourists and outers, "camping out" is a leading factor in the summer vacation. And during the long winter months they are prone to collect in little knots and talk much of camps, fishing, hunting, and "roughing it." The last phrase is very popular and always cropping out in the talks on matters pertaining to a vacation in the woods. I dislike the phrase. We do not go to the green woods and crystal waters to rough it, we go to smooth it. We get it rough enough at home; in towns and cities; in shops, offices, stores, banks anywhere that we may be placed--with the necessity always present of being on time and up to our work; of providing for the dependent ones; of keeping up, catching up, or getting left.....

To this end you need pleasant days and peaceful nights. You cannot afford to be tormented and poisoned by insects, nor kept awake at night by cold and damp, nor to exhaust your strength by hard tramps and heavy loads. Take it easy, and always keep cool. Nine men out of ten, on finding themselves lost in the woods, fly into a panic, and quarrel with the compass. Never do that. The compass is always right, or nearly so. It is not many years since an able-bodied man--sportsman of course--lost his way in the North Woods, and took fright, as might be expected. He was well armed and well found for a week in the woods. What ought to have been only an interesting adventure, became a tragedy. He tore through thickets and swamps in his senseless panic, until he dropped and died through fright, hunger and exhaustion.

A well authenticated story is told of a guide in the Oswegatchie region, who perished in the same way. Guides are not infallible; I have known more than one to get lost. Wherefore, should you be tramping through a pathless forest on a cloudy day, and should the sun suddenly break from under a cloud in the northwest about noon, don't be scared. The last day is not at hand, and the planets have not become mixed; only, you are turned. You have gradually swung around, until you are facing northwest when you meant to travel south. It has a muddling effect on the mind-this getting lost in the woods. But, if you can collect and arrange your gray brain matter, and suppress all panicky feeling, it is easily got along with. For instance; it is morally certain that you commenced swinging to southwest, then west, to northwest. Had you kept on until you were heading directly north, you could rectify your course simply by following a true south course. But, as you have varied three-eighths of the circle, set your compass and travel by it to the southeast, until, in your judgment, you have about made up the deviation; then go straight south, and you will not be far wrong. Carry the compass in your hand and look at it every few minutes; for the tendency to swerve from a straight course when a man is once lost-and nearly always to the right-is a thing past understanding.

As regards poisonous insects, it may be said that, to the man with clean, bleached, tender skin, they are, at the start, an unendurable torment. No one can enjoy life with a smarting, burning, swollen face, while the attacks on every exposed inch of skin are persistent and constant. I have seen a young man after two days' exposure to these pests come out of the woods with one eye entirely closed and the brow hanging over it like a clam shell, while face and hands were almost hideous from inflammation and puffiness. The St. Regis and St. Francis Indians, although born and reared in the woods, by no means make light of the black fly.

It took the man who could shoot Phantom Falls to find out, "Its bite is not severe, nor is it ordinarily poisonous. There may be an occasional exception to this rule; but beside the bite of the mosquito, it is comparatively mild and harmless." And again: "Gnats...in my way of thinking, are much worse than the black fly or mosquito." So says Murray. Our observations differ. A thousand mosquitoes and as many gnats can bite me without leaving a mark, or having any effect save the pain of the bite while they are at work. But each bite of the black fly makes a separate and distinct boil, that will not heal and be well in two months.

While fishing for brook trout in July last, I ran into a swarm of them on Moose River, and got badly bitten. I had carelessly left my medicine behind. On the first of October the bites had not ceased to be painful, and it was three months before they disappeared entirely. Frank Forester says, in his *Fish and Fishing*, page 371, that he has never fished for the red-fleshed trout of Hamilton county, "being deterred therefrom by dread of that curse of the summer angler, the black fly, which is to me especially venomous."

"Adirondack Murray" gives extended directions for beating these little pests by the use of buckskin gloves with chamois gauntlets, Swiss mull, fine muslin, etc. Then he advises a mixture of sweet oil and tar, which is to be applied to face and hands; and he adds that it is easily washed off, leaving the skin soft and smooth as an infant's; all of which is true. But, more than forty years' experience in the woods has taught me that the following recipe is infallible anywhere that *sancudos*, *moquims*, or our own poisonous insects do most abound.

It was published in Forest and Stream in the summer of 1880, and again in '83. It has been pretty widely quoted and adopted, and I have never known it to fail: Three ounces pine tar, two ounces castor oil, one ounce pennyroyal oil. Simmer all together over a slow fire, and bottle for use. You will hardly need more than a two-ounce vial full in a season. One ounce has lasted me six weeks in the woods. Rub it in thoroughly and liberally at first, and after you have established a good glaze, a little replenishing from day to day will be sufficient. And don't fool with soap and towels where insects are plenty. A good safe coat of this varnish grows better the longer it is kept on--and it is cleanly and wholesome. If you get your face and hands crocky or smutty about the camp-fire, wet the corner of your handkerchief and rub it off, not forgetting to

apply the varnish at once, wherever you have cleaned it off. Last summer I carried a cake of soap and a towel in my knapsack through the North Woods for a seven weeks' tour, and never used either a single time. When I had established a good glaze on the skin, it was too valuable to be sacrificed for any weak whim connected with soap and water. When I struck a woodland hotel, I found soap and towels plenty enough. I found the mixture gave one's face the ruddy tanned look supposed to be indicative of health and hard muscle. A thorough ablution in the public wash basin reduced the color, but left the skin very soft and smooth; in fact, as a lotion for the skin it is excellent. It is a soothing and healing application for poisonous bites already received.

I have given some space to the insect question, but no more than it deserves or requires. The venomous little wretches are quite important enough to spoil many a well planned trip to the woods, and it is best to beat them from the start. You will find that immunity from insects and a comfortable camp are the two first and most indispensable requisites of an outing in the woods....

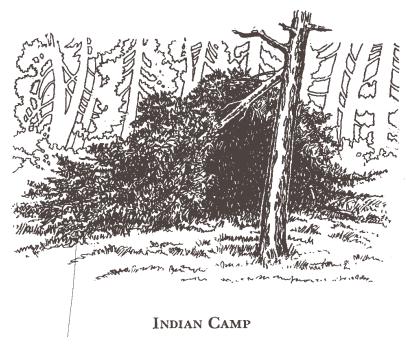
One other little annoyance I will mention, as a common occurrence among those who camp out; this is the lack of a pillow. I suppose I have camped fifty times with people, who, on turning in, were squirming around for a long time, trying to get a rest for the head. Boots are the most common resort. But, when you place a boot-leg--or two of them--under your head, they collapse, and make a head-rest less than half an inch thick. Just why it never occurs to people that a stuffing of moss, leaves, or hemlock browse, would fill out the bootleg and make a passable pillow, is another conundrum I cannot answer. But there is another and better way of making a pillow for camp use, which I will describe further on.

And now I wish to devote some space to one of the most important adjuncts of woodcraft, i.e., camps; how to make them, and how to make them comfortable. There are camps, and camps. There are camps in the North Woods that are really fine villas, costing thousands of dollars, and there are log-houses, and shanties, and bark camps, and A tents, and walled tents, shelter tents and shanty tents. But, I assume that the camp best fitted to the wants of the average outer is the one that combines the essentials of dryness, lightness, portability, cheapness, and is easily and quickly put up. Another essential is, that it must admit of a bright fire in front by night or day. I will give short descriptions of the forest shelters (camps) I have found handiest and most useful.

Firstly, I will mention a sort of camp that was described in a sportsman's paper, and has since been largely quoted and used. It is made by fastening a horizontal pole to a couple of contiguous trees, and then putting on a heavy covering of hemlock boughs, shingling the with the tips downward, of course. A fire is to be made at the roots of one of the trees. This, with plenty of boughs, may be made to stand a pretty stiff rain; but it is only a damp arbor, and no camp, properly speaking. A forest camp should always admit of a bright fire in front, with a lean-to or shed roof overhead, to reflect the fire heat on the bedding below. Any camp that falls short of this, lacks the requirements of

warmth, brightness and healthfulness. This is why I discard all close, canvas tents.

The simplest and most primitive of all camps is the "Indian camp." It is easily and quickly made, is warm and comfortable, and stands a pretty heavy rain when properly put up. This is how it is made: Let us say you are out and have slightly missed your way. The coming gloom warns you that night is shutting down. You are no tenderfoot. You know that a place of rest is essential to health and comfort through the long, cold November night. You dive down the first little hollow until you strike a rill of water, for water is a prime necessity. As you draw your hatchet you take in the whole situation at a glance. The little stream is gurgling downward in a half choked frozen way. There is a huge sodden hemlock lying across it. One clip of the hatchet shows it will peel. There is plenty of smaller timber standing around; long, slim poles, with a tuft of



foliage on top. Five minutes suffice to drop one of these, cut a twelve-foot pole from it, sharpen the pole at each end, jam one end into the ground and the other into the rough back of a scraggy hemlock, and there is your ridge pole. Now gowith your hatchet--for the bushiest and most promising young hemlocks within reach. Drop them and draw them to camp rapidly. Next, you need a fire. There are fifty hard, resinous limbs sticking up from the prone hemlock; lop off a few of these, and split the largest into match timber; reduce the splinters to shavings, scrape the wet leaves from your prospective fireplace, and strike a match on the

balloon part of your trousers. If you are a woodsman you will strike but one. Feed the fire slowly at first; it will gain fast. When you have a blaze ten feet high, look at your watch. It is 6 P. M. You don't want to turn in before 10 o'clock, and you have four hours to kill before bed-time. Now, tackle the old hemlock; take off every dry limb, and then peel the bark and bring it to camp. You will find this takes an hour or more.

Next, strip every limb from your young hemlocks, and shingle them onto your ridge pole. This will make a sort of bear den, very well calculated to give you a comfortable night's rest. The bright fire will soon dry the ground that is to be your bed, and you will have plenty of time to drop another small hemlock and make a bed of browse a foot thick. You do it. Then you make your pillow. Now, this pillow is essential to comfort and very simple. It is half a yard of muslin, sewed up as a bag, and filled with moss or hemlock browse. You can empty it and put it in your pocket, where it takes up about as much room as a handkerchief. You have other little muslin bags--an' you be wise. One holds a couple of ounces of good tea; another, sugar; another is kept to put your loose duffle in: money, match safe, pocket-knife. ...

Ten o'clock comes. The time has not passed tediously. You are warm, dry and well-fed. Your old friends, the owls, come near the fire-light and salute you with their strange wild notes; a distant fox sets up for himself with his odd, barking cry and you turn in. Not ready to sleep just yet.

But you drop off; and it is two bells in the morning watch when you waken with a sense of chill and darkness. The fire has burned low, and snow is falling. The owls have left, and a deep silence broods over the cold, still forest. You rouse the fire.... The smoke curls lazily upward; the fire makes you warm and drowsy, and again you lie down—to again awaken with a sense of chilliness—to find the fire burned low, and daylight breaking. You have slept better than you would in your own room at home. You have slept in an "Indian camp."

You have also learned the difference between such a simple shelter and an open air bivouac under a tree or beside an old log.

Another easily made and very comfortable camp is the "brush shanty," as it is usually called in Northern Pennsylvania. The frame for such a shanty is a cross-pole resting on two crotches about six feet high, and enough straight poles to make a foundation for the thatch. The poles are laid about six inches apart, one end of the ground, the other on the crosspole, and at a pretty sharp angle. The thatch is made of the fan-like boughs cut from the thrifty young hemlock, and are to be laid bottom upward and feather end down. Commence to lay them from the ground, and work up to the crosspole, shingling them carefully as you go. If the thatch be laid a foot in thickness, and well done, the shanty will stand a pretty heavy rain--better than the average bark roof, which is only rain-proof in dry weather.

A bark camp, however, may be a very neat sylvan affair, provided you are camping where spruce or balsam fir may be easily reached, and in the hot

months when bark will "peel"; and you have a day in which to work at a camp. The best bark camps I have ever seen are in the Adirondacks. Some of them are rather elaborate in construction, requiring two or more days' hard labor by a couple of guides. When the stay is to be a long one, and the camp permanent, perhaps it will pay.

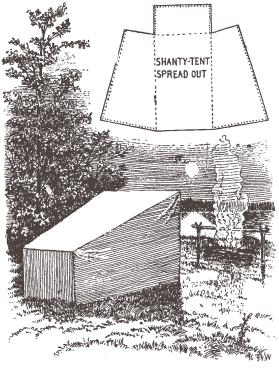
As good a camp as I have ever tried--perhaps the best--is the "shanty-tent" shown in the illustration. It is easily put up, is comfortable, neat, and absolutely rain-proof. Of course, it may be of any required size; but, for a party of two, the following dimensions and directions will be found all sufficient:

Firstly, the roof. This is merely a sheet of strong cotton cloth 9 feet long by 4 or 4 1/2 feet in width. The sides, of the same material, to be 4 1/2 feet deep at front, and 2 feet deep at the back. This gives 7 feet along the edge of the roof, leaving 2 feet for turning down at the back end of the shanty. It will be seen that the sides must be "cut bias," to compensate for the angle of the roof, otherwise the shanty will not be square and ship-shape when put up. Allowing for waste in cutting, it takes nearly 3 yards of cloth for each side. The only labor required in making, is to cut the sides to the proper shape, and stitch them to the roof. No buttons, strings, or loops. The cloth does not even require hemming. It does, however, need a little water-proofing; for which the following receipt will answer very well, and add little or nothing to the weight: To 10 quarts of water add 10 ounces of lime, and 4 ounces of alum; let it stand until clear; fold the cloth snugly and put it in another vessel, pour the solution on it, let it soak for 12 hours; then rinse in luke-warm rain water, stretch and dry in the sun, and the shanty-tent is ready for use.

To put it up properly, make a neat frame as follows: Two strong stakes or posts for the front, driven firmly in the ground 4 feet apart; at a distance of 6 feet 10 inches from these, drive two other posts--these to be 4 feet apart--for back end of shanty. The front posts to be 4 1/2 feet high, the back rests only two feet. The former also to incline a little toward each other above, so as to measure from outside of posts, just 4 feet at top. This gives a little more width at front end of shanty, adding space and warmth. No crotches are used in putting up the shanty-tent. Each of the four posts is fitted on the top to receive a flat-ended cross-pole, and admit of nailing. When the posts are squarely ranged and driven, select two straight, hardwood rods, 2 inches in diameter, and 7 feet in length--or a little more. Flatten the ends carefully and truly, lay them alongside on top from post to post, and fasten them with a light nail at each end. Now, select two more straight rods of the same size, but a little over 4 feet in length; flatten the ends of these as you did the others, lay them crosswise from side to side, and lapping the ends of the other rods; fasten them solidly by driving a sixpenny nail through the ends and into the posts, and you have a square frame 7x4 feet. But it is not yet complete. Three light rods are needed for rafters. These are to be placed lengthwise of the roof at equal distances apart, and nailed or tied to keep them in place. Then take two straight poles a little over 7 feet long, and some 3 inches in

diameter. These are to be accurately flattened at the ends, and nailed to the bottom of the posts, snug to the ground, on outside of posts. A foot-log and head-log are indispensable. These should be about 5 inches in diameter, and of a length to just reach from outside to outside of posts. They should be squared at ends, and the foot-log placed against the front post, outside, and held firmly in place by two wooden pins. The head-log is fastened the same way, except that it goes against the inside of the back posts; and the frame is complete. Round off

all sharp angles or corners with knife and hatchet, and proceed to spread and fasten the cloth. Lay the roof on evenly, and tack it truly to the front cross-rod. using about a dozen six-ounce tacks. Stretch the cloth to its bearings, and tack it at the back end in the same manner. Stretch it sidewise and tack the sides to the side poles, fore and aft. Tack front and back ends of sides to the front and back posts. Bring down the 2-foot flap of roof at back end of shanty; stretch, and



tack it snugly to the back posts-and your sylvan house is done. It is rain-proof, wind-proof, warm and comfortable. The foot and head logs define the limits of your forest dwelling; within which you may pile fragrant hemlock browse as thick as you please, and renew it from day to day. It is the perfect camp.

You may put it up with less care and labor, and make it do very well. But I have tried to explain how to do it in the best manner; to make it all sufficient for an entire season. And it takes longer to tell it on paper than to do it.

When I go to the woods with a partner, and we arrive at our camping ground, I like him to get his fishing rig together, and start out for a half day's exercise with his favorite flies, leaving me to make the camp according to my own notions of woodcraft. If he will come back about dusk with a few pounds of trout, I will have a pleasant camp and a bright fire for him. And if he has enjoyed wading an icy stream more than I have making the camp--he has had a good day.

Perhaps it may not be out of place to say that the camp, made as above, calls for fifteen bits of timber, posts, rods, etc., a few shingle nails, and some six-penny wrought nails, with a paper of six-ounce tacks. Nails and tacks will weigh about five ounces, and are always useful. In tacking the cloth, turn the raw edge in until you have four thicknesses, as a single thickness is apt to tear. If you desire to strike camp, it takes about ten minutes to draw and save all the nails and tacks, fold the cloth smoothly, and deposit the whole in your knapsack. If you wish to get up a shelter tent on fifteen minutes' notice, cut and sharpen a twelve-foot pole as for the Indian camp, stick one end in the ground, the other in the rough bark of a large tree--hemlock is best--hang the cloth on the pole, fasten the sides to rods, and the rods to the ground with inverted crotches, and your shelter tent is ready for you to creep under.

The above description of the shanty-tent may seem a trifle elaborate, but I hope it is plain. The affair weighs just three pounds, and it takes a skillful woodsman about three hours of easy work to put it in the shape described. Leaving out some of the work, and only aiming to get it up in square shape as quickly as possible, I can put it up in an hour. The shanty as it should be, is shown in the illustration very fairly. And the shape of the cloth when spread out, is shown in the diagram. On the whole, it is the best form of close-side tent I have found. It admits of a bright fire in front, without which a forest camp is just no camp at all to me. I have suffered enough in close, dark, cheerless, damp tents.

More than thirty years ago I became disgusted with the clumsy, awkward, comfortless affairs that, under many different forms, went under the name of camps. Gradually I came to make a study of "camping out." It would take too much time and space, should I undertake to describe all the different styles and forms I have tried. But I will mention a few of the best and worst.

The old Down East "coal cabin" embodied the principle of the Indian camp. The frame was simply two strong crotches set firmly in the ground at a distance of eight feet apart, and interlocking at top. These supported a stiff ridge-pole fifteen feet long, the small end sharpened and set in the ground. Refuse boards, shooks, stakes, etc., were placed thickly from the ridge-pole to the ground; a thick layer of straw was laid over these, and the whole was covered a foot thick with earth and sods, well beaten down. A stone wall five feet high at back and sides made a most excellent fireplace; and these cabins were weather-proof and warm, even in zero weather. But they were too cumbersome, and included too much labor for the ordinary hunter and angler. Also, they were open to the objection, that while wide enough in front, they ran down to a dismal, cold peak at the far end. Remembering, however, the many pleasant winter nights I had passed with the coal-burners, I bought a supply of

oil-cloth and rigged it on the same principle. It was a partial success, and I used it for one season. But that cold, peaked, dark space was always back of my head, and it seemed like an iceberg. It was in vain that I tied a handkerchief about my head, or drew a stocking-leg over it. That miserable, icy angle was always there. And it would only shelter one man anyhow. When winter drove me out of the woods I gave it to an enthusiastic young friend, bought some more oilcloth, and commenced a shanty-tent that was meant to be perfect. A good many leisure hours were spent in cutting and sewing that shanty, which proved rather a success. It afforded a perfect shelter for a space 7x4 feet, but was a trifle heavy to pack, and the glazing began to crack and peel off in a short time. I made another and larger one of stout drilling, soaked in lime-water and alum; and this was all that could be. asked when put up properly on a frame. But, the



SHANTY-TENT AND CAMP-FIRE

sides and ends being sewed to the roof made it unhandy to use as a shelter, when shelter was needed on short notice. So I ripped the back ends of the sides loose from the flap, leaving it, when spread out, as shown in the diagram. This was better; when it was necessary to make some sort of shelter in short order, it could be done with a single pole as used in the Indian camp, laying the tent across the pole, and using a few tacks to keep it in place at sides and center. This can be done in ten minutes, and makes a shelter-tent that will turn a heavy rain for hours.

On the whole, for all kinds of weather, the shanty-tent is perhaps the best style of camp to be had at equal expense and trouble.

For a summer camp, however, I have finally come to prefer the simple lean-to or shed roof. It is the lightest, simplest and cheapest of all cloth devices

for camping out, and I have found it sufficient for all weathers from June until the fall of the leaves. It is only a sheet of strong cotton cloth 9x7 feet, and soaked in lime and alum-water as the other. The only labor in making it is sewing two breadths of sheeting together. It needs no hemming, binding, loops or buttons, but is to be stretched on a frame as described for the brush shanty, and held in place with tacks. The one I have used for two seasons cost sixty cents, and weighs 2 1/4 pounds. It makes a good shelter for a party of three; and if it be found a little too breezy for cool nights, a sufficient windbreak can be made by driving light stakes at the sides and weaving in a siding of hemlock boughs.

Lastly, whatever cloth structure you may elect to use for a camp, do not fail to cover the roof with a screen of green boughs before building your camp-fire. Because there will usually be one fellow in camp who has a penchant for feeding the fire with old mulchy deadwood and brush, for the fun of watching the blaze, and the sparks that are prone to fly upward; forgetting that the blazing cinders are also prone to drop downward on the roof of the tent, burning holes in it.

I have spoken of some of the best camps I know. The worst ones are the A and wall tents, with all closed camps in which one is required to seclude himself through the hours of sleep in damp and darkness, utterly cut off from the cheerful, healthful light and warmth of the camp-fire.

CHAPTER IV

CAMP-FIRES AND THEIR IMPORTANCE--THE WASTEFUL WRONG WAY THEY ARE USUALLY MADE, AND THE RIGHT WAY TO MAKE THEM

HARDLY second in importance to a warm, dry camp, is the camp-fire. In point of fact, the warmth, dryness, and healthfulness of a forest camp are mainly dependent on the way the fire is managed and kept up. No asthmatic or consumptive patient ever regained health by dwelling in a close, damp tent. I once camped for a week in a wall tent, with a Philadelphia party, and in cold weather. We had a little sheet iron fiend, called a camp-stove. When well fed with bark, knots and chips, it would get red hot, and, heaven knows, give out heat enough. By the time we were sound asleep, it would subside; and we would presently awake with chattering teeth to kindle her up again, take a smoke and a nip, turn in for another nap--to awaken again half frozen. It was a poor substitute for the open camp and bright fire. An experience of fifty years convinces me that a large percentage of the benefit obtained by invalids from camp life is attributable to the open camp and well-managed camp-fire. And the latter is usually handled in away that is too sad, too wasteful; in short, badly botched. For instance.

It happened in the summer of '81 that I was making a canoe trip in the Northern Wilderness, and as Raquette Lake is the largest and about the most interesting lake in the North Woods, I spent about a week paddling, fishing, etc. I made my headquarters at Ed. Bennett's woodland hostelry, "Under the Hemlocks." As the hotel was filled with men, women and crying children, bitten to agony by punkies and mosquitoes, I chose to spread my blanket in a well-made bark shanty, which a signboard in black and white said was the "Guides' Camp."

And this camp was a very popular institution. Here it was that every evening, when night had settled down on forest and lake, the guests of the hotel would gather to lounge on the bed of fresh balsam browse, chat, sing and enjoy the huge camp-fire.

No woodland hotel will long remain popular that does not keep up a bright, cheery, out-o'-door fire. And the fun of it--to an old woodsman--is in noting how like a lot of school children they all act about the fire. Ed. Bennett had a man, a North Woods trapper, in his employ, whose chief business was to furnish plenty of wood for the guides' camp, and start a good fire every evening by sundown. As it grew dark and the blaze shone high and bright, the guests would begin to straggle in; and every man, woman and child seemed to view it as a religious duty to pause by the fire, and add a stick or two, before passing into camp. The wood was thrown on endwise, crosswise, or any way, so that it would burn, precisely as a crowd of boys make a bonfire on the village green. The object being, apparently, to get rid of the wood in the shortest possible time.

When the fire burnt low, toward mid-night, the guests would saunter off to the hotel; and the guides, who had been waiting impatiently, would organize what was left of the fire, roll themselves in their blankets, and turn in. I suggested to the trapper that he and I make one fire as it should be, and maybe they would follow suit--which would save half the fuel, with a better fire. But he said, "No; they like to build bonfires, and 'Ed.' can stand the wood, because it is best to let them have their own way. Time seems to hang heavy on their hands--and they pay well." Summer boarders, tourists and sportsmen, are not the only men who know how to build a camp-fire all wrong.

When I first came to Northern Pennsylvania, thirty-five years ago, I found game fairly abundant; and, as I wanted to learn the country where deer most abounded, I naturally cottoned to the local hunters. Good fellows enough, and conceited, as all local hunters and anglers are apt to be. Strong, good hunters and axe-men, to the manner born, and prone to look on any outsider as a tenderfoot. Their mode of building camp-fires was a constant vexation to me. They made it a point to always have a heavy sharp axe in camp, and toward night some sturdy chopper would cut eight or ten logs as heavy as the whole party could lug to camp with hand-spikes. The size of the logs was proportioned to the muscular force in camp. If there was a party of six or eight, the logs would be twice as heavy as when we were three or four. Just at dark, there would be a log heap built in front of the camp, well chinked with bark, knots and small sticks; and, for the next two hours, one could hardly get at the fire to light a pipe. But the fire was sure though slow. By 10 or 11 P. M. it would work its way to the front, and the camp would be warm and light. The party would turn in, and deep sleep would fall on a lot of tired hunters--for two or three hours. By which time some fellow near the middle was sure to throw his blanket off with a spiteful jerk, and dash out of camp with, "...I can't stand this; it's an oven."

Another Snorer (partially waking).--"N-r-r-rm, gu-r-r, ugh. Can't you-deaden--fire--a little?"

First Speaker.--".... If you want the fire deadened, get up and help throw off some of these logs."

Another (in coldest corner of shanty)-"What's 'er matter with a-you fellows? Better dig out--an' cool off in the snow. Shanty's comfor'ble enough."

His minority report goes unheeded. The camp is roasted out. Strong hands and hand-spikes pry a couple of glowing logs from the front and replace them with two cold, green logs; the camp cools off, and the party takes to blankets once more--to turn out again at 5 A. M., and inaugurate breakfast.

The fire is not in favorable shape for culinary operations, the heat is mainly on the back side, just where it isn't wanted. The few places level enough to set a pot or pan are too hot; and, in short, where there is any fire, there is too much. One man sees, with intense disgust, the nozzle of his coffee-pot drop into the fire. He makes a rash grab to save his coffee, and gets away--with the handle, which hangs on just enough to upset the pot.

"Old Al.," who is frying a slice of pork over a bed of coals that would

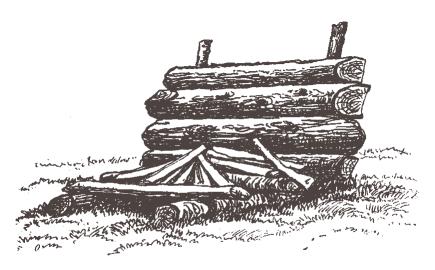
melt a gun barrel, starts a hoarse laugh, that is cut short by a blue flash and an explosion of pork fat, which nearly blinds him. And the writer, taking in these mishaps in the very spirit of fun and frolic, is suddenly sobered and silenced by seeing his venison steak drop from the end of the "frizzling stick," and disappear between two glowing logs. The party manages, however, to get off on the hunt at daylight, with full stomachs; and perhaps the hearty fun and laughter more than compensate for these little mishaps.

This is a digression. But I am led to it by the recollection of many nights spent in camps and around camp-fires, pretty much as described above. I can smile today at the remembrance of the calm, superior way in which the old hunters of that day would look down on me, as from the upper branches of a tall hemlock, when I ventured to suggest that a better fire could be made with half the fuel and less than half the labor. They would kindly remark, "Oh, you are a Boston boy. You are used to paying \$8.00 a cord for wood. We have no call to save wood here. We can afford to burn it by the acre." Which was more true than logical. Most of these men had commenced life with a stern declaration of war against the forest; and, although the men usually won at last, the battle was along and hard one. Small wonder that they came to look upon a forest tree as a natural enemy. The camp-fire question came to a crisis, how ever, with two or three of these old settlers. And, as the story well illustrates my point, I will venture to tell it.

It was in the "dark days before Christmas" that a party of four started from W., bound for a camp on Second Fork, in the deepest part of the wilderness that lies between Wellsboro and the Block House. The party consisted of Sile J., Old Al., Eli J. and the writer. The two first were gray-haired men, the others past thirty; all the same, they called us "the boys." The weather was not inviting, and there was small danger of our camp being invaded by summer outers or tenderfeet. It cost twelve miles of hard travel to reach that camp; and, though we started at daylight, it was past noon when we arrived. The first seven miles could be made on wheels, the balance by hard tramping. The road was execrable; no one cared to ride; but it was necessary to have our loads carried as far as possible. The clearings looked dreary enough, and the woods forbidding to a degree, but our old camp was the picture of desolation. There was six inches of damp snow on the leafless brush roof, the blackened brands of our last fire were sticking their charred ends out of the snow, the hemlocks were bending sadly under their loads of wet snow, and the entire surroundings had a cold, cheerless, slushy look, very little like the ideal hunter's camp. We placed our knapsacks in the shanty, Eli got out his nail hatchet, I drew my little pocket-axe, and we proceeded to start a fire, while the two older men went up stream a few rods to unearth a full-grown axe and a bottle of old rye, which they had cached under a log three months before. They never fooled with pocket-axes. They were gone so long that we sauntered up the band, thinking it might be the rye that detained them. We found them with their coats off, working like beavers, each with a stout, sharpened stick. There had been an October freshet, and a flood-jam at the

bend had sent the mad stream over its banks, washing the log out of position and piling a gravel bar two feet deep over the spot where the axe and flask should have been. About the only thing left to do was to cut a couple of stout sticks, organize a mining company, limited, and go in; which they did. Sile was drifting into the side of the sandbar savagely, trying to strike the axe-helve, and Old Al. was sinking numberless miniature shafts from the surface in a vain attempt to strike whisky. The company failed in about half an hour. Sile resumed his coat, and sat down on a log--which was one of his best holds, by the way. He looked at Al.; Al. looked at him; then both looked at us, and Sile remarked that, if one of the boys wanted to go out to the clearings and "borry" an axe, and come back in the morning, he thought the others could pick up wood enough to tough it out one night. Of course nobody could stay in an open winter camp without an axe.

It was my time to come to the front. I said: "You two just go at the camp; clean the snow off and slick up the inside. Put my shelter-cloth with Eli's, and cover the roof with them; and if you don't have just as good a fire tonight as you ever had, you can tie me to a beech and leave me here. Come on, Eli." And Eli did come on. And this is how we did it: We first felled a thrifty butternut tree ten inches in diameter, cut off three lengths at five feet each, and carried them to camp. These were the back logs. Two stout stakes were driven at the back of the fire, and the logs, on top of each other, were laid firmly against the stakes. The latter were slanted a little back, and the largest log placed at bottom, the smallest



CAMP-FIRE AS IT SHOULD BE MADE

on top, to prevent tipping forward. A couple of short, thick sticks were laid with the ends against the bottom log by way of fire dogs; a fore stick, five feet long and five inches in diameter; a well built pyramid of bark, knots and small logs completed the camp-fire, which sent a pleasant glow of warmth and heat to the furthest corner of the shanty. For "night-wood," we cut a dozen birch and ash poles from four to six inches across, trimmed them to the tips, and dragged them to camp. Then we denuded a dry hemlock of its bark; and, by the aid of ten-foot poles, flattened at one end, and packed the bark to camp. We had a bright, cheery fire from the early evening until morning, and four tired hunters never slept more soundly.

We stayed in that camp a week; and, though the weather was rough and cold, the little pocket-axes kept us well in firewood. We selected butternut for backlogs, because, when green, it burns very slowly and lasts a long time. And we dragged our smaller wood to camp in lengths of twenty to thirty feet, because it was easier to lay them on the fire and burn them in two than to cut them shorter with light hatchets. With a heavy axe, we should have cut them to lengths of five or six feet....

CHAPTER VI

CAMP COOKERY--HOW IT IS USUALLY DONE, WITH A FEW SIMPLE HINTS ON PLAIN COOKING--COOKING FIRE AND OUT-DOOR RANGE

THE way in which an average party of summer outers will contrive to manage-or mis-manage--the camp and camp-fire so as to get the greatest amount of smoke and discontent at the least outlay of time and force, is something past all understanding, and somewhat aggravating to an old woodsman who knows some better. But it is just as good fun as the cynical O. W. can ask, to see a party of three or four enthusiastic youngsters organize the camp on the first day in, and proceed to cook the first meal. Of course, every man is boss, and every one is bound to build the fire, which every one proceeds to do. There are no back logs, no fore sticks, and no arrangement for level solid bases on which to place frying-pans, coffee pots, etc. But, there is a sufficiency of knots, dry sticks, bark and chunks, with some kindling at the bottom, and a heavy volume of smoke working its way through the awkward-looking pile. Presently thin tongues of blue flame begin to shoot up through the interstices, and four brand new coffee pots are wriggled into level positions at as many different points on the bonfire. Four hungry youngsters commence slicing ham and pork, four frying-pans are brought out from as many hinged and lidded soap boxes-when one man yells out hurriedly, "Look out, Joe, there's your coffee pot handle coming off." And he drops his frying-pan to save his coffee pot, which he does, minus the spout and handle. Then it is seen that the flames have increased rapidly, and all the pots are in danger. A short, sharp skirmish rescues them, at the expense of some burned fingers, and culinary operations are the order of the hour.

Coffee and tea are brewed with the loss of a handle or two, and the frying-pans succeed in scorching the pork and ham to an unwholesome black mess. The potato kettle does better. It is not easy to spoil potatoes by cooking them in plenty of boiling water; and, as there is plenty of bread with fresh butter, not to mention canned goods, the hungry party feed sufficiently, but not satisfactorily. Everything seems pervaded with smoke. The meat is scorched bitter, and the tea is of the sort described by Charles Dudley Warner, in his humorous description of "camping out": "The sort of tea that takes hold, lifts the hair, and disposes the drinker to hilariousness. There is no deception about it, it tastes of tannin, and spruce, and creosote." Of the cooking he says: "Everything has been cooked in a tin pail and a skillet--potatoes, tea, pork, mutton, slapjacks. You wonder how everything would have been prepared in so few utensils. When you eat, the wonder ceases, everything might have been cooked in one pail. It is a noble meal....The slapjacks are a solid job of work, made to last, and not go to pieces in a person's stomach like a trivial bun."

I have before me a copy of *Forest and Stream*, in which the canoe editor, under the heading of "The Galley Fire," has some remarks well worth

quoting. He says: "The question of camp cookery is one of the greatest importance to all readers of *Forest and Stream*, but most of all to the canoeists. From ignorance of what to carry the canoeist falls back on canned goods, never healthy as a steady diet, Brunswick soup and eggs.... The misery of that first camp-fire, who has forgotten it? Tired, hungry, perhaps cold and wet, the smoke everywhere, the coffee pot melted down, the can of soup upset in the fire, the fiendish conduct of frying-pan and kettle, the final surrender of the exhausted victim, sliding off to sleep with a piece of hardtack in one hand and a slice of canned beef in the other, only to dream of mother's hot biscuits, juicy steaks, etc., etc." It is very well put, and so true to the life. And again: "Frying, baking, making...stews, plain biscuits, the neat and speedy preparation of a healthy 'square meal' can be easily learned." Aye, and should be learned by every man who goes to the woods with or without a canoe.

But I was describing a first day's camping out, the party being four young men and one old woodsman, the latter going along in a double character of invited guest and amateur guide. When the boys are through with their late dinner, they hustle the greasy frying-pans and demoralized tinware into a corner of the shanty, and get out their rods for an evening's fishing. They do it hurriedly, almost feverishly, as youngsters are apt to do at the start. The O. W. has taken no part in the dinner, and has said nothing save in response to direct questions, nor has he done anything to keep up his reputation as a woodsman, except to see that the shelter roof is properly put up and fastened. Having seen to this, he reverts to his favorite pastime, sitting on a log and smoking navy plug. Long experience has taught him that it is best to let the boys effervesce a little. They will slop over a trifle at first, but twenty-four hours will settle them. When they are fairly out of hearing, he takes the old knapsack from the clipped limb where it has been hung, cuts a slice of ham, butters a slice of bread, spreads the live coals and embers, makes a pot of strong green tea, broils the ham on a three-pronged birch fork, and has a clean, well-cooked plain dinner. Then he takes the sharp three-pound camp axe, and fells a dozen small birch and ash trees, cutting them into proper lengths and leaving them for the boys to tote into camp. Next, a bushy, heavy-topped hemlock is felled, and the O. W. proceeds leisurely to pick a heap of fine hemlock browse. A few handfuls suffice to stuff the muslin pillow bag, and the rest is carefully spread on the port side of the shanty for a bed. The pillow is placed at the head, and the old Mackinac blanket-bag is spread neatly over all, as a token of ownership and possession. If the youngsters want beds of fine, elastic browse, let 'em make their own beds.

No camp-fire should be without **poker** and **tongs**. The poker is a beech stick four feet long by two inches thick, flattened at one end, with a notch cut in it for lifting kettles, etc. To make the tongs, take a tough beech or hickory stick, one inch thick by two feet in length, shave it down nearly one-half for a foot in the center, thrust this part into hot embers until it bends freely, bring the ends together and whittle them smoothly to a fit on the inside, cross-checking them also to give them a grip; finish off by chamfering the ends neatly from the

outside. They will be found exceedingly handy in rescuing a bit of tinware...or any small article that happens to get dropped in a hot fire.

And don't neglect the camp **broom**. It is made by laying bushy hemlock twigs around a light handle, winding them firmly with strong twine or moose wood bark, and chopping off the ends of the twigs evenly. It can be made in ten minutes. Use it to brush any leaves, sticks, and any litter from about the camp or fire. **Neatness is quite as pleasant and wholesome around the forest camp as in the home kitchen**. These little details may seem trivial to the reader. But remember, if there is a spot on earth where trifles make up the sum of human enjoyment, it is to be found in a woodland camp. All of which the O. W. fully appreciates, as he finishes the above little jobs; after which he proceeds to spread the fire to a broad level bed of glowing embers, nearly covering the same with small pieces of hemlock bark, that the boys may have a decent cooking fire on their return.

About sundown they come straggling in, not jubilant and hilarious, footsore rather and a little cross. The effervescence is subsiding, and the noise is pretty well knocked out of them. They have caught and dressed some three score of small brook trout, which they deposit beside the shanty, and proceed at once to move on the fire, with evident intent of raising a conflagration, but are checked by the O. W., who calls their attention to the fact that for all culinary purposes, the fire is about as near the right thing as they are likely to get it. Better defer the bonfire until after supper. Listening to the voice of enlightened woodcraft, they manage to fry trout and make tea without scorch or creosote, and the supper is a decided improvement on the dinner. But the dishes are piled away as before, without washing.

Then follows an hour of busy work, bringing wood to camp and packing browse. The wood is sufficient; but the browse is picked, or cut, all too coarse, and there is only enough of it to make the camp look green and pleasant--not enough to rest weary shoulders and backs. But, they are sound on the bonfire. They pile on the wood in the usual way, criss-cross and haphazard. It makes a grand fire, and lights up the forest for fifty yards around, and the tired youngsters turn in. Having the advantage of driving a team to the camping ground, they are well supplied with blankets and robes. They ought to sleep soundly, but they don't. The usual drawbacks of a first night in camp are soon manifested in uneasy twistings and turnings, grumbling at stubs, nots, and sticks, that utterly ignore conformity with the angles of the human frame. But. at last, tired nature asserts her supremcy, and they sleep. Sleep soundly, for a couple of hours; when the bonfire, having reached the point of disintegration, suddenly collapses with a sputtering and crackling that brings them to their head's antipodes, and four dazed, sleepy faces look out with a bewildered air, to see what has caused the rumpus. All take a hand in putting the brands together and re-arranging the fire, which burns better than at first; some sleepy talk, one or two feeble attempts at a smoke, and they turn in again. But, there is not an hour during the remainder of the night in which some one is not pottering about the

fire.

The O.W., who has abided by his blanket-bag all night quietly taking in the fun--rouses out the party at 4 A. M. For two of them are to fish Asaph Run with bait, and the other two are to try the riffles of Marsh Creek with the fly. As the wood is all burned to cinders and glowing coals, there is no chance for a smoky fire; and, substituting coffee for tea, the breakfast is a repetition of the supper.

By sunrise the boys are off, and the O. W. has the camp to himself. He takes it leisurely, gets up a neat breakfast of trout, bread, butter, and coffee, cleans and puts away his dishes, has a smoke, and picks up the camp axe. Selecting a bushy hemlock fifteen inches across, he lets it down in as many minutes, trims it to the very tip, piles the limbs in a heap, and cuts three lengths of six feet each from the butt. This insures browse and back logs for some time ahead. Two strong stakes are cut and sharpened.

Four small logs, two of eight and two of nine feet in length, are prepared, plenty of night wood is made ready, a supply of bright, dry hemlock bark is carried to camp, and the O. W. rests from his labors, resuming his favorite pastime of sitting on a log and smoking navy plug. Finally it occurs to him that he is there partly as guide and mentor to the younger men, and that they need a lesson on cleanliness. He brings out the frying-pans and finds a filthy-looking mess of grease in each one, wherein ants, flies, and other insects have contrived to get mixed. Does he heat some water, and clean and scour the pans? Not if he knows himself. If he did it once he might keep on doing it. He is cautious about establishing precedents, and he has a taste for entomology. He places the pans in the sun where the grease will soften and goes skirmishing for ants and doodle bugs. They are not far to seek, and he soon has a score of large black ants, with a few bugs and spiders, pretty equally distributed among the frying-pans. To give the thing a plausible look a few flies are added, and the two largest pans are finished off, one with a large earwig, the other with a thousand-legged worm. The pans are replaced in the shanty, the embers are leveled and nearly covered with bits of dry hemlock bark, and the O. W. resumes his pipe and log

> With such a face of Christian satisfaction, As good men wear, who have done a virtuous action.

Before noon the boys are all in, and as the catch is twice as numerous and twice as large as on the previous evening, and as the weather is all that could be asked of the longest days in June, they are in excellent spirits. The boxes are brought out, pork is sliced, a can of Indian meal comes to the front, and they go for the frying-pans.

"...Look here. Just see the ants and bugs."

Second Man.--"Well, I should say! I can see your ants and bugs, and go you an earwig better."

Third Man (inverting his pan spitefully over the fire).--"...I'll roast the beggars.

Bush D. (who is something of a cook and woodsman) "Boys, I'll take the pot. I've got a thousand-legged worm..., and it serves us right, for a lot of slovens. Dishes should be cleaned as often as they are used. Now let's scour our pans and commence right."

Hot water, ashes, and soap soon restore the pans to pristine brightness; three frying-pans are filled with trout well rolled in meal; a fourth is used for cooking a can of tomatoes; ...and everything comes out without being smoked or scorched. The trout are browned to a turn, and even the O. W. admits that the dinner is a success. When it is over and the dishes are cleaned and put away, and the camp slicked up, there comes the usual two hours of lounging,...and story telling, so dear to the hearts of those who love to go a-fishing and camping. At length there is a lull in the conversation, and Bush D. turns to the old woodsman with, "I thought, 'Uncle Mart,' you were going to show us fellows such a lot of kinks about camping out, camp-fires, cooking, and all that sort of thing, isn't it about time to begin? Strikes me you have spent most of the last twenty-four hours holding down that log." "Except cutting some night wood and tending the fire," adds number two.

The old woodsman, who has been rather silent up to this time,...gets on his feet for a few remarks. He says, "Boys, a bumblebee is biggest when it's first born. You've learned more than you think in the last twenty-four hours."

"Well, as how? Explain yourself," says Bush D.

O. W.--"In the first place, you have learned better than to stick your cooking-kit into a tumbled down heap of knots, mulch and wet bark, only to upset and melt down the pots, and scorch or smoke everything in the pans, until a starving hound wouldn't eat the mess. And you have found that it doesn't take a log heap to boil a pot of coffee or fry a pan of trout. Also, that a level bed of live coals makes an excellent cooking fire, though I will show you a better. Yesterday you cooked the worst meal I ever saw in the woods. Today you get up a really good, plain dinner; you have learned that much in one day. Oh, you improve some. And I think you have taken a lesson in cleanliness today."

"Yes; but we learned that of the ant and bug," says number two.

O. W.--"Just so. And did you think all the ants and doodle-bugs blundered into that grease in one morning? I put 'em in myself--to give you a 'kink.'"

Bush D. (disgusted).--"You blasted, dirty old sinner."

Second Man.--"Oh, you miserable old swamp savage; I shan't get over that earwig in a month."

Third Man (plaintively).--"This life in the woods isn't what it's cracked up to be; I don't relish bugs and spiders. I wish I were home. I'm all bitten up with punkies, and--"

Fourth Man (savagely).--"Dashed old woods-loafer; let's tie his hands and fire him in the creek."

O. W. (placidly).--"Exactly, boys. Your remarks are terse, and to the point. Only, as I am going to show you a trick or two on woodcraft this afternoon, you can afford to wait a little. Now, quit smoking, and get out your hatchets; we'll go to work."

Three hatchets are brought to light; one of them a two-pound clumsy



G. W. HATCHET

hand-axe, the others of an old time, Mt.
Vernon, G. W. pattern. "And now," says good-natured Bush, "you give directions and we'll do the work."

Under directions, the coarse browse

of the previous night is placed outside the shanty; three active youngsters, on hands and knees, feel out and cut off every offending stub and root inside the shanty, until it is smooth as a floor. The four small logs are brought to camp; the two longest are laid at the sides and staked in place; the others are placed, one at the head, the other at the foot, also staked; and the camp has acquired definite outlines, and a measurable size of eight by nine feet. Three hemlock logs and two sharpened stakes are toted to camp; the stakes driven firmly, and the logs laid against them, one above the other. Fire-dogs, forestick, etc., complete the arrangement, and the camp-fire is in shape for the coming night, precisely as shown in the engraving on page 33.

"And now," says the O. W., "if three of you will go down to the flat and pick the browse clean from the two hemlock tops, Bush and I will fix a cooking-range."

"A what?" asks one.

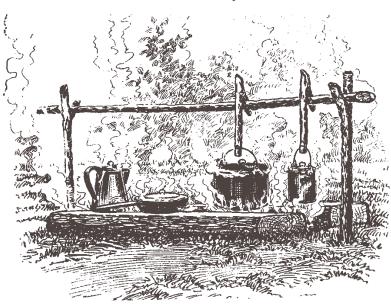
"Going to start a boarding-house?" says another. "Notion of going into the hardware business?" suggests a third. "Never mind, sonny; just 'tend to that browse, and when you see a smoke raising on the flat by the spring, come over and see the range." And the boys, taking a couple of blankets in which to carry the browse, saunter away to the flat below.

A very leisurely aesthetic, fragrant occupation is this **picking browse**. It should never be cut, but pulled, stripped or broken. I have seen a Senator, ex-Governor, and a wealthy banker enjoying themselves hugely at it, varying the occupation by hacking small timber with their G. W. hatchets, like so many boys let loose from school. It may have looked a trifle undignified, but I dare say they found their account in it. Newport or Long Branch would have been more

expensive, and much less healthful.

For an hour and a half tongues and fingers are busy around the hemlock tops; then a thin, long volume of blue smoke rises near the spring, and the boys walk over to inspect **the range**. They find it made as follows: Two logs six feet long and eight inches thick are laid parallel, but seven inches apart at one end and only four at the other. They are bedded firmly and flattened a little on the inside. On the upper sides the logs are carefully hewed and leveled until pots, pans and kettles will sit firmly and evenly on them. A strong forked stake is driven at each end of the space, and a cross-pole, two or three inches thick, laid on, for hanging kettles. This completes the range; simple, but effective. (See illustration.) The broad end of the space is for frying-pans, and the potato kettle. The narrow end, for coffee-pots and utensils of lesser diameter. From six to eight dishes can be cooked at the same time. Soups, stews, and beans are to be cooked in closely covered kettles hung from the cross-pole, the bottoms of the kettles reaching within some two inches of the logs. With a moderate fire they may be left to simmer for hours without care or attention.

The fire is of the first importance. Start it with fine kindling and clean, dry, hemlock bark. When you have a bright, even fire from end to end of the space, keep it up with small fagots of the sweetest and most wholesome woods in the forest. These are, in the order named, black birch, hickory, sugar maple, yellow birch, and red beech. The sticks should be short, and not over two inches across. Split wood is better than round. The out-door range can be made by one man in little more than an hour, and the camper-out, who once tries it, will never



OUT-DOOR COOKING-RANGE

wish to see a "portable camp-stove" again.

When the sun leaves the valley in the shade of Asaph Mountain, the boys have a fragrant bed of elastic browse a foot deep in the shanty, with pillows improvised from stuffed boot legs, cotton handkerchiefs, etc. They cook their suppers on the range, and vote it perfect, no melting or heating handles too hot for use, and no smoking of dishes, or faces.

Just at dark--which means 9 P.M. in the last week of June--the fire is carefully made and chinked. An hour later it is throwing its grateful warmth and light directly into camp, and nowhere else. The camp turns in. Not to wriggle and quarrel with obdurate stubs, but to sleep. And sleep they do. The sound, deep, restful sleep of healthy young manhood, inhaling pure mountain air on the healthiest bed yet known to man.

When it is past midnight, and the fire burns low, and the chill night breeze drifts into camp, they still do not rouse up, but only spoon closer, and sleep right on. Only the O. W. turns out sleepily, at two bells in the middle watch, after the manner of hunters, trappers, and sailors, the world over. He quietly rebuilds the fire, reduces a bit of navy plug to its lowest denomination, and takes a solitary smoke--still holding down his favorite log. Quizzically and quietly he regards the sleeping youngsters, and wonders if among them all there is one who will do as he has done, i.e., relinquish all of what the world reckons as success, for the love of nature and a free forest life. He hopes not. And yet, as he glances at the calm yellow moon overhead, and listens to the low murmur of

the little waterfall below the spring, he has a faint notion that it is not all loss and dross.

Knocking the ashes from his pipe he prepares to turn in, murmuring to himself, half sadly, half humorously, "I have been young, and now I am old; yet have I never seen the true woodsman forsaken, or his seed begging bread--or anything else, so to speak-unless it might be a little tobacco or a nip of whisky." And he creeps into his blanket-bag, backs softly out to the outside man, and joins the snorers.

"I have been young, and now am old; yet have I not seen the <u>righteous</u> forsaken, nor his seed begging bread." Psalm 37:25.

"Be not among winebibbers; among riotous eaters of flesh: For the drunkard and the glutton shall come to poverty: and drowsiness shall clothe a man with rags."

Proverbs 23:20, 21.

"He becometh poor that dealeth with a slack hand: but the hand of the diligent maketh rich." Proverbs 10:4.

It is broad daylight when he again turns out, leaving the rest still sleeping soundly. He starts a lively fire in the range, treats two coffee pots to a double handful of coffee and three pints of water each, sets on the potato kettle, washes the potatoes, then sticks his head into the camp, and rouses the party

with a regular second mate's hail. "Star-a-ar-bo'lin's aho-o-o-y. Turn out, you beggars. Come on deck and see it rain." And the boys do turn out. Not with wakeful alacrity, but in a dazed, dreamy, sleepy way. They open wide eyes, when they see that the sun is turning the sombre tops of pines and hemlocks to a soft orange yellow.

"I'd have sworn," says one, "that I hadn't slept over fifteen minutes by the watch."

"And I," says another, "was just watching the fire, when I dropped off in a doze. In about five minutes I opened my eyes, and I'll be shot if it wasn't sunrise."

"As for me," says a third, "I don't know as I've slept at all. I remember seeing somebody poking the fire last night. Next thing I knew, some lunatic was yelling around camp about 'starbolin's,' and 'turning out.' Guess I'll lay down and have my nap out."

"Yes," says the O. W., "I would. If I was a healthy youngster, and couldn't get along with seven hours and a half of solid sleep, I'd take the next forenoon for it. Just at present, I want to remark that I've got the coffee and potato business underway, and I'll attend to them. If you want anything else for breakfast, you'll have to cook it."

And the boys, rising to the occasion, go about the breakfast with willing hands. It is noticeable, however, that only one pan of trout is cooked, two of the youngsters preferring to fall back on broiled ham, remarking that brook trout is too rich and cloying for a steady diet. Which is true. The appetite for trout has very sensibly subsided, and the boyish eagerness for trout fishing has fallen off immensely. Only two of the party show any interest in the riffles. They stroll down stream leisurely, to try their flies for an hour or two. The others elect to amuse themselves about the camp, cutting small timber with their little hatchets, picking fresh browse, or skirmishing the mountain side for wintergreen berries and sassafras. The fishermen return in a couple of hours, with a score of fair-sized trout. They remark apologetically that it is blazing hot--and there are plenty of trout ahead. Then they lean their rods against the shanty, and lounge on the blankets, and smoke and dose.

It is less than forty-eight hours since the cross-pole was laid; and, using a little common sense woodcraft, the camp has already attained to asystematic no-system of rest, freedom and idleness. Every man is free to "loaf, and invite his soul." There is good trouting within an hour's walk for those who choose, and there is some interest, with a little exercise, in cooking and cutting night wood, slicking up, etc. But the whole party is stricken with "camp-fever," "Indian laziness," the *dolce far niente*. It is over and around every man, enveloping him as with a roseate blanket from the Castle of Indolence. It is the perfect summer camp.

And it is no myth; but a literal resume of a five days' outing at Poplar Spring, on Marsh Creek, in Pennsylvania. Alas, for the beautiful valley, that once afforded the finest camping grounds I have ever known.

Chapter VII

MORE HINTS ON COOKING, WITH SOME SIMPLE RECEIPTS-BREAD, POTATOES, SOUPS, STEWS, BEANS

We may live without friends, we may live without books, But civilized man cannot live without cooks.

IT is probably true that nothing connected with out-door life in camp is so badly botched as the cooking. It is not through any lack of the raw material, which may be had of excellent quality in any country village. It is not from lack of intelligence or education, for the men you meet in the woods, as outers or sportsmen, are rather over than under the average in these respects. Perhaps it is because it has been dinned into our ears from early childhood, that an appetite, a healthy longing for something good to eat, a tickling of the palate with wholesome, appetizing food, is beneath the attention of an aesthetic, intellectual man. Forgetting that the entire man, mental and physical, depends on proper aliment and the healthy assimilation thereof; and that a thin, dyspeptic man can no more keep up in the struggle of life, than the lightning express can make connections, drawn by a worn out locomotive.

I have never been able to get much help from cook-books, or the scores of recipes published in various works on out-door sport....In making up the rations for camping out, the first thing usually attended to is bread. And if this be light, well-made bread, enough may be taken along to last four or five days, and this may be eked out with Boston crackers, or the best hard-tack, for a couple or three days more, without the least hardship. Also, there are few camps in which some one is not going out to the clearings every few days for mail, small stores, etc., and a supply of bread can be arranged for, with less trouble than it can be made. There are times; however, when this is not feasible, and there are men who prefer warm bread all the time. In this case the usual resort, from Maine to Alaska, is the universal flapjack. I do not like it; I seldom make it; it is not good. But it may be eaten, with maple syrup or sugar and butter. I prefer a plain water Johnnycake, made as follows (supposing your tins are something like those described in Chapter II): Put a little more than a pint of water in your kettle and bring it to a sharp boil, adding a small teaspoonful of salt, and two of sugar. Stir in slowly enough good corn meal to make a rather stiff mush, let it cook a few minutes, and set it off the fire; then grease your largest tin dish and put the mush in it, smoothing it on top. Set the dish on the out-door range described in the previous chapter, with a lively bed of coal beneath--but no blaze. Invert the second sized tin over the cake, and cover the dish with bright live coals, that bottom and top may bake evenly, and give it from thirty-five to forty minutes for baking. It makes wholesome, palatable bread, which gains on the taste with use.

...When stopping in a permanent camp with plenty of time to cook, excellent light bread may be made by using dry yeast...

I am afraid I shall discount my credit on camp cooking when I admit that--if I must use fine flour--I prefer unleavened bread; what my friends irreverently call "club bread." Not that it was ever made or endorsed by any club of men that I know of, but because it is baked on a veritable club, sassafras or black birch.

This is how to make it: Cut a club two feet long and three inches thick at the broadest end; peel or shave off the bark smoothly, and sharpen the smaller end neatly. Then stick the sharpened end in the ground near the fire, leaning the broad end toward a bed of live coals, where it will get screeching hot.

While it is heating, mix rather more than a half pint of best Minnesota flour with enough warm water to make a dough. Add a half teaspoonful of salt, and a teaspoonful of sugar, and mould and pull the dough until it becomes lively. Now, work it into a ribbon two inches wide and half an inch thick, wind the ribbon spirally around the broad end of the club, stick the latter in front of the fire so that the bread will bake evenly and quickly to a light brown, and turn frequently until done, which will be in about thirty minutes. When done take it from the fire, stand the club firmly upright, and pick the bread off in pieces as you want it to eat. It will keep hot a long time, and one soon becomes fond of it....

Almost any man can cook potatoes, but few cook them well. Most people think them best boiled in their jackets, and to cook them perfectly in this manner is so simple and easy, that the wonder is how anyone can fail. A kettle of screeching hot water with a small handful of salt in it, good potatoes of nearly equal size, washed clean and dipped at the ends, these are the requisites. Put the potatoes in the boiling water, cover closely, and keep the water at high boiling pitch until you can thrust a sharp sliver through the largest potato. Then drain off the water, and [67] set the kettle in a hot place with the lid partly off. Take them out only as they are wanted; lukewarm potatoes are not good. They will be found about as good as potatoes can be, when cooked in their jackets. But there is a better way, as thus: Select enough for a mess, of smooth, sound tubers; pare them carefully, taking off as little as possible, because the best of the potato lies nearest the skin, and cook as above. When done, pour the water off to the last drop; sprinkle a spoonful of salt and fine cracker crumbs over them; then shake, roll, and rattle them in the kettle until the outsides are white and floury. Keep them piping hot until wanted. It is the way to have perfect boiled potatoes.

Many outers are fond of roast potatoes in camp; and they mostly spoil them in the roasting, although there is no better place than the camp-fire in which to do it. To cook them aright, scoop out a basinlike depression under the fore-stick, three or four inches deep, and large enough to hold the tubers when laid side by side; fill it with bright, hard-wood coals, and keep up a strong heat for half an hour or more. Next, clean out the hollow, place the potatoes in it, and cover them with hot sand or ashes, topped with a heap of glowing coals, and keep up all the heat you like. In about forty minutes commence to try them with a sharpened hard-wood sliver; when this will pass through them they are done,

and should be raked out at once. Run the sliver through them from end to end, to let the steam escape, and use immediately, as a roast potato quickly becomes soggy and bitter. I will add that, in selecting a supply of potatoes for camp, only the finest and smoothest should be taken.

A man may be a trout-crank...For two or three days he revels in fly-fishing, and eating brook trout. Then his enthusiasm begins to subside. He talks less of his favorite flies, and hints that wading hour after hour in ice-water gives him cramps in the calves of his legs. Also, he finds that brook trout, eaten for days in succession, pall on the appetite. He hankers for the flesh-pots of the restaurant, and his soul yearns for the bean-pot of home.

Luckily, some one has brought a sack of white beans, and the expert-there is always an expert in camp--is deputed to cook them. He accepts the trust, and proceeds to do it.... Presently the beans begin to swell and lift the lid of the kettle; their conduct is simply demoniacal. They lift up the lid of the kettle, they tumble out over the rim in a way to provoke a saint, and they have scarcely begun to cook. The expert is not to be beaten. As they rise, he spoons them out and throws them away, until half of the best beans being wasted, the rest settle to business. He fills the kettle with water and watches it for an hour. When bean-skins and scum arise he uses the spoon; and when a ring of greasy salt forms around the rim of the kettle, he carefully scrapes it off, but most of it drops back into the pot. When the beans seem cooked to the point of disintegration, he lifts off the kettle, and announces dinner. It is not a success. The largest beans are granulated rather than cooked, while the mealy portion of them has fallen to the bottom of the kettle, and become scorched thereon, and the smaller beans are too hard to be eatable. The liquid, that should be palatable bean soup, is greasy salt water, and the pork is half raw. The party falls back, hungry and disgusted. Even if the mess were well cooked, it is too salt for eating. And why should this be so? Why should any sensible man spend years in acquiring an education that shall fit him for the struggle of life, yet refuse to spend a single day in learning how to cook the food that must sustain the life? It is one of the conundrums no one will ever find out.

There is no article of food more easily carried, and none that contains more nourishment to the pound, than the bean. Limas are usually preferred, but the large white marrow is just as good. It will pay to select them carefully. Keep an eye on grocery stocks, and when you strike a lot of extra large, clean beans, buy twice as many as you need for camp use. Spread them on a table, a quart at a time, and separate the largest and best from the others. Fully one-half will go to the side of the largest and finest, and these may be put in a muslin bag, and kept till wanted.... With such material, if you cannot lay over Boston baked beans, you had better sweep the cook out of camp.... If the beans be fresh and fine they will probably fall to pieces before time is up. This, if they are not allowed to scorch, makes them all the better. If a portion of pork be left over, it is excellent sliced very thin when cold, and eaten with bread. The above is a dinner for three or four hungry men.

It is usually the case that some of the party prefer baked beans. ...Boil as above, until the beans begin to crack open; ...place [them] in ...your largest cooking tin, take beans enough from the kettle to nearly fill the tin, set it over a bright fire on the range, invert the second sized tin for a cover, place live, hard-wood coals on top, and bake precisely as directed for bread--only, when the coals on top become dull and black, brush them off, raise the cover, and take a look. If the beans are getting too dry, add three or four spoonfuls of liquor from the kettle, replace cover and coals, and let them bake until they are of a rich light brown on top. Then serve. It is a good dish. If Boston can beat it, I don't want to lay up anything for old age.

Brown bread and baked beans have a natural connection in the average American mind, and rightly. They supplement each other,...

Soup is, or should be, a leading food element in every woodland camp. I am sorry to say that nothing is, as a rule, more badly botched, while nothing is more easily or simply cooked as it should be. Soup requires time, and a solid basis of the right material. ...Season sparingly; it is easier to put salt in than to get it out. Cayenne pepper adds zest to a soup or stew, but, as some dislike it, let each man season his plate to his own cheek....

As a rule, on a mountain tramp or a canoe cruise, I do not tote canned goods. I carry my duffle in a light, pliable knapsack, and there is an aggravating antagonism between the uncompromising rims of a fruit-can, and the knobs of my vertebrae, that twenty years of practice have utterly failed to reconcile. And yet, I have found my account in a can of condensed milk, not for tea or coffee, but on bread as a substitute for butter. And I have found a small can of Boston baked beans a most helpful lunch, with a nine-mile carry ahead. It was not epicurean, but had staying qualities.

I often have a call to pilot some muscular young friend into the deep forest, and he usually carries a large pack-basket, with a full supply of quart cans of salmon, tomatoes, peaches, etc. As in duty bound, I admonish him kindly, but firmly, on the folly of loading his young shoulders with such effeminate luxuries; often, I fear, hurting his young feelings by brusque advice. But at night, when the camp-fire burns brightly, and he begins to fish out his tins, the heart of the Old Woodsman relents, and I make amends by allowing him to divide the groceries....

It may be expected that a pocket volume on woodcraft should contain a liberal chapter of instruction on hunting. It would be quite useless. Hunters, like poets, are born, not made. The art cannot be taught on paper. A few simple hints, however, may not be misplaced. To start aright, have your clothes fitted for hunting. Select good cassimere of a sort of dull, no-colored, neutral tint, like a decayed stump, and have coat, pants, and cap made of it. For foot-gear, two pairs of heavy yarn socks, with rubber shoes or buckskin moccasins. In hunting, "silence is gold." Go quietly, slowly, and silently. Remember that the bright-eyed, sharp-eared woodfolk can see, hear and smell, with a keenness that throws your dull faculties quite in the shade. As you go lumbering and

stick-breaking through the woods, you will never know how many of these quietly leave your path to right and left, allowing you to pass, while they glide away, unseen, unknown. It is easily seen that a, sharp-sensed, light-bodied denizen of the woods can detect the approach of a heavy, bifurcated, booted animal, a long way ahead, and avoid him accordingly.

But there is an **art**, little known and practiced, that **invariably succeeds in outflanking most wild animals**; an art, simple in conception and execution, but requiring patience; a species, so to speak, of high art in forestry--the art of "sitting on a log." I could enlarge on this. I might say that the only writer of any note who has mentioned this phase of woodcraft is Mr. Charles D. Warner; and he only speaks of it in painting the character of that lazy old guide, "Old Phelps."

Sitting on a log includes a deal of patience, with oftentimes cold feet and chattering teeth; but, attended to faithfully and patiently, is quite as successful as chasing a deer all day on tracking snow, while it can be practiced when the leaves are dry, and no other mode of still-hunting offers the ghost of a chance. When a man is moving through the woods, wary, watchful animals are pretty certain to catch sight of him. But let him keep perfectly quiet and the conditions are reversed. I have had my best luck, and killed my best deer, by practically waiting hour after hour on runways. But the time when a hunter could get four or five fair shots in a day by watching a runway has passed away forever. Never any more will buffalo be seen in solid masses covering square miles in one pack. The immense bands of elk and droves of deer are things of the past, and "The game must go."

Chapter VIII

A TEN DAYS' TRIP IN THE WILDERNESS--GOING IT ALONE

ABOUT the only inducements I can think of for making a ten days' journey through a strong wilderness, solitary and alone, were a liking for adventure, intense love of nature in her wildest dress, and a strange fondness for being in deep forests by myself. The choice of route was determined by the fact that two old friends and school-mates had chosen to cast their lots in Michigan, one near Saginaw Bay, the other among the pines of the Muskegon. And both were a little homesick, and both wrote frequent letters, in which, knowing my weak point, they exhausted their adjectives and adverbs in describing the abundance of game and the marvelous fishing. Now, the Muskegon friend--Davis--was pretty well out of reach. But Pete Williams, only a few miles out of Saginaw, was easily accessible. And so it happened, on a bright October morning, when there came a frost that cut from Maine to Missouri, that a sudden fancy took me to use my new Billinghurst on something larger than squirrels. It took about one minute to decide, and an hour to pack such duffle as I needed for a few weeks in the woods.

Remembering Pete's two brown-eyed "kids," and knowing that they were ague-stricken and homesick, I made place for a few apples and peaches, with a ripe melon. For Pete and I had been chums in Rochester, and I had bunked in his attic on Galusha Street, for two years. Also, his babies thought as much of me as of their father. The trip to Saginaw was easy and pleasant. A "Redbird" packet to Buffalo, the old propeller Globe to Lower Saginaw, and a ride of half a day on a buckboard, brought me to Pete Williams' clearing. Were they glad to see me? Well, I think so. Pete and his wife cried like children, while the two little homesick "kids" laid their silken heads on my knees and sobbed for, very joy. When I brought out the apples and peaches,...their delight was boundless....

I stayed ten days or more with the Williams family, and the fishing and hunting were all that he had said--all that could be asked. The woods swarmed with pigeons and squirrels; grouse, quail, ducks and wild turkeys were too plentiful, while a good hunter could scarcely fail of getting a standing shot at a deer in a morning's hunt. But, what use could be made of fish or game in such a place? They were all half sick, and had little appetite. Mrs. Williams could not endure the smell of fish; they had been cloyed on small game, and were surfeited on venison.

My sporting ardor sank to zero. I had the decency not to slaughter game for the love of killing, and leave it to rot, or hook large fish that could not be used. I soon grew restless, and began to think often about the lumber camp on the Muskegon. By surveyors' lines it was hardly more than sixty miles from Pete Williams' clearing to the Joe Davis camp on the Muskegon. "But practically," said Pete, "Joe and I are a thousand miles apart. White men, as a rule, don't

undertake to cross this wilderness. The only one I know who has tried it is old Bill Hance; he can tell you all about it."

Hance was the hunting and trapping genius of Saginaw Bay--a man who dwelt in the woods summer and winter, and never trimmed his hair or wore any other covering on his head. Not a misanthrope, or taciturn, but friendly and talkative rather; liking best to live alone, but fond of tramping across the woods to gossip with neighbors; a very tall man withal, and so thin that, as he went rapidly winding and turning among fallen logs, you looked to see him tangle up and tumble in a loose coil, like a wet rope, but he was better than he looked. He had a high reputation as trailer, guide, or trapper, and was mentioned as a "bad man in a racket." I had met him several times, and as he was decidedly a character, had rather laid myself out to cultivate him. And now that I began to have a strong notion of crossing the woods alone, I took counsel of Bill Hance. Unlike Williams, he thought it perfectly feasible and rather a neat, gamey thing for a youngster to do. He had crossed the woods several times with surveying parties, and once alone. He knew an Indian trail which led to an old camp within ten miles of the Muskegon, and thought the trail could be followed. It took him a little less than three days to go through; "but," he added, "I nat'rally travel a little faster in the woods than most men. If you can follow the trail, you ought to get through in a little more'n three days--if you keep moggin'."

One afternoon I carefully packed the knapsack and organized for a long woods tramp. I took little stock in that trail, or the three days' notion as to time. I made calculations on losing the trail the first day, and being out a full week. The outfit consisted of rifle, hatchet, compass, blanket-bag, knapsack and knife. For rations, one loaf of bread, two quarts of meal, two pounds of pork, one pound of sugar, with tea, salt, etc., and a supply of jerked venison. One tin dish, twelve rounds of ammunition, and the bullet-molds, filled the list, and did not make a heavy load.

Early on a crisp, bright October morning I kissed the little fellows good-bye, and started out with Hance, who was to put me on the trail. I left the children with sorrow and pity at heart. I am glad now that my visit was a golden hiatus in the sick monotony of their young lives, and that I was able to brighten a few days of their dreary existence. They had begged for the privilege of sleeping with me on a shake-down from the first; and when, as often happened, a pair of little feverish lips would murmur timidly and pleadingly, "I'm so dry; can I have er drink?" I am thankful that I did not put the pleader off with a sip of tepid water, but always brought it from the spring, sparkling and cold. For, a twelvemonth later, there were two little graves in a corner of the stump-blackened garden, and two sore hearts in Pete Williams' cabin.

Hance found the trail easily, but the Indians had been gone a long time, and it was filled with leaves, dim, and not easy to follow. It ended as nearly all trails do; it branched off to right and left, grew dimmer and slimmer, degenerated to a deer path, petered out to a squirrel track, ran up a tree, and ended in a knot hole. I was not sorry. It left me free to follow my nose, my

inclination, and the compass.

There are men who, on finding themselves alone in a pathless forest, become appalled, almost panic stricken. The vastness of an unbroken wilderness subdues them, and they quail before the relentless, untamed forces of nature. These are the men who grow enthusiastic--at home--about sylvan life, outdoor sports, but always strike camp and come home rather sooner than they intended. And there be some who plunge into an unbroken forest with a feeling of fresh, free, invigorating delight, as they might dash into a crisp ocean surf on a hot day. These know that nature is stern, hard, immovable and terrible in unrelenting cruelty. When wintry winds are out and the mercury far below zero, she will allow her most ardent lover to freeze on her snowy breast without waving a leaf in pity, or offering him a match; and scores of her devotees may starve to death in as many different languages before she will offer a loaf of bread. She does not deal in matches and loaves; rather in thunderbolts and granite mountains. And the ashes of her camp-fires bury proud cities. But, like all tyrants, she yields to force, and gives the more, the more she is beaten. She may starve or freeze the poet, the scholar, the scientist; all the same, she has in store food, fuel and shelter, which the skillful, self-reliant woodsman can wring from her savage hand with axe and rifle.

Only to him whose coat of rags
Has pressed at night her regal feet,
Shall come the secrets, strange and sweet,
Of century pines and beetling crags.
For him the goddess shall unlock
The golden secrets which have lain
Ten thousand years, through frost and rain,
Deep in the bosom of the rock.

The trip was a long and tiresome one, considering the distance. There were no hairbreadth escapes; I was not tackled by bears, treed by wolves, or nearly killed by a hand-to-claw "racket" with a panther; and there were no Indians to come sneak-hunting around after hair. Animal life was abundant, exuberant, even. But the bright-eyed woodfolk seemed tame, nay, almost friendly, and quite intent on minding their own business. It was a "pigeon year," a "squirrel year," and also a marvelous year for shack, or mast. Every nut-bearing tree was loaded with sweet well-filled nuts; and this, coupled with the fact that the Indians had left, and the whites had not yet got in, probably accounted for the plentitude of game.

I do not think there was an hour of daylight on the trip when squirrels were not too numerous to be counted, while pigeons were a constant quantity from start to finish. Grouse in the thickets, and quail in the high oak openings, or small prairies, with droves of wild turkeys among heavy timber, were met with almost hourly, and there was scarcely a day on which I could not have had a

standing shot at a bear. But the most interesting point about the game was--to me, at least--the marvelous abundance of deer. They were everywhere, on all sorts of ground and among all varieties of timber; very tame they were, too, often stopping to look at the stranger, offering easy shots at short range, and finally going off quite leisurely.

No ardent lover of forest life could be lonely in such company, and in such weather. The only drawback was the harassing and vexatious manner in which lakes, streams, swamps and marshes constantly persisted in getting across the way, compelling long detours to the north or south, when the true course was nearly due west. I think there were days on which ten hours of pretty faithful tramping did not result in more than three or four miles of direct headway. The headwaters of the Salt and Chippewa rivers were especially obstructive; and, when more than half the distance was covered, I ran into a tangle of small lakes, marshes and swamps, not marked on the map, which cost a hard day's work to leave behind.

While there were no startling adventures, and no danger connected with the trip, there was a constant succession of incidents, that made the lonely tramp far from monotonous. Some of these occurrences were intensely interesting, and a little exciting. Perhaps the brief recital of a few may not be uninteresting at the present day, when game is so rapidly disappearing.

My rifle was a neat, hair-triggered Billinghurst, carrying sixty round balls to the pound, a muzzle-loader, of course, and a naildriver. I made just three shots in ten days, and each shot stood for a

60 balls to the pound works out to about .427 diameter, and was probably used in a .45 caliber rifle. The ball would weigh about 117 grains.

plump young deer in the "short blue." It seemed wicked to murder such a bright, graceful animal, when no more than the loins and a couple of slices from the ham could be used, leaving the balance to the wolves, who never failed to take possession before I was out of ear shot. But I condoned the excess, if excess it were, by the many chances I allowed to pass, not only on deer but bear, and once on a big brute of a wild hog, the wickedest and most formidable looking animal I ever met in the woods. The meeting happened in this wise. I had been bothered and wearied for half a day by a bad piece of low, marshy ground, and had at length struck a dry, rolling oak opening where I sat down at the foot of a small oak to rest. I had scarcely been resting ten minutes, when I caught sight of a large, dirty-white animal, slowly working its way in my direction through the low bushes, evidently nosing around for acorns. I was puzzled to say what it was. It looked like a hog, but stood too high on its legs; and how would such a beast get there anyhow? Nearer and nearer he came, and at last walked out into an open spot less than twenty yards distant. It was a wild hog of the ugliest and largest description; tall as a yearling, with an unnaturally large head, and dangerous looking tusks, that curved above his savage snout like small horns. There was promise of magnificent power in his immense shoulders, while flanks

and hams were disproportionately light. He came out to the open leisurely munching his acorns, or amusing himself by ploughing deep furrows with his nose, and not until within ten yards did he appear to note the presence of a stranger. Suddenly he raised his head and became rigid as though frozen to stone; he was taking an observation. For a few seconds he remained immovable, then his bristles became erect, and with a deep guttural, grunting noise, he commenced hitching himself along in my direction, sidewise. My hair raised, and in an instant I was on my feet with the cocked rifle to my shoulder--meaning to shoot before his charge, and then make good time up the tree. But there was no need. As I sprang to my feet he sprang for the hazel bushes, and went tearing through them with the speed of a deer, keeping up a succession of snorts and grunts that could be heard long after he had passed out of sight. I am not subject to buck fever, and was disgusted to find myself so badly "rattled" that I could scarcely handle the rifle. At first I was provoked at myself for not getting a good ready and shooting him in the head, as he came out of the bushes; but it was better to let him live. He was not carnivorous, or a beast of prey, and ugly as he was, certainly looked better alive than he would as a porcine corpse. No doubt he relished his acorns as well as though he had been less ugly, and he was a savage power in the forest. Bears love pork; and the fact that the hog was picking up a comfortable living in that wilderness, is presumptive evidence hat he was a match for the largest bear, or he would lave been eaten long before.

Another little incident, in which Bruin played a leading part, rises vividly to memory. It was hardly an adventure; only the meeting of man and bear, and they parted on good terms, with no hardness on either side.

The meeting occurred, as usually was the case with large game, on dry, oak lands, where the undergrowth was hazel, sasafras, and wild grapevine. As before, I had paused for a rest, when I began to catch glimpses of a very black animal working its way among the hazel bushes, under the scattering oaks, and toward me. With no definite intention of shooting, but just to see how easy it might be to kill him, I got a good ready, and waited. Slowly and lazily he nuzzled his way among the trees, sitting up occasionally to crunch acorns, until he was within twenty-five yards of me, with the bright bead neatly showing at the butt of his ear, and he sitting on his haunches, calmly chewing his acorns, oblivious of danger. He was the shortest-legged, blackest, and glossiest bear I had ever seen; and such a fair shot. But I could not use either skin or meat, and he was a splendid picture just as he sat. Shot down and left to taint the blessed air, he would not look as wholesome, let alone that it would be unwarrantable murder. And so, when he came nosing under the very tree where I was sitting, I suddenly jumped up, threw my hat at him, and gave a Comanche yell. He tumbled over in a limp heap, grunting and whining for very terror, gathered himself up, got up headway, and disappeared with wonderful speed--considering the length of his legs.

On another occasion--and this was in heavy timber--I was resting on a log, partially concealed by spice bushes, when I noticed a large flock of turkeys

coming in my direction. As they rapidly advanced with their quick, gliding walk, the flock grew to a drove, the drove became a swarm--an army. To right and on the left, as far as I could see in front, a legion of turkeys were marching, steadily marching to the eastward. Among them were some of the grandest gobblers I had ever seen, and one magnificent fellow came straight toward me. Never before or since have I seen such a splendid wild bird. His thick, glossy black beard nearly reached the ground, his bronze uniform was of the richest, and he was decidedly the largest I have ever seen. When within fifty feet of the spot where I was nearly hidden, his wary eye caught something suspicious; and he raised his superb head for an instant in an attitude of motionless attention. Then, with lowered head and drooping tail, he turned right about, gave the note of alarm, put the trunk of a large tree quickly between himself and the enemy, and went away like the wind. With the speed of thought the warning note was sounded along the whole line, and in a moment the woods seemed alive with turkeys, running for dear life. In less time than it takes to tell it, that gallinaceous army had passed out of sight, forever. And the like of it will never again be possible on this continent.

And again, on the morning of the sixth day out, I blundered on to such an aggregation of deer as a man sees but once in a lifetime. I had camped over night on low land, among heavy timber, but soon after striking camp, came to a place where the timber was scattering, and the land had a gentle rise to the westward. Scarcely had I left the low land behind, when a few deer got out of their beds and commenced lazily bounding away. They were soon joined by others; on the right flank, on the left, and ahead, they continued to rise and canter off leisurely, stopping at a distance of one or two hundred yards to look back. It struck me finally that I had started something rather unusual, and I began counting the deer in sight. It was useless to attempt it; their white flags were flying in front and on both flanks, as far as one could see, and new ones seemed constantly joining the procession. Among them were several very large bucks with superb antlers, and these seemed very little afraid of the small, quiet biped in leaf-colored rig. They often paused to gaze back with bold, fearless front, as though inclined to call a halt and face the music; but when within a hundred yards, would turn and canter leisurely away. As the herd neared the summit of the low-lying ridge, I tried to make a reasonable guess at their numbers, by counting a part and estimating the rest, but could come to no satisfactory conclusion. As they passed the summit and loped down the gentle decline toward heavy timber, they began to scatter, and soon not a flag was in sight. It was a magnificent cervine army with white banners, and I shall never look upon its like again. The largest drove of deer I have seen in twenty years consisted of seven only.

And with much of interest, much of tramping, and not a little vexatious delay, I came at length to a stream that I knew must be the south branch of the Muskegon. The main river could scarcely be more than ten miles to the westward, and might be easily reached in one day.

It was time. The meal and pork were nearly gone, sugar and tea were at low ebb, and I was tired of venison; tired anyhow; ready for human speech and human companionship.

It was in the afternoon of the ninth day that I crossed the South Muskegon and laid a course west by north. The traveling was not bad; and in less than an hour I ran on to the ruins of a camp that I knew to be the work of Indians. It had evidently been a permanent winter camp, and was almost certainly the Indian camp spoken of by Bill Hance. Pausing a short time to look over the ruins, with the lonely feeling always induced by a decayed, rotting camp, I struck due west and made several miles before sundown.

I camped on a little rill, near a huge dry stub that would peel, made the last of the meal into a johnny-cake, broiled the last slice of pork, and lay down with the notion that a ten days' tramp, where it took an average of fifteen miles to make six, ought to end on the morrow. At sunrise I was again on foot, and after three hours of steady tramping, saw a smoky opening ahead. In five minutes I was standing on the left bank of the Muskegon.

And the Joe Davis camp--was it up stream or down? I decided on the latter, and started slowly down stream, keeping an eye out for signs. In less than an hour I struck a dim log road which led to the river, and there was a "landing," with the usual debris of skids, loose bark, chocks, and some pieces of broken boards. It did not take long to construct an efficient log raft from the dry skids, and as I drifted placidly down the deep, wild river, munching the last bit of johnny-cake, I inwardly swore that my next wilderness cruise should be by water.

It was in late afternoon that I heard--blessed sound--the eager clank, clank, clank of the old-fashioned sawmill. It grew nearer and more distinct; presently I could distinguish the rumble of machinery as the carriage gigged back; then the raft rounded a gentle bend, and a mill, with its long, log boarding-house, came full in sight.

As the raft swung into the landing the mill became silent; a brown-bearded, red-shirted fellow came down to welcome me, a pair of strong hands grasped both my own, and the voice of Joe Davis said earnestly, "Why, George! I never was so glad to see a man in my life!"

The ten days' tramp was ended. It had been wearisome to a degree, but interesting and instructive. I had seen more game birds and animals in the time than I ever saw before or since in a whole season; and, though I came out with clothes pretty well worn and torn off my back and legs, I was a little disposed to plume myself on the achievement. Even at this day I am a little proud of the fact that, with so many temptations to slaughter, I only fired three shots on the route. Nothing but the exceptionally fine, dry weather rendered such a trip possible in a wilderness so cut up with swamps, lakes, marshes and streams. A week of steady rain or a premature snow storm--either likely enough at that season--would have been most disastrous; while a forest fire like that of '56, and later ones, would simply have proved fatal.

Reader, if ever you are tempted to make a similar thoughtless, reckless trip--don't do it.

CHAPTER X

ODDS AND ENDS-WHERE TO GO FOR AN OUTING--WHY A CLINKER?-BOUGHS AND BROWSE

THE oft-recurring question as to where to go for the outing, can hardly be answered at all satisfactorily. In a general way, any place may, and ought to be, satisfactory, where there are fresh green woods, pleasant scenery, and fish and game plenty enough to supply the camp abundantly, with boating facilities and pure water.

"It's more in the man than it is in the land," and there are thousands of such places on the waters of the Susquehanna, the Delaware, the rivers and lakes of Maine, Michigan, Wisconsin, and Canada.

A few words of explanation and advice may not be out of place. I have used the words "boughs" and "browse" quite frequently. I am sorry they are not more in use. The first settlers in the unbroken forest knew how to diagnose a tree. They came to the "Holland Purchase" from the Eastern States, with their families, in a covered wagon, drawn by a yoke of oxen, and the favorite cow patiently leading behind. They could not start until the ground was settled, some time in May, and nothing could be done in late summer, save to erect a log cabin, and clear a few acres for the next season. To this end the oxen were indispensable, and a cow was of first necessity, where there were children. And cows and oxen must have hay. But there was not a ton of hay in the country. A few hundred pounds of coarse wild grass was gleaned from the margins of streams and small marshes; but the main reliance was "browse." Through the warm months the cattle could take care of themselves; but, when winter settled down in earnest, a large part of the settler's work consisted in providing browse for his cattle. First and best was the basswood (linden); then came maple, beech, birch and hemlock. Some of the trees would be nearly three feet in diameter, and, when felled, much of the browse would be twenty feet above the reach of cattle, on the ends of huge limbs. Then the boughs were lopped off, and the cattle could get at the browse. The settlers divided the tree into log, limbs, boughs, and browse. Anything small enough for a cow or deer to masticate was browse. And that is just what you want for a camp in the forest. Not twigs, that may come from a thorn, or boughs, that may be as thick as your wrist, but browse, which may be used for a mattress, the healthiest in the world.

And now for a little useless advice. In going into the woods, don't take a medicine chest or a set of surgical instruments with you. A bit of sticking salve, a wooden vial of anti-pain tablets and another of rhubarb regulars, your fly medicine, and a pair of tweezers, will be enough. Of course you have needles and thread.

If you go before the open season for shooting, take no gun. It will simply be a useless incumbrance and a nuisance. If you go to hunt, take a solemn oath never to point the shooting end of your gun toward yourself or any

other human being.

...never...shoot at a dim, moving object in the woods for a deer, unless you have seen that it is a deer. In these days there are quite as many hunters as deer in the woods; and it is a heavy, wearisome job to pack a dead or wounded man ten or twelve miles out to a clearing, let alone that it spoils all the pleasure of the hunt, and is apt to raise hard feelings among his relations. In a word, act coolly and rationally. So shall your outing be a delight in conception and the fulfillment thereof; while the memory of it shall come back to you in pleasant dreams, when legs and shoulders are too stiff and old for knapsack and rifle.

That is me. That is why I sit here tonight--with the north wind and sleet rattling the one window of my little den, writing what I hope younger and stronger men will like to take into the woods with them, and read. Not that I am so very old. The youngsters are still not anxious to buck against the muzzleloader in off-hand shooting. But, in common with a thousand other old graybeards, I feel that the fire, the fervor, the steel, that once carried me over the trail from dawn until dark, is dulled and deadened within me.

We had our day of youth and May; We may have grown a trifle sober; But life may reach a wintry way, And we are only in October.

Wherefore, let us be thankful that there are still thousands of cool, green nooks beside crystal springs, where the weary soul may hide for a time, away from debts, duns and deviltries, and a while commune with nature in her undress. And with kindness to all true woodsmen; and with malice toward none, save the trout-hog, the netter, the cruster, and skin-butcher, let us

PREPARE TO TURN IN.