

## THE POSSIBILITIES OF SMALL BOAT CRUISING

By A. V. COMINGS

**I**F I hadn't proved it to my own entire satisfaction by actual experience, I suppose I would still be one

of those wise boys who think that there is no such thing as taking a real cruise and having real cruising comfort in any motor boat under forty feet in length. In my earlier cruising days on Puget Sound and British Columbia waters most of my traveling was done on motor cruisers ranging from 40 to 65 feet in length, and I will admit that on motor craft of that type one may be very, very comfortable and have a whale of a time. For in a well appointed cruiser of forty feet and upward you can have every convenience to be found in a modern city apartment, save possibly a janitor, and usually you can single out some member of the crew to fill the shoes of the janitor's nautical namesake, whatever that may be in sea parlance.

But in those days I fear I would have argued hotly that there couldn't possibly be any real fun and real comfort in taking a long cruise on a small motor boat, say an eighteen-footer, or on anything up to 25 feet in length. We learn with age, and by experience, however, and I can assure you that I have never, on any big cruiser I have ever known, had a better time nor a more comfortable cruise than I have had on small boats properly equipped for long journeys.

On small craft cruises I have met wind and rain, cold nights and rough waters, and because I foresaw some such experience when I outfitted for the cruise, each difficulty but added to the fun of the trip and made it more worth while, for I was prepared for each.

By small motor boats I mean everything from the row-boat with an outboard motor up to the launch of 25 feet or thereabouts. Two fellows with a well-built row-boat and an outboard motor of any of the good, standard makes, can have a wonderful outing on any of the waters of the Pacific Coast, and can have many of the comforts and pleasures that the owners of big roomy cruisers enjoy. The most wonderful trip I ever took was in a 14-foot row-boat with an outboard motor, from the head of navigation on the Columbia to the mouth, 375 miles. The story of that trip was told in *Pacific Motor Boat* in 1916. It was an

inexpensive trip, thoroughly comfortable, and a fine bit of adventure that any real cruising man might well enjoy.

An open launch (and curse a canopy on a small launch, anyway), will prove a mighty pleasant cruising boat if given half a chance. Give a little thought to outfitting for the trip and you'll have the time of your life.

But right here let me drive home to the owner of the small motor boat who intends to take a cruise next summer, or some other summer, that the one big thing he should keep in mind in preparing for that cruise is to get the proper equipment aboard his craft ere ever he casts off for the big trip. For on going properly outfitted depends the success and enjoyment of the journey. And woe to the crew of the small craft that sets sail with a carelessly selected outfit, for the members of that crew are more apt to come home sworn enemies than bosom friends. And they'll cuss the sport of motor boating up hill and down dale and blame all their misfortunes on the game rather than on themselves.

First consideration of the man intending to make a cruise should be given, on a small boat, as on a large one, to his motor. It should be put in perfect condition, and not a single detail in inspecting the engine should be left to guess work. A trifle that might take fifteen minutes to put in first-class shape before the trip might

lay you up for a day or more on the cruise, or might even cause disaster. Go over the entire power plant, the ignition devices, the couplings, the water connections, see that everything is ship shape. And if convenient take a look at the propeller, and see that it is soundly in place and not apt to jar loose and cause trouble a hundred or two miles from home. If an open boat, arrange some sort of covering for the engine, not a temporary affair that will blow off in the first rain-

storm, but something that will really protect the motor when the necessity arises. A small waterproof tarpaulin, well fastened down, will do.

If there is some particular spring that breaks sometimes, or some other part of the engine that is apt to give out, carry spare parts to insure your safe return in case they break.

And be sure to carry several extra spark plugs, or



Lazy Cruising Days on Waterways of Puget Sound.

The Owner of This Boat Which Is Only a Twenty-four Footer With a 4 h. p. Engine, Has Cruised Not Only All Through Puget Sound Waters But Also Extended His Trips Up the British Columbia Coast to Alaska.



Sir Frances Drake Had Nothing on These Boys When It Comes to the Spirit of Adventure.

ignitor points, and don't put them in with a lot of rusty nails or other junk. Keep them where it is clean and dry.

Go over your entire gasoline supply system, make certain that all joints are tight and not apt to jar

loose in the day-after-day vibration. It is well to drain the water out of the water trap of both tank and carburetor, also.

Few small craft are provided with fresh water tanks aboard, though this is a very handy thing to provide for in building a small boat. If not, get a gallon or two-gallon canteen, felt covered, to have aboard the boat, and always keep it filled with pure, fresh water. Drinking from a river in river cruising is a mighty dangerous custom, for river water is very apt to contain typhoid or other disease germs. A canteen may be filled several times a day at springs or wells, or other known sources of pure water. Use river water for cooking, but not for drinking.

The question of sleeping arrangements on a small boat, at first thought, seems a weighty one to solve, but it does not need to be. Some owners prefer going ashore each evening and erecting a small shelter tent, beneath which they sleep. Personally I have always thought this a very useless sort of way, for it is a dull head indeed that can't rig up sleeping space for two or four members of a crew in a small craft. If there are seats along the sides of the cockpits, it is easy to arrange cross supports on which to lay boards, on which cushions, etc., make soft sleeping foundation for the night. The boards may be stowed entirely out of the way during the day.

What will we do in case of rain, you will ask. Well, one of the first things you want to get in outfitting

for this trip is a good, heavy waterproof tarpaulin, big enough to form a small "A" tent over the entire length of your boat, and then rig a ridge rope over two end supports to hold it up when it is needed. The rope and supports, of course, come down during the day time. Under this "tarp" you can sleep dry as in a house, and the patter of the rain on the canvas within a foot or two of your head is the best little lullaby you ever heard. The "tarp" should be well secured, don't take any chance on a little gust of wind lifting it skyward.

Bedding for the cruise depends entirely on what season of the year you are cruising in. Take enough, however, no matter what the season. Bedding on a trip like this is best stored in a waterproof dunnage bag, where it is out of the way in the day time and will keep clean and dry.

The cooking arrangements for a cruise on a small boat should be



Ashore Along the Columbia.



A Nook in the San Juan Islands.



Let the "Outboard Do It.



When Evening Comes How About Bacon and Eggs and Coffee Cooked Over a Snug Little Fire Ashore?

given the most thoughtful consideration, for a crew poorly fed is a mutinous crew, always, whereas good food, well cooked, will keep your pal or your party smiling even under difficulties that would otherwise seem unbearable.

Personally, I rather incline to a "cook box" on a small boat, a box large enough to contain most of the food, the cooking utensils and the dishes. This box may be built in any shape to fit conveniently into some designated portion of the cockpit, or to lash to the after deck, perhaps. It should have rope handles on either end, and should be the first article ashore, along with the cook, when a stop is made to cook a meal ashore. And of course, in small boat cruising, all real meals will be cooked ashore, for I have yet to see the small stove, oil, alcohol or otherwise, that will get a hungry man's meal in a small boat. They'll do for

heating shaving water in an apartment, but excuse me from taking anything like that on a pleasure trip.

I once talked with a man who was going to take a long auto trip, and he was going to do all the cooking for four people, three meals a day, on two burners of a little alcohol stove. I saw him after he returned, and what he said about the experiment would be deleted by the censor. So I won't repeat it.

But pin your faith on the good little camp fire ashore to do your cooking. Build it small, so that you can get close enough to cook on it without wearing a fireman's suit, and remember that no matter if it has rained several days, that rain doesn't soak very far into wood, and you can always get dry wood just beneath the wetted surface. A standing dead tree will always give you fuel. If there's nothing dry to start your fire with, whittle a few little sticks about the size of matches, a little longer perhaps. Light these in a little pile, gradually add a few more, each time a little larger, and first thing you know you will have a blazing camp fire.

For a cooking grate I prefer the kind the sporting good stores now sell quite universally, consisting of a heavy wire frame, with heavy netting, and four pointed legs to drive into the ground. These legs fold up when the grate is stored. This will hold your coffee pot, frying pans, etc., and is a very convenient acces-

sory. Don't buy the little, light, cheap ones. The first hot fire will heat them so that anything heavy placed on them will bend them all out of shape.

If no grate is carried, suspend your pots from a stick held down



Outboard Motorboating on the Lakes.



An Afternoon Swim in a Sandy Bay.



A Snug Little Outboard Motor Cruiser.



A Handy and Compact Small Boat Outfit for Cooking Meals Ashore.

by heavy stones at one end and passing over another stone high enough to raise the free end a couple of feet above the fire. Carry a few assorted lengths of bailing wire for pot hooks.

There is now on the market an aluminum coffee pot, with flat spout, that nests in a pail a size larger, and this makes a very desirable combination where space is none too great. Into the coffee pot may be placed the cups used on the cruise, nested, the whole taking up only the room originally occupied by the pail alone. A good frying pan to which a long wooden handle may be fastened, should be taken, and last, but not least, a reflector oven. These ovens are made in various sizes, of aluminum, and fold up about an inch thick. They will bake anything before an open fire, and make it possible to have variety even on the small boat cruise. Baked potatoes, baked biscuit, baked corn bread, oh,

a lot of good things may be made in these ovens. If you want further variety, take a broiler along, too, for fish, steaks, ham, etc., and don't forget to broil with the broiler propped up beside the fire, not held over it, where dropping grease will flare up and smoke the cooking meat.

Knives, forks, spoons and other "tools" of like nature, should be kept in a smaller box inside the cook box.

By using a cook box the entire culinary arrangements may be kept together and handled compactly. And this will make for satisfaction all around.

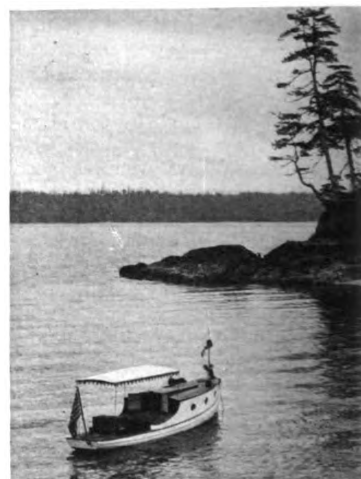
Take a good, man's size axe along, don't putter around with one of the toy kind that might chop a shingle to pieces but wouldn't be worth much on a hunk of driftwood you wanted for your fire. And fix some kind of a guard for its edge, otherwise an unguarded movement may find you with a slash somewhere on your anatomy. I know, I've got a scar on

my left thumb from just that oversight.

Beware of taking glass jars, dishes, etc., on a trip such as this. They almost invariably get broken, and pieces of glass in the cook box are not always welcome. Put your food in tin containers, or food bags.

Food for a trip such as this should be carefully selected. If the trip is to be made entirely away from civilization, then a very careful list will have to be prepared. If the trip will take you to a village or city every day or so, then you can always replenish your supply. Take some canned goods, of course, but don't feed your crew on tinned stuff entirely. Set a good table, a little extra thought and effort will enable you to do it, and you will be well repaid.

The staples will be easy to select,



On Upper Puget Sound.

of course, the things that would ordinarily be taken without giving any particular thought to them. For the things that you might not think about, inquire among your cruising or woodsmen friends, find out what they have found worth while in their various trips. You will be surprised how many little extras they will put you next to.

For breakfasts I have yet to find the man who would object to pancakes, and several mighty good prepared pancake flours are on the market. Take a couple of packages, they're easy to make. A cereal is always good. Boil some prunes, or make apple sauce, enough for several breakfasts, some night over the camp fire before you turn in. Then they will be good for breakfast for several days. Take onions, for fried onions



The Inland Lakes of the Coast Country Offer Fine Cruising for Small Boat Owners.



always are good out in the open. If far from meat markets, canned beef may be used in a variety of palatable ways, as may canned corn beef, or tongue. A few cans of green beans, corn and the good old standby, baked beans, will come in quite handy, as will a few cans of good vegetable soup.

For deserts you may be able to get fruit along the way. If not, use good grades of canned fruits, there are many to choose from. There are several brands of mighty good canned pudding on the market. Mrs. C's Fig Pudding I have always found a welcome addition to dinner after a hard day's run. Try it sometimes, it's easy to prepare and serve. A little syrup, "larrupy dope," will help with it.

Use your "noodle" when it comes to cooking and planning meals and



A Sheltered Cove on the Inland Passage.

you will find your trip much more successful than as if you let everything slide till meal time and then cooked and served things in the way many cruising men do.

For clothes on a cruise in a small boat, you will have to give thought to the season of the year more than anything else. If it is summer time the chances are that you will not need any very heavy clothes, unless you are taking your cruise on Puget Sound and British Columbia waters. Clothes will have to be chosen with discretion, for you will have little room aboard for an extensive wardrobe.

A felt hat, or sombrero, for an open small boat, is a good bet, and don't be afraid to wear a chin strap to keep it from blowing off. Flannel shirt, of course, and a vest for the



The Author Ashore Among the Islands in Typical Cruising Outfit.

pockets it furnishes, more than the warmth. It is hardly worth-while to take along an ordinary coat, it will only be in the way, kicking around the boat most of the time. Take instead, a slicker for wet weather, or a combined rainproof and windproof canvas coat, lined with some warm substance.

Waterproof canvas breeches, with shoe pacs, with eight-inch tops, will be ideal for your nether limbs on a trip like this, for you will hardly have room to carry rubber boots, and the shoe pacs will answer all normal wet weather purposes and are ideal for shore wear, too.

A couple of pairs of woolen socks, of course.

If you are going to cruise where mosquitos abound, as they are sure to abound in the vicinity of large rivers, then by all means take some mosquito bar to fend them off at night. Mosquito dope is useful, day and night, and Nessmuk's formula, one

of the best ever devised, is as follows:

|                     |         |
|---------------------|---------|
| Oil pine tar.....   | 3 parts |
| Castor oil.....     | 2 parts |
| Oil pennyroyal..... | 1 part  |

It is not necessary to use a large quantity of this, and its effectiveness is lasting. Stewart Edward White says one doping from this will "last until next wash time." Which is sometimes quite a few hours, as any one who has ever cruised or camped will admit.

Now as to places to cruise with a small boat. It seems almost a waste of time to point out good cruising waters on this Pacific Coast, yet there are many people who really don't realize what wonderful opportunities there are for small boat cruising close at hand. A summer vacation spent in this way will prove inexpensive, diverting, full of health and recreation, and something that will be remembered and repeated in after years.



Small Boats Passing Through Locks on Cruise Up Willamette River.

In the Pacific Northwest there is, of course, all of Puget Sound and British Columbia waters, just beckoning to motor boat owners. To the initiated, those waters may look very dangerous to a small boat owner. But if care is taken to choose proper weather conditions for each jump, a summer could be spent cruising those waters in a row-boat with an outboard motor in perfect safety. It has been done, more than once. Down Olympia way is paradise for the small motor boat.

There are many lakes, such as Coeur d'Alene (with the shadowy St. Joe for a side trip), Chelan Pend'd Orielle, Kootenay, the Arrow Lakes and upper Columbia reaches. Then the rivers, such as the Fraser, Columbia, Snake, etc., all have long reaches where small motor boats will find much of interest and adventure in day-after-day cruising.

In California the Sacramento and San Joaquin rivers are the most important, and I cannot imagine a

more delightful outboard motor boat trip than down the Sacramento from away up in the Shasta country. It would be exciting, I am sure, and well worth the adventure.

Just think over this small boat cruising idea for the coming summer, and when vacation time comes get out and "explore" strange waters with your little craft. And if you haven't a small motor boat, get an outboard motor and a row-boat, and start out. You'll never regret it.

## HOW TO BUILD A THIRTY-TWO-FOOT TROLLER

By GERALD T. WHITE

(Concluded from April Issue)

**T**ACK your large sheet of paper to the floor over as smooth a spot as you can find. The paper should cover an area about 8' by 11'. In the center of this lay up a perpendicular that we will call the center line. On each side of this line lay up parallel lines 2" away from the center line. These two lines represent the thickness of the four inch keel. Now a foot from the bottom of the paper lay across a line at exact right angles to the center line. Mark this line "BASE". At intervals of 12" now draw parallel lines for the 2B, 1B, L. W. L., 1A, 2A, 3A. Now measure 5" above 1A on the center line and make a mark. Now measure out along 1B on each side of the center line a distance of 4' 5½". Connect these two marks with a diagonal line. Be sure that the L. W. L. is exactly 36" above the base.

The next lines to get out are the buttock lines. They are parallel to the centerline and are 12" apart. They are known as 12", 24" and 36" buttocks. The name indicates their distance from the center line. You will note that on the drawings the W. L. are marked 1, 2 and 3, and that the Table of Offsets calls for 12"; 24" and 36" lines. The one case gives them numbers above the L. W. L.; the other their actual distance. We will now start to lay down the sections. Let us take station 0 for instance. From the Table you will find that the Half Breadth of 0 on the L. W. L. is 1' 9". Lay this off from the center line and mark. On the 12" or 1A line it is 2' 9 3/4", on the 24" line 3' 1½". As it does not go up as far as the 3A line there is no offset for it there. Now measure along the diagonal from the center line down and outwards a distance as called for in the Table under the heading diagonal. In the case of No. 0, it is 2' 6". Now measure up from the Base Line the distances along the buttocks as given. There are only two spots now that you haven't obtained to make a complete section outline. One is the sheer. As the

height of this above the Base is given in the Table and also the distance out from the centerline, you can lay off these two dimensions and where they intersect will be the proper sheer point. The other is the Rabbett or Fairbody height. This is given in the Table and should be measured up the centerline and then squared off to the line representing the thickness of the keel. You will now have a line of spots that can be connected with a thin batten and a line drawn. One of your sections is now complete. The rest should be gotten out in the same manner. If you are going to make a separate pattern for each mould you will now want to transfer the section to your paper pattern. After this is done you must cut off from around your pattern the thickness of the planking on the side; and the thickness of the plank-sheer on the top. This must be done because the lines were drawn to the outside of the planking and the moulds must be made for the outside of the frames.

In making the wooden moulds up be very sure that you make all the joints very strong. They should be constructed of 7-8" rough stock. As a rule the moulds are usually made from four side pieces; two on each side; with a strong cleat across the lower end and across the joints on the sides. Across the upper part of the mould you should run a piece of 7-8" by 4" stuff with the top edge planed fair. The top should be just even with the sheer line of the mould. A center line mark should be made on this cross piece and another on the bottom cleat so that the mould can be set up and plumb-ed perfectly straight. When all of the moulds are out you should set them up on the keel and run a shore from each side to the floor. If you stretch a line from the center of the head of the stem to the center of the stern knee you should find that the center line on every mould is directly under it.

Next come the ribbands. They are to be pieces of fir or yellow pine, full length if possible, about 1" thick

