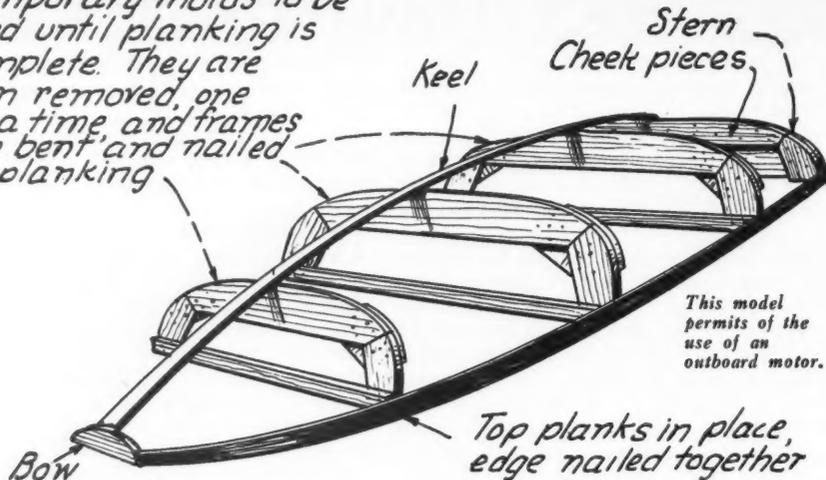


*Temporary molds to be used until planking is complete. They are then removed, one at a time and frames are bent and nailed to planking*



*The sneak boat should be built upsidedown in this manner:*

## How to Build a Sneak Boat

**S**PORTSMEN in each section of the country have slightly different means of accomplishing the same ends. The duck shooter of the upper reaches of the Mississippi may use one type of boat while his brother, shooting on Barnegat Bay, may use a craft of entirely different design, but the results are much the same. In the matter of a sneak boat, the end may justify the means and it is quite possible that an old, leaky skiff, when properly camouflaged, will do the work just as well as the most intricate sneak boat, yet your sportsman firmly believes that he must use an approved type, and so it's a sneak boat that we have here. The best features of several different types have been incorporated in this design and the stern has been broadened out somewhat to permit the use of an outboard motor of low power. In the ordinary, double ender, the propeller would simply dig a hole and the stern of the boat would settle into it. The motor, too, will take away a lot of that long job of rowing and it will make the trip to and from the shooting grounds a lot pleasanter.

The boat in question is some twelve feet six inches in length by four feet wide and is suitable for one or two gunners. The hull is eleven inches deep and a coaming on top of this adds another four inches, giving a boat that will be extremely seaworthy. The shape is round bottomed with a long, sloping bow and stern which will permit her to slip through the water with the least amount of fuss. There is four feet of deck forward and an eight inch washboard along the sides of the coaming. A sort of outrigger is provided for rowing and there is a hole in the stern which is to be used for sculling when approaching the ducks. Unlike many boats, this one is planked with narrow strips of material, nailed through the edges to each other and to the frames. This makes an extremely strong and tight job.

Steam bending is always considered an extremely hard job by those who have not tried to do it or by those who have gone about the job improperly. Actually, there is nothing to it and the experienced boat builder would much sooner use steam bent frames than build a boat of

By **WILLIAM F. CROSBY**

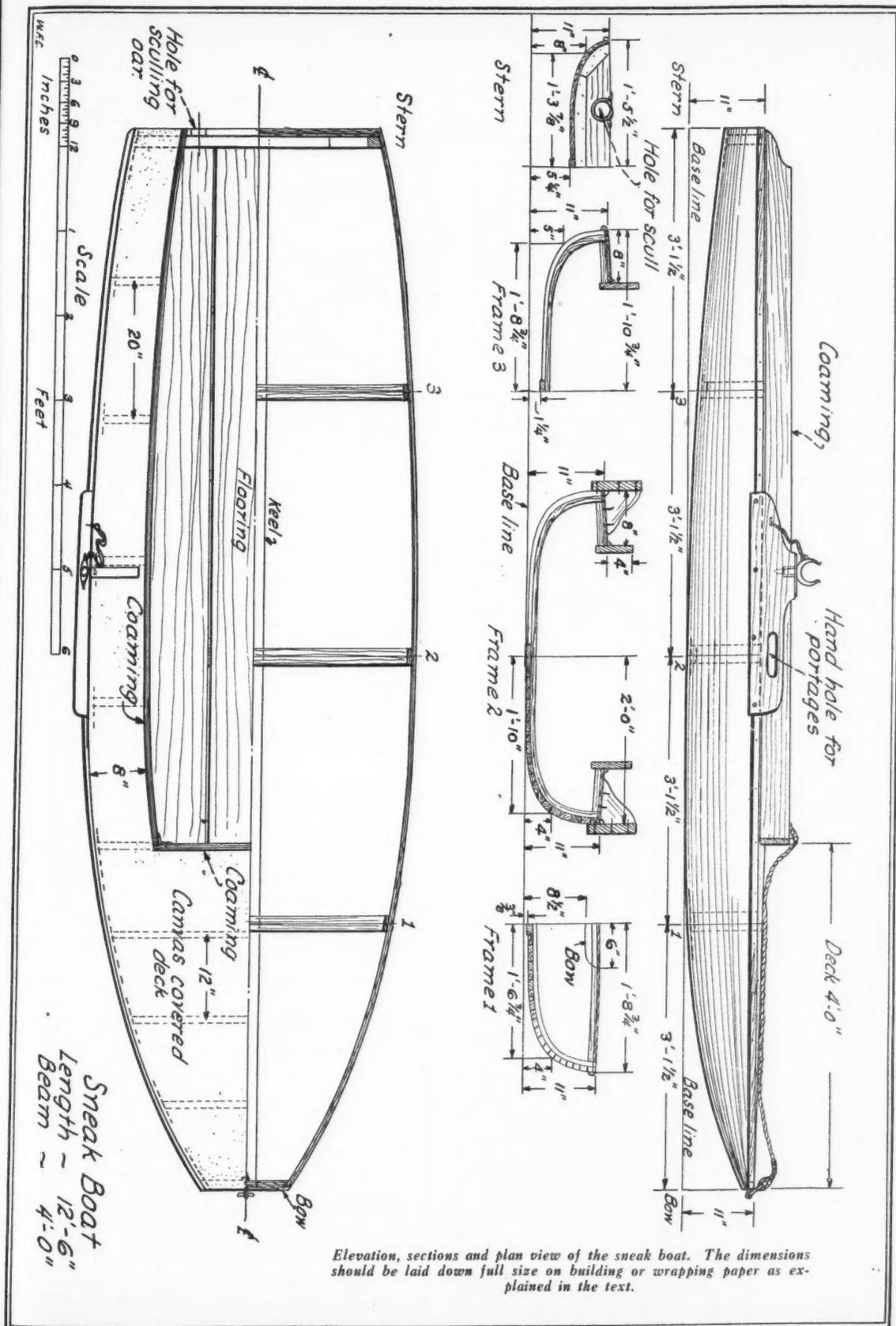
Editor of "The Rudder"

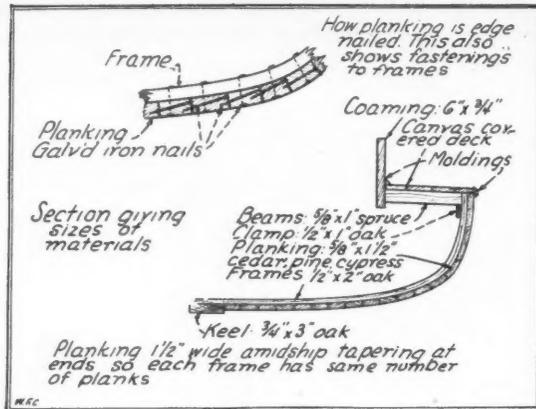
the V-bottom type. The entire secret is to allow the wood to remain in the steam box, until it is thoroughly saturated. It must then be bent with

the utmost speed in order that the wood shall retain its heat and moisture.

The simplest form of steam box is to cut out one half of the end of an old galvanized iron hot water boiler, such as is used in the kitchen. This boiler is propped up at a slight angle on some kind of a foundation within which a wood fire is built. A few buckets of water in the boiler will be sufficient, the water settling down in the end farthest away from the cut away end. The wood, to be steamed, is then pushed in through the opening and a piece of canvas or old carpet is thrown over the opening. Keep a good, brisk fire going and replenish the water as it is depleted. The wood should be left in for at least an hour and in the mean time, the molds, around which the wood is to be bent, should be arranged and made ready for instant work. Be sure to use good gloves when you remove the wood from the steam box, for it should be good and hot. If the wood is not hot and steaming, it will be impossible to make it take a good bend. Incidentally, such a steam box as this is fine for steaming up the ends of skis.

**A**S for the boat itself, it is necessary to make a set of four molds and a bow piece. These molds are set up on the floor at the proper distance, 3'-1½", being securely braced fore and aft and sideways to prevent movement. The molds are made by making full sized patterns in paper to the dimensions as shown in one of the drawings. The molds for frames 1, 2 and 3 are temporary and are made from straight pieces, fastened together as shown in the upsidedown view of the framework. The stern is a solid piece of wood, but in order that the fastenings from the planking may have a good hold upon it, additional pieces are fitted on the forward side. These are called the cheek-pieces. The bow is also a solid piece of wood, rounded as shown. Both the stern and bow will have a slight bevel on the under side, that





is the side nearest the planking, so that the planking will fit up flush.

With all of these pieces set up on a solid, level floor, the keel, a piece of oak or yellow pine 3/4" by 3", is secured in place down the exact center. It may be screw fastened in place using brass or galvanized screws preferably.

In order that the planking will fit properly, it is necessary to divide off each section into an equal number of spaces, each space representing the width of a plank. Thus, if there are nineteen spaces on frame number 2, there should be an equal number for the stern and also the bow. By making these divisions equal on each mold, as well as the bow and stern, the planks will fit well and there will be no feather edges. Of course, the planks for one side should be made in duplicate for the other, and in the drawing, the planking is shown as being 1 1/2" wide amidships. This may be varied slightly to suit local conditions, but if the wood is too wide, it will not lay up flush against the frames or molds.

When the divisions are all marked in, the plank next to the floor should be cut out, the edges planed smooth and then fitted in place. It is screw fastened to the stem and stern, but not to the molds, except by temporary nails which are driven in part way only. A similar plank is then secured in place on the opposite side of the boat. Then follow with the second plank and the third. It is now advisable to start with the planks nearest the keel, the garboards, one on each side. Follow this with the next planks above the garboard, in each case securely nailing the new plank, through the edge to the next plank in place. It is a good plan to smear the edges of each plank with marine glue or similar compound in order to prevent leaks. Thus each plank is fitted in place until we come to the last one, which is called the shutter. This is fitted by taking a pattern of the edges of the adjoining planks and cutting out the shutter to an exact fit. This plank, like the others, is temporarily nailed to the molds, and is nailed to the adjoining planks by toeing the nails in on a slant, using brads set into the wood on the outside.

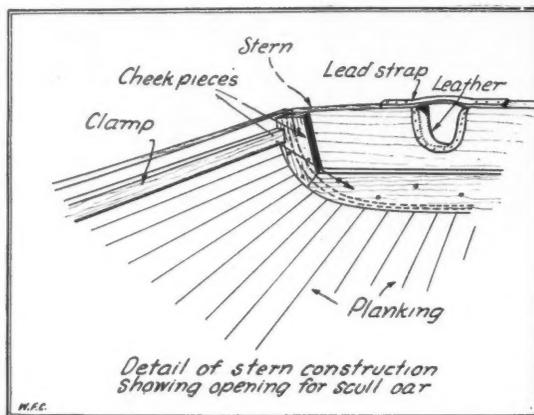
With the planking job complete, the boat may be

turned over and the material for the frames, when it is hot enough, may be bent into place at each of the molds, removing one mold at a time. The wood for the frames must be hot and pliable and while one man holds the frame down into the turn of the bilge, the other should secure it in place with a few wood screws from the inside of the boat. Before the next mold is removed, this frame should be screw fastened to every plank. The frames run in a continuous piece from one side to the other. Of course, as each mold is removed, it is necessary to take out the temporary nail fastenings and care should be taken to see that each nail hole is properly filled, either with a soft pine plug or by some waterproof cement.

**T**WO light pieces may be bent an inch down from the inner edge of the planking forming what are called clamps upon which the deck beams will rest. These pieces run from bow to stern. Next get the deck beams for the forward deck in place and then the coamings at the sides and the short beams that support the side deck. The deck may be made from any light material, covered with canvas, which should be laid in marine glue or old, sticky paint. Floor boards may be made for the inside and a screw-eye attached to the bow for a rope painter. A compass saw is used to cut a hole in the stern

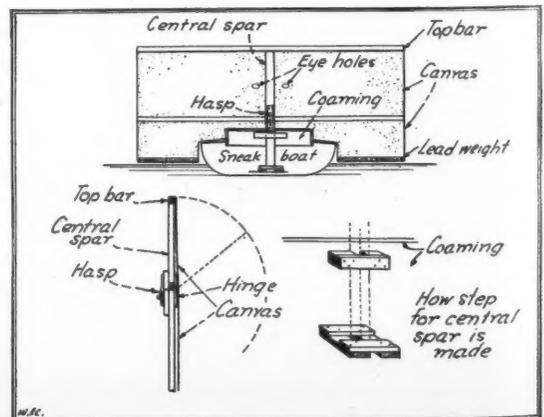
for the sculling oar and this hole should be well lined with leather with a lead strap over the top. The sculling oar should also have leather on it where it passes through this hole.

Oarlocks are provided on the side pieces, the oarlock coming just a little above the edge of the coaming. Handholes are provided in the piece supporting the oarlock, these holes coming in exactly the center of the boat in such a way that one man on each side may pick her up when she is brought ashore. A light, protective molding is carried around the entire edge



of the deck. The oarlock pieces may be backed up with a small knee in order to make them somewhat stronger and where this knee meets the oarlock piece, the corner should be cut away in order to permit any water that might accumulate, to run through and overboard.

(Continued on page 793)



said, when I bungled it somewhat and the lure dropped into the water a foot from the frog, "you'd let me have that rod I'd show you how it's—Look out! You got a fish!"

I had. A fish that raced away into the middle of the stream, making the line fairly sing. Rather than risk frightening the frog, without moving out of my tracks, I played the fish down into the shallows and passed it back to Joe, a black-perch as large as any we had taken that day.

"That," observed Joe, after a couple of ill-mannered guffaws at the altogether surprising result of my recent frog fishing, "is real fisherman's luck. I can't beat it. Now let's see you catch this green grandparent before it gets tired of your tiddling around and swims off."

"If," I said, grinning satisfiedly at Joe, "you think taking that perch so unexpectedly wasn't fun, you're crazy. Who cares if a frog now and then get way? Not me."

Swinging around I lowered Joe's feathered treble hook to the water a short distance in front of the frog and slowly maneuvered it into position.

Much to Joe's disgust my first upward flip of the fly missed the frog entirely. The frog settled lower in the water until only its head from the eyes up stuck out. I dropped the lure into the water to keep the wind from dragging it off and slipped it slowly toward the retiring chin of my intended victim. When almost against the frog the wind bowed the line and the bright feathers arose to the surface an inch from the frog's nose. The frog's long tongue darted out and licked the lure in. I lifted the rod and Son Sam soon had another nice frog to slip into his sack.

After a time I returned to the bank where I had had a heavy strike. Wading carefully in the water below the bank I fished out ahead, slowly covering the entire stream. I wanted that fish that had struck so solidly. I had no luck. I attached an inch of worm to my trail fly

and flipped in near a clump of grass at the end of a small point. A black-perch took it and sped away into the depths. I soon landed it.

I readjusted my worm, cast it far out and let it sink. Retrieving inch by inch I had a solid strike. It was the big one! It bucked like a bass!

"Heigh, Sam!" I shouted, walking back beneath the bank to the gravelly beach. "Here's a bass."

The fish fought doggedly and went to the bottom repeatedly as I played it toward the sloping bank. I was in no hurry to end my enjoyment of its valient efforts to escape, you see. Son Sam came running, arriving in time to see me haul a pound and a half channel cat out upon the gravel.

I didn't quite know whether to be disappointed or delighted at first, but was so amused at Sam's elation as he strung the fish that I decided the loss of the two pound bass I had been so sure of was well repaid in the capture of the cat.

About eleven thirty I stood upon a six foot bank above a shallow spot which sloped off into blue depths in three directions and caught eight black-perch large enough to keep and twelve little fellows that I returned to the water.

Fly-fishing in such waters is a great pleasure and at high noon I reluctantly abandoned the spot and followed Joe and Sam to the motor car and our fried chicken lunch.

In the blazing sun about one thirty I sneaked up on a long pond with several trees shading one bank and an oil pipeline across one end. The wind was ruffling up small waves, I found so my caution was needless. My first cast into water a foot in depth with limestone ledges for bottom netted me the biggest black-perch of the day,—a bright green, lively fellow, that cut many capers as I brought it in and measured exactly 9½ inches when we returned to the automobile.

Sitting in the shade I "nigger-fished" a while with worms on a number six

snelled hook, taking three or four perch of mediocre size and a bluegill that I thought was a pound crappie until I saw its blue gills and golden-brown sides, it made such a commotion.

I relinquished the rod to Sam when he came up with the kodak and lolled upon the cool dam ledges while he descended and straddled out on the eight inch pipe-line, fishing.

I saw him take several small fish which he threw back and was half asleep, eyes closed indolently, when a yell from him brought me up, alert, wide awake, filled with visions of Sam struggling in the stream. But Sam continued to sit upon the pipe-line, holding up his rod which was almost bent double with one hand and clasping the pipe with both legs and the other, yelling at the top of his voice. And all the while something churned the water beneath him and made violent rushes upon his line.

I rushed to the rescue but found myself powerless to help. So I stood upon the bank laughing at Sam's frantic efforts to control the fish and gave advice.

"He's sure a big one," explained Sam, hanging on for dear life when the fish gave a great yank.

As fast as Sam would straighten up the fish would make him lie down upon the pipe again. Three times this happened while Sam was slipping cautiously back my way, doing things to my favorite rod that caused me to scringe whenever the fish attempted to pass beneath the pipe.

I waded in as far as I could and helped him ashore and shortly thereafter Sam, in not exactly scientific manner, dragged a flopping large-mouth bass up among the rocks.

The tiny number eight hook seemed so perilously near the edge of the lip that I landed it for Sam with a finger in his mouth. That bass weighed two pounds and seven ounces and Sam wouldn't have been prouder of it if it had weighed twice as much.

Joe is no eagle, for he does make war on frogs.

## How to Build a Sneak Boat

(Continued from page 766)

The most common way of using a sneak boat is to pile brushwood on the forward deck so that the men aboard are completely concealed as the boat advances. The man doing the sculling may lie on his back or side, while the other man directs him. In some waters, a piece of wood is clamped across the forward coaming, this piece being considerably wider than the boat and with the upper edge filled with holes. Into these holes, rushes are placed in such a way that a bow-on view would make the boat look like a small island. In any event, progress with the sculling oar must be slow and the boat kept free from making ripples.

A canvas blind may also be used, designed along the lines of the one shown in one of the drawings. This is arranged to fit into a socket in the coaming and the bottom of the boat and is at least twice as wide as the boat. The canvas is cut out to conform to the shape of the boat and the lower edge is weighted to hold it down just above the level of the water. The central spar is hinged on the forward side with a hasp on the inside. Removal of a piece of wood from the hasp will cause the canvas to fold over forward

and the gunner is ready for action. Eye holes are provided in the canvas and, of course, the entire thing should be painted a protective color.

The art of sculling is one that relatively few men can accomplish, that is, in proportion to the number who can row. It is a simple process, though, but it will bring into play certain muscles that may make it hard work for a time. A good sculler can make a small boat travel along as fast as some men can row and apparently with one-half the effort.

The principle of the thing is to take advantage of the backward thrust of the flat blade. If you will take an oar or paddle and put the blade in the water and then, using a boat or float as a lever, push the handle downward quickly, with the blade flat against the float or boat, you will see that, due to the leverage, a little pressure on the handle will cause a considerable commotion in the water. The point is this: after you have made one such stroke, how are you going to get the blade back in position again without taking it out of the water.

The flat of the blade does the work while the edge of the blade has little or

no resistance. Therefore we use the edge and by tilting the handle a little one way or the other, we cut the paddle back into place by permitting its edge to slip easily through the water. Then another upward thrust and again the return, this time with the opposite edge cutting the water.

Now, instead of having the paddle straight up and down at the start of the thrust, suppose we let it lie in the water at a flatter angle. By bearing down on the handle, we can still get a considerable amount of thrust and by working the edge of the blade, on the back stroke, first one way and then the other on alternate strokes, we get a sort of rotary motion at the handle. It takes practice to do it, but after a time you will find that one-hand sculling is as simple as rolling off a log—and that's supposed to be very simple indeed. Start with a light, flat bladed oar or a narrow bladed paddle and remember that the larger the surface of the blade, the more slowly the strokes will have to be. Don't think that you can start right out sculling like an expert, but try a little at a time until you finally have it down. Sculling takes practice in order to make a good job of it and to accustom the muscles to the unusual exercise.