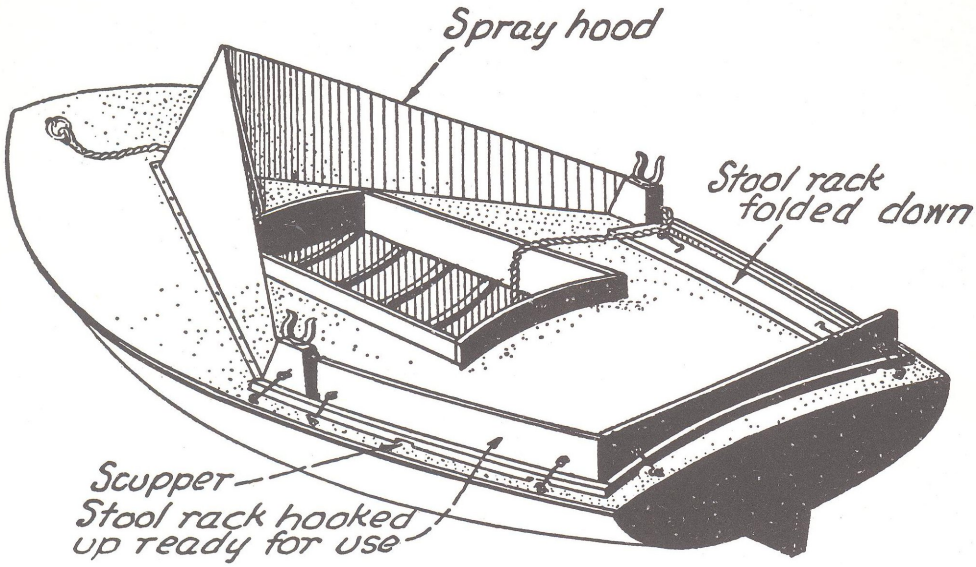


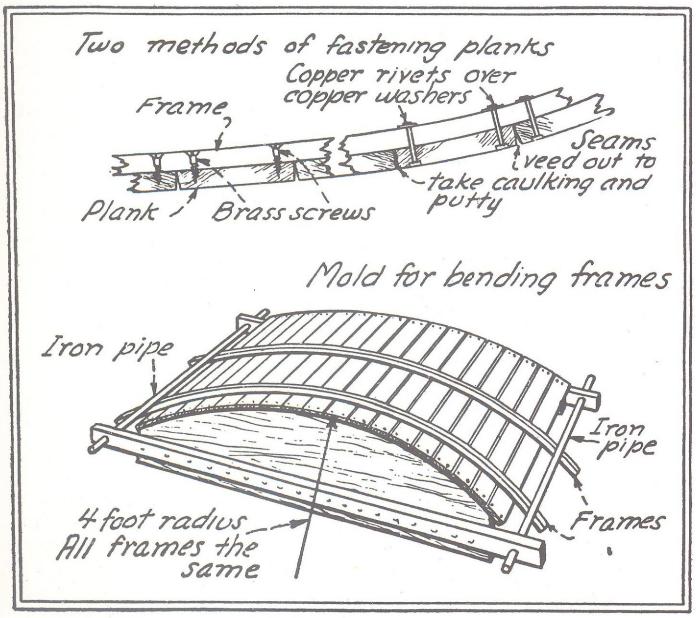
The boat complete showing spray hood and rack for decoys

Barnegat Bay Sneak Box

Length overall 12 ft. Beam 4 ft.
Handy small boat for hunters

The Barnegat Bay sneak box is probably the best known duck boat in the world, and justly so, because it incorporates all of the features of the other types and in addition it has other advantages almost too numerous to mention. In addition, there is a center-board for those who desire to sail, and mighty sporty sailing these little boats make. The sneak box is well adapted for use with an ordinary sprit-sail, one of the simplest rigs and one which is highly successful. The small hatchway amidships is covered with a wooden hatch that may be locked in place if the hunter wishes to leave his duffel aboard for a day or so. The interior of these boats is snug and warm and many a man has used them for a night's lodging. For such work the hatch may be left partly on, thus giving protection, but at the same time allowing for a little fresh air.

The sneak box is twelve feet long and four feet wide. It is round bottomed and round decked, the bottom being laid over steam bent frames, all of which are bent to the same radius—four feet. The deck beams are sawn to shape from boards and have slightly less bow to them than the frames.

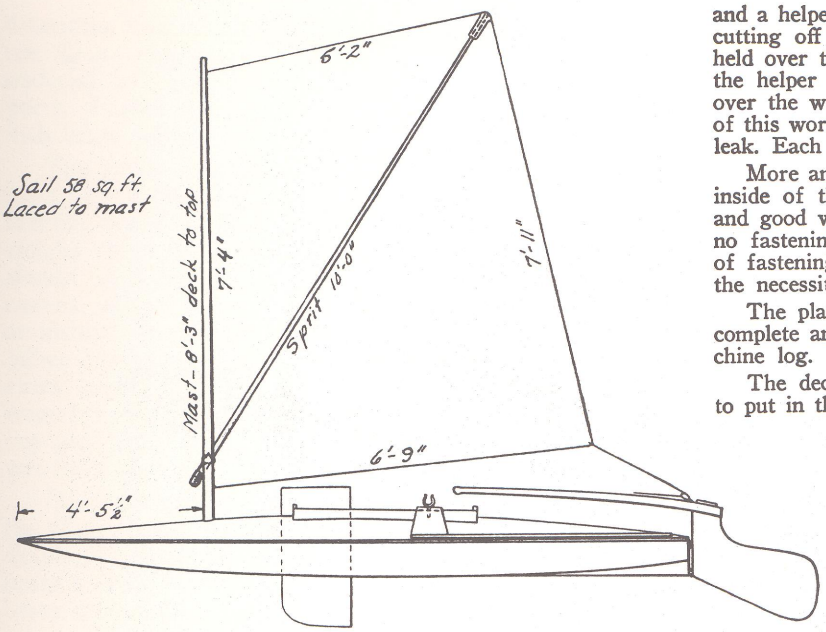


The requirements are simple and consist of two pieces of oak or pine, each about thirteen feet long and an inch and a half square. These are the chine logs and represent the greatest amount of work. One of the detail drawings shows how these pieces are planed and chiseled down to a wedge shaped section. Rabbets are cut, top and bottom, to take the decking and the bottom planks and the frames and deck beams butt up against these chine logs, being securely fastened together by galvanized iron nails or brass screws. The rabbets for decking and the bottom planking should be cut to the proper bevel and of just the right depth to let the deck and bottom boards lay in flush with the chine log. This is shown in the detail drawings, together with the fastenings which, of necessity, are shown one over the other. Actually,. they will come at separate parts of the chine log.

When these logs are nearly completed they may be fastened together at the bow by means of a hackmatack knee and brass screws. Then fasten a temporary piece across, six feet back from the bow, so that the outside edges of the chine logs are exactly four feet apart. Now nail another piece across the stern so that the chine logs are a total of two feet nine inches apart. It may be necessary to nail another temporary piece across, half way between the bow and amidships, in order to make the line approximate the one shown in the larger drawing.

The next step is to secure the material for the frames. This should be of oak one-half an inch by one inch or thereabouts. These frames are to be bent flat—that is, with the thinnest section up and down. In order that all the frames may be of the same shape, it is necessary to make some kind of a bending mold, something like the one shown in the drawing. This mold may be made up of one inch material and the radius should be exactly four feet to the top edge of the boards. If these boards are an inch thick, the radius will be one inch less for the end pieces.

The entire structure should be strong and rigid. Pieces of two by four may be nailed across each side and a piece of three-quarter inch iron pipe fitted as shown at each end. The builder should be cautioned to make sure that the wood is left a sufficient length of time in the steam box. This will make it soft and pliable and it will bend easily without splitting or checking. The ends of the hot frames are slipped between the mold and the iron pipes and are then pushed down until they rest snugly up against the mold. It is best to leave them there for several days until they are thoroughly dry and set. Some builders will tell you to make the mold a little more rounded than the actual frames, as they may straighten out a little when removed. If they are properly steamed and left on the mold this will not be necessary, but in any event it is not a bad plan to nail a light, temporary strip across their ends when removed from the mold.

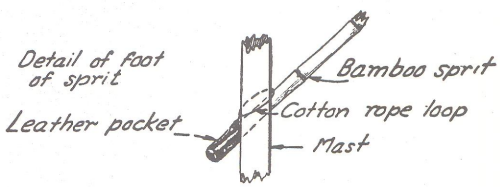


and a helper on the inside places the copper washer over the end, cutting off the surplus material. A heavy piece of iron is then held over the head of the rivet on the outside of the boat while the helper inside, using a light hammer, rivets the metal down over the washer until the plank is held tightly in place. Be sure of this work because a loose rivet will cause a mighty troublesome leak. Each rivet should fit its hole tightly for the same reason.

More and more small boats are being screw fastened from the inside of the frames through to the planking. This is a strong and good way to do the job and it has the great advantage that no fastenings are exposed on the outside of the hull. This type of fastening will also make it considerably easier if there is ever the necessity for changing a plank due to breakage.

The planking should be smoothed off and sanded down when complete and it should present a flush surface to the edge of the chine log.

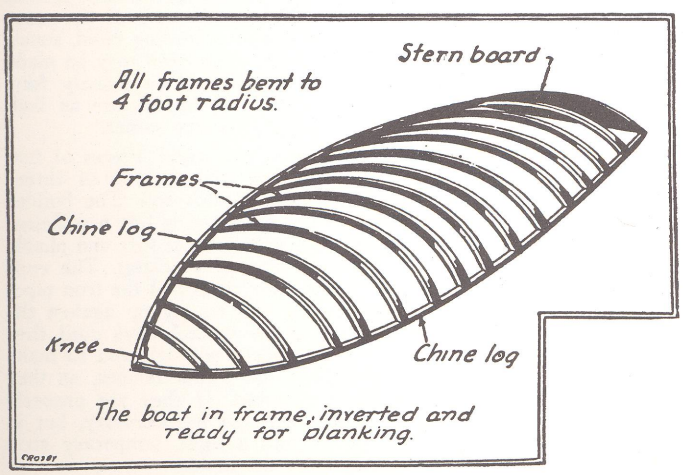
The deck comes next, but perhaps it would be a better plan to put in the center-board trunk before this work is started. This



The ends of the frames should be bevelled to fit up against the inside edge of the chine log and secured in place, exactly eight inches apart throughout the length of the boat. There are seventeen frames in all with an additional one butting up against the stern board or transom to reinforce it and make the planking stronger at that point. If the mold is made large enough, most of these frames may be steamed and bent at once.

When all the frames are in place, evenly spaced and square to the chine logs, the next step will be to plank the bottom of the boat. This material will be five-eighths of an inch thick and should be of cedar, although other material will do if cedar is too hard to secure. The boards may be around two and a half to three inches wide and run straight fore and aft, tapering out in the rabbet which has been cut in the chine log. It is a good plan to fill this rabbet with marine glue or some similar material before the planks are placed, as this will make an absolutely water-tight joint. Marine glue should also be used in the seams between planks, but, in addition, each seam should be Veed out a little and caulked lightly with one or two threads of cotton caulking or oakum. A brush full of old paint in each seam before it is caulked will tend to hold the caulking in place and the same thing applies when the caulking is smoothed off with putty. Do not, above all, caulk the seams too tightly because, if the wood is dry or if the boat is built in a warm room, there will be real danger of the planks buckling and coming off when they begin to swell in the water. This point is extremely important.

The planking is fastened securely to the chine logs where they come into contact and also to every frame. Either brass wood screws or copper rivets over copper washers may be used, the rivets being generally considered somewhat better. It is necessary in this work to drill a hole for every fastening, slightly smaller than the diameter of the rivet. The rivet is then driven through



comprises a small box, located between the two frames shown, with a reinforcing piece all the way around the bottom and securely put together with marine glue and wood screws so that it will be watertight. The center-board itself consists of a piece of wood just large enough to slip through the trunk easily and long enough to come about twenty-four inches below the bottom of the boat when it is down. It may be weighted with lead so that it will stay down. A piece of cotton rope may be stapled to the top of the board and arranged with loops in it that may be hung on a small hook when the board is hoisted or when it is all the way down. The board may be taken completely out of the well and stowed away inside the hull when not in use.

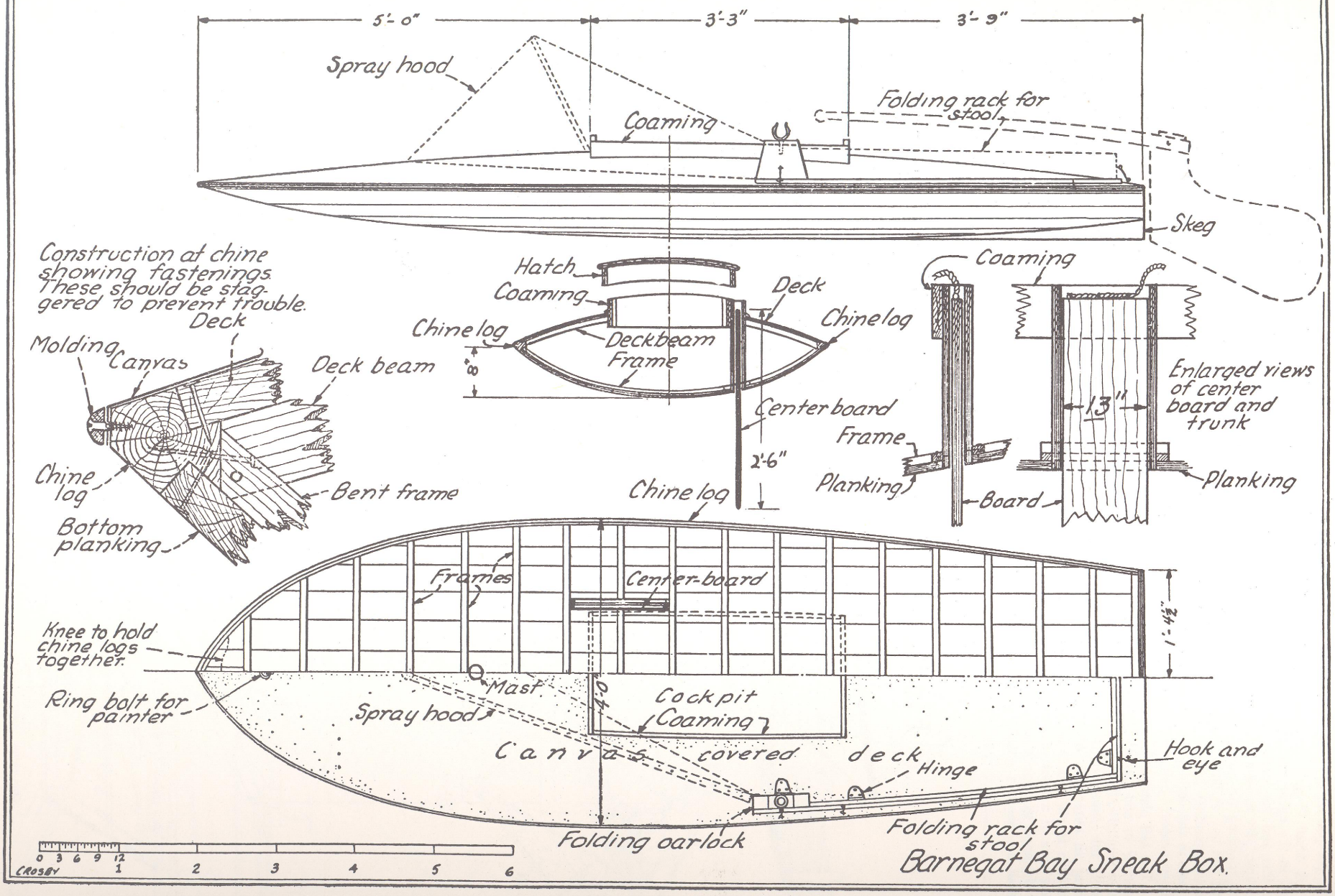
The deck beams will have to be somewhat deeper in section than the frames and will be made of spruce seven-eighths of an inch by one inch. A master frame should be made wide enough to go clear across with some to spare, and all the others are made to this curve. The radius for this will be five feet instead of four, thus giving a somewhat flatter crown. Each beam should be sawn to shape and planed a little to make it smooth. It is then nailed in place on the chine logs. The beams may be the same spacing as the frames but usually one foot will be enough for this work. The decking comes on top of the beams and is put on the same as the bottom, but it is slightly lighter; half inch tongue and groove material will be about right so long as it will present a flat surface on the top.

The deck, when complete and smooth, should be covered with canvas. This may be laid in old paint, to make it stick to the wood, and it should be tacked down all the way around with copper tacks. The hole for the cockpit may be cut later on and the edges of the canvas tacked down between the coaming and the ends of the deck. A better way is to run the canvas up over the coaming so that the water cannot possibly get inside the boat. When in place and tacked down tightly, a small half round oak molding may be screwed to the chine log, all the way around. This will serve as a fender and at the same time it will cover up the edge of the canvas.

The entire boat, inside and out, should be painted to protect it from the elements.

It is customary to have a rack rigged around the stern where the decoys may be kept when being taken out or in. This rack is made up of three pieces of wood, one on each side and another across the stern. They are all hinged on the inside in order that they may be closed down flat on the deck. The hinge for the board across the stern deck should be higher than the others in order that this board will lie down flush on top of the side boards. Brass hooks and eyes on the deck are used to hold these boards in an upright position. The blocks supporting the oarlocks are also arranged in a similar manner as shown in the drawings.

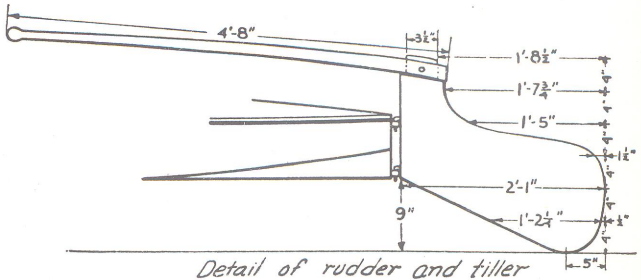
Usually there is a spray hood arranged so as to cover the forward end of the cockpit. This is made of canvas or khaki, tacked down to the deck and to the oarlock blocks. A light piece of wood in the center, with its lower end resting against the forward end of the coaming, is used to hold the peak up in position. A gal-


5'-0"
3'-3"
3'-9"
Spray hood
Coaming
Folding rack for stool
Skeg
Construction of chine showing fastenings. These should be staggered to prevent trouble.
Deck
Molding
Canvas
Deck beam
Chine log
Bent frame
Bottom planking
Hatch
Coaming
Deck
Chine log
Deck beam
Frame
8"
Center board
2'-6"
Chine log
Coaming
Enlarged views of center board and trunk
13"
Frame
Planking
Board
Planking
Frames
Center-board
Knee to hold chine logs together.
Ring bolt for painter
Mast
Spray hood
Cockpit
Coaming
Canvas covered deck
Hinge
Hook and eye
Folding oarlock
Folding rack for stool
Barnegat Bay Sneak Box.
CROSBY

vanized iron screw eye and a rope painter complete the deck work. The perspective drawing shows these things in detail.

A small skeg, down under the stern, will help to steady her and in the event that she is to be sailed, a rudder will be hung to this and the stern. This will steer with a long tiller to the cockpit. By using a sprit sail, as shown, there will be no rigging for lowering or raising the sail, as the entire thing will unstep and roll up. A head stay and two shrouds will hold the mast in a vertical position, but are not necessary. The butt is stepped through a hole in the deck and a block of wood inside the bottom boards. When properly balanced, she will make a fine little sailer.

The sail plan as shown is the simplest possible and is used for running in and out to the hunting grounds. We wish to state most emphatically that this sneak box is not of the type used generally for racing but is essentially a hunting boat, the racing type being an outgrowth of the original ducking boat. While it is possible to rig this boat for racing and to enlarge the cockpit to take care of a crew of two or more, we do not advise this. She is designed to balance as well as could be expected for a boat as small as this and should make a good little sailing vessel, but



Detail of rudder and tiller

please bear in mind that she is *not* a racer and was never designed for such work.

We would also like to caution builders against making changes in the plans as shown. The little boat is carefully worked out as she stands and changes will probably result in failure. An experienced boat builder might be able to use these plans as a basis for working out a somewhat larger boat, but we do not advise any changes whatever and no additional plans are available.