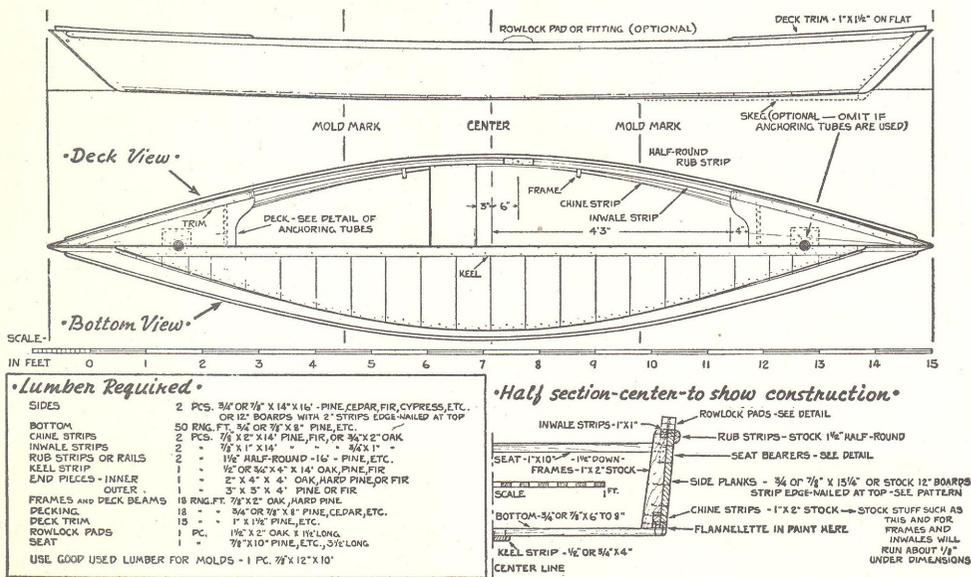


HOW TO BUILD A VERSATILE SNEAK SKIFF

This 15½-foot skiff—copied from one of the best of the distinctive craft to be seen at Smiths Island, in Maryland's famous Chesapeake Bay—is designed as an all-round sportsman's boat for inland waters. Ordinary lumber and simple fastenings can be used; its manner of construc-

Only the usual single seat is shown but you may wish to fit an *extra seat* forward and another aft, both just inside the decked-in ends and about 3 in. off the bottom. Or, when one or two guests are aboard, floor cushions can be used instead of seats.

ANCHORING TUBES too are optional but will prove handy for hunting or cast-



tion is easy enough not to require too much time.

But the main thing, of course, is that you'll find it ideal for sheltered-water use, whether duck hunting in the marshes, fishing open ponds and rivers, or idle exploration along winding streams.

OPTIONAL FEATURES. Although seldom used on such boats, *rowlocks* are provided for in the plans, as some builders who expect to cover considerable distances will find oars handiest or safest. For shallow water and marsh going, however, one usually stands and shoves the boat with a long paddle or pole; in deeper water, free of grass, a short paddle is used astern, canoe fashion.

ing in water that's not too deep. The skiff can be held in any desired spot by thrusting a couple of slender poles through the tubes and into the mud.

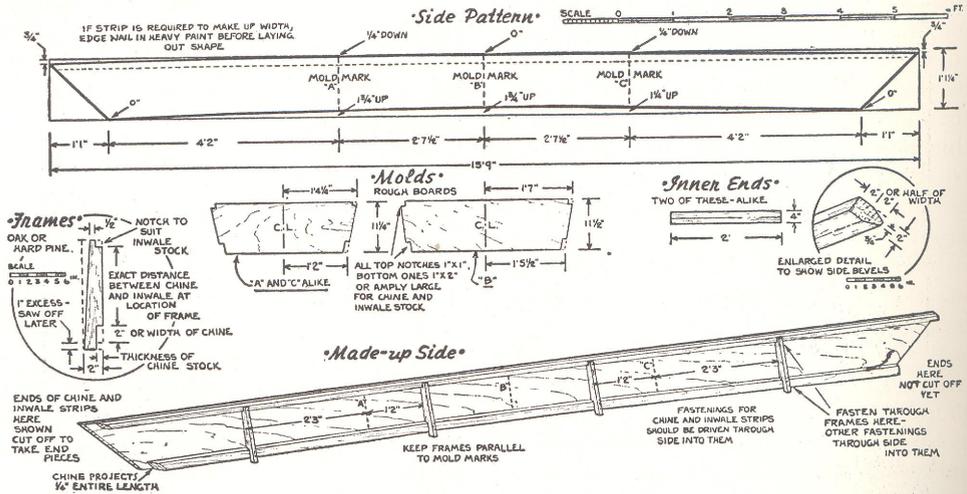
SIDE PATTERN. The two sides are made up first, complete with chine and inwale strips and frames attached. Use cedar, cypress, fir, pine, or any other wood recommended locally for skiff sides, so long as it is free of serious knots and checks. To keep weight down, ¾-in. lumber will serve; otherwise choose 1-in. stock (which will actually be nearer 7/8 in. thick). If you can't get boards 14 in. wide, settle for 12-in. stock and fasten a 2-in. strip, same thickness, to what will be the top edge of each side. First paint both touching edges

with heavy paint, then edge-nail at 1-ft. intervals with 3-in. finishing nails, heads well countersunk. Located so high above water, the seam will hardly have a chance to leak.

Mark one board according to side pattern shown, drawing upright lines to take molds A, B, and C. Mark rake of ends and saw them off. After measuring

because it holds fastenings so much more securely, by all means use oak if you can, and have it dressed $\frac{3}{4}$ in. thick.

In fastening each chine, bend it to the curve of the bottom but have its edge project $\frac{1}{4}$ in. below the side to avoid having to dress away too much wood later on, when sides are beveled to take bottom boards. First, though, point all



up and down mold marks and at ends to determine points along what will be the top and bottom, use a length of your limber inwale stock to draw fair lines connecting these points. Saw outside the lines, then plane to them—being careful to countersink still further any top-edge fastenings, if necessary, as you come to them. Now use this side as a pattern for the other, being sure to mark upright mold lines on it too.

touching surfaces, to forestall rot and help prevent leaking, and drill tight-fitting holes for all fastenings, to keep the wood from splitting. These last two precautions are musts! Next come the top or inwale strips, which are fastened flush with edge of side.

CHINE AND INWALE STRIPS. Specifications throughout have purposely been made as elastic as possible, because nowadays one must use whatever lumber is available. Stock 1 x 1 and 1 x 2 in. pine or fir strips can be used (actually they'll run slightly under these dimensions), or you can cut lumber about $\frac{7}{8}$ in. thick into strips a full 1 and 2 in. wide. But

For fastenings use flathead screws, if possible— $1\frac{1}{4}$ in. for $\frac{3}{4}$ -in. stock, $1\frac{1}{2}$ in. for heavier; galvanized or brass for salt water, or, in a pinch (but only for fresh water), common steel. If you must use nails, give preference to square or ordinary galvanized ones. Finishing nails are unsuitable, as their heads will pull through, and common nails won't do either, except as a last resort, and then only for fresh water.

These fastenings are best driven through sides into inwales and chines—about 8 in. apart into inwales, and 3 in.

apart staggered in a double row into chines. Heads of nails or screws should be countersunk slightly below surface to permit puttying over them. Where nails are used and points break through, clinch neatly into wood.

FRAMES. Where frames are to go, draw lines that parallel the mold marks. Lay a length of your frame stock (a couple of inches longer than you think you'll need) on one of these lines, mark the lower edge of inwale and top edge of chine on it, make sure these marks are square, then cut out top and bottom notches to thickness of inwale and chine respectively. Permit a good inch to project at the bottom for cutting off later, and for a neat-looking job taper the frame to have it full width at the bottom but only $\frac{1}{2}$ in. wide where it fits over the inwale at top.

It should bear snugly against planking, inwale, and chine; and though all four end frames are theoretically alike, as are the four slightly different central ones, each will likely require individual fitting. Bore holes in all frames for two 2-in. screws or nails into chine, and for one $1\frac{1}{4}$ in. fastening into inwale; paint touching surfaces and fasten; then from outside drive four more fastenings through side into each frame.

INNER END PIECES. The fact that both ends of this boat are alike simplifies construction throughout. Use 2 x 4-in. oak or pine for these, beveled as shown in second blueprint and purposely made longer than necessary.

MOLDS. Make of single boards, or cleat narrower widths together but work out from a center line to have ends of each alike.

ASSEMBLING. Fasten an inner end piece to each end of the made-up sides, using plenty of heavy paint and permitting excess length to project at top and

bottom. This will necessitate sawing off ends of inwales and chines. It's easiest to saw these off 4 in. back, to make sure of clearance, but a careful builder will make slanting cuts instead (see detail of made-up side), so members will hug the unbeveled sides of end pieces. Fasten through sides into end pieces with screws or nails about $1\frac{1}{2}$ in. apart, staggered in a double row.

Next trim ends of chine and inwale on the other made-up side and fasten it to one of the attached end pieces, being sure this side is directly across from the one already fastened.

You now have a V-shape assembly. Turn it upside down on a couple of leveled beams or horses, to keep ends clear of ground or floor, and fasten center mold B in place directly over its marks by driving temporary nails—four on each side—into its ends. A good plan is to drive these through holes bored in short slats so these can be split away when the time comes to remove molds, and the nailhead will be exposed for pulling.

Trim ends of chine and inwale, bore holes for fastenings in free side, then pull the free ends together. If you can't requisition enough manpower for this, a rope twitch like that shown in the second blueprint will come in handy. In any case, C-clamps can be used for the final holding. Before fastening, be sure the whole side is properly lined up opposite its mate, and sight along the hull to see if end pieces need truing up.

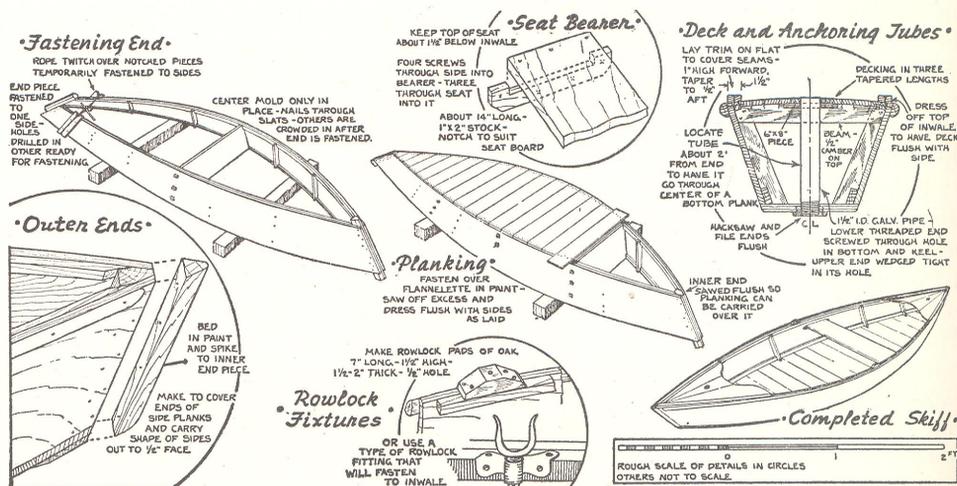
Now put molds A and C inside and gradually drive them toward the ends until they're on their marks. Then you may want to skift them a bit one way or the other, depending on how this affects the appearance of the hull. Stretch a string between centers of end pieces, and make any further adjustments necessary to get the hull right before proceeding. Molds should run out at right angles to the string, their center marks should be in line with it, and everything should

look right to the eye when viewed from all angles

BOTTOM PLANKING. Recheck level of blocking or horses. Saw off lower ends of end pieces roughly to shape of bottom. Then, after laying a straight board 4 ft. long across the hull, to serve as a straight-edge for checking your work, commence

screws or nails to an end, driving three into the chine and two into the side, staggered in a double row.

If lumber is fairly well air-seasoned, no calking is needed; crowd boards together hand-tight, and seams swell perfectly. If using kiln-dried stuff, however, leave a crack about the thickness of a hacksaw blade between adjacent boards,



beveling sides to take bottom planking. All surfaces that are supposed to touch *should* touch—not be held apart by uneven beveling—so try to forestall any such trouble as you go along. Saw off projecting ends of frames as you come to them, then plane everything smooth (tips of end pieces and bottoms of molds included) until the straightedge shows there are no humps or hollows left.

Bottom planking can be same thickness as sides, but not wider than 8 in. A precaution worth taking is to lay a strip of flannelette or soft cloth in heavy paint all along the sides and over ends, and then paint over it, before fastening planks down. Commence laying at the center and work toward one end, then toward the other. Have each plank project a little on both sides, fasten, and saw off the excess as you proceed, but leave the final dressing until last. Use five

to avoid undue swelling and buckling.

The last planks to be laid down should extend right over the end pieces, so you'll need to drill carefully for the fastenings that go here, or you may split the wood. These last planks, of course, are trimmed to conform to flare of sides and rake of ends.

KEEL AND OUTER ENDS. If bottom planks vary in thickness, dress them smooth before fitting the keel strip, and paint well under it first. Use three fastenings (preferably screws) to each bottom plank.

Stock for outer or false ends (see detail sketch,) should be thick enough to cover ends of sides and wide enough to carry the lines of the sides out to a face that's 1/2 in. wide. Shape each end piece a little larger than necessary, dress down ends of side planks so that they and the

inner end piece form a smooth bearing surface for the other end piece, spike it in place over heavy paint, and finally plane it to shape, rounding its lower tip to blend in with keel but letting the top project for the time being.

DECK. Turn hull rightside up and make sure blocking is still level. Cut a piece of frame stock to a crowding fit against the pair of frames nearest one end, cambering or curving the top edge of this beam to be $\frac{1}{2}$ in. higher in the center than at ends. Note that this top edge rests just far enough below the boat sides so that when the outer deck planks are laid over it their top surface will be flush with inwale and gunwale. Chisel off after side of each frame as required to have a wood-to-wood fit, then fasten beam in place with two screws or nails at each end.

Now install a 1 x 2-in. block of wood inside the end piece, for the tips of the decking to rest upon, and make sure that it, like the beam, is sunk decking-thickness below the sides.

Both ends of the deck are alike. Each consists of three tapered pieces or strakes as shown in the sketch of the completed skiff. In shaping the two outer pieces to bear snugly against inwales, and then crowding the center piece in to fill the remaining space, you'll find you need to saw off the frame heads that project above the beam and remove the fastenings there. Also, bevel away the top surface of the inwale, one edge of which projects slightly above deck level, so that when trim strips are added they'll hug decking, inwale, and sides.

Shape the inner edge of the deck as shown—or carry it straight across, if you prefer. Fastenings should be driven through sides and inwales into edges of outer strakes of decking, also into beam and end block. Now saw end pieces off flush with decking, and shape trim strips to cover seams along the deck sides. They should meet in a point at the bow, and

taper down from a height of 1 in. there to $\frac{1}{2}$ in. aft. Next come the rub strips or rails. Be sure to round their ends off nicely, and then secure one to each side with screws or nails about 9 in. apart.

INSIDE WORK. Before installing bearers for the center seat (see detail,) fasten a temporary strip about amidships, to prevent hull from changing shape, and remove the center mold so that you'll have room in which to work. The near edge of this seat should be 3 in. off center. Once in place, it will serve to brace the hull, and the temporary cross strip and molds A and C can be dispensed with. If end seats are wanted, fit these over bearers as before. Rowlock pads, if used, must be well fastened. For the average man 7-ft. oars will be about right. A $\frac{1}{2}$ -in. hole for a painter rope can be bored through the outer end piece at the bow of the boat.

ANCHORING TUBES. Obtain two 14-in. lengths of galvanized pipe $1\frac{1}{2}$ in. I.D. (inside diameter) and have one end threaded for a couple of inches back. With the hull upside down, bore or cut a hole through keel and bottom plank so close fitting that the pipe, when screwed into it, will bury its threads in the wood. Center this hole on a bottom plank (not near its edge) somewhere between 2 and $2\frac{1}{2}$ ft. from the end, drive a few extra screws through the keel about the hole, and bore a second hole through the deck directly above it. This hole should be snug, of course, but not so snug that the pipe cannot be turned.

Now—and this should be done even if you don't provide anchoring tubes—plane one side of a 6 x 8 in. block of wood to fit the underside of the deck, and drive a few screws through the deck into it to reinforce the decking strakes and tie them together. Where anchoring tubes are used, of course, the hole must be continued through this block of wood. Daub plenty of paint inside both holes and thread the pipe in place, using a pipe

wrench from inside the boat to turn it until the end just comes through. File it flush with keel, then hacksaw and file the upper end flush with deck, using enough tiny wedges to crowd it tight if there is any play.

The tube for the opposite end is installed in exactly the manner described above.

PAINT. Your sneak skiff is now complete—but don't underestimate the importance of giving it a good finish. Smooth and sand the boat, inside and out; give a thin priming coat of paint; putty over heads of fastenings and fill any checks or openings flush; and give two final coats of paint. Perhaps a drab brown or green, to blend in with marsh reeds or grass, would be the most effective shade to use.