

Design No. 1. & 15.
18 foot Cabin Catboat.

Peterson & Williams,
Naval Architects,

Specifications.

Jones Cove
South Bristol, Maine 04568
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1. Keel- To be worked out of a sound piece of oak, preferably white oak, 5" x 14" x 18'. This will be worked down to a siding of 4½" from the forward end to the after end of the centerboard trunk, and from that point it will be tapered to 2" at the bottom of the sternpost. The centerboard slot, 1½" wide, should be cut before the keel is set up.

2. Deadwood- In the deadwood shown on the construction plan the main timber is chamfered off at the rabbet and an apron piece of 7/8" oak is fastened on top to form a back rabbet. This apron piece should be 6" wide to allow a ¾" back rabbet on each side, and should be set in paint when fastening down. If preferred, the main deadwood timber can be made of one piece extending about 2" above the inside of the planking and with the rabbet cut in, as in the keel. This timber should be of oak, but the triangular filler piece underneath may be of Oregon fir if desired.

3. Sternpost and knee- Of oak, molded as shown. The sternpost will be sided 4½", but 2½" would be sufficient for the knee. Joints to be painted when assembling, fastenings to be 3/8" or 7/16" dia. galvanized iron bolts and rods, as shown. Where rods, or drives, are used they must be headed up on washers. Sternpost to be tapered down to 2" at lower end.

4. Stem and knee- To be worked out of carefully selected oak, sided 4½", molded as shown, fastened with 3/8" or 7/16" galvanized bolts. Joints to be painted and fitted with pine stopwaters, which must also be fitted in the sternpost assembly. Stem and knee to be joined with a hook scarf, as shown.

5. Transom or sternboard- Oak of 1½" stock, to finish 1-3/8" as shown. To be built of two boards 12" wide, or of three boards 8" wide. To be fastened to sternpost and knee with 3/8" or 7/16" galvanized carriage bolts. These bolts should be staggered, not run directly down the centerline of the sternpost. Seams to be caulked, and oak stiffening cleats about 1-3/8" x 2", two on each side, to be well fastened with galvanized screws. At the sides of the transom, where the plank fastenings would be in end grain, it is well to fit a vertical fashion piece to take additional plank fastenings.

6. Sawn frames- Oak, sided 7/8", molded 2½" along straight portions, widened out to support side deck beams as shown. Note that the sawed frame on Sta. 10, and from this point forward, have the after edge on the station line, while the frames aft of Sta. 10 have the forward edge on the station. This is so that when the frame is sawed to the section there will be sufficient wood left for beveling to the hull shape. The parts of the frames may be fastened together with galvanized screws.

7. Bent frames- Oak, $7/8"$ x $7/8"$, steam bent. These frames should be bent in so that the grain of the wood, when the frame section is viewed from above, runs nearly parallel with the planking instead of athwartship, to avoid danger of breaking the frames. Frames to be bent in after the ribbands are fastened to the sawed frames.

8. Floor timbers- Oak, sided $1-3/8"$, molded as shown, fastened to keel with $7/16"$ dia. galvanized bolts, two in each floor except where the keel narrows down at the after end. Floor timbers must be accurately fitted to planking.

9. Centerboard trunk- Base white pine, sided about $1-5/8"$ to come flush with outside of keel. Upper sides $7/8"$ white pine, head pieces $1\frac{1}{2}$ x $2"$ oak after one to be let into slot in keel, the forward one, if desired, may be extended up to house beam as shown. As the floor timbers in the way of the trunk are to be fastened to same with galvanized or cast brass clips about $\frac{1}{4}"$ x $2"$ x $4\frac{1}{2}"$, the bolts for these should be let into the trunk base before assembling. The clips should be fastened to the keel with lag screws, and the floor timbers with bolts, and of course brass or bronze screws or bolts should be used with brass clips and galv'd. iron bolts with iron clips. Before assembling the trunk paint the inside with two or three coats of good anti-fouling paint. If the bottom of the trunk base is perfectly fitted to the top of the keel, set on a thread of cotton well bedded in thick paint, and fastened down by four or five $7/16"$ dia. brass or galvanized rods set up with nuts on washers, it should not be necessary to spline the seams, but every precaution should be taken to ensure a tight job.

10. Centerboard- $7/8"$ oak, fastened with $3/8"$ dia. galvanized rod. To be hung on a $\frac{1}{4}"$ dia. brass or galv'd. pin in keel. It would be well to fit a metal plate of the same material as the pin on each side of the board to prevent the pin from pulling through the wood.

11. Planking- White cedar or white pine, $3/4"$ finished thickness, in as long lengths as possible, with butts well distributed and made on oak butt blocks extending full distance between frames and of sufficient width to overlap adjacent seams. The planking may be fastened with galvanized boat nails, but the designer's preference is for screws in all cases to avoid the hammering and jarring of the structure. Plank seams to be caulked with cotton, painted, and filled with white lead putty. Fastening heads may be bunged or painted and puttied.

12. Clamps- Yellow pine or Oregon fir, sided $1-3/8"$, molded $1-1/2"$, fastened to sawn frames with galvanized screws and to bent frames with $\frac{1}{4}"$ dia. galvanized bolts.

13. Deck beams- Sided, molded, and crowned as shown, of selected oak, fastened to clamps with $\frac{1}{4}"$ dia. galvanized bolts. Beams to be notched about $3/8"$ over clamps.

14. Breast hook and mast partners- $1\frac{1}{4}"$ oak, arranged as shown and fastened with $3/8"$ or $7/16"$ dia. galvanized bolts. To be thoroughly bolted to clamps and auxiliary clamps with $5/16"$ dia. galvanized carriage bolts.

15. Quarter knees and traveler blocks- Quarter knees $1\frac{1}{4}$ " oak, bolted or screw fastened to transom and bolted to clamps and beam shelves. Blocks under traveler to be $\frac{7}{8}$ " oak, carefully fitted and fastened to deck with galvanized screws.

16. Main deck- $\frac{1}{2}$ " x 3" white pine, laid straight without covering board, fastened with brass or galvanized screws or galvanized boat nails. To be covered with eight ounce or ten ounce canvas laid in thick paint. The canvas should be turned up between the house side and the house ledge, and turned down over the deck edge.

17. Cockpit- Beams $\frac{7}{8}$ " x $2\frac{1}{2}$ " oak, bolted to sawn frames where possible, and supported elsewhere by posts fastened to floor timbers. Deck $\frac{7}{8}$ " x 3" white pine, fastened with galvanized boat nails. Seams to be caulked, well painted, and filled with white lead putty. Staving $\frac{1}{2}$ " x 3" pine, or mahogany if desired, screw fastened to rabbeted sill and to beam shelf, deck edge and coaming. Staving should be tongued and grooved if possible.

18. Bulkheads- Forward bulkhead $\frac{3}{4}$ " x 3" T. & G. pine, to extend up to house deck, and to be well fastened to deck beam and house front. A doorway to be cut for access to fore peak. After bulkhead $\frac{3}{4}$ " x 3" pine or mahogany, T.&G., screwed to cockpit beam.

19. Cabin House- Ledge of $\frac{7}{8}$ " x 1-38" oak, fastened to beams from underside with round head brass or galvanized screws, and from underside of deck with flat head screws. House sides of $\frac{5}{8}$ " Oak to be screwed to this ledge. Beams $\frac{7}{8}$ " x 1- $\frac{1}{4}$ " oak, steam bent to a crown of $10\frac{1}{2}$ " in 7'-0". The form over which the beams are bent should be made to a somewhat greater crown so that when the beams are taken off they will not be less than the required crown. Beams to be notched into house side and fastened with one screw in each end of each beam. House deck $\frac{5}{8}$ " x 3" pine, fastened with brass screws and covered with eight or ten ounce canvas laid in thick paint.

20. Companion hatch, doors, etc.- Hatch $\frac{3}{4}$ " x 2- $\frac{3}{4}$ " mahogany, seams to be fitted with splines. Runners 1- $\frac{1}{4}$ ", door frame $\frac{7}{8}$ " x 1- $\frac{1}{2}$ " screwed to bulkhead, sill 1- $\frac{3}{4}$ ", well fastened to sub-sill.

21. Rail, moldings, etc.- Although a plain foot rail of $\frac{7}{8}$ " x $\frac{7}{8}$ " oak is satisfactory, the designer's preference is for a rail 1- $\frac{3}{4}$ " wide as shown. The small rail would be fastened into the deck edge and sheer strake with galvanized wire nails. The wide rail, if used, should be re-enforced by additional brass bolt fastenings with nuts under the deck just inside the edge of the sheer strake. The rubbing molding, of $\frac{3}{4}$ " x 1- $\frac{1}{2}$ " half round oak, should be fastened with galvanized wire nails in the deck edge. House edge molding of 1" x $\frac{1}{2}$ " half round oak to be similarly fastened. All rails and moldings must be well painted on the side next to the hull, as must also the surface to which they are fastened. If this is not carefully done, the oak is certain to stain the sides of the boat.

22. Cockpit seat. Of $\frac{3}{4}$ " mahogany, with two or three transverse cleats to prevent warping. The inboard ends of these cleats should be covered by a skirt along the front edge of the seat. Seats to be laid on cleats well screw fastened to the cabin and cockpit after bulkheads.

23. Spars- The spars should be made of spruce if a good drae of reasonably clear stock can be obtained, as Oregon fir is too heavy. If fir must be used however, one of the lighter varieties should be selected. The mast to be worked out of a piece of timber 7" x 2 x 22', tapered to the dimensions given. The step tenon should be about 3" x 5", and a galvanized heel band should be fitted above this to avoid danger of the mast splitting under str Gaff and boom as shown on sail plan. Gaff jaws to be formed of oak, but a detail for a metal saddle will be supplied if preferred. Spars to have three coats of best spar varnish, or may be painted if preferred. The U.S.N. Deck Paint, dark yellow color, is suitable for painted spars. It is suggested that the mast be painted white above the highest point of the gaff jaws.

24. Blocks- Bronze blocks are the least expensive blocks that are suitable, while lignum-vitas or ash shell blocks with bronze roller bushes are the best and most expensive.

25. Rudder- Of 1-3/4" oak, tapered to 1-1/4" at after edge, fastened with 1/2" and 3/8" dia. galvanized drives as shown. Tiller oak, 1-3/4" x 2 1/4" where it enters the stern, to be held by 3/16" x 1-1/2" brass straps screw fastened to the rudder. The rudder can be hung by standard brass or galvanized pintles and gudgeons.

26. Painting- The following painting scheme is suggested as suitable. Bottom to have three coats of a good grade of anti-fouling green without priming coat. Topsides two priming coats flat white and one finish coat semi-gloss yacht white. It is suggested that it would be best not to attempt to make an enamel finish of the topsides the first year, as it is often found that after the first season afloat the hull will need smoothing off. Deck to have two coats of buff exclusive of the coat in which the canvas is laid. House sides may be varnished or painted white, and mahogany will be varnished. The lighter colors that are used the cooler will the surface remain in the hot sun. For this reason the designers boat is entirely white, and the deck is always cool to walk on.

For the interior finish it is suggested that the bulkheads, hull sides, and house sides be painted white, ice box, coal box, toilet box front, berth fronts, and cabin floor bluish gray,; underside of house deck, top of toilet cover, and mahogany trim varnished. It is well to give the underside of the main deck a coat of linseed oil and leave unpainted, as this is a troublesome place to paint and is apt to scale off due to dampness.

27. Sail- May be of eight ounce commercial or army duck, or yacht duck if a better grade can be afforded. To be fitted with eyes for a lacing wire on the boom, and for wood hoops on the mast. It is to be preferred that the reef points be set in bands rather than on individual tabs, as these latter are more apt to result in a torn sail.