

The canoe should have a weather helm, that is a tendency to turn up in the wind when the tiller is let go, and therefore the center of effort of the sail plan should be just aft of the center of the boat's lateral resistance.

Put in two mast tubes for the use of a large or small mizzen—one four feet from stern and the other three feet from stern. The positions of the masts are for the use of the Mohican or balance lug style of rig. The centerboard can be of ¹/₁₆ inch brass or galvanized iron 30x14. The forefoot should round up well, and the rabbit line, one foot aft of a perpendicular line at the stem, should be ¹/₄ inch above the base. A fair shaped stem is shown in Fig. 2. The base line, from which heights are taken, excludes the thickness of the external keel, and is horizontal with the bottom of the planking amidships,

All work should be smoothly rubbed with sand paper. Lead paint is cheap and durable, and in conjunction with red-lead putty hides many imperfections. On a nice surface oil and varnish make a handsome finish. Paddles and masts can be made of spruce or pine and oiled. Booms can be made of pine or bamboo.

In the following table the figures

after the decimal point denote eighths of an inch; thus, 14.3 means 14³/₈ inches.

TABLE OF OFFSETS FOR SAILING CANOE.

Stations.	HEIGHTS.		HALF BREADTHS.					Keel.
	Rab.	Deck	Deck	No. 1.	No. 2.	No. 3.	No. 4.	
0	—	18	0.1	0.1	—	—	—	—
1	0.4	14.3	8	5.3	4.4	3.3	8	0.4
2	—	11.6	12	10.5	9.3	7.7	5.2	1.1
3	—	10.4	14.3	13.7	13.1	11.6	9.3	1.4
4	—	10.1	14.7	14.7	14.6	13.7	12	1.4
5	—	10.2	14.7	14.7	14.6	13.7	12.1	1.4
6	—	10.6	13.4	13.2	12.6	11.5	9.4	1.3
7	0.3	12.5	8.4	7.7	7.3	6.2	4.2	1
8	—	16	0.1	0.1	0.1	0.1	0.1	0.1

- Length over all..... 16 feet
- Greatest beam..... 30 inches
- Depth amidships at gunwale..... 10¹/₂ inches
- Sheer at bow..... 8 inches
- Sheer at stern..... 6 inches
- Greatest width of keel..... 3 inches
- From fore side of bow to mast..... 18 inches
- To fore end of centerboard case..... 5 feet 7 inches
- To fore end of cockpit..... 6 feet
- Length of cockpit..... 5¹/₂ feet

Bleached muslin makes good sails, and the cloth should be bighted according to fancy—that is, the number of seams in which the sail is run, and the bights run parallel with the leach of the sail. Sails may be partially mildew and water proofed by dipping or soaking in a bucket of water in which has been dissolved one-half pound each of sugar of lead and powdered alum, and then hung up to dry without wringing.



C A N O E S O N G .

STRENGTH of the tree that gave the blade
Make my heart strong and unafraid.

And, wind, come fill the sail that I
May see the friendly shores go by.

As one may love a brother true,
I love my boat, my light canoe,

Where I can lie at length and hear
The song of robins sweet and clear,

With now and then a winter blast
Through towering treetop dashing past,

These are the dreams that men will know
When down the summer streams they flow,

We are content when winds propel,
Or when my arms the way compel.

Our only thought is this—to steer
Of hidden rock and sand-bar clear.

The sweetest hour to me is when
I journey from the sight of men,

Dipping the blades that, left and right,
Are wings that give me ready flight.

It makes me glad to see the town
Behind the hills and bluffs go down,

Knowing that liquid pathways run
To where the sweetest peace is won.

—MEREDITH NICHOLSON.