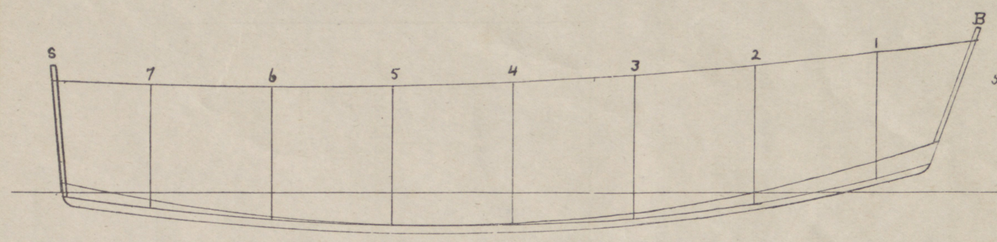
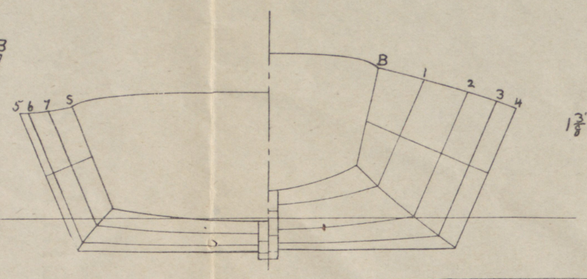
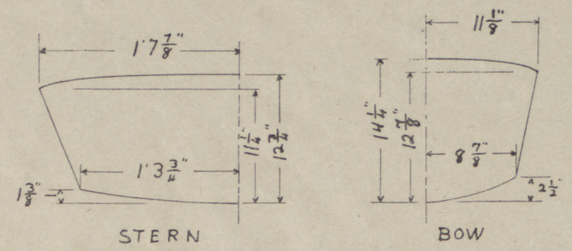
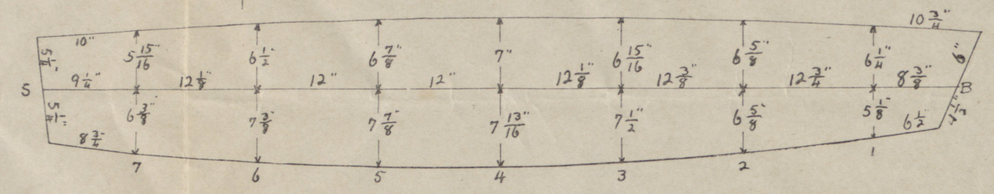


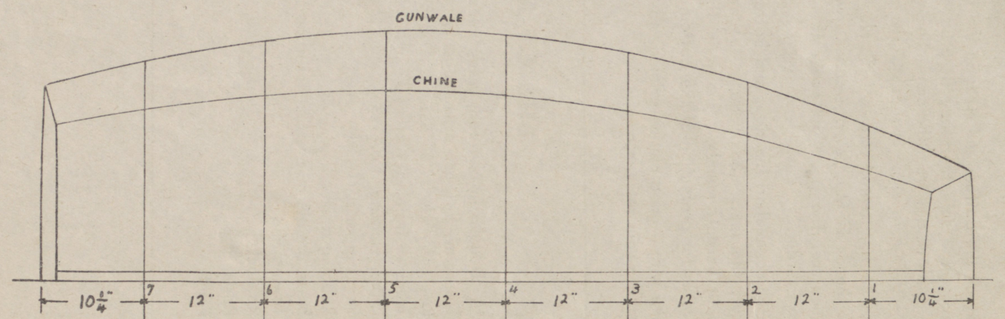


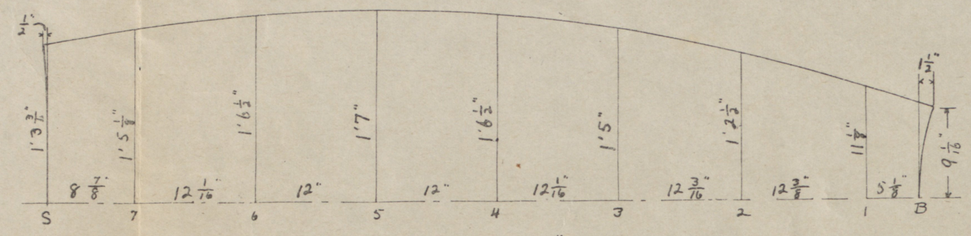


TRANSOMS.

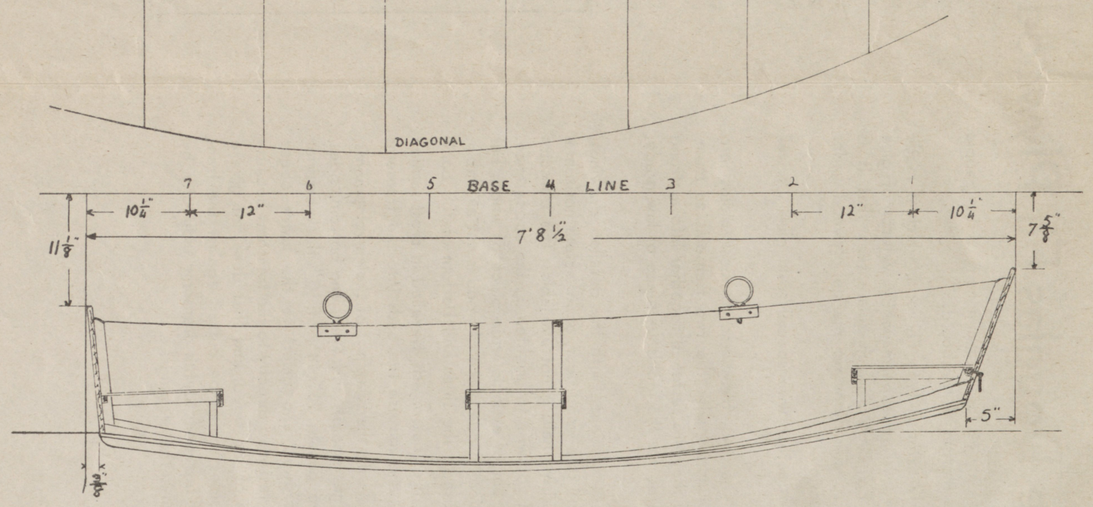


SIDES 7'10 1/8" x 1'2 7/8"



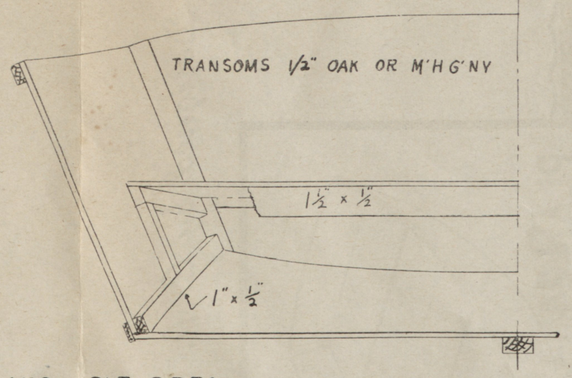


BOTTOM 7'4 11/16" x 3'2"

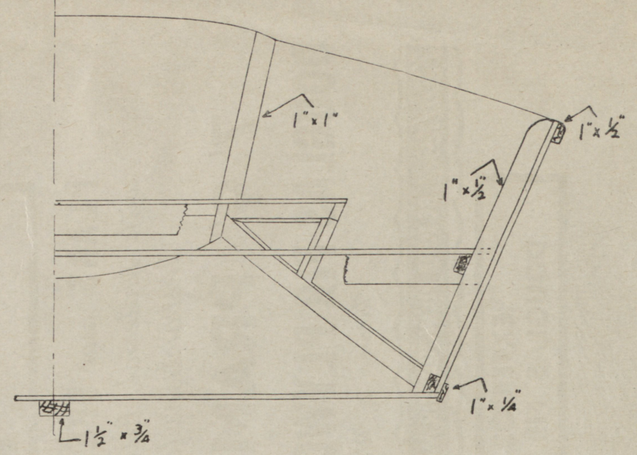


STATION 5

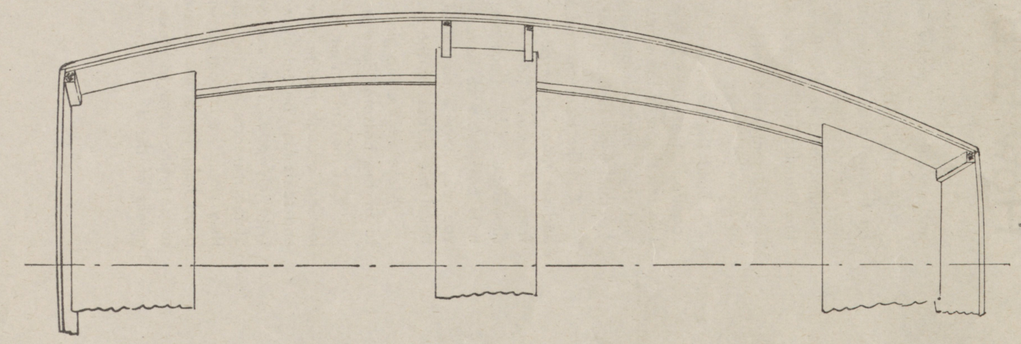
LOOKING AFT

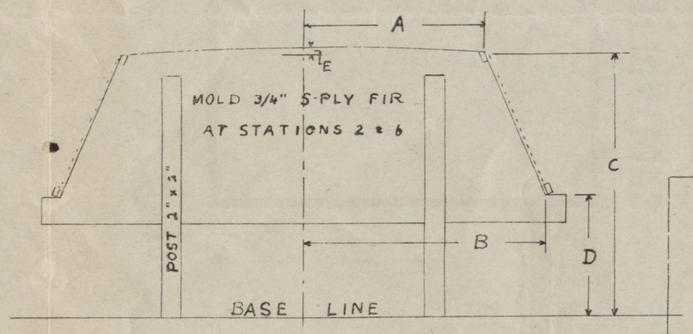


LOOKING FORWARD



SIDES, BOTTOM, & SEATS MADE OF 1/4" DOUGLAS FIR PLYWOOD EXTERIOR TYPE, GRADE-MARK EXT-DFPA





STATION	A	B	C	D	E
2	1'2 1/4"	1'7 1/2"	1'11 1/2"	11 1/4"	1"
6	1'6 1/4"	1'11 3/4"	2'2"	1'1 1/4"	1/4"

7'9" PRAM DINGHY

FOR

DOUGLAS FIR PLYWOOD ASSOCIATION

C.P & E.D BURGESS

DESIGNERS

STRUCTURAL DETAILS.

6-15-40

How to Build the Douglas Fir Plywood Association's 7′ 9″ Pram Dinghy

This useful and handy little craft weighs only 60 lbs., but can carry three people and an outboard motor with a comfortable margin of freeboard.

For the bottom, sides, and seats use only Exterior type Plywood, which is made by the hot-pressed, resin-bonded method to assure a permanently waterproof glue line. Be sure that it bears the grade mark EXT-DFPA, which guarantees that it is manufactured to the Bureau of Standards specifications for marine plywood under the Douglas Fir Plywood Association's inspection.

All contacting surfaces should be glued together with special resin glue, as well as screwed.

Build the pram upside down. Since it has no transverse frames, molds are required at Stations 2 & 6 to serve in conjunction with the two transoms to maintain the shape of the sides and bottom until they are fastened together into a strong and rigid unit. Almost anything handy will do for the molds. A piece of low grade, ¾″ thick 5-ply fir is suggested.

Cut the transoms and molds to shape in accordance with the detailed drawings, and set them up on posts or A frames nailed to a wood floor, or to a stout horizontal frame if a wood floor into which you can drive nails is not available. The transoms should be of ½″ thick oak, or mahogany if you wish to brighten up the appearance. It is preferable to have the transoms cut out of a single wide piece of wood, but you may have a horizontal joint if a sufficiently wide piece of wood is not available. Bevel the edges of the transoms to conform to the sides and bottom of the boat.

Make each chine piece out of one length of oak or ash, bevelled in cross-section to fit the bottom. Bend it over the molds, and mortise the ends into the transoms

Cut the bottom and sides in accordance with the drawings of the developments, leaving enough margin for planing the edges smooth and even. The bottom, sides, and seats may be cut from two standard size panels, 96″x48″, of ¼″ thick Exterior type Plywood. The bottom should be screwed and glued to the lower edges of the transoms, but the sides should not be fastened directly to the transoms because they would be in contact with the end grain of the wood, and that does not give a good hold for either screws or glue. The sides should be butted against the transoms, taking care to make a good fit, and fastened to the transoms indirectly by means of the 1″ x 1″ corner posts as shown in the drawings.

Attach the bottom and sides to the transoms and chine pieces by screws without glue, and make sure that they fit properly. Then back out the screws, remove the panels, brush all dirt from the contacting surfaces, apply the resin glue, replace the panels and redrive all screws as quickly as possible.

Use flat-head wood screws, ⅝″ x No. 4, at about 4″ apart, and do not countersink the heads in the ¼″ plywood. Drive them flush, and give an extra turn for good measure. The paint will cover the heads. The screws should be of bronze, brass, or Everdur.

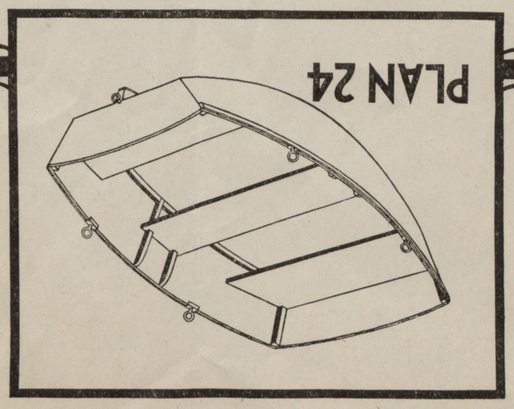
After completing the sides and bottom, turn the boat over. Put on the gunwales, and insert the seats. Then remove the molds. Be sure to reinforce the sides at the seats with vertical members shown in the drawings. Put on the keel and chine rubbing strakes for protection of the bottom.

Paint with a good marine primer and three finishing coats of any good marine paint, and to your taste in color.

BILL OF MATERIAL

¼″ Douglas fir plywood, grade mark EXT-DFPA, 48″x96″	2 pieces
Transoms, ½″ oak or mahogany, 5′3″x15″ or 10′6″x7½″	1 piece
Keel, 1½″x¾″x7′6″ oak	1 piece
Transom framing 1″x1″x4′0″	1 piece
Other framing, 1′x½″x8′	6 pieces
Seat supports, 1½″x½″x4′	4 pieces
Rubbing strakes, 1″x¼″x8′	2 pieces
Brass, bronze, or Everdur flat wood screws, ⅝″ x No. 4	20 doz.
Towing ring	1
Rowlocks	2 pairs
Resin glue	
Paint	

Designed by G. P. and E. D. Bungeat



PLAN 24

PLANS and SPECIFICATIONS
with Material List and Complete Instructions for Building

7′ 9″ PRAM DINGHY

DOUGLAS FIR PLYWOOD ASSOCIATION
Tacoma 2, Washington

Caution! BE SURE PLYWOOD FOR MARINE USE IS EDGE BRANDED EXT.DFPA.

EXTERIOR TYPE
DOUGLAS FIR PLYWOOD