

YEOMAN

MINX

20 INCH CABIN CRUISER

SUITABLE FOR ELECTRIC MOTOR OR DIESEL POWER UP TO 0.5 H.P.

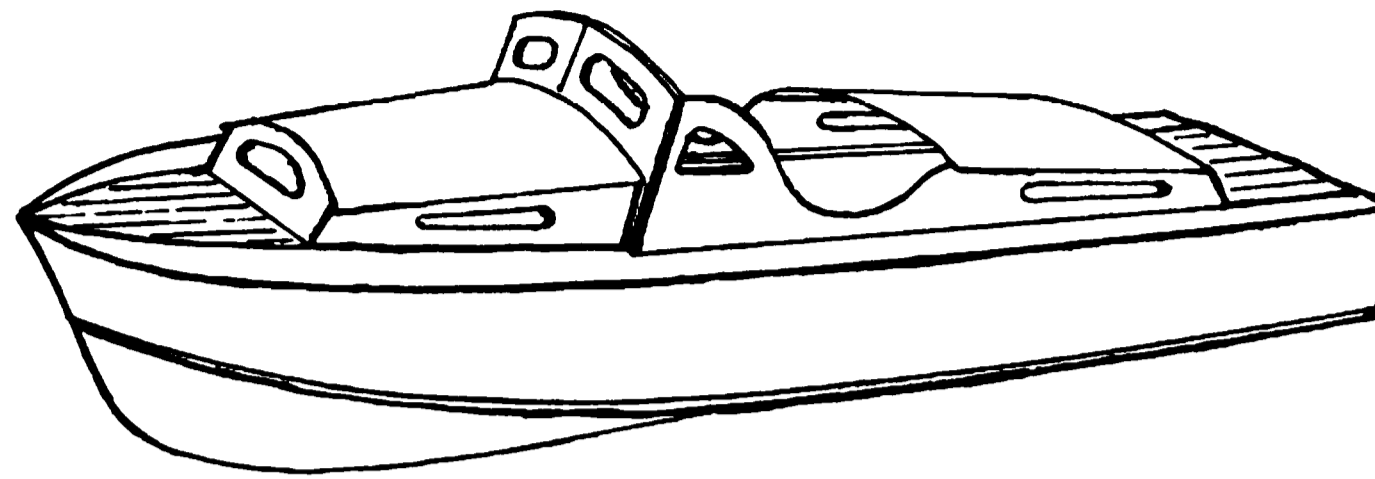
DESIGNED BY

ERIC MARX
P.R.A.S.

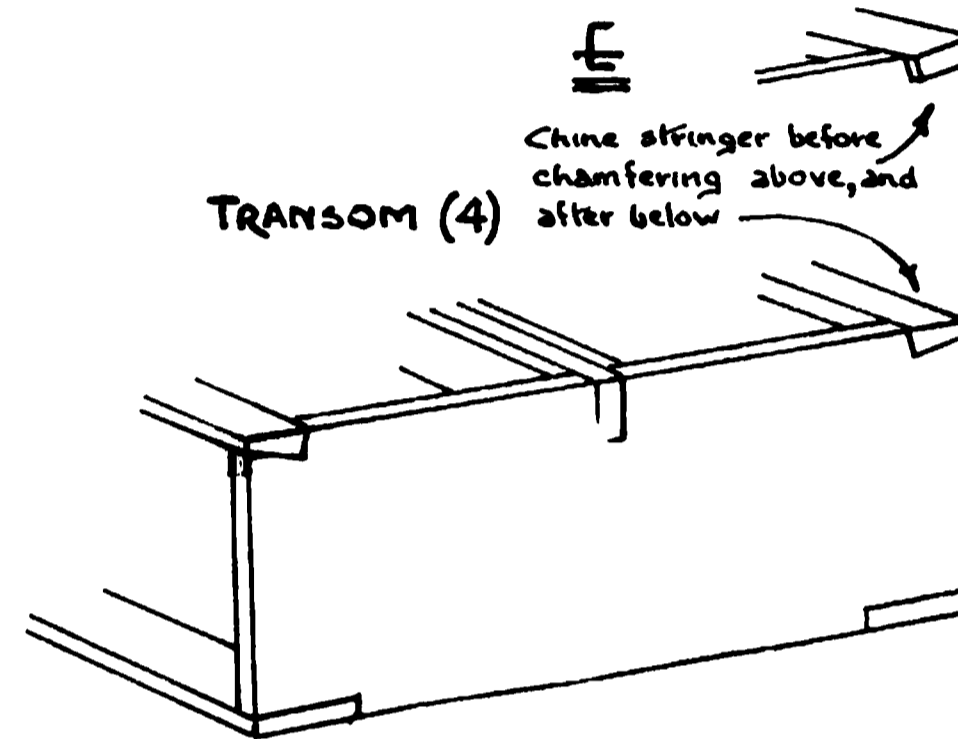
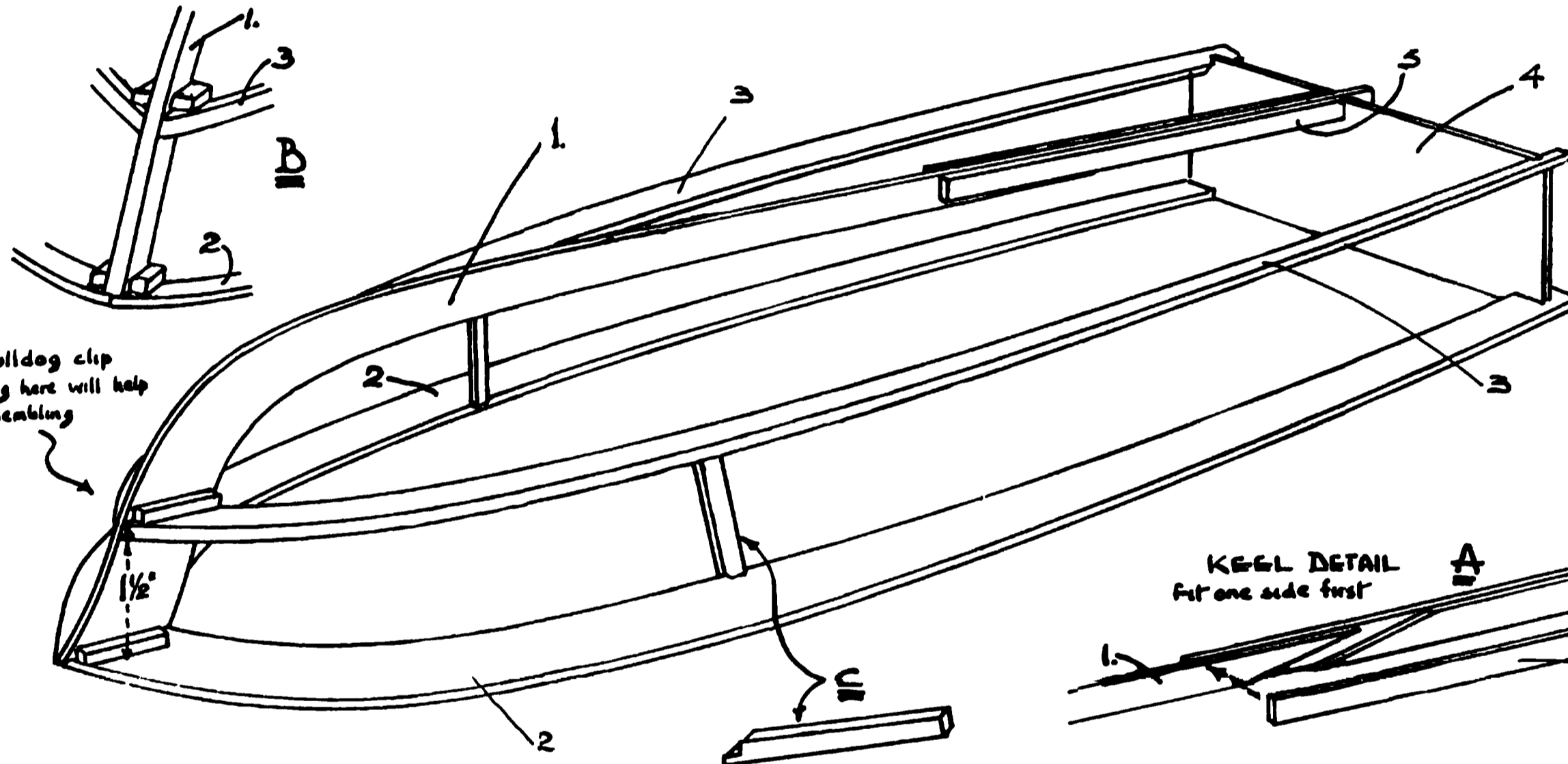
A YEOMAN KIT

Manufactured for A.A. HALES LTD 60 STATION ROAD - LONDON. N. 11.

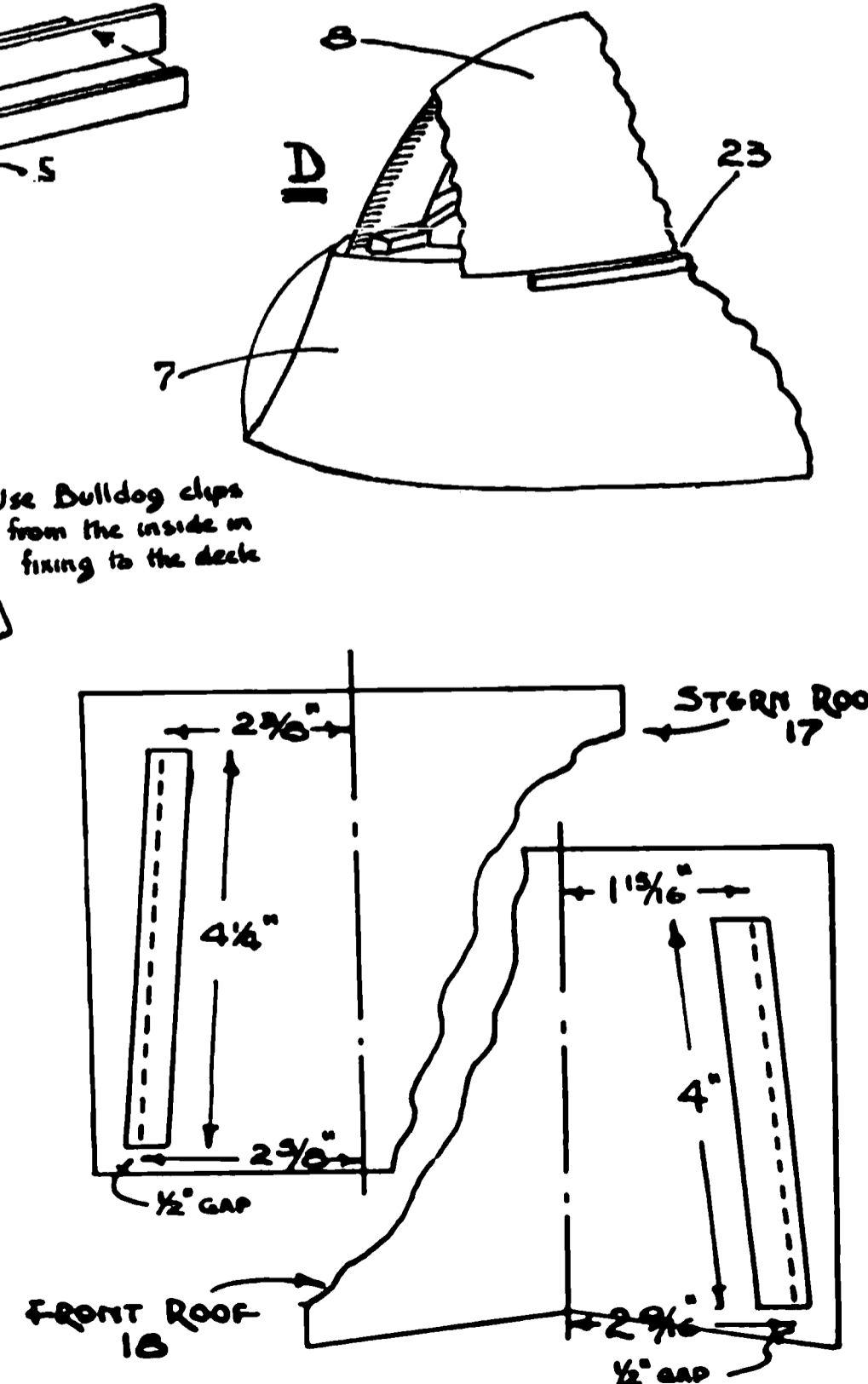
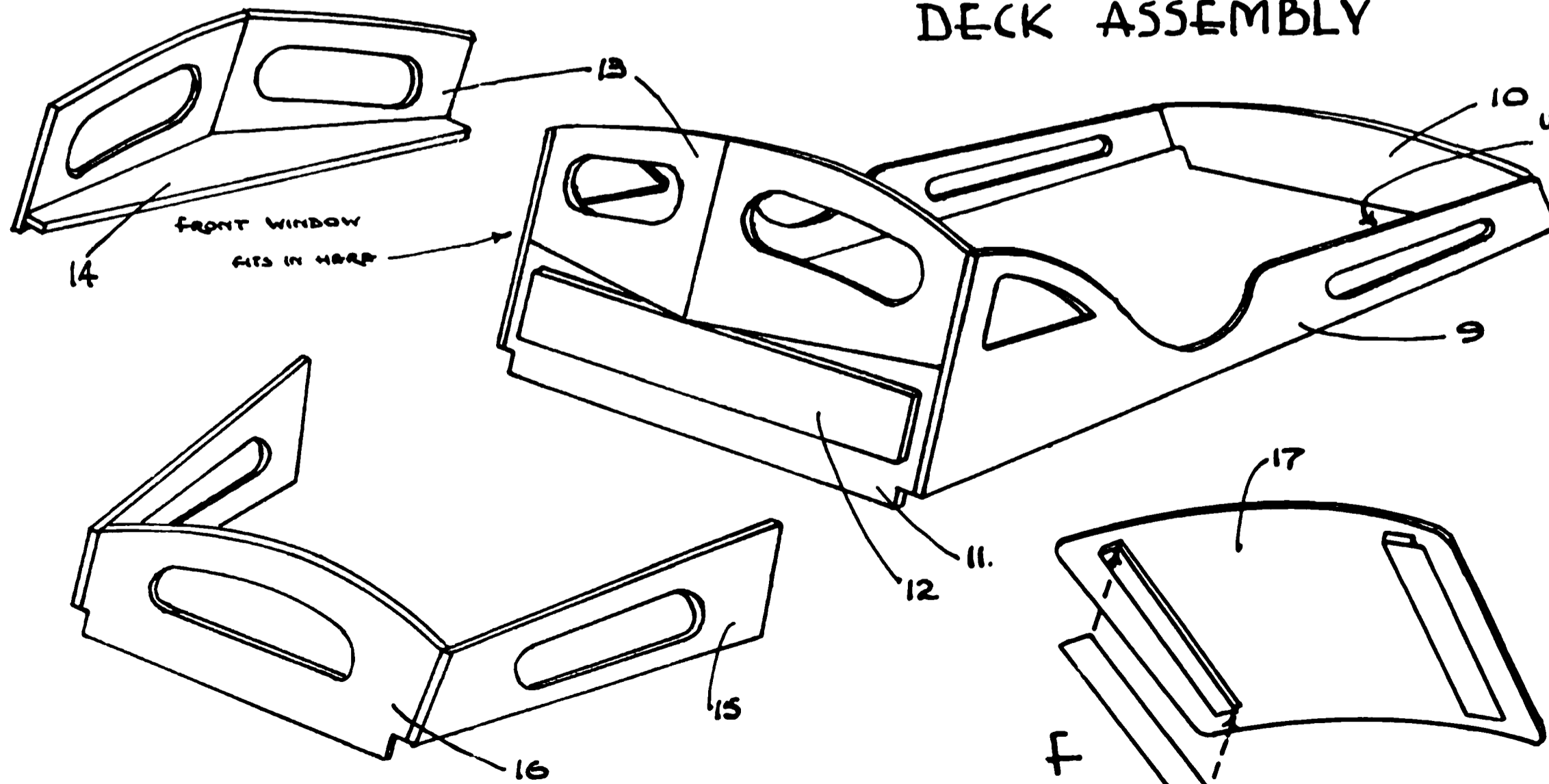
by HAMMERSMITH MODEL MAKERS LTD 92 Holland Park Avenue - London, England



HULL ASSEMBLY



DECK ASSEMBLY



LIST OF PARTS

Item	Quantity	Part	Thickness	Size (approx.)
1.	1	Keel	6 m/m	
2.	2	Deck stringers	4 m/m	
3.	2	Chine stringers	6 m/m	
4.	1	Transom	4 m/m	5 1/4" x 2 1/4"
5.	2	Keel Blocks	1/4" x 1/2"	9" long
6.	1	Length of 1/4" square		9" long
7.	2	Side skins	2 m/m	21 1/2" x 2 1/2"
8.	2	Bottom skins	2 m/m	21 1/2" x 3 1/2"
9.	2	Cabin sides (aft)	4 m/m	9 1/2" x 2 1/2"
10.	1	Rear cabin former	4 m/m	4 1/2" x 1 1/2"
11.	1	Midship former	4 m/m	5 1/2" x 1 1/2"
12.	1	Smaller ditto	4 m/m	5 1/2" x 1 1/2"
13.	1	Wheelhouse front	4 m/m	5 1/2" x 1 1/2"
14.	1	Wheelhouse former	4 m/m	5 1/2" x 1 1/2"
15.	2	Cabin sides (front)	4 m/m	5" x 1 1/4"
16.	1	Front former	4 m/m	3 1/4" x 1 1/4"
17.	1	Aft cabin roof	2 m/m	6 1/2" x 5 1/2"
18.	1	Front cabin roof	2 m/m	6 1/2" x 5"
19.	1	Strip	4 m/m	18" x 1/2"
20.	1	Piece	2 m/m	4 1/2" x 2"
21.	1	Forward deck	2 m/m	4 1/2" x 4"
22.	1	Stern deck	2 m/m	5 1/2" x 2 1/2"
23.	2	Rubbing strokes	1/4" x 1/2" x 22"	
24.	1	Piece of Acetate		
25.	1	Packet of Nails.		

BUILDING INSTRUCTIONS

This kit can be assembled with no more than a hammer, a file and a sharp knife but of course it is an advantage to have more tools.

The special method of construction with deck and chine stringers and keel accurately cut to shape and running the whole length of the boat avoids the complications of the old method with narrow bulkheads. The parts are all correctly shaped but as you deal with each item you must chamfer or trim it as instructed where it joins onto other parts so as to make a perfect joint. Do not try to hurry too much and if possible pre-glue (and rub in) all joining surfaces.

Before you start check each item against the list of parts.

The hull is built upside down on a flat board which is first covered with paper to prevent the glue sticking to the board. Draw a line down the middle of the board 20" long with a line at right angles across one end. The transom stands upright inside this cross line with its centre on the centre line and the point of the bows comes at the other end of the long line.

The pair of deck stringers (2) should now be fastened onto the board by three temporary nails in each, with the transom (4) fitting upright at the stern end. Make sure the transom fits accurately with the inside edges of the deck stringers 5/8" apart; if necessary open out the slots in the transom to accommodate them. The deck stringers (also chines and keel) are deliberately left a little over length. Glue the bows and transom into position.

Before fitting the keel you should prepare the slot for the stern tube but as there are so many alternative and diverse methods available it is not possible to give a definite position for this. The stern tube should emerge at an angle about 4" from the transom. The method of assembly is shown at A. Mark the line of the slot on the keel (1) end, before cutting it, glue and nail on one keel block (5) only. Then cut out the slot in the keel and fix the second keel block, leaving the hole as it is until the boat is finished.

Mark a line on the front edge of the keel 1 1/2" vertically from the flat bow and which rests on the deck. This indicates the position of the chine stringers as shown at B. Now glue the keel in place and then glue and nail two 1" pieces of 1/4" square (6) on each side of it as shown at B.

Next the chine stringers (3). Chamfer to fit against the keel in the bows so that the edge uppermost is in a line with the mark already mentioned, then glue and nail in place. Chamfer and fit two more 1" pieces of 1/4" square to keep the bow and stern firm as shown at B.

Measure and cut two pieces of 1/4" square 1 1/4" long with an 1/4" slot as at C, and glue and nail them into place as supports for the inner edge of the chines B" from the point of the bows.

Leave the glue to set overnight and next day make sure all joints are nailed, then remove from the board and nail the deck stringers 5/8" apart; if necessary use support pieces C.

Now, using file and perhaps knife, chamfer the deck and chine stringers and bows so that the side skins will have flat surfaces to fit to. Refix on the board. In the following operations you will find some "Bulldog" clips very useful to help hold things in place.

Offer up the side skins (7), one at a time, against the boat and trim them to get an exact fit. The edge against the deck stringers must be a perfect fit against the building board the whole way along to avoid errors showing afterwards along the edge of the deck but any surplus along the chine can be cleaned off later. In the bows the skins may be butt jointed or overlapped, whichever you find easier; before fitting the skins warm them in front of a fire and bend them to near the shape required. Glue and nail each skin in place. Use plenty of glue.

Now deal with the bottom skins (8) one at a time.

Draw a pencil line down the middle of the edge of the keel as a guide then chamfer the keel and chines so that the skins have flat surfaces to fit to, taking off any surplus side skins at the same time. See D and E. Warm and bend one skin to shape first then trim the skin to fit. The skins meet edge to edge along the centre of the keel and a little chamfering of the skin is required over the curve of the bows. They overlap the side skins about 1/2" for about 3/5" from the bows along the chine as shown at D. When you are satisfied that you have a perfect fit glue and nail on, being careful not to push the keel out of shape. Then do the same for the other skin.

Take off the board and clean up. Glue and pin the rubbing strokes (23) along the chine on each side using ordinary household pins driven in a little and then cut off.

This completes the hull.

Now comes the assembly of the deck house, starting with the stern half. Figs. 9 and 15 are in one piece in kit and before assembly starts should be separated as shown in Deck Assembly drawing. Glue and nail the sides (9) onto the rear cabin former (10). The sides go onto the ends of all the formers. Next glue and nail the smaller midship former (12) onto the form (11) equidistant from either side and 1/2" below its top edge. In due course this makes the front cabin. Glue and nail the stern cabin sides onto the larger midship former in the position shown on the drawing.

Now take the wheel house front window (13) and mark a centre line between the two windows. Make a V-shaped cut down this line partly through the wood, leaving one layer of the ply intact so that it will bend to shape. Rub a little glue into this cut and fix this bent piece onto the V-shaped former (14). Trim and then glue and nail this assembly into place between the sides.

This whole cabin assembly fits on the deck with the rear former 2" from the stern but the slots at each side of the formers must be opened and chamfered carefully to fit the deck. It should be a close fit. The sides should fit flat on the deck. Glue them to the deck using plenty of glue and Bulldog clips gripping the windows to the deck to hold it in place until the glue is thoroughly dry.

Similarly glue and nail the front cabin sides (15) to the front former (16), chamfer the former to fit the deck then glue and nail to the ends of the smaller midship former (12) and glue to the deck using Bulldog clips again in the same way.

Trim the stern deck (22) to size so that its sides follow the lines of the cabin sides. Glue and nail into place. Do the same for the bow deck (21).

On the drawing measurements are given for each cabin roof. Draw a centre line down the rear cabin roof (17) and mark it up from the measurements. Cut off two lengths of 1/2" strip (19) along and then nail from the outer side. Cut off two pieces of 2m/m ply from the piece provided (20) the same length and 1/2" wide. Glue and nail them onto the 1/2" strips so that they project 1/2" towards the sides as shown at F. You will now find that by pinching the roof to a curve it will fit onto the cabin gripping between the sides. Try it on the cabin. If the curve formed is too high carefully trim a very little off the projecting 2m/m pieces to let it down onto the curve of the rear former (10). If, on the other hand the curve of the former is too high this must be trimmed down accordingly. The edges of the roof can then be trimmed.

Do the same for the front roof (18).

The position for the rudder is 1/2" from the transom.

Round corners, smooth edges and rub down well with fine sand paper.

Give the whole boat, inside and out, at least two coats of clear dope to waterproof it and then paint it.