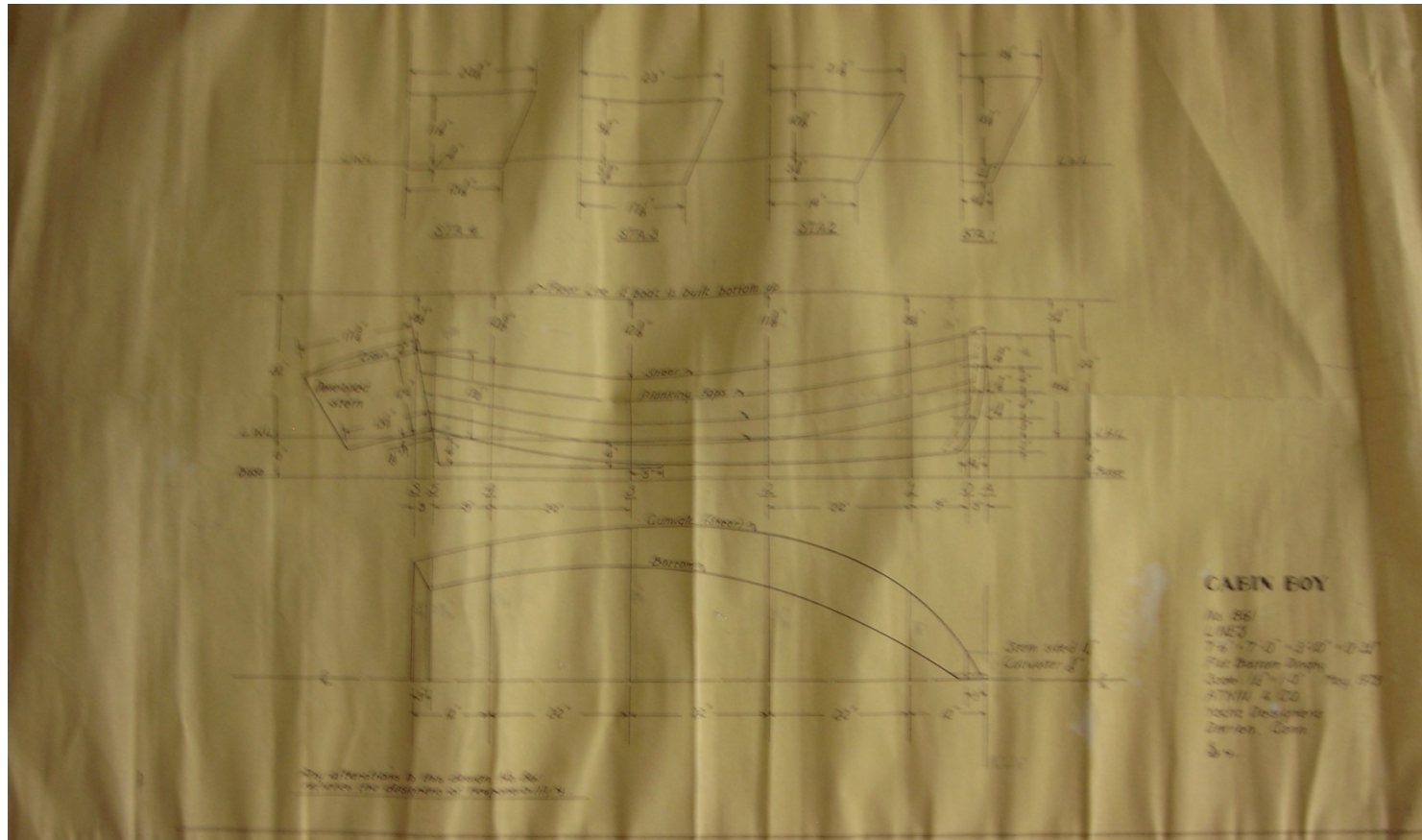


THE ARK

Record of the construction of a John Atkin designed sailing dinghy.



Genesis

- In the beginning there was a boy who spent time in small sailing dinghy's. He learnt to sail in Wellington Harbour where the wind bloweth mightily.
- During his youth and early manhood he dreamed of sailing around the world in the wake of many solo sailors. [Slocum;Lewis,Chichester.]
- Entering his middle years the dream was rekindled. He purchased a block of bush on the south coast of Kangaroo Island in South Australia with the intention of building the boat to sail the ocean blue.
- The plans for a small tender were purchased in 1984.

Exodus

- The plans were shelved when I entered into a marriage of 10 years.
- In 1996 Kangaroo Island was abandoned.
- 10 years of wandering was spent looking for the promised land.
- Located the land in the form of Community of Saints Barnabas and Cecilia.
- 10 further years and I was lead to the Little Brothers of Francis and their Hermitage *Eremophilia*.
- The dream to build a boat reignited and encouraged by the Brothers.

Happiness

- Armed with various woodworking tools, the gift of Brother Geoffrey - Adam, I returned to my home in Wallaroo, South Australia and commenced the project. Caring for some of the gifted tools was an important commencement.



New plans came from the widow of John Atkin and the process of expanding the lines full size onto a piece of painted plywood which was screwed to the wall at the foot of my bed; no chance of letting go the dream this time!



Some days are 'inside' days; the task was to plane timber to use as battens which can be bent to the various curves of the boat.



The tools are for working wood; I was able to access a supply of timber locally that provided me with a piece that I was able to cut down to stem size. A local man with a band saw trimmed to the pattern that I had drawn on the timber; some work with the spokeshave and: my stem!

Acquiring tools and timber took time. Seeking out supplies and patiently waiting for the tide to rise in the savings account was an exercise in patience and faith.





Rabbetting the stem which will enable the plank to land.

From the locally sourced timber, the local hardware and the sliding doors removed from the units, I was able to construct the foundation frame in a workspace between two units.





TIMBER JOINERY & HARDWARE

ABN 61 007 550 843

t: 8362 3522 F 8363 2923
e: ottos@ottotimber.com.au
w: www.ottotimber.com.au

5 Ann Street
STEPNEY SA 5069

Tax Invoice **147959** **15/06/2016** **1 / 1**

Sold To:
Cash

Delivered To:
MARTYN ROBINSON
Ph. 0466 985 671

Ordered Date	Required Date	Order Number	Account No
14/06/2016	14/06/2016		CASH

Description	Quantity	Rate / Per	Disc	Amount
(200 x 19) 200 x 12 F OREGON JOINERS PAR 2 / 2.700	0.021	5559.05		116.74
(150 x 19) 150 x 12 F OREGON JOINERS PAR 2 / 2.800 1 / 3.000	0.026	4969.62		129.21
(125 x 19) 125 x 12 F OREGON JOINERS PAR 1 / 3.000	0.007	7304.29		51.13
(112 x 19) 112 x 12 F OREGON JOINERS PAR 2 / 3.000	0.013	8795.38		114.34
(325 x 25) 300 F x 19 F OREGON JOINERS PAR 1 / 1.200	0.010	5000.00		50.00
(137 x 25) 125 F x 16 F AMERICAN WHITE OAK PAR 1 / 2.400	2.400	24.11		57.86
(50 x 25) 41 F x 16 F AMERICAN WHITE OAK PAR 2 / 2.400	4.800	12.97		62.27
(380 x 25) 380 x 16 F AMERICAN WHITE OAK PAR 1 / 0.900	0.900	70.71		63.64
(175 x 25) 150 F x 19 F AMERICAN WHITE OAK PAR 1 / 1.500	1.500	21.51		32.27
90 x 45 PINE OCA HS PAR 4 / 2.700	10.800	5.15		55.64
PLY MARINE H/PINE16X 2400X1200 [RRP=298.90] 1 Only	1.000	271.73		271.73

PAID

Sub Total \$1,004.89

Returns will not be accepted after 14 days from pick up or delivery from our premises and must be accompanied by original invoice or cartnote

GST \$100.47

Title of goods included on this invoice shall remain with Otto & Co Pty Ltd until payment is received in full - as per our Terms and Conditions Agreement

Total of Tax Invoice \$1,105.30

Note: Our Banking details are:

Westpac Nonwood
[unreadable]

Midwinter day brought a great warmth into my heart as the carrier arrived with my timber order from OTTO'S timber merchants in Adelaide

Translated the invoice
looks like this:

The essentials to build a boat:

1 American White Oak Keelson

2 “ “ Chine Pieces

1 “ “ Skeg

1 Marine Plywood Bottom

8 Oregon Planks

All stored behind the piano in the lounge
room of my unit – blocking access to the
front door!

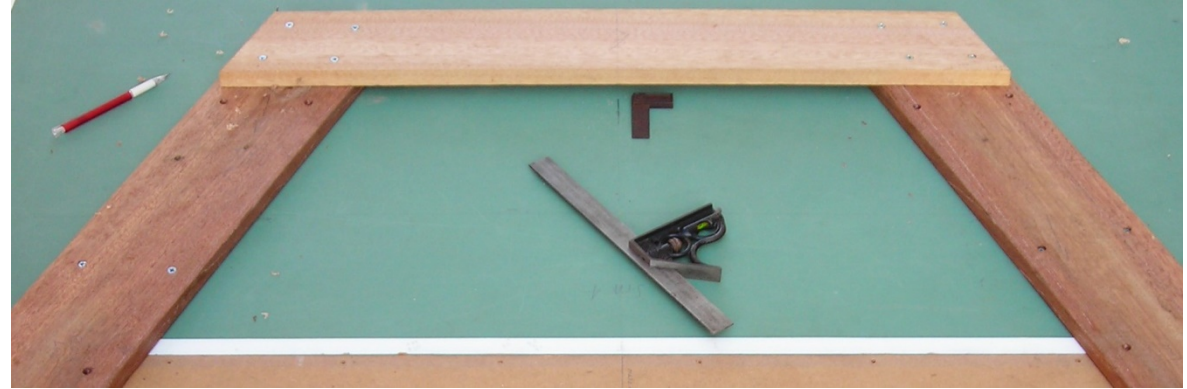
Stored under my bed:

1 White Oak Transom

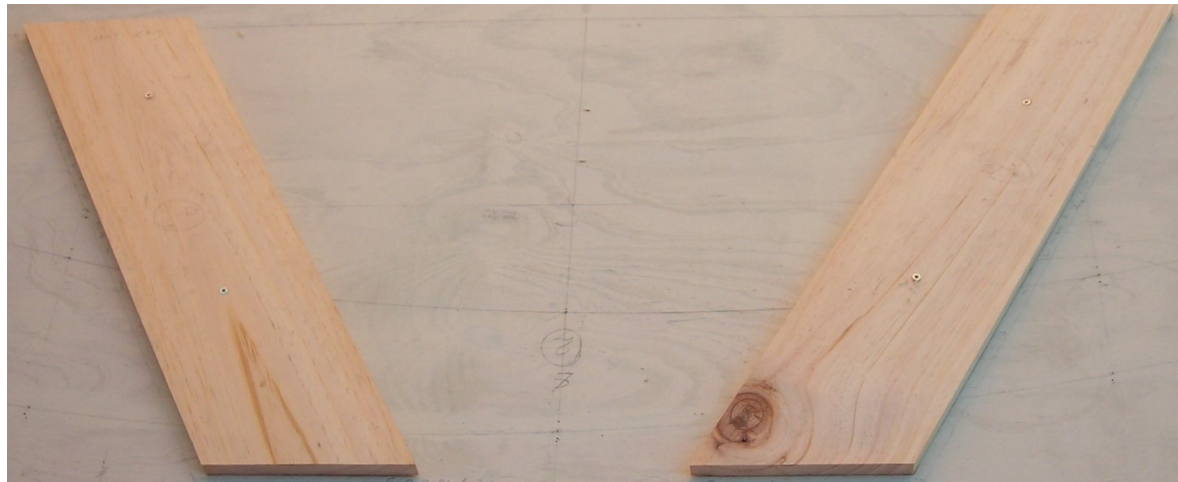
1 White Cedar centre board
casing.



The moulds about which the construction would be attached were taken from the lines plan (drawn onto a (former) table tennis table) using the locally sourced timber



The cross sectional form is to be seen while constructing station 2 mould.



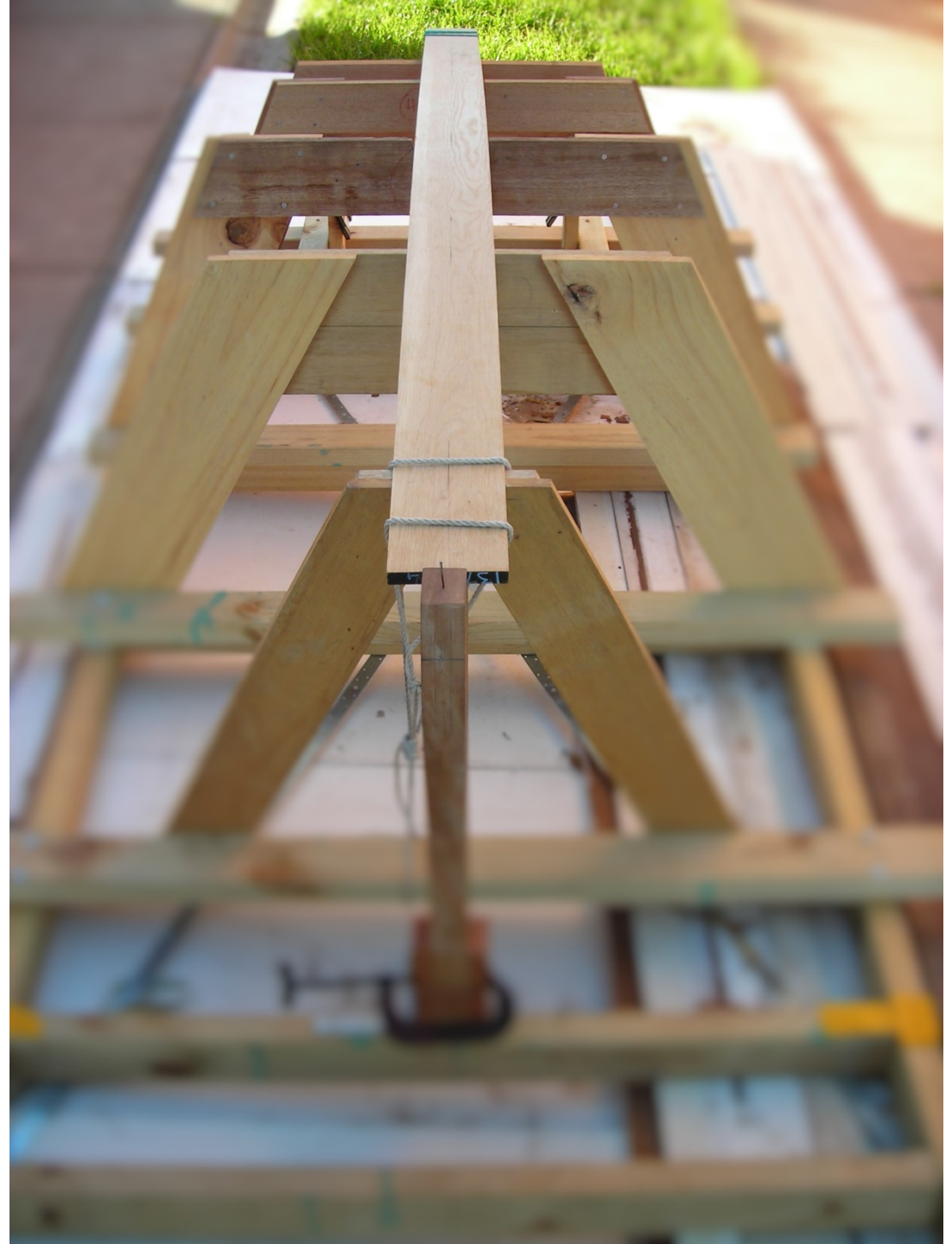


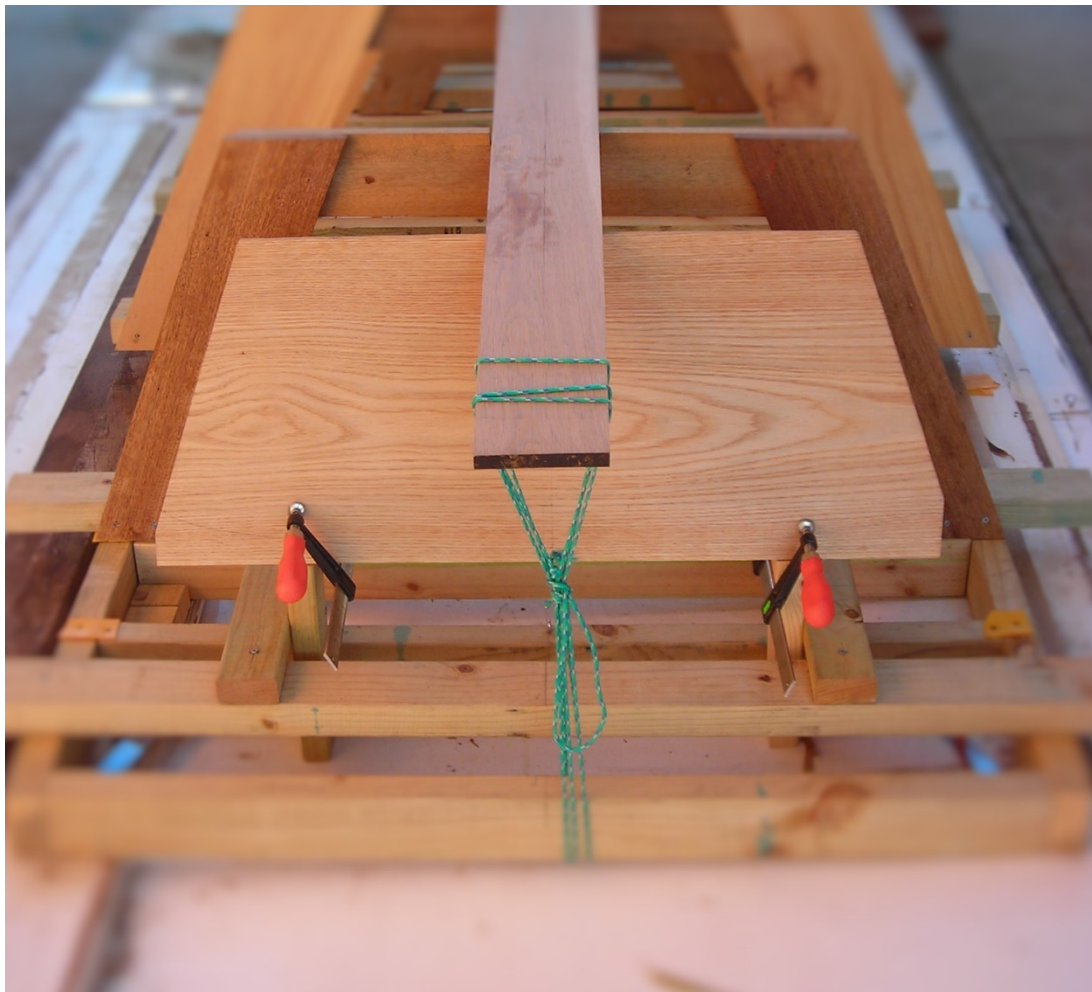
With all the moulds completed it was time to assemble them onto the construction frame





The moulds were cut out to allow the keelson to be set into the moulds.



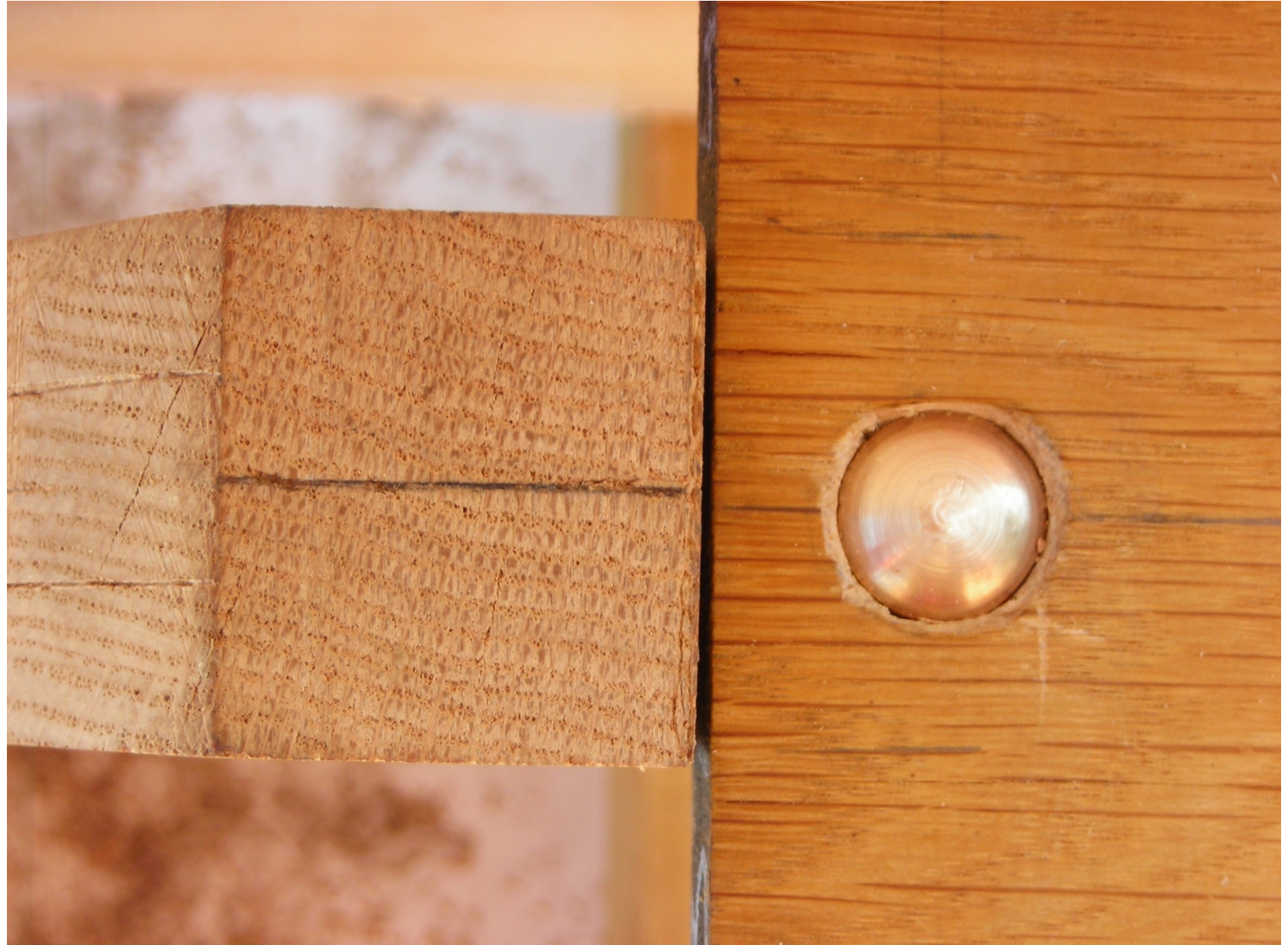


The transom fitted



Keelson showing rocker

Keelson
bolted to
white
oak stem



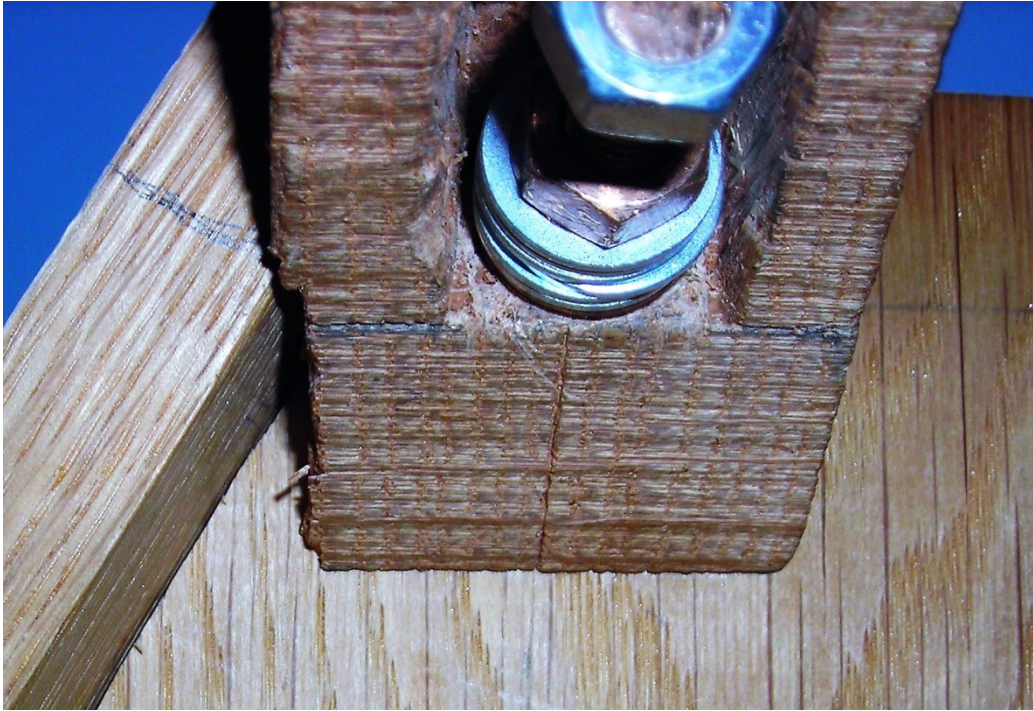


From the under side.

With the attachment of the chine piece (let into the moulds the shape is coming into view.

Note that the after section of the chine lies alongside the transom to which it will be attached.





View from under:
chine; keelson;
stem; connection



The first attempt at joining the chine to the transom.



Chine the second being sweated into place.

With both chines attached at the stem and bent around the moulds the shape is coming into focus



Down the stern end things are very busy and have provided much in the way of learning for the amateur boat builder.





Keelson has
been cut and let
into the frame
attached to the
transom



Here is to see the cut in the transom frame which was to accommodate the chine. In this first attempt I laid the chine on top of the transom and projected the chine section down to obtain the cut out. When the chine was cut to length and lowered into the frame it was too short!

Here I sat for many days; what was the technique for getting that chine into the frame “as snug as a bug in a rug”?

The answer was geometry!

The distance from mould 3 station to the transom frame is a fixed distance. So strike an ark with a compass and mark onto the transom frame.

Taking a small section of chine (called a ‘fid’) and pivoting it from the mould 3 station enables a projection onto the frame to give the cut out borders. It’s a tricky cut but it worked.



So where to from here?

On return to Adelaide I will collect two new chines from Otto's.

A new stem needs to be cut and placed as in the process of preparing the oak stem, which replaced the box brush one, the oak split.

There is the possibility of a jarrah stem which is airdried and would be ideal.

With the chines in place I need to cut out the shape of the bottom onto the 16mm marine plywood. Then I can make a pattern for the garboard strake which attaches

Then its onto the planking, attaching the bottom ply and I'll be ready to turn the boat right side up and do the fitting out.

Around the time that I received a letter from Brother Geoffrey there was a cartoon in the local Adelaide Advertiser. Both referred to THE ARK. That is the name I have given the boat.



A new piece of Oak was obtained from Ottos Timber and with the knowledge obtained from the first attempt to fit the Chine into the Transom a fit was made!



Now that the skeleton was in place it was time for the skin (planking) to be attached.

Greg Rossel *Building Small Boats* was consulted and the idea of Lapstrake clamps led to the construction of this collection using the oak from the rejected chine.





Before the planking can start the positions of each plank needs to be determined so that the shape of the plank may be assessed.

Flexible battens were cut from a piece of Western Red Cedar chosen with the assistance of a timber technician at Ottos.



With these on my shoulder I walked across town to the Central Bus Terminal and placed them into the baggage bay of the bus for the trip to Wallaroo.

With the plank location marked it was time to learn how to find the shape of the plank; called *spiling*.



To make sure I had this process correct I created a model plank from 3mm particle board.

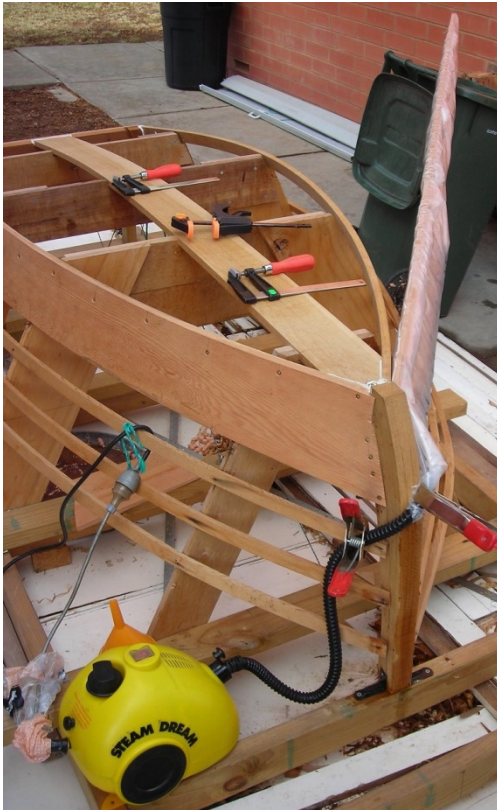


Reassured that I had the correct shape I was able to take the pattern to the western red cedar for cutting and shaping.



This first (Garboard) plank in place was a greatly needed confidence booster. Getting the plank to nestle into the stem and its recess (rabbet) was a fiddly work





One of the small miracles that occurred during the construction relates to the bending of the planks. On the day that I needed to generate steam and convey it to the plank inside its plastic envelope an *angel* called "Chris" appeared by my side. (No bull shit!!) He, unbeknowns to me, had been watching the action from the other side of the fence but on this day came in while I was at my workbench. He had a steam machine and heavy duty plastic which he said I could have. Faithful to his word he came around a couple of days later and here is the rig. The method for all the planks was the same: Spile, transfer to the timber, cut and shape, place in plastic envelope, attach end of plank to stem (called the *hood end*) and lead hose into envelope. Steam for 30 mins and then : slowly and gingerly bend plank around the curve. Apply clamps and leave overnight.



Should any wonder at the name of the boat *ARK ARK* here is an explanation:
When the sound of the timber splitting hit my ears I let out a shout:
(f)ARK!!!



Eventually all the planks were in place and although they were not symmetrical (my need for balance was severely tested with this reality) the hull was in place. Just need to fill that big gap between the sides!!

Gap filled! But is it watertight?





Finally facing the sky;
moulds removed and
crossspalls inserted to hold
the shape while fitting
frames, breasthook, quarter
and stern knees and thwart
(seat). Then removed them
all for the next operation!





Now is the part that I can relax into; I know painting!
The construction was a big big challenge but with quality paint and brushes I settled down to enjoy the process of completion.



Here we are at the stage when the boat was ready to be taken to the environment for which it was designed; the sea.

**LAUNCH DAY
FRIDAY 22ND JANUARY
2019**

On a beautiful late summer morning my much respected friend Jeff Jones appeared with his trailer and together with my neighbor John Brennan carried the boat to the Sailing Club Beach.



Marcia Daley was the witness to this special occasion. It floats and rows well.
Thanks to John Atkin (Design) and John Murray (Bespoke Oars)

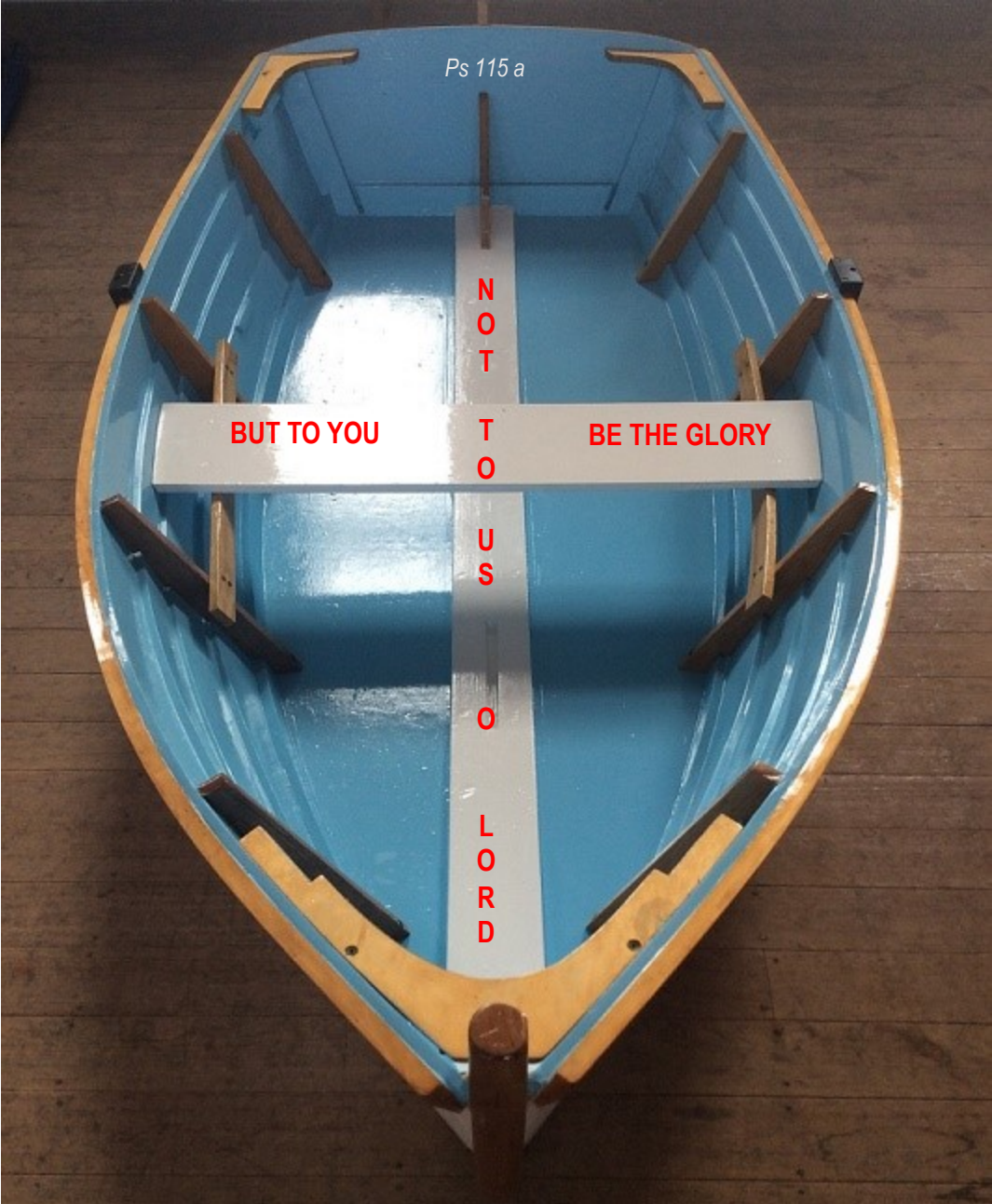


Bishop John Stead considers the task of blessing a boat !

BUNDLE OF BLESSINGS DAY
Sunday June 16th 2019

My Son Damian and his wife
Leigh-Anne
blessed me by travelling from Sydney
to share in my joy on this day when
ARK ARK was revealed to the world





Ps 115 a

N
O
T

BUT TO YOU

T
O

BE THE GLORY

U
S

O

L
O
R
D