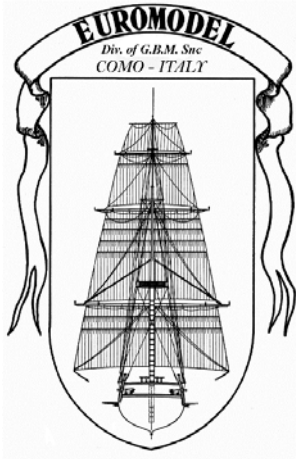


TRANSLATION LINKS:

1. type into your browser ... **english+italian+glossary+nautical terms**
2. utilise the translation dictionary 'Nautical Terms' from Euromodel website



An *Interpretive* Build of the **Pinco Genovese**

18th. Century Ligurian Navy Ship

Scale - 1:36

utilising the supplied kit

05 – Ship's Boat Construction, v.07

My interpretive build is based on the supplied drawings, the kit material – and an amount of extra material.

This work only illustrates how this ship might be built. The level of complexity chosen is up to the individual

This resource information was based on the original text supplied by Euromodel and then expanded in detail as the actual ship was constructed by the author, Peter Coward. Neither the author or Euromodel have any commercial interest in this information and it is published on the Euromodel web site in good faith for other persons who may wish to build this ship. Euromodel does not accept any responsibility for the contents that follow.

This is NOT an instructional manual

It shows how I interpreted the build utilizing the provided kit ... ***and supplementing with additional material*** which was dictated by my own personal choices. Many steps could have been simplified by only using the material as it was supplied. This invariably is indicated by the heading '**Alternative 1**'. However, where I did feel that I needed to challenge myself with a higher degree of accuracy, this will be denoted by '**Alternative 2**'.

Reference Text

The Mastng and Rigging of English Ships of War 1625 – 1860 by James Lee (1984). Another indispensable book ! Without this, the masting and especially the rigging would have been difficult.

The Construction and Fitting of the English Man of War 1650-1850 by Peter Goodwin (1984)

Historic Ship Models by Wolfram zu Mondfeld (1989).

[To navigate through the contents - use 'control + click']

Contents

Ship's Boat – Supplementary Construction.....	5
Plastic Resin vs Timber	6
<i>Possible</i> Hull Modifications	7
Weathering	10
Ribs	11
Bottom Boards	12
Risings & Thwarts	12
Kedging Components	12
Thwarts and Thwart Support	13
Tholepin/ Thole	13
Pintle and Gudgeon	15

Illustrations

[The figures below are not hyperlinked]
No table of figures entries found.

Figure 11: Deck Cargo	5
Figure 12: Non-modification of Supplied Boat.....	5
Figure 13: Cutting & Sanding Tools	6
Figure 14: Longitudinal Profile	7
Figure 15: Possible Internal Contouring	7
Figure 16: Possible Further Modifications.....	8
Figure 17: Boat's Rudder	8
Figure 18: Boat Structural Detail.....	9
Figure 19: Anchor Kedging	9
Figure 20: Paint Selection for Dry Brushing.....	10
Figure 21: Wet Brush Layer	10
Figure 22: Immersion in Ammonia Soln.....	11
Figure 23: Rib Shaping	11
Figure 24: Ribs in Position.....	11
Figure 25: Painted Ribs	11
Figure 26: Bottom Boards	12
Figure 27: Risings and Thwarts	12
Figure 28: Kedging Bars (fore and aft)	12
Figure 29: Kedging Components Completed.....	13
Figure 30: Reinforcement of Mast-Supporting Thwart.....	13
Figure 31: Oar Lashed to a Tholepin.....	13
Figure 32: Tholepins in Place.....	13

Ship's Boat – Supplementary Construction

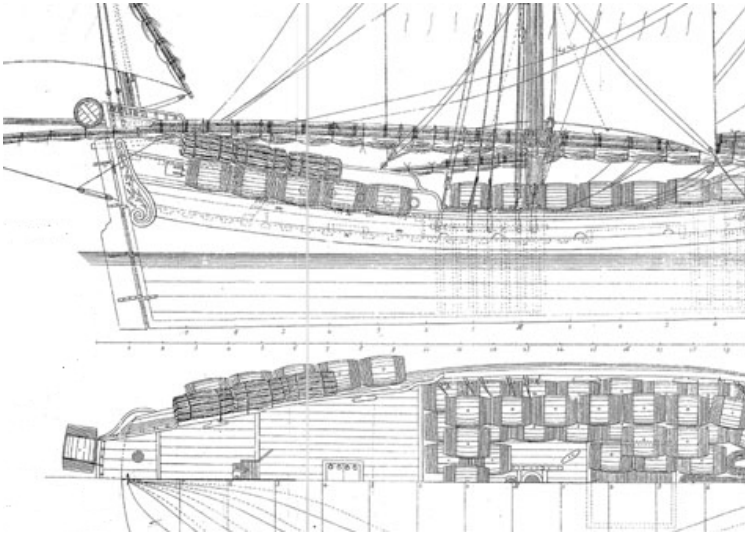


Figure 1: Deck Cargo

An interesting possible addition! The Pinco Genovese was typical of ships that worked close to the coastline in the Mediterranean. Their role was solely for cargo transportation, and, not being overly large, space was always at a premium with some goods lashed to the outside. Invariably, the ship's boat was towed behind and, it too, was usually filled with cargo. Euromodel decided that the ship would best be built without the boat and have not included it in the kit [it can still be purchased from the Euromodel on-line shop].

Construction Choices

Alternative 1:

The ship is loaded with cargo and the ship's boat is being towed astern. The *boat then is not added*.

Alternative 2:

If the boat supplied in the kit is to be included, then it can be suitably *painted as it is and eventually installed with perhaps only the thwarts installed*. Euromodel supplies simple plastic resin hulls which will save much time and far less patience !

Alternative 3a:

Install interior fittings in supplied boat. (Fig. 43) – not the Pinco Genovese, but showing the construction style.

Alternative 3b:

Modify the longitudinal profile (and perhaps interior profile as well) and *install all interior fittings*.

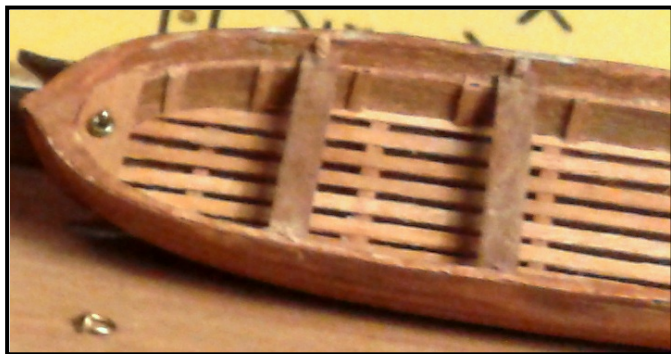


Figure 2: Non-modification of Supplied Boat

Alternative 4: The supplied boats are discarded and new ones *built from scratch*. This is only for the ardent builder !

After some deliberation, I decided to adopt 'Alternative 3b' option.

Boat Crutches

The construction of the boat crutches was left until a later stage.

Plastic Resin vs Timber

I decided on the on-line purchase approach and found that in fact the plastic resin was incredibly easy to work with and equipped with a Dremel and a number of differently-shaped cutting and sanding tools, I was able to alter the standard shape to conform quite closely to the drawings supplied.

In summary – a worthwhile purchase. The white appearance was readily changed to a timber weathered finish with a combination of wet and dry brushing coats.



Figure 3: Cutting & Sanding Tools

Possible Hull Modifications

The generic Euromodel shell that I purchased, not surprisingly, required significant changes to bring it into line with the drawings. That is the nature of this work.

- The drawing shows the gunwale as having a *curved longitudinal profile*. I opted to shape the gunwales – curved downwards from stem to stern. Note also that the stern is approx. the same height as the stem (broken blue line).

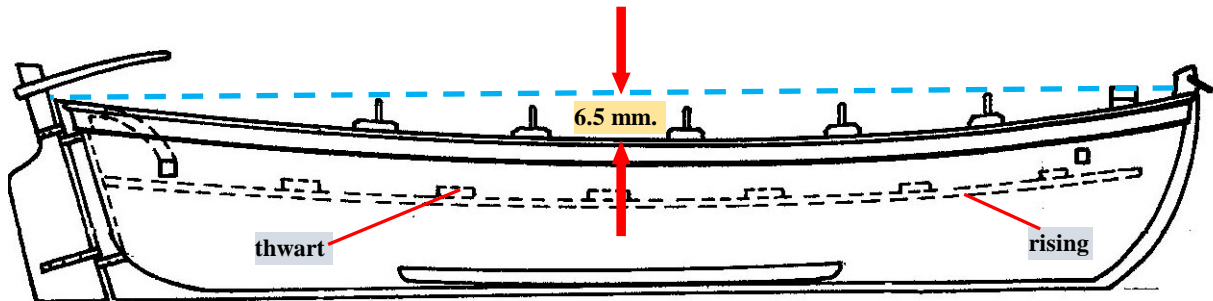


Figure 4: Longitudinal Profile

- The flat inside bottom was changed into a *concave surface matching the outside*. A Dremel cutting bit with a rounded shape made this task simple and approx. 5 mm. was cut out from the bottom (refer back to Fig. 13). The guide to cutting down to a suitable depth involved holding the boat up to a strong light and observing a uniform translucent colour (to begin with, thick bottom was totally opaque to light). The concave inner surface is evident in Fig. 15 below and this was carried out before any further modifications took place.

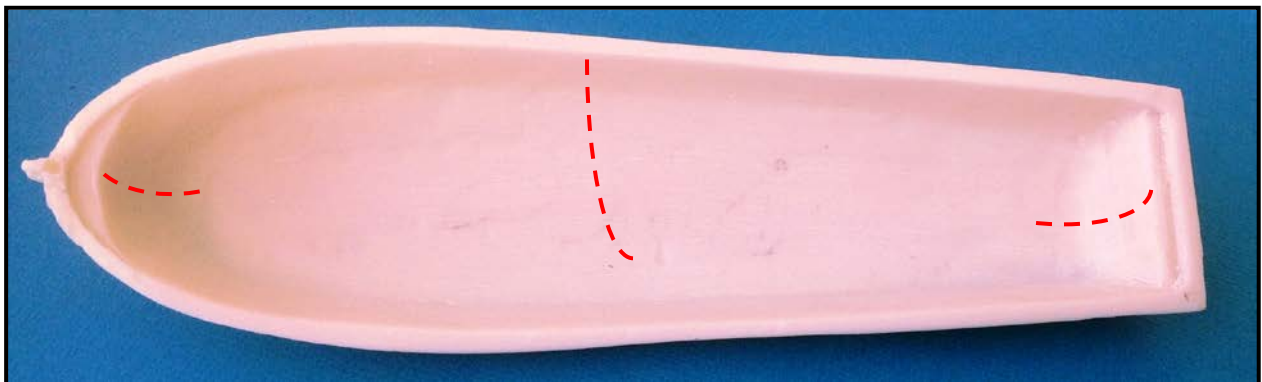


Figure 5: Possible Internal Contouring

- Sequence of Further Possible Modifications

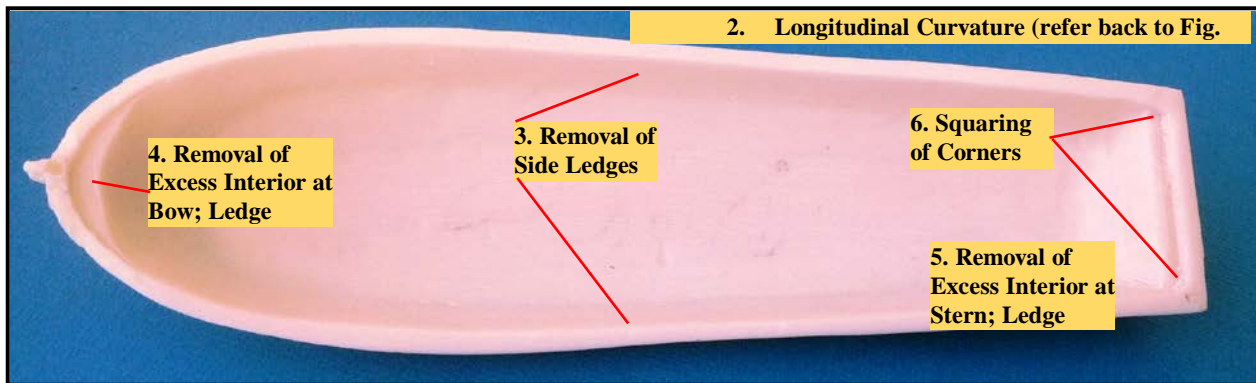
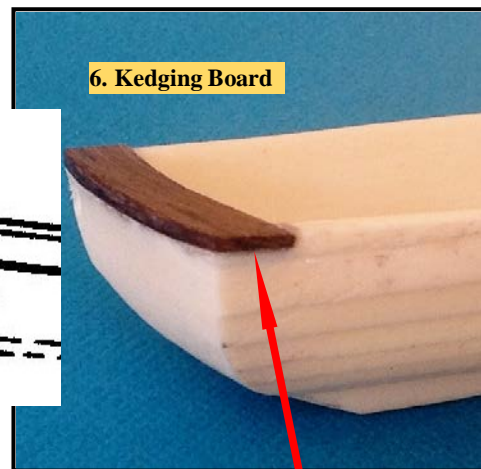
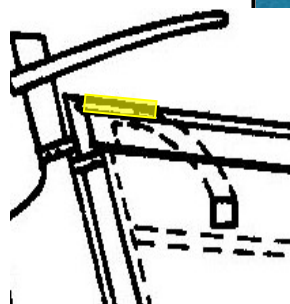


Figure 6: Possible Further Modifications



Anchor keading structure – incomplete at this stage

Rudder

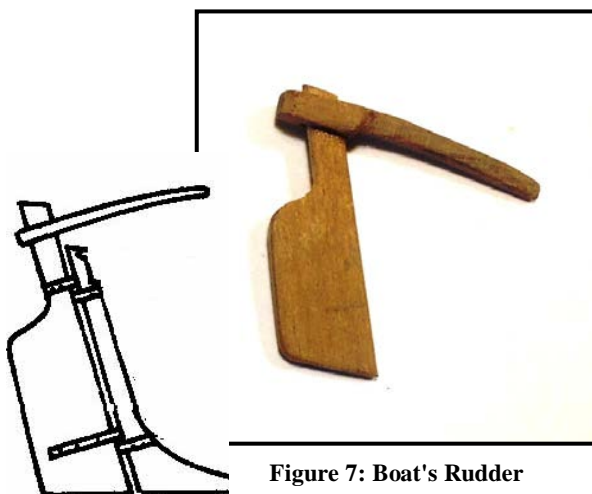


Figure 7: Boat's Rudder

- Tiller arm angle a little different due to shape of supplied plastic resin hull.
- Tiller arm *length* was made longer (27 mm.) than that shown in the drawing (same reason as above).
- *Thick timber* scrap was chosen to allow for curvature of tiller arm.
- *Hole for the rudder* was created first before reducing timber to required width (allowed for greater strength whilst drilling).

Figure 18 displays extensive interpretive detail for fitting out the boat – so how much is added is up to the individual.

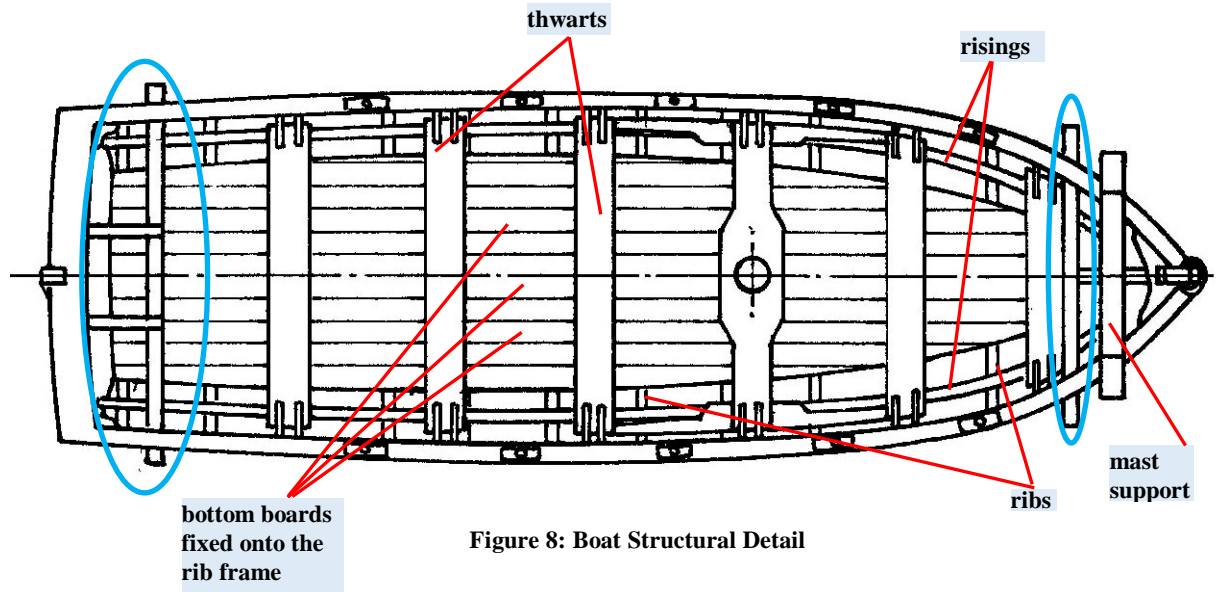


Figure 8: Boat Structural Detail

Anchor Kedging

Euromodel have included specific anchor kedging structures into the drawing design of the boat (encircled in blue in Fig. 16 above), both of which are particularly uncommon amongst ship plans and yet in one form or another was not uncommon in nautical practice. The following information gives some background ...

... kedging was a means for maneuvering large ships in and out of tight harbours, shallow estuary entrances and off mudbanks and sandbars. Sailors would take to the ship's boat and row out one of the ship's smaller anchors in the direction they wanted to move the ship. They would then drop anchor, return to the ship and use the ship's capstan/ windlass to pull the ship up to the anchor. It was a slow, dangerous and arduous process, but was often the only option. [<http://www.hnsa.org/...ng-out-anchors/>]

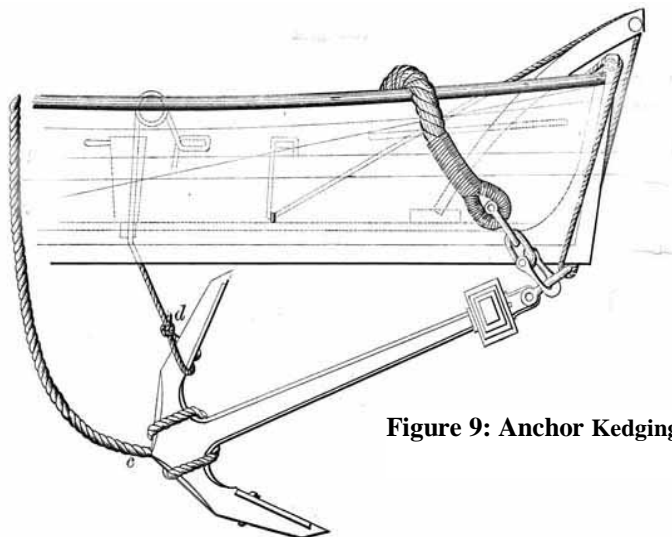


Figure 9: Anchor Kedging

Diagram taken from:

<http://www.hnsa.org/...ng-out-anchors>

Historical Naval Ships Assoc.
CARRYING OUT ANCHORS
 Chapter XVII, p.280

Weathering

Constructing a boat out of timber seemed to be the ideal but having settled on using the supplied white plastic piece, the hull needed painting (before fitting out) to create a weathered finish. Dry brushing was utilised to achieve this. [The paints used were a brand called 'Citadel' from Games Workshop that seem to have outlets in many countries. Model Ship World Forum contains a number of very excellent & specific references.]



Figure 10: Paint Selection for Dry Brushing

Weathering: Wet Brush Layer (Dryad Bark)



Figure 11: Wet Brush Layer

Having modified the hull, and applied the wet brush layer of paint, the hull needed to be fitted out with ribs, bottom boards, thwarts, rudder etc., etc. How much detail and what proportions are used is very much up to the individual.

Ribs



Figure 12: Immersion in Ammonia Soln.

Ribs: *2 mm. x 65 mm.* (i.e. excess length)

To fit ribs against the curved boat interior without breaking, the strips were soaked in dilute ammonia solution – available from supermarkets as a cleaning agent called ‘cloudy ammonia’.

The timber strips were removed after 3-4 hours of soaking, wiped with a dry cloth and then held in position in a block grouping (Fig. 23) allowing at least 12 hours to dry.

Even though the athwartships width varies across the boat along the length, the dry ribs were easily fitted into position.

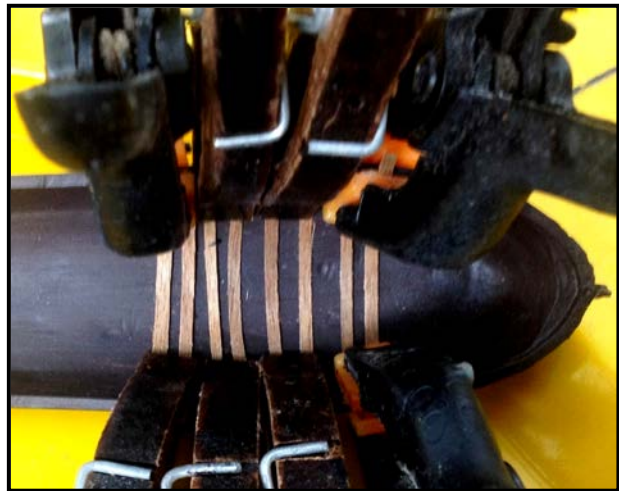


Figure 13: Rib Shaping

Rib spacing along the boat was approx. 10 mm.

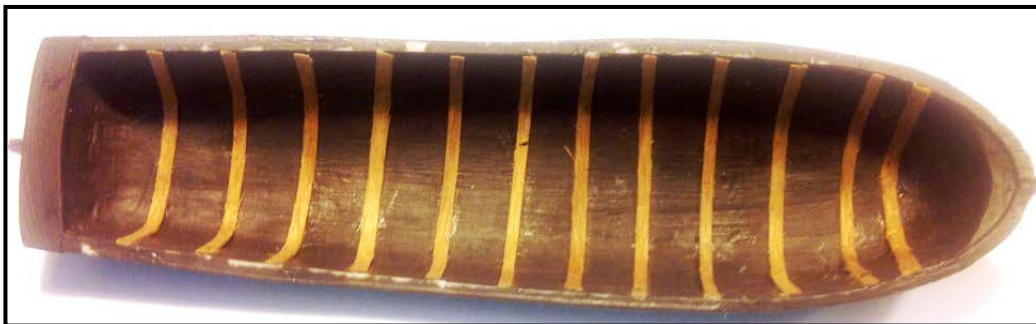


Figure 14: Ribs in Position

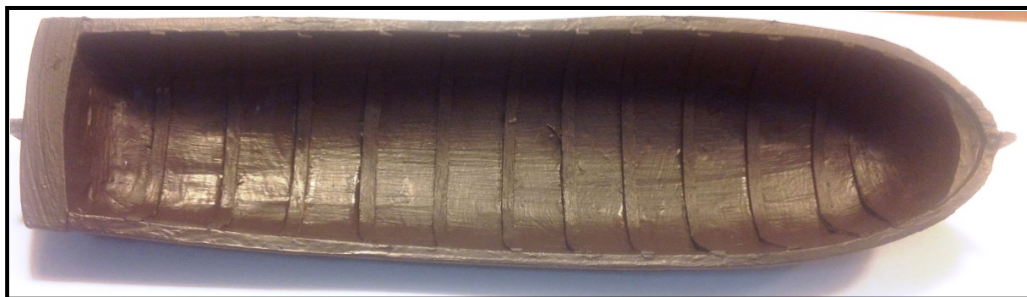


Figure 15: Painted Ribs

Bottom Boards

From my stock, I utilised timber that was $0.9 \times 3 \text{ mm}$. [forward ends of boards still to be finished]



Figure 16: Bottom Boards

Risings & Thwarts

Thwarts (seats) were often removable and supported by the risings – a narrow strip of timber underneath (refer back to Fig. 18). This allowed for better storage of masts, oars, sails, water barrels and so on. In this build the thwarts were fixed later – after the dry-brushing.

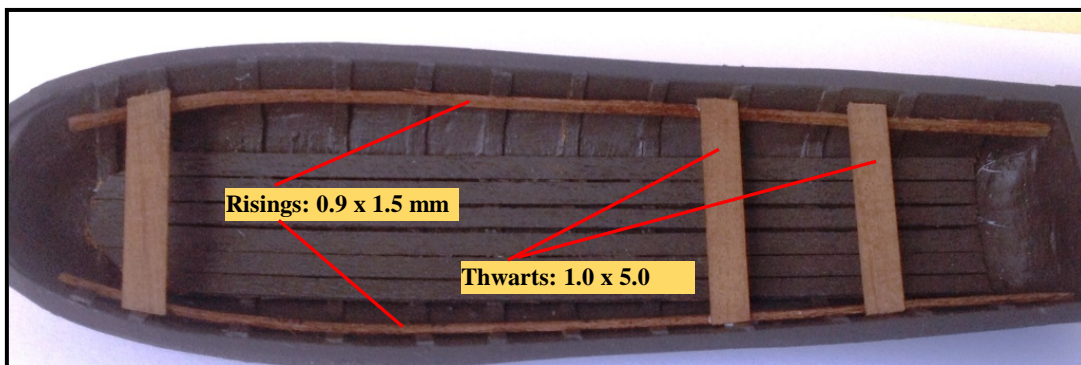


Figure 17: Risings and Thwarts

Kedging Components



Figure 18: Kedging Bars (fore and aft)



Figure 19: Kedging Components Completed

Thwarts and Thwart Support

Thwarts were installed even though this was to make it difficult with the dry-brushing applications.



Figure 20: Reinforcement of Mast-Supporting Thwart

Tholepin/ Thole

These pins, either singly or in pairs were embedded into the gunwale to act as a fulcrum for the oar. Fig. 31 is from an actual boat.



Figure 22: Tholepins in Place



Figure 21: Oar Lashed to a Tholepin

Weathering: Dry Brushing

Layer Sequence:

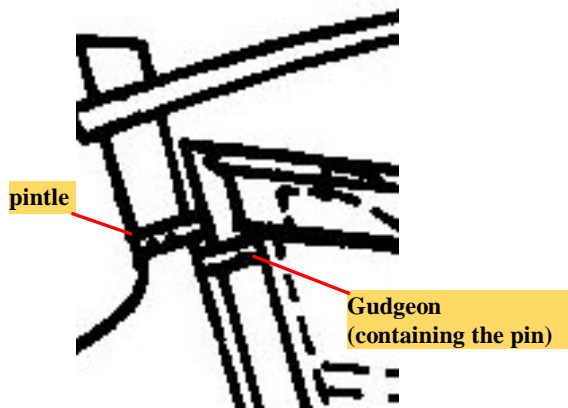
1. *75% Dryad Bark & 25% Skrag Brown*
2. *50% Dryad Bark & 50% Skrag Brown*
3. *Dawnstone*

Dry brushing involves a specific brush being lightly filled with the paint applied and then stroking that brush over paper until all the paint appears to be used. The brush is then lightly applied to the base coat until an amount of colouration can just be perceived. That is the point when the brushing on of that new 'layer' is stopped. If multiple brush coat 'layers' are used, then it becomes a mixture of colours rather than just a multi-layered application of paint.

The wet layer of Drad Bark had already been applied at this point.

Dry Brushing Layer 1:

Pintle and Gudgeon



The approach adopted here was to construct fixed rudder hinges (pintle + gudgeon) made from black cardstock/ cardboard. This will be shown later after finishing the boat with all fittings so as to avoid any damage to the 'hinges'.