

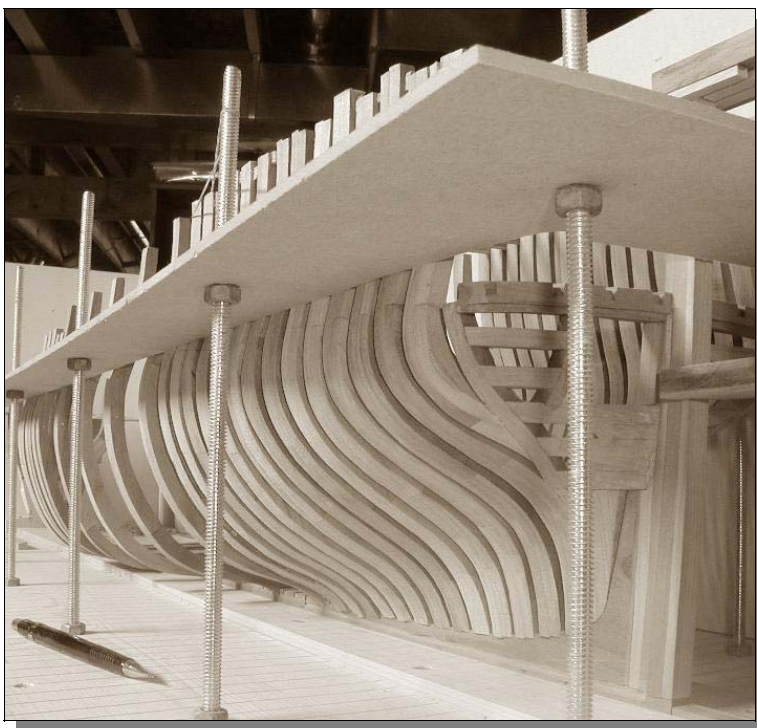
*Ships from Times gone By* .....

---

# *The Slipway News* .....

*Le GROS VENTRE*

*- The construction of  
a planked on frame Model -*



*The framing of Le GROS VENTRE in progress.....  
(Photo Gilles Korent)*



*Volume 1 - Issue 4 - November 2004*

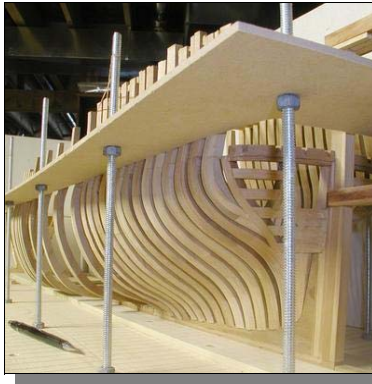
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# *The Slipway News* - Periodical Newsletter

Original conception, redaction,  
layout and publication by:  
*Gilles Korent*

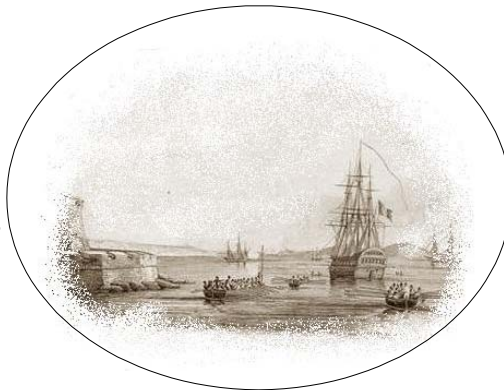
French original text corrected by :  
*Gérard Delacroix*

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*November 2004*  
Cover photo by *Gilles K.*

The progress on my model (end of Sept. 2004)



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\*Finishing the lower stern and installation of the aft frames (p 101)

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(p 109)

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#### ***The hawse timbers***

\*construction (p 110)

### ***Extra***

#### ***Chateaulin July 2004***

\*A few of the models shown during this model expo (p 122)



## *LE GROS VENTRE*

*Gabare (1766 - 1779)*



### *The construction of the Models*

Internet sites to keep up with the project:

Access to the documentation being gathered throughout the construction.

Main discussion Forum where questions are asked, problems are solved and where everything is kept:

<http://forum.aceboard.net/index.php?login=15916>

The construction in photos:

<http://www.bonhrichard.com/grosventre.html>

This is the main site for the project. From there you can get some information about the project, its goal as well as follow the construction progress on all the models. All of the participating modelers who send their photos have or will have a section dedicated to their model.

Also, as can be seen several members do have their own website showing their own construction log with some explanations and lots of images.

Steve H. (in English)

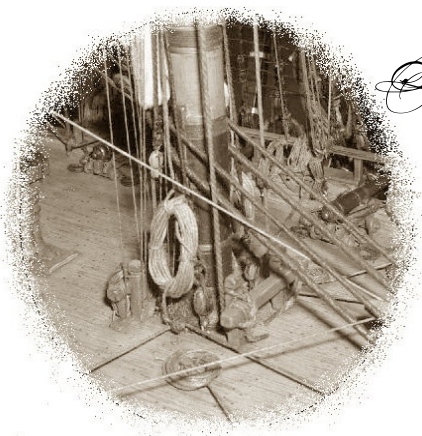
[http://www.angelfire.com/moon2/stu/GV\\_Build\\_Log.html](http://www.angelfire.com/moon2/stu/GV_Build_Log.html)

Alain D. (in French)

<http://avancement-gv.monsite.wanadoo.fr/>

The Magellano Group (in Italian)

<http://www.magellano.org/grosventre/>



# *The construction of the Model*

## *The lower stern..... (Cont.)*

by T Gilles K.

At the end of the previous article about the construction of the lower stern (July issue), we had cut most of the parts shown in the image on the right. We touched on the cutting of the following pieces: the wing transom, the transoms, loading port framing and the fashion pieces. In this short follow up section, we will then work on more of the parts that will eventually complete the lower stern. For that we will also assume that frame 63 has been cut and assembled.

I will remind all that for the construction of the lower stern some modeler will build or will have built a separate jig, but as far as I am concerned I had opted for the use of the main building board and the images included in this section will reflect that. We must also note that whether the lower stern is built from either method, work will be done on the aft part of the keel included the sternpost which must be mounted in the chosen jig.

First all the parts cut should be fitted on the sternpost making sure that all is square; the wing transom and transoms placed horizontally and the fashion pieces fitted at the correct angle. To achieve this set up I have made a jig consisting of a simple plywood sheet supported vertically by two brackets. This jig is not indispensable but it makes the alignment of the parts a little easier by giving a solid reference perpendicular to the keel and other elements. This jig can even replace frame 63 as can be seen in photo 2. We must note that this image shows the lower stern fitted with most parts including the filling pieces (partial frames which are the next pieces that will be described here.

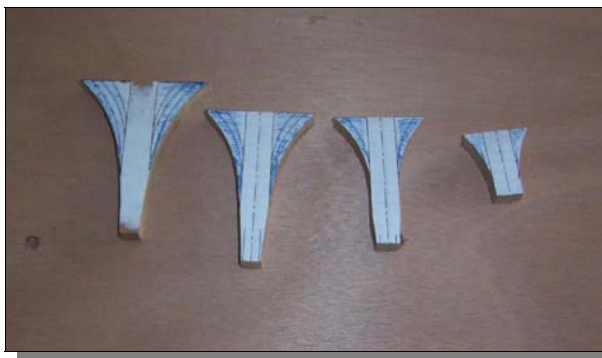


*Photo 1: Preparation .....*



*Photo 2: Preparation .....*

At first glance, these pieces seem to present some difficulty in their disposition. First, we must note that their profile is found on plate 8: in the drawing showing the stern from the back. The lines are tight together, but with a little attention it is a simple matter of transferring everything on tracing paper to obtain the individual patterns. Photo 3 below represents the a view of the parts as cut by Patrice.



*Photo 3: The filling pieces are traced and cut  
(Photo by Patrice G.)*

As far as the cutting of the parts is concerned, one must take a look at plate 15 (longitudinal view) where we note the position of the keelson. Looking at this plate, we see that the upper portion of two of the filling pieces must be shaped to receive the keelson. It is much easier to shape the parts now than later as they are still separated. Refer to photo 4 for a detailed view. The curved shape in the first two pieces follow the curve of the inside of the transoms as well as the notch cut in the frame (63)

The parts having been cut and shaped in their upper portion, they are ready to be assembled. As can be seen on the side view (plate 8) the filling pieces will be installed behind frame 63 and will support the lower transom. There are 4 filling pieces in total, of which the last one is placed in the corner formed by the lower transom and the sternpost knee. This filling piece is quite reduced in size. Before assembling everything there is still one more operation to do; the shaping of the lower area for the first and last filling pieces which must follow the angle and shape of the sternpost knee. To help in doing that, the location of each filling piece (all 4) should be marked on the knee by tracing vertical reference lines on both sides. Then the shaping can be done on the two pieces. This method can be open for debate, but here is the reason I proceeded this way:

After having roughly shaped the top portion of the filling pieces, the parts were aligned and temporarily assembled to form a solid block to be sure that the notches cut were corresponding with the seating of the keelson, with the rounded shape of the inside of the transoms as well as the notch cut in the frame (63). Once that is verified it is simply a matter of shaping the first filling piece according to the bottom portion of the knee as well as cutting the last piece following the seating angle on the top area of the same knee. The two parts are then individually fitted in place using the reference lines on the knee. When everything is fitting, the 4 filling pieces can be lined up and assembled permanently. The shaping of the two middle pieces is then worked using the shape and angles of the first and last piece.

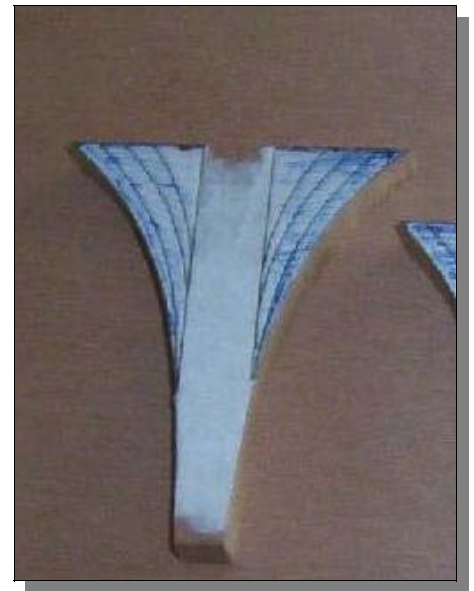


Photo 4: Notch for the keelson



### *Corner filling pieces.....*

To obtain a good connection between the wing transom and the fashion pieces, a small triangular filling piece is fitted and glued in the corner formed by both elements.



Photo 5 & 6: Inside view...  
The corners are installed between the wing transom and the fashion piece (on both sides).



All the parts have been assembled on these two images, including frames 63 and 64. The positioning of all the pieces in relation to the keel and sternpost were verified by putting the assembly in place in the building board. I personally decided to assemble everything permanently at this stage to form one solid area of the model. Permanent assembly as seen on the left image; the right image showing the lower stern parts mounted on but not glued to the keel and sternpost.



*We must note that the construction of the aft area of the framing will most certainly be the object of more articles to come. These articles will cover the construction up from the top of the fashion pieces. For the modelers who want to do so, the permanent installation on the keel and sternpost can be done at this point, but personally I want to built all the frames and hawse timbers before doing so.*

*So there will at least be a third Part in this series.....*





## - Gallery: the Models under construction -

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This area of the newsletter is dedicated to the construction progress made by the participating members since the last issue. The images were kindly sent by the builders.



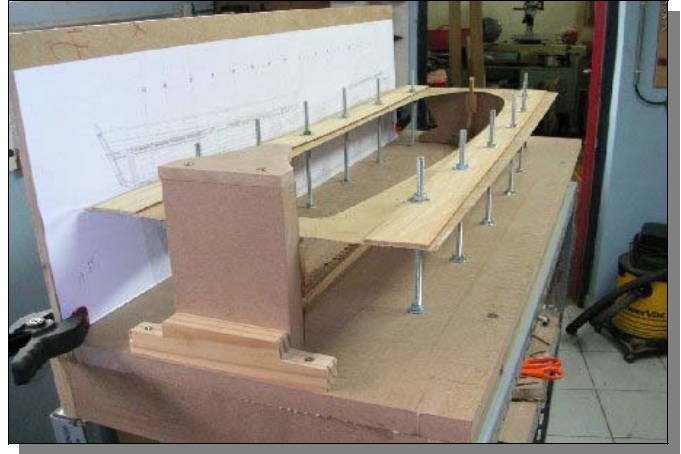
*Marc M.*



Marc has two models under construction....  
Here are the first images of one of them; the stern section.  
The second model is a full representation of Le Gros Ventre which will be planked on one side and fitted with masts and rigging. This second model has also been started..... the frames are being built.....



*Alain D.*



The building board.....

The keel, rising-wood and frames are built from Tamarin (a native tree on the Island of Reunion). The grain is not quite as tight as pearwood but I was able to plane it down to the dimensions for the framing. I used the glued bristol paper as patterns. The cutting is done using a band saw and scroll saw. Sanding is done with a drum mounted on a drill press; which allowed me to work on curved areas.

- Scale 1:48 -

*John H.*



All the frames have been built.....



- Scale 1:64 -

*Jean Paul B.*

Please note that some of the parts are neither complete nor glued in place. They have been put in place only for the photo.....



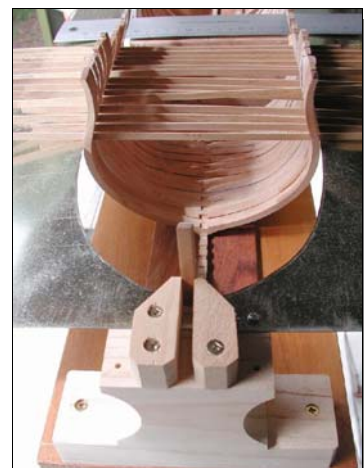
- Scale 1:36 -

*John W.*



The new workshop....

The frames are being temporarily installed.....



*Gilles K.*

The hawse timbers have been completed and temporarily put in place.



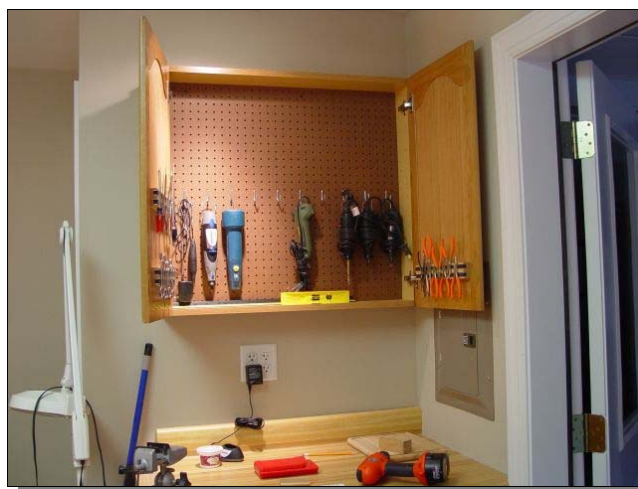
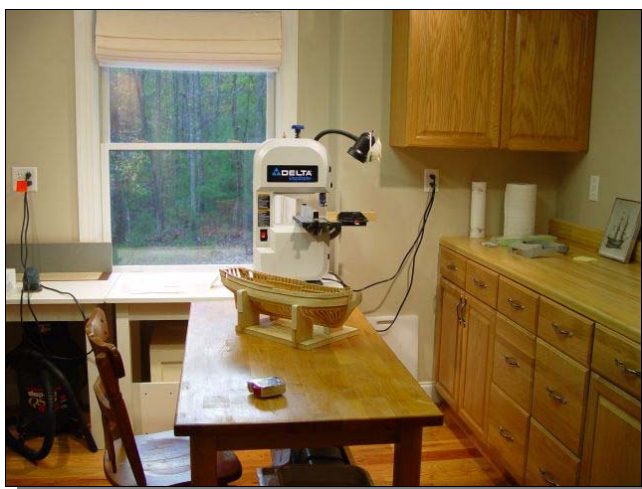
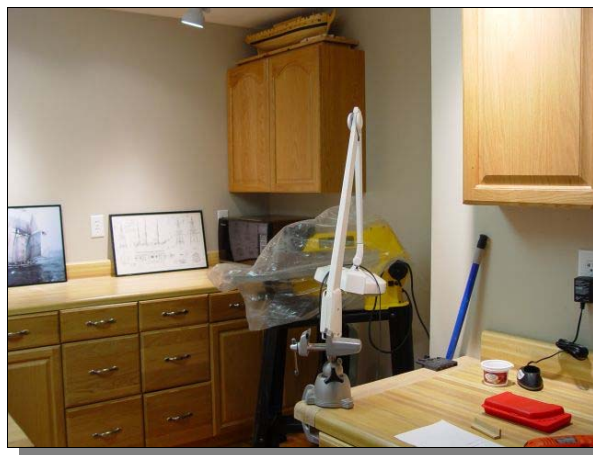
A view of the inside. Final sanding will be done later .....

- Scale 1:36 -



*Bob P.*

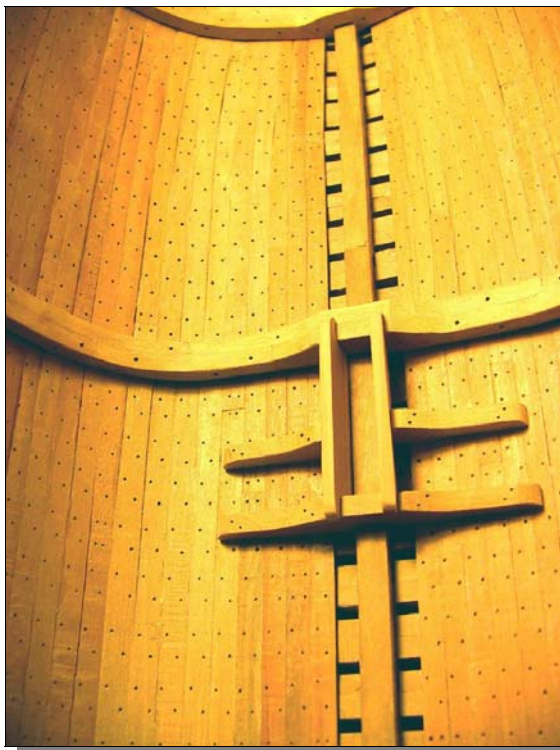
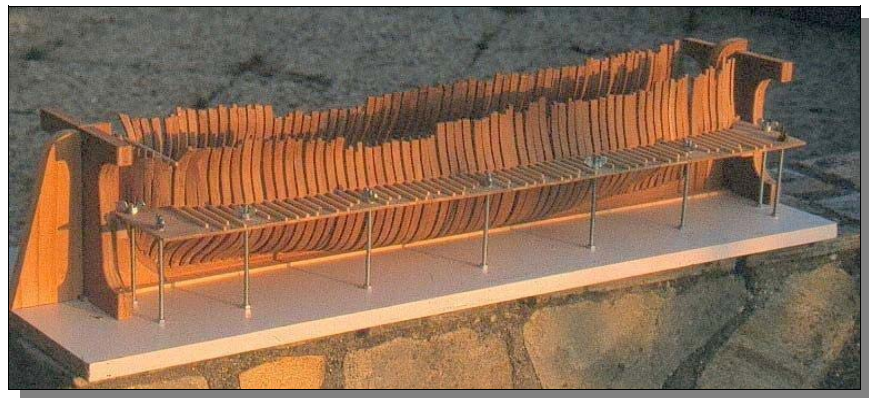
A view on Bob's new Workshop .....



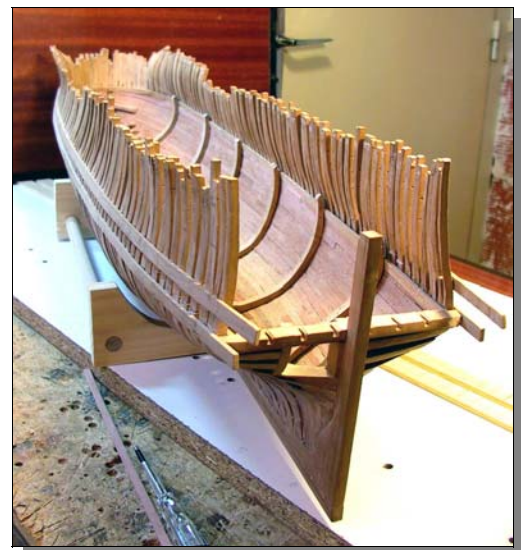
*Marcel C.*



The size of the model .....



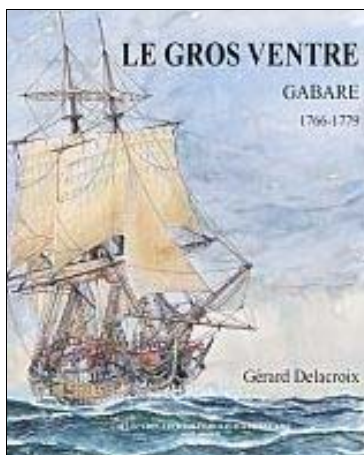
The inner planking, a rider and mast step .....



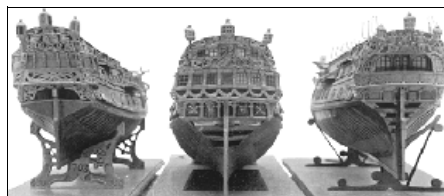
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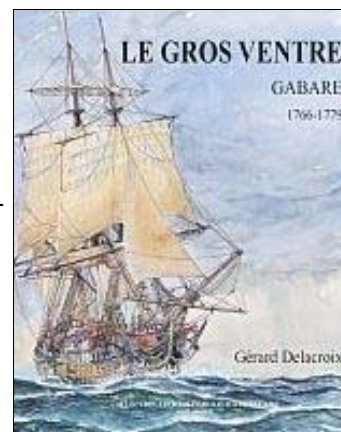
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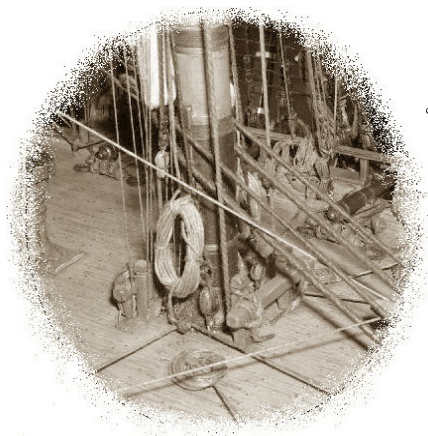
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# *The construction of the Model*

## *The Hawse timbers*

by Gilles H. 

Their name comes from the word "Hawse" which is the name given to the holes located on the bow of the ship and which are used for the anchor cables to pass thru. The hawse timbers are located among the timbers between the first frame and the stem.

### *Introduction*

There is no reason to hide the fact that along with the lower stern framing, the dispositions associated with the head and the decorations in general, the hawse timbers represent one of the more complicated steps in the construction on the model of a ship of this size for this time period. This said, although difficult, the construction of these timbers is not an insurmountable task. The goal of this article is to try to clarify the presentation as well as the building of these elements. In regards to understanding the layout of these timbers, it is strongly suggested that the reader turn back to page 49 in the April 2004 issue of the newsletter where one will find an article by Jean Paul B. on this subject.

Building the hawse timbers will be done following plate 9 of the plans; in particular the drawings shown as sections "B" and "C". Section "B" shows us three views; from the side, front and top. In "C" we observe the drawings which show the actual patterns to be used for the cutting and the shaping of each individual timber. We must also note that as usual the monograph contains explanations which must be read; these are to be found on page 44 of the book.



### *Building the timbers*

In regards to the construction technique presented in the pages to come, it cannot be said that it will be the most economical in both material and time, but it follows the thoughts found in the explanations given by Jean Paul in the April issue. As the timbers were compared to 7 sections forming the quarter of the sphere necessary to fill the space between the first frame and the stem, why not build them as such?

The fact that some of these timbers are supported by a shoulder cut into the neighboring timber should not present too many additional difficulties; just a few adjustments to be taken into consideration.

### *The construction*

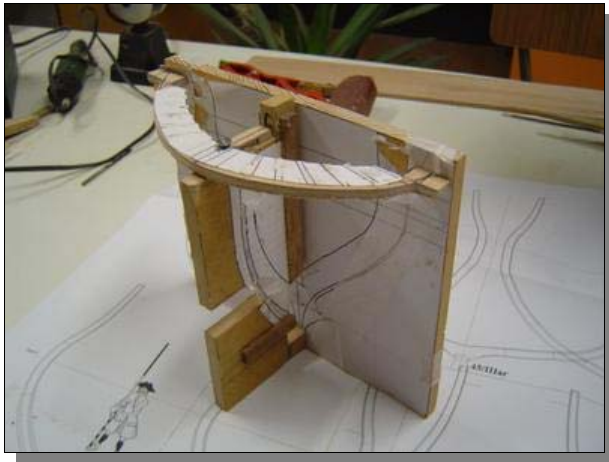
#### *Step one... the jig....*

After having studied the drawings on plate 9 and taken a good walk and some fresh air for a moral uplift, it is time to start. Right away we must admit that the building of this area of the ship requires a dedicated separate jig. Work could of course be done from the main building board but due to restriction presented by the stem support which would in fact be in the way, a different jig works out best.

#### *The jig:*

It is built from a small rectangular piece of 1/2" plywood cut to the following dimensions: 30 cm in length and 25 cm in width. These dimensions are not critical as all that is needed is to have enough room to add a few references. This board will be use as a base for the jig where one could work keeping it flat on a table or set up vertically. In the latter case only a back support needs to be added. Once cut, the board should be orientated to result in a 30 cm wide by 25 cm high jig.

We are now ready to add a few indispensable references such as the profile of frame 1, the profile of the stem and the profile of the top outside edge of the hawse timbers.



*Photo 1: The jig by Jean Paul*

There are of course several methods to trace and cut the parts used as necessary references on the jig. Photos 1 and 2 are two examples.

Here is how I personally proceeded (photo 2):

1) First the centre of the jig is measured and marked as a line. It represents the vertical center line of frame 1.

2) The profile of frame 1 is taken from the set of plans (plate 4) and transferred on the jig. It can be traced directly onto the board or on a piece of tracing paper as a pattern, then glued on the jig. In both cases the pattern must be lined up with the center line on the jig. From there it is obvious that this pattern must show the following information; the vertical center line, the outside contour line (profile) and a horizontal line delimiting the height of the frame.

3) Tracing and cutting the stem profile. We note that this profile must be cut from lumber that must be of the same thickness as the lumber used on the model for the stem. The dimension of the pattern corresponds to the imaginary perpendicular line which is located at the intersection of the forward face of frame 1 and the foot of the stem all the way up to the top of the frame.

The pattern is then marked with the outside profile of the hawse timber which is in contact with the stem. In this case, it is the length of hawse timber 1 and the foot of timber 2. To clarify this, one may also use the stem's inside rabbet line as shown on the plan. The lines must be traced on both sides of the stem template.

As for the cutting of this profile, I have, myself, done it following the outside profile of the stem as per the stem on the model

4) The profile of the top of the hawse timbers.

This pattern is taken from plate 9; it is the view of the timbers from above. This is also one of the reasons why it is preferable to build a separate jig as it will be easier to line up the timbers during test fittings. The height of the location of the profile on the jig must be measured from the plans.

The profile is traced on a sheet of plywood, possibly the same material as was used on the upper level of the main building board. Just as was done then, it is best to cut the pattern leaving a little extra room for fitting in order to have consistency with the rest of the framing.

Once traced, cut and installed, one may add extra reference points on the jig; such as small wood strips representing the spacing between the individual timbers. This step is not imperative as these strips may be in the way during the fitting of the timbers, but if one chooses to go ahead with this, the strip must be placed from the outside edge of the timbers all the way to the corner made by the base of the jig (frame profile) and the profile of the stem. This may be somewhat complicated as the strips must all meet in that corner formed by the two templates.



*Photo 2: The jig by Gilles*

### *Step two....*

Le Gros Ventre needs 7 timbers to fill the space between frame 1 and the stem; on each side of the ship. As indicated in the monograph and as can certainly be seen on the plans, not all of the timbers are full length timbers. Some are actually partial timbers and must be fitted on a small shoulder that is part of the neighboring timber. Following the order of placement and the location of all the timbers, they are fitted in the following fashion: Timber 1 is an integral part of timber 2, timbers 4 and 5 are fitted on a shoulder on timber 3 and timber 7 is fitted on the shoulder on timber 6.

As a result and following the explanations referred to earlier (in the April issue), all the timbers then represent a total of 3 main sections; timber 1-2 as the first section, timbers 3-4 and 5 the second and timbers 6-7 the third section.

### *Making the individual timbers....*

As far as the tracing and cutting of the individual timbers, we will use section "C" of plate 9 where we have every timber shown in two drawings for each; **a** and **a'** as preliminary profiles, **b** and **b'** as final shape profile.

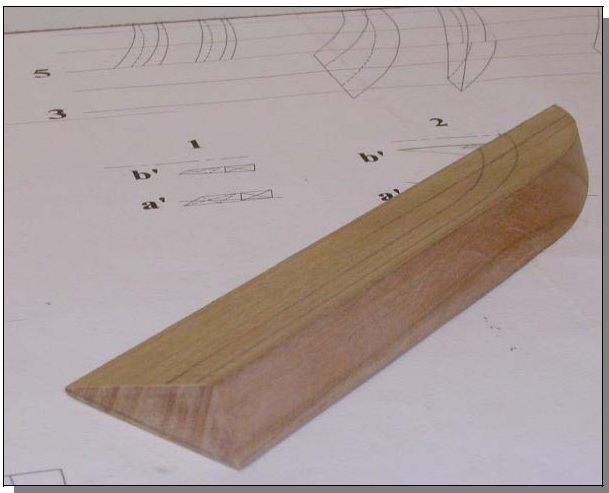
Again, the method described below is not the most economical in material and time spent, but it somewhat follows the explanations given earlier by Jean Paul.

### *Here is the method used... timber #2.....*

The first timber to be worked on is #2. As this timber will be placed against the stem after being combined with timber #1, its preliminary sided dimension will be equal to the two assembled timbers.

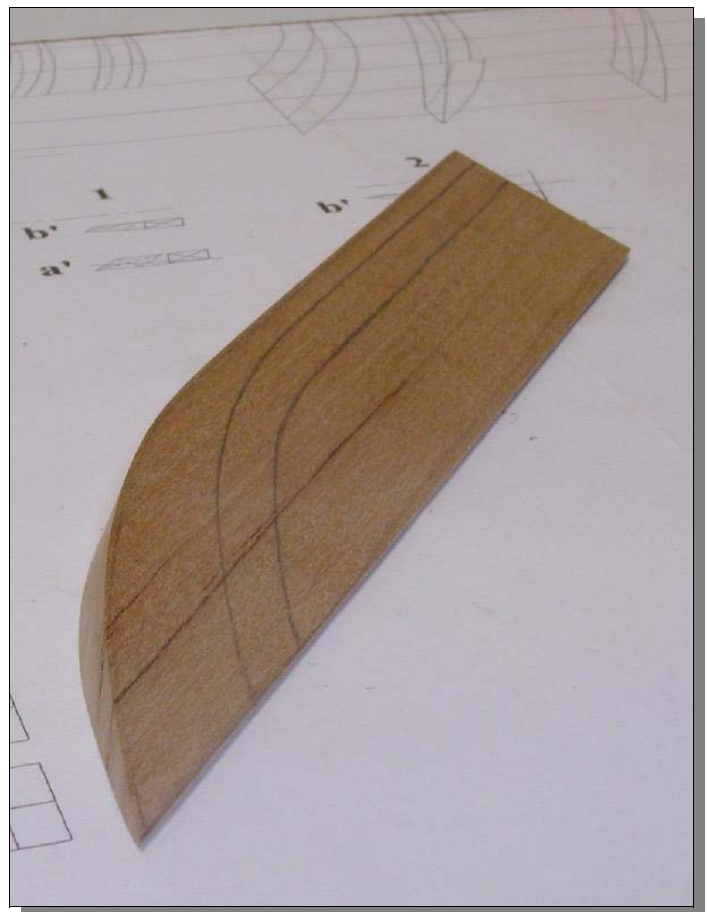
Photo 3 shows timber #2 in its shape as a whole section but in its preliminary form the inside profile has not been yet cut. We will also notice that timber #1 has not yet been incorporated in it and that the bevels have, for the time being also been omitted. So only the outside profile is cut taking into account an extra 0.5 to 1 mm material to be sanded down later. I'll admit that in my case I have been quite generous with the extra lumber as I did leave a full millimeter; just to be sure. As well, this is the first timber being cut... so just in case.....

As for the sided dimension, it is determined using drawing **a'** relative to the timber being worked on; see section "C" on plate 9.



*Photo 4:*

The same timbers seen from another angle.

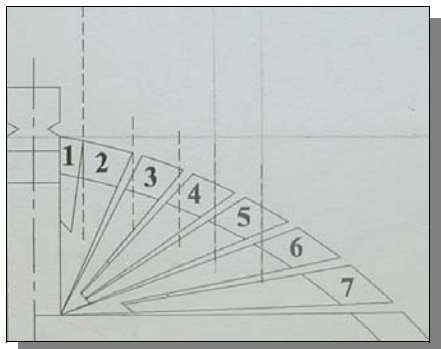


*Photo 3:* The pattern for timber #2 has been traced and cut. The preliminary shape of the timber represents the first full section. It will be seated against the stem and timber 1 has not yet been incorporated in it.

### *Shaping the seating angle of the 1<sup>st</sup> quarter....*

Shaping is done on the outside face of the timber (meaning; the face which will be directly facing the next outside timber). For timber #2 it will be the face closest to timber #3. For timber #3 the side facing #4, etc.... The side face the stem will in all cases be the one left at a 90 degree angle (see photo 7).

The drawings used to cut the angle on each timber are shown as **b'** on plate 9. Once the profile of the timber has been cut, a line running from the top (exterior side) to the bottom (interior side) is traced on the outside profile or face. This line will be used as a guide for the shaping of the part. To start with, sanding down is done using a band sander to obtain the long vertical edge at the back of the timber which corresponds to the edge that will be fitted in the corner of the base of the jig and the stem template. Fine tuning is achieved by hand with a sanding block, file or scraper.

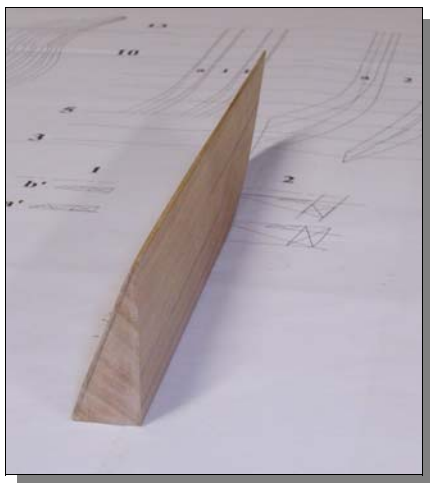


*Photo 5:* Layout of the timbers on the plan (view from above).

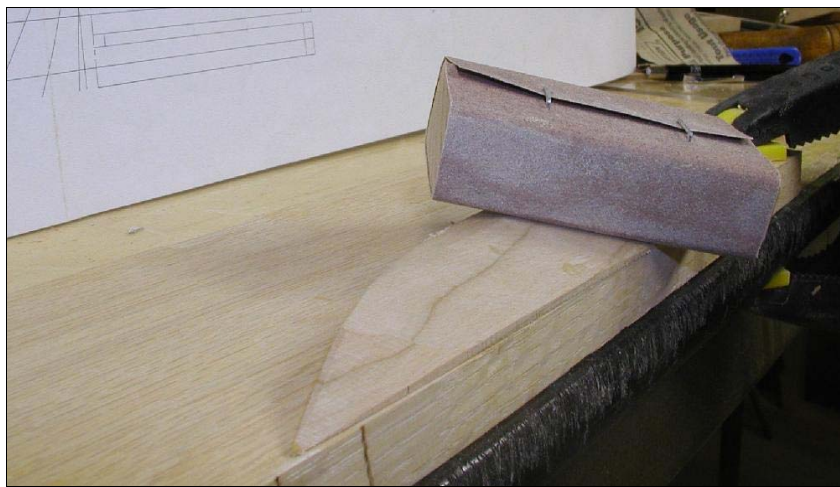
Timber #1 and the shoulder at the bottom of timber 2 are the only parts in contact with the stem.

The fact that the timbers are cut in the shape of a complete section draws the following conclusions:

- 1) The thickness of the edge fitted in the corner made by the back of the jig and the profile of the stem must reduce to a very fine line.
- 2) The foot of each quarter is shaped into a fine point.
- 3) For the timbers which have their lower part used as support for the partial timbers, the width at the shoulder must be respected so that the area where the timbers meet is equal to the width of the section at the joint line.



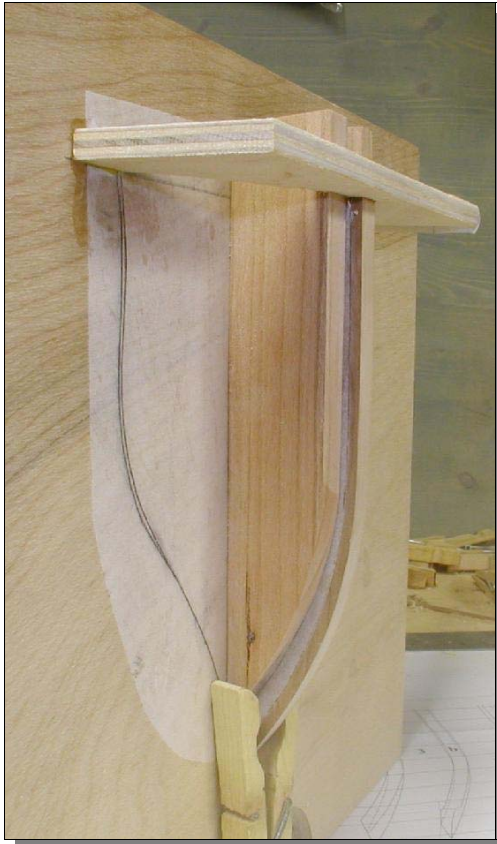
*Photo 7:* The shape



*Photo 6:* Cutting (sanding) the angle on the timbers. Here we see timber #2 on which, after being sanded down, the angle will have the shape of the first full section needed to start closing the space between the frame and the stem. Making sure that the thickness of the timber is correct in its upper area (right side on the image), by reducing the bottom of the timber to a point (left side of the image) and by respecting the needed angle. The timber should end up with the right shape. In the process, it is imperative that the sanding be done keeping the thin side of the timber lined up with the edge of the workbench and that the sanding block or tool be moved along the length of the timber (right to left on the image). The line traced on the outside of the timber is used as a guide.



*At this point we must note that for the modelers who are apprehensive about this step in the construction it is important to proceed with the timbers on one side of the ship only. It is not necessary to work on both sides simultaneously as to try to avoid wasting lumber. One must still expect to have to redo parts, whatever the reason may be. In most cases the mistakes are easily identified as the timbers will not fit properly.*



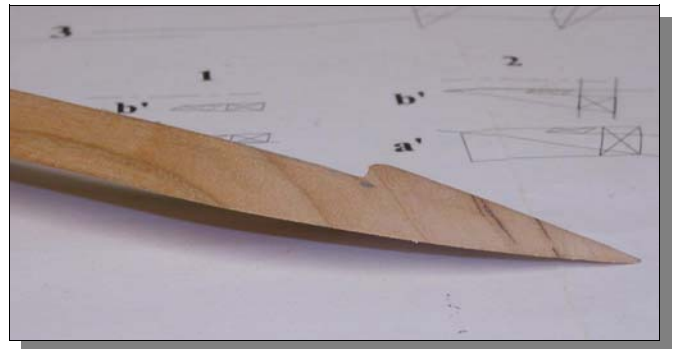
*Photo 8: First test fitting in the jig.....*

*The next step.....*

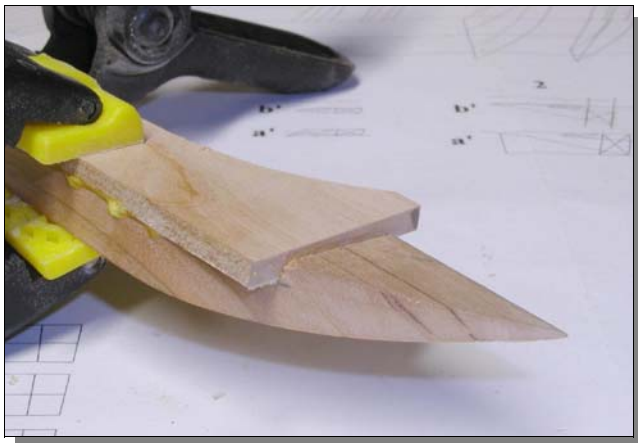
Having been cut to represent a full section combining timbers #1 and 2, it is time to fit timber #2 in the jig and verify that the outside angle was respected. In photo 8 we will note that only the upper bevel has been cut in order to fit the part in the jig. The rest of the bevel (along the rest of the timber) will be done at a later stage.

This ensemble of two timbers must now be completed by incorporating its second part; timber #1. I must admit that in regards to timber #1, I somewhat cheated a little (well! a lot) as its final shape was achieved only after being glued to timber #2.

To start with, timber 2 should be notched according to the plan to be able to receive timber 1. The profile of the notch was roughed in using a band sander, then finish by hand; again with a sanding block, file and scraper. It is to be noted that in my case timber 1 was not cut according to the pattern given on the plan (this is where I cheated) as instead, after having cut the required notch I simply fitted an oversized piece of lumber. See photo 10 below.



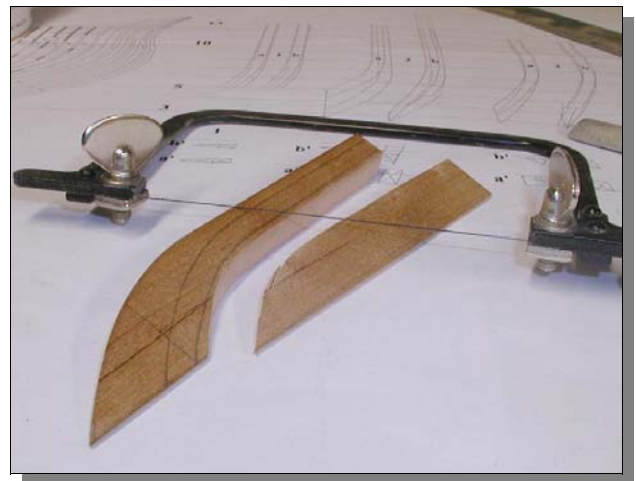
*Photo 9: The notch cut in timber #2*



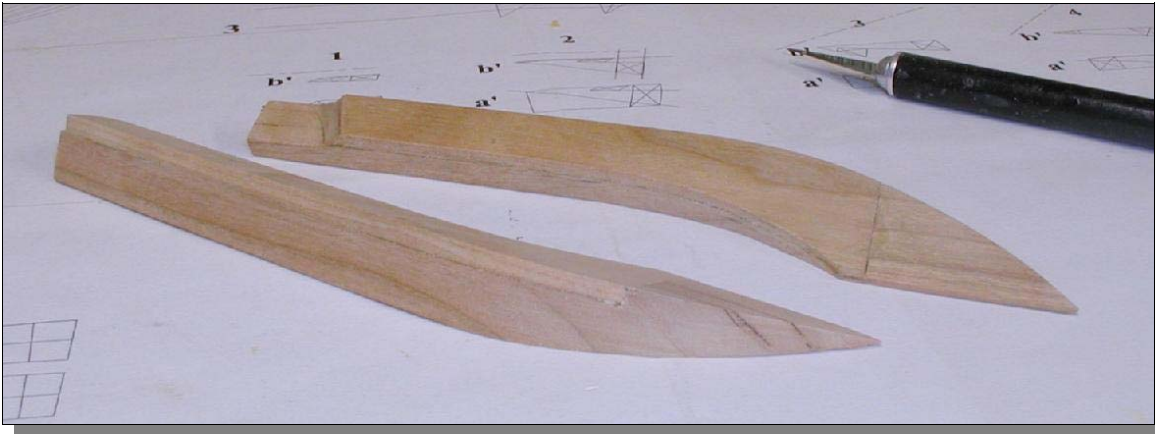
*Photo 10: There is sometimes an easier way.... In this case timber #1 is only an oversized piece of lumber glued in place in the appropriate notch to #2 .*

The extra part (timber #1) is then sanded down to follow the angle needed so that it will fit against the stem. This operation is delicately done using the disk sander. The sanding is done little by little and requires a number of fitting to get it just right. Once satisfied with the fit the outside shape can be worked out to follow the shape of timber #2.

This section is now almost complete.....



*Photo 11: Cutting the inside profile.*



*Photo 12:* Two sets of timbers 1 and 2 are shown here; one for each side of the setm. One of the two assemblies, timber 1 has been shaped for the passage of the bowsprit; the top area has been taken off and the joint between the two timbers has been rounded off. The top of timber 2 will be higher than the others and will help stabilize the bowsprit. This timber is named the knighthood and there is one on each side of the stem

We will note that for the time being the inside and outside bevels have not been cut. They will be after having fitted all the timbers in the jig as at this time it is preferable to concentrate on getting a good fit between the individual timbers by respecting the right spacing. As well the rounded shape of the top of timber 1 does not have to be cut right away. These are details that can wait if the modeler is so inclined.



*The two timbers do not present major difficulties. Getting the correct angles for their fitting is important, especially the angle on the outside face along timber #3 which will be our next project.*

*There is another detail that is worth noting: even though the size of the model is quite impressive at either 1:48 or 1:36 scale, the hawse timbers still appear as a fairly small part of the framing.*



<http://perso.wanadoo.fr/gerard.delacroix/sommaire.html>

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The other hawse timbers will be built following a method similar to the one used for timber #2. We must now look at the order in which they will be made and fitted. As it has been proposed in the previous pages, the assembly of the 7 timbers is divided in several groups, each forming a section, which after being installed will fit between the first frame and the stem. They will basically close the forward area of the ship.

The order of construction shown here is most certainly not imperative and could be debated. But after having consulted with the other members, it would seem that there is a certain consensus and logic in it. I must say that having worked as was suggested earlier; first on one side then on the other, I allowed myself to experiment a little. As far as the first set of timbers and after having cut timbers 1 & 2, work was done in the following fashion; timber 3 followed by 6, then 7 and finally 4 and 5. For the second set the order was slightly changed. Here again after having cut 1 & 2, it was followed by 6 & 7, then 3 and finally 4 and 5. This change was partly due to the fact that during the construction of timber 3, a mistake was done in the cutting of the shoulder support for 4 and 5. After fitting timber 6 and 7 it appear that the shoulder supporting 4 and 5 on timber 3 was too narrow. It goes without saying that whatever the chosen order, it will not mean that such mistake will be completely avoided and that in the end the order will have little or no importance as long as the full length timbers are built first; in this case 2, 3 and 6. Even though the plans give us all the information and patterns needed, we must also note that in most cases, during the construction of these timbers, the modeler will have to more or less adapt his work in relation to the timbers previously cut. For example; even knowing that the plans are followed, there will be certain minor variations in the shape of one timber or another, which will call for minor adjustments on the next timber. The goal is to obtain an assembly of timber that is harmonious and as close as possible to the patterns offered on the plans; by respecting these patterns and the spacing between the timbers. This is mostly where the difficulty as both sides must be symmetrical.

***The construction of timber 1 could be done by somewhat cheating, but as far as the timbers left to do, I am afraid that one should avoid taking shortcuts as they will soon become shortcomings and as a result..... a disaster...!!***



### Timber 3

Timber 3 is the second timber that will be used as support for several partial timbers. Its disposition is somewhat different compared to timber 2, and will need particular attention. As we are able to note on photo 13, from timber 2, the space which separates all the other timbers is constant. On the same image we also clearly see the support shoulder that must be cut in the lower part.

Drawing **3a'** and **3b'** on plate 9 will be used; **3a'** to work out the thickness and **3b'** to working out the angles on the outside (side which faces timber 4 or the side that is closest to the frame).

This timber must then be cut in several steps, following a similar method than the one used on timber 2. It will seem that some of the steps are repetitive but here is the procedure that I followed:

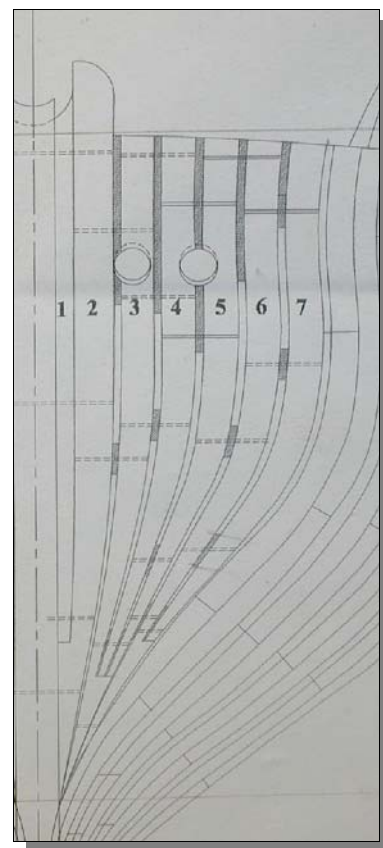
1) Tracing of the timber from drawing **3a** taking care of reporting the entire profile of the piece; meaning the profile of the timber all the way to the corner between the frame and the stem on the jig.

The width of the profile can be verified on the plan by following the measurements taken on the view from above (see photo 5 in the previous pages).

2) Transfer of the pattern on a wood plank of the right thickness; as per drawing **3a'**, and cutting of the profile to follow its sided dimension.

The profile is of course cut following the forward contour and leaving a little extra material. At this point, we must note that the tracing is only done on the face that will stay square (inside face). Refer to photo 14 on the following page.

*Photo 13: All 7 timbers viewed from the front as shown in the plans. We note that timber 3 and 6 are the support for 4, 5 and 7; they will require particular attention and will need to be shape in several steps.*



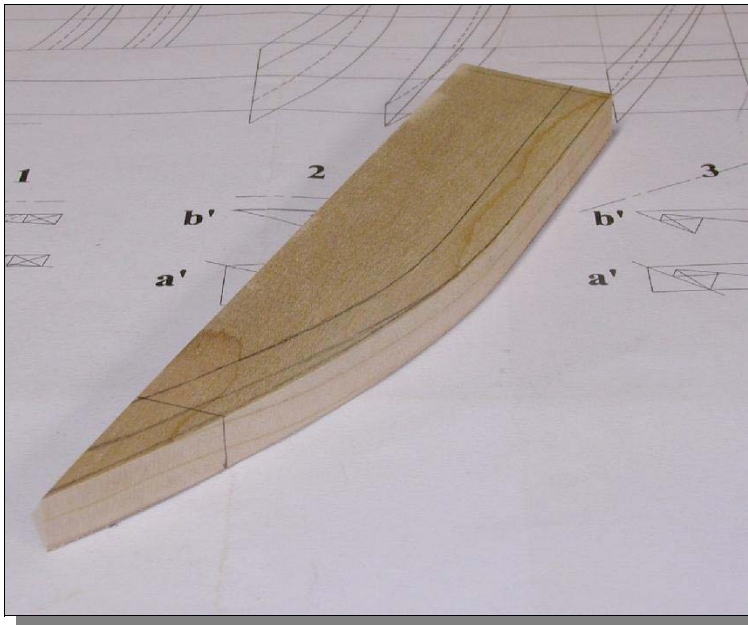


Photo 14: The profile of timber 3 has been cut.

3) Cutting the rough bevel on the length of the timber; from the top down to the level of the support shoulder. For that we must transfer the profile of the timber on its two sides. The bevel is then worked leaving a little extra material. The cutting of the bevel is necessary for a later step as its shape will need to be taken into account to give the shoulder the right dimension.

4) Cutting the angle that will allow the timber to be installed in the jig..... the inside edge having been shaped in a sharp edge to fit in the corner formed by the frame meeting the stem in the jig. Given that this timber is the support for timbers 4 and 5, the cut angle for the upper part of the shoulder is different from the angle for the rest of the timber. In fact, after looking

at drawing **3a'**, we see that the width at the top of the support is the same as the width at the top of the timber. The shaping of the back edge (right on photo 14) must be done in two separate steps. The location of the shoulder must then be marked on the timber's profile. (horizontal line across the timber on photo 14)

5) The angle for the back edge.

The shaping is done in two steps; 1<sup>st</sup>, for the portion of the timber starting at the top down to the level of the shoulder and 2<sup>nd</sup> from the top of the shoulder down to the foot of the timber.

*First step:* shaping the timber above the support shoulder. The upper part of the timber is worked starting with its full thickness, the lower area will be reduced to follow the thickness on its forward face where it meets the shoulder. This thickness can be taken from drawing **3a'** and marked on the forward face of the timber. Once this reference has been marked, the two points can be joined by a line on the forward face; the line being used as a guide during sanding. At this point, a cut must be made following the horizontal line traced on the outside profile of the timber (see photo 15). Do not cut deeper than necessary; stop at the thickness reference point. The shaping can now be worked by sanding down as was done for timber 2. The lower area of the timber above the shoulder may require the use of a knife as it is a tight corner. As well we must remember that the back must end in a thin edge.

*Second step:* shaping the lower area of the timber, from the top of the shoulder down to the foot of the timber. Keeping the full width of the timber after having worked the bevel at the level of the shoulder, a guiding line must be traced down and across to the foot of the timber. Shaping the foot is simply a matter of following the line and the back edge which also has to end as a thin edge (see photo 15)

Note: for this step it is imperative to take the bevel at the top of the shoulder into account as the total width of the shoulder must be the same as at the very top of the timber. If not, the result will be a shoulder that is too narrow to receive the two partial timbers as well as too narrow for the fit with timber 6.

The shaping of these angles is somewhat delicate to achieve. It is then necessary to proceed carefully and it is safe to expect to make a mistake or two.

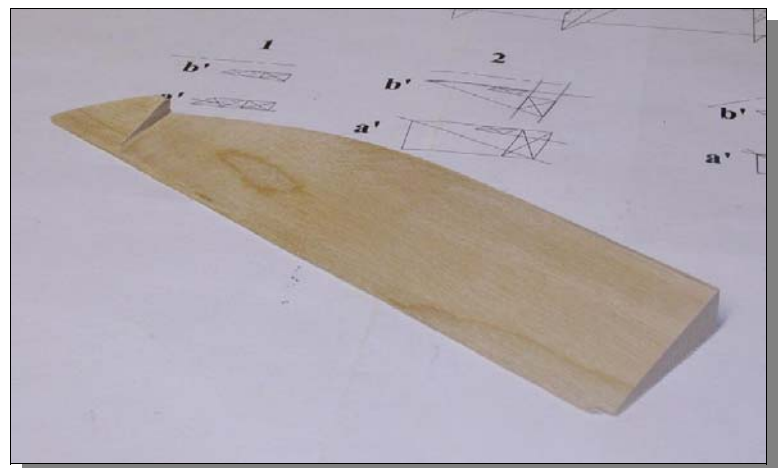


Photo 15: Shaping of timber 3.....

Photo 16 shows timber 3 installed in the main jig (building board). We must note that even though there is a separate jig made, it is a good idea to verify the fit of each timber in the main building board to be sure of the result. Looking at the image shown here, it looks like everything fits in place. We also see that the timber is still in its preliminary shape; meaning that the inside profile has not yet been cut, which is to be done once the fit has been verified (see photo 17).

Once the fit has been checked, the inside profile is trace making sure that the bevel line is included. It is then cut out and the bevel can as well be shaped to both inside and outside face.



*Photo 16: The timbers are in place in the main building board.*

*Photo 17: Timber 3 after the inside profile has been cut.*

On photo 17 we also see that the bevel has not yet been cut on timber 2, but the one on timber 3 has been done. The bevel on timber 1 and 2 will be worked in after having verified the fit of the next timber to be cut; timber 6.



#### *Timber 6.....*

This timber is made using the method described for timber 3; see the previous pages.

#### *Timber 7.... 4 and 5.....*

At this point the fitting of the timber must be done keeping the right spacing between the top of each timber as well as making sure that the foot of 2, 3 and 6 is shaped accordingly. They must fill the space available at the foot of all the timbers. It may be necessary to make a few adjustments for the fitting of these 3 timbers.

These last three timbers; 6, 4 and 5 are straightforward to make. They are used as filling timbers between the timbers that support them. The construction method is similar to the others and the fact that they are supported only means a minor adjustment. As well since they require only one angle cut, they will be easier to make.

Tracing of timber 7 must be done making sure that two measurements are initially made as these measurements will be used as reference points. Once again these measurements are taken from the view from the top on plate 9. The measurements correspond to the distance between the back of the corner formed by the frame and the stem template on the small jig. Note that they must also be taken at both; the top and bottom of the timbers. Once the pattern has been traced and cut, the lateral angle is sanded down on the side the closest to the frame. The technique to shape the angle is the same as the one used on the other timbers. This timber can then be put in place between timber 6 and the frame, making sure that the spacing has been respected. Note: the spacing between the top of the timber is constant; at 54 mm in scale 1:1.

We must note that the lateral angle of the shoulder on timber 6 and the lateral angle along timber 7 are the same so that they can be lined up as one in reference to the frame.



*Photo 18:* Timber 6 and 7 (on the right) are in place in the jig along with timber 1, 2 and 3. The photo was taken during the fitting of the spaces between the timbers.

As far as these spacers are concerned, see the explanations further down.

The construction of timber 4 and 5 is done following the same method. Measuring at the top and bottom in relation to the corner between the frame and the stem template, Tracing, cutting and shaping. The order in the construction of the two timbers has little importance. The shaping of the angle in relation to the other timbers must be done slowly as it may be necessary to make some adjustments; it could be a good idea to work on these two timbers at the same time (at least during the shaping). The spacing at the top must also be kept in mind.

The exterior bevel can be cut before or after verifying the fit on the support shoulder.

Photo 19 shows the timber in the main building board. As was indicated in the preceding pages, the two jigs are used during the construction. Here the stem support has been removed to have a good view of the whole area; this can be justified by the fact that during the construction of these timbers the modeler can become impatient in seeing the results on the model itself. We note that the preliminary bevel has been cut on all the timbers.

*Photo 19*



Having cut and verified all the timbers on one side of the stem, it is normal to have a certain apprehension at the idea of having to start again for the other side.... Of course the timbers will have to be identical.... And further more work has to be done in reversed position.....

#### *The bevels .....*

For the modelers who will have elected to not finish the bevels during the cutting of the individual timbers (as it has been suggested); now is the time to do it as all the timbers are done. They have been installed temporarily in the jig, which gives a nice overall view of the whole area.

Personally I find that working on the bevel on permanently assembled timbers renders the operation somewhat more difficult. So, at this point, the timbers are assembled but only temporarily, to check their fit and make any adjustments in regards to the bevel lines for both inside and outside. After which the timbers are once again separated and worked on making sure that a little extra material is left on..

#### *The spacing between the timbers .....*

Once the bevels have been sanded down and checked on the individual timbers, the pieces can be re-assembled permanently. As far as the spacers between the timbers, at this point all that is needed is to glue a small strip of appropriate thickness at the top of the timbers. These strips must be glued just above the point where the final spacer will be fit at the top of the timbers. At the same time the feet of the timbers are glued together.

In regards to the permanent spacers, we will note that their shape is tapered from top to bottom and from the outside to the inside. The placement of all the spacers is shown in the front view on plate 9 (photo 13 here). The spacers must have the profile of the space they are supposed to fill so a little test fitting may be required to get just right. Reminder, they are filling the space on the outside as well as on the inside of the assembly.

#### *Conclusion .....*

As mentioned in the previous pages, the technique shown here is not economical (neither in material or time). Working on these timbers is delicate and the execution of the shaping of the various angles needed for a good fit is very important for a good result. The important factors in this are to have a good look at the drawings on plate 9, taking the time needed in doing the work and mostly to jump in and start the construction. This method has not meant that no mistakes were made, but these were easily discovered and in time. As far as mistakes are concerned, the modeler must expect to make some and, under no circumstance, should it be discouraging. The order of execution of the construction steps can certainly be changed; for example the bevel can be worked into the timbers earlier than suggested, etc.....

For the modelers who have some apprehension in starting this step in the construction of the framing, starting work on one or two timbers using another kind of lumber may be a good idea as to not waste valuable wood, as always, for the more difficult steps, this can be good practice....



*Photo 20:* The timbers are in place including the spacers. We note the shape of the spaces between each timber.



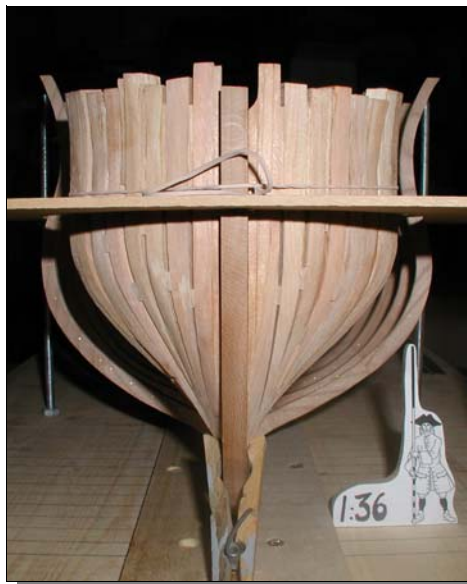
*Photo 21:* During the construction of the hawse timbers, there were several mistakes done, here are some of the proofs..... I must also say that the first side of the stem took approximately 2 weeks to complete, the other was done in one weekend.



The final sanding will be done only after the framing of the hull is complete.

*FINAL NOTE:*

*One of the advantages found in the technique used is that it allowed for a certain consistency between the inside and the outside of the assembly, most especially in the spacing between the timbers.*



- *For your Pleasure* -

A few photos taken during  
Châteaulin Model Ship Expo - July 2004



L'Ambitieux; the quarter gallery  
by René Van Houche



This exposition was organised by the AAMM, Association des Amis du Musée de la Marine, at the request of the Fédération Française de Modélisme Naval ( FFMN) during the 12<sup>th</sup> world ship model championship (class C) in Chateaulin (France) in July 2004



The Association head office is located at the Musée National de la Marine in Paris  
AAMM

Musée National de la Marine  
Palais de Chaillot  
75116 PARIS



<http://www.amis-musee-marine.net/index.html>

## Samples of some of the models exhibited .....

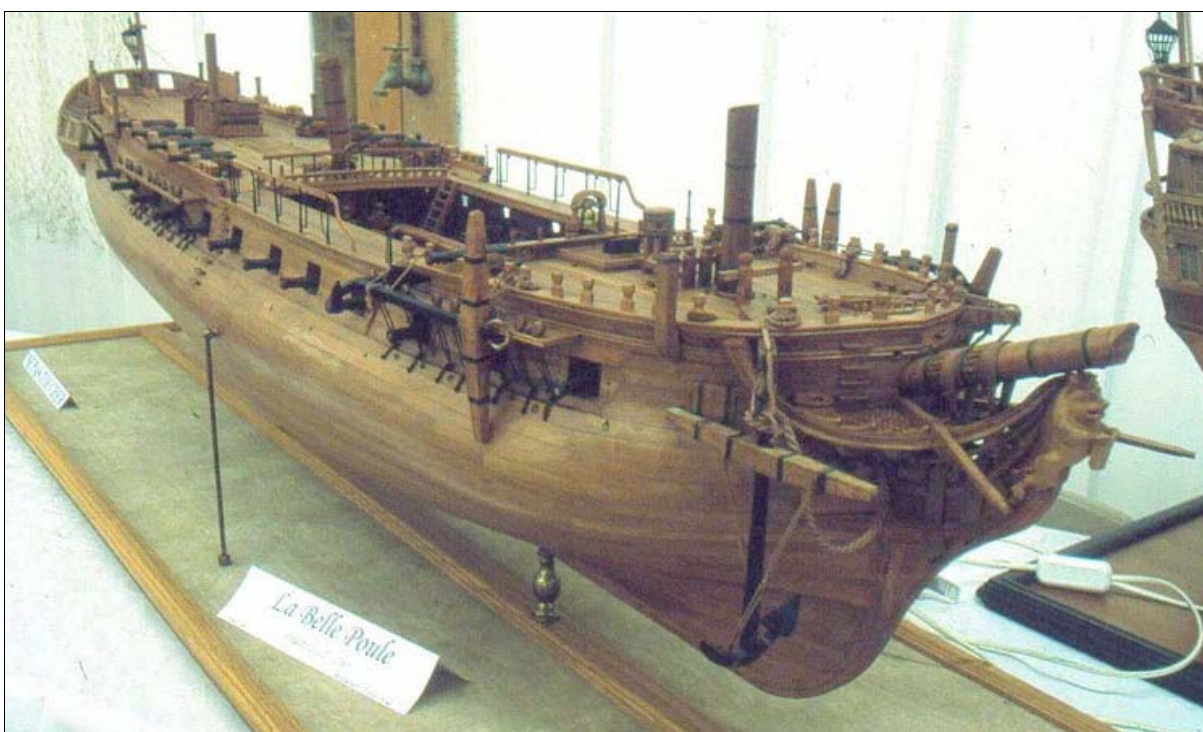
*Ships by Arthur MOLLE*



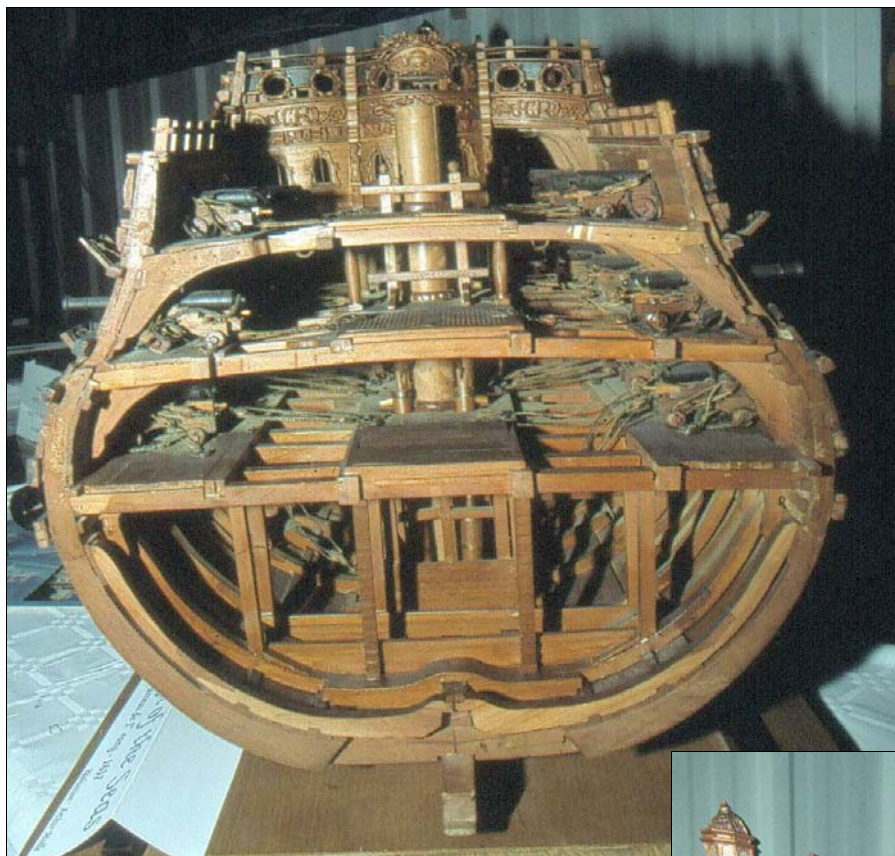
*- Bonhomme Richard -*



- *Bonhomme Richard* - (another view)



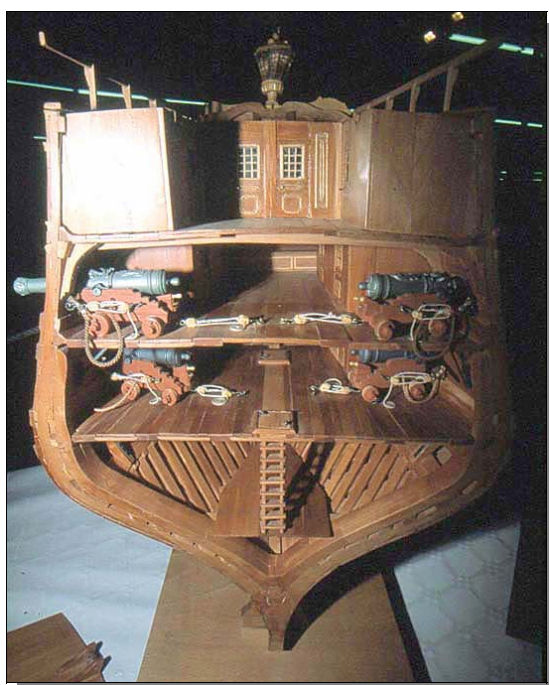
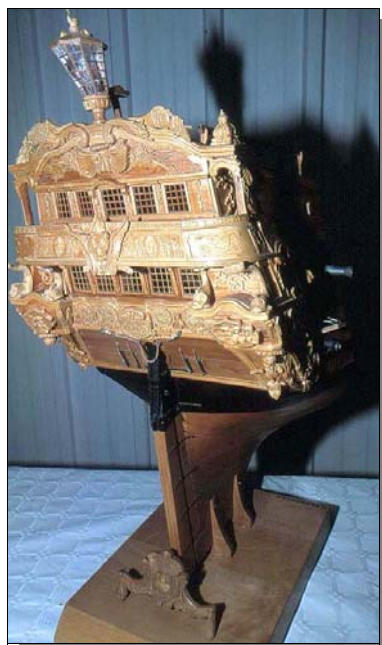
- *La Belle Poule* -



Section of the - *Sovereign of the Seas* -  
Scale 1:36



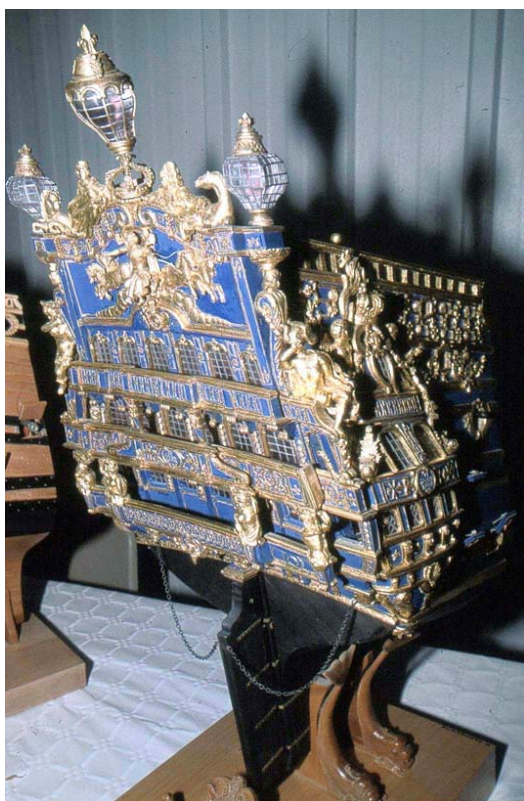
by René VANHOUCHE



Stern section of  
- *Le Neuron* -



Stern section  
- *L'Ambitieux* -



- *Le Soleil Royal* -

# *The Slipway News*.....

Le GROS VENTRE



*Volume 1 - Issue 4 - November 2004*



Contributors

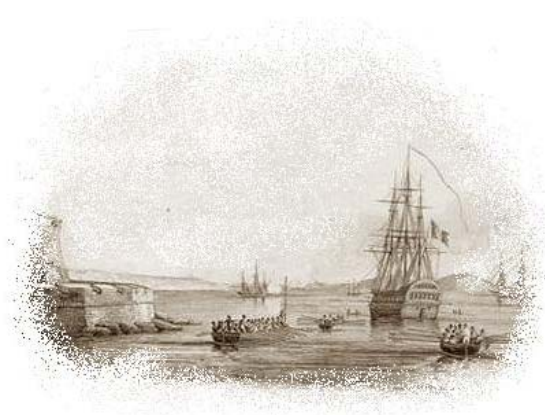


*"Gallery" and other photos*

Alain D. - John H. - Marc M. - Gilles K. - Jean Paul B.  
Bob P. - John N. - Patrice G.

*"The Chateaulin Expo"*

Marcel C. - Pierre R. -



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