



BLUENOSE~II

1:75 Scale

Dear Client,

First of all we wish to thank you for the confidence you have placed in us in buying this model, and it is our intention to live up to this responsibility by providing you with not only the finest quality materials, but also a complete back up service to give you every assistance in completing the model to your complete satisfaction. Our greatest reward would be to know that you have built this magnificent model with the same enthusiasm that we, for our part, have planned and developed it for sale on the world's markets.

You will find that every part on the plans has been given a number. This number, in running order also appears on the list of reference numbers at the end of the building instructions and describes the part for its easy identification together with the type of material and its measurements. Before this list, we also give a summary of what the kit contains. This should be used by you to check that all the parts are included in the kit and that you are not missing any part before you start to construct the model.

Please note that although the great majority of the parts are pre-formed and pre-cut for you, there are a few instances where you are required to cut certain sizes from some of the wood strips in the kit. You will see these parts quite easily when you check the section "What the kit contains".

If you have any doubts or are not too sure of anything, please do not hesitate to write to us here in Spain. We enjoy hearing from you and we receive many letters asking for advice, not only in resolving a doubt, but also in advising clients on the next model to buy after they have completed the current one. Indeed we have a large album of photographs of models built by proud customers from almost every part of the world. It gives us the feeling that it is not clients we have but friends.

We wish you every success and many happy relaxing hours in the construction of this splendid model. We are here to serve you and to help you. Please make use of this service if you should need it.

Good sailing.

ARTESANIA LATINA

HISTORICAL

The original BLUENOSE was launched in 1921 from the slipways of Smith and Rhuland, of Lunenburg, Nova Scotia, and was under the command of Capt. Angus Walters, from Lunenburg. She first beat all the Canadian challengers for the right to represent Canada in the International Schooner Races. This trophy was easily regained for Canada by the BLUENOSE at the first attempt, with her incredible speed. In subsequent years she became a living legend as she continuously thrashed all other international challengers including the last race held in 1938.

She was honoured by being put on the back of Canada's 10 cent piece and also appeared on one of Canada's beautiful 50 cent stamps.

The BLUENOSE II was built in 1963 as an exact replica of the original BLUENOSE and for the people of Nova Scotia. She was built by Col. Sidney C. Oland of Halifax and the opportunity of measuring her to provide the utmost detailed plans of the BLUENOSE and BLUENOSE II was undertaken by Commander L. B. Jensen. This detailed work took 6 long years and not only provided marvellous plans but every historical detail including the old art of shaping and constructing as was the custom in these days, so that today we are very fortunate indeed to have a complete record of sailing ships of these days that will last forever, even although the great

tall schooners have long since vanished. In this way, the correct nautical terminology and customs for this magnificent vessel are also preserved.

She is known to have achieved speeds of 21 knots under full sail, whereas with 2x180 HP diesel engines, the maximum logged was only 9 knots. She had a total of only 13 crew members: A Master—a first officer—a chief engineer—a boatswain—a cook—a mess-boy and 7 seamen. Although she was a magnificent fishing vessel, and indeed held the record catch ever landed at Lunenburg, her great and undying fame was as an undefeated racer.

During the second world war, with continuous battles with the U-Boats in the fishing banks, BLUENOSE was used on the West Indies trade and in 1946, the whole of Canada was shocked by the news that her fabulous career had ended on a coral reef off the island of Haiti.

BLUENOSE II has been officially certified as being identical in measurement in every way to the original BLUENOSE; her main-sail of some 4,100 sq ft is the largest known working sail in the world. BLUENOSE and her indomitable Capt. Angus Walters were synonymous. A commanding figure on her deck—he was a natural leader and an inspiration to countless young men. Besides landing record catches, winning every known record in schooner races, he presented BLUE-

NOSE from Canada before King George V at the famous Spithead Review. Yet he was modest enough to state simply "I never wanted to be better than any other man—I just wanted to be as good".

Many people often enquire as to where the name BLUE-NOSE came from. There used to be a myth that it was because of the harsh climatic conditions when the first of these vessels were sailing from the "Boston States" to Nova Scotia, and subsequently the crew were called Bluenosers because of the freezing cold. It is true that the people of Nova Scotia are often called Bluenosers, but it was because of a potatoe from that land, called the bluenose potatoe, that was exported by schooner to New England. Nova Scotia is a very beautiful and rugged part of Canada, and the cruel winter weathers make for a very special breed of men, and it is with justified pride that the Nova Scotians are known as bluenosers.

The fishing on the great fishing banks of Newfoundland was done mainly by one or two men, each in a small flat bottomed boat called a Dory. As each vessel carried up to 6 or more dories, a greater area could be fished by line fishing, rather than all hands fishing from the sides of the ship itself. 6 or 7 lines were usually put over from each dory. Trawl fishing from dories began around 1850, but it was a very dangerous procedure and in 1963 was discontinued. The dories were painted yellow-orange for maximum visibility in fog, snow and sleet. Each could hold about 1,700lbs of fish besides all the other essential gear, and all hands received a share in the profits from the total catch of the ship. The main catches were of Halibut, Cod, Haddock and Ocean Perch. These great Banks of Newfoundland are possibly the richest and certainly the most dangerous fishing grounds in the world, as they are bitter cold, foggy and often swept by gales of snow and sleet

and indeed in what's called a Whole Gale on the Beaufort Wind Scale, the ocean presents the most awesome of sights.

The BLUENOSE also had its rum-running days. After prohibition was introduced in the United States, some time after in 1920, a lot of money was earned by smuggling rum from the French island of St. Pierre, off Newfoundland to Miami. After 1933 this trade shifted to Nova Scotia where prohibition was still in force. When the second world war began in 1939, both rum-runners and excise-men found themselves serving together in the Canadian navy, and as they were now ship-mates, many a "now it can be told" story was aired, about that era.

Useful Information

The main object in calculating tonnages of ships, is to be able to determine the type and volume of cargo that the vessel might carry. Nett tonnage is also used for calculating dues for the Panama, Suez and other canals.

1. Displacement tonnage is the total quantity of water displaced by a vessel when floating at her load draught.
2. Dead-weight tonnage is the number of tons of cargo, stores, etc., that a vessel is capable of carrying at her load draught.
3. Gross tonnage is the measure of the total internal volume of the vessel. The unit of conversion is given as 1 ton = 100 cubic feet.
4. Nett tonnage is found by deducting from the gross tonnage, the cubic measure of the contents of all propelling power spaces, crew spaces and navigational spaces not available for cargo.

For fish. 1 Quintal of fish is 112 lbs
and 20 quintals is 1 Ton.

BUILDINGS INSTRUCTIONS

SECTION A

CONSTRUCTION OF THE HULL

A.1. The False keel and Frames (Figs. 1 and 2 - Nos. 1 to 14). Take the plywood routed sheets containing the false keel and the timber frames (Nos. 1 and 2-14) from the kit and carefully cut off the joints of each part where they are jointed to the plywood sheet. Smooth off the edges where the bridge joints were so that their lines run smoothly and that all the edges are smooth. Then fit the timber frames into the grooves on top of the false keel so that the top of the frames sit at the same level as the top of the false keel. You will see that frames Nos 8 to 14 are slightly higher than the first ones because the level of the top of the false keel is slightly higher at that point. Nevertheless the top of each of the frames must be at its corresponding level with the top of the false keel at that point. You will also see that the Break Beam (No. 8a) also sits into position just at the precise point where the level of the top of the false frame changes.

Now before going on, check that all these timber frames sit upright and are parallel with each other at right angles to the false keel. This is very important because if they are not parallel and do not sit upright as they should, it will be very difficult indeed to plank the hull later on. We do not think that you will have any adjusting to do, but if there so happens to be one frame out of line, you will have to adjust the fit with a knife or even add some small wood slivers. Now once you are completely satisfied with the alignment, you should then glue each timber frame into position with

wood glue, reset the frames into position again as before and leave this framework to completely dry out before going on. You must leave this in such a position so as not to disturb the lay of the timber frames. Prop it up between two books or clamp into position with suitable clamps. You will have noted that the top and bottom edges of the frame No. 14 will have to be chamfered down so as to fit flush into position.

A.2. Mast Reinforcing Blocks. (Fig. 3. No. 15).

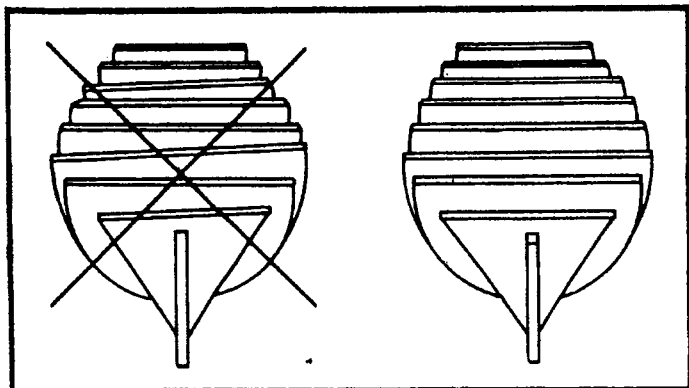
Take the 4 Samba wood blocks from the kit that you should use as the mast reinforcing blocks. These should be bonded into place with wood glue as shown on the plans: that is, one on each side of the false keel and at its top level and backing up flush against the backs of frame Nos. 6 and 9, so as to be flush with the top edge of these frames.

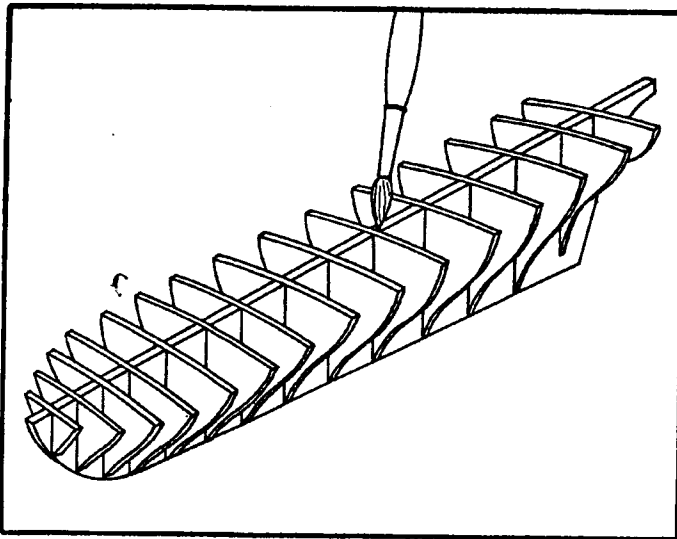
When all this is dry and firmly in position, file down smoothly, any part of the surface of these blocks, so as to obtain the same level as the levels of the tops of the frames. This is important because the decks will have to sit flush on top of all those points of contact. Make sure that the top edge of frame 14 lies at the same level as the tops of the frames 9 to 13.

A.3. The Decks. Forward and Quarter Decks. (Fig. 3. Nos. 16 and 17).

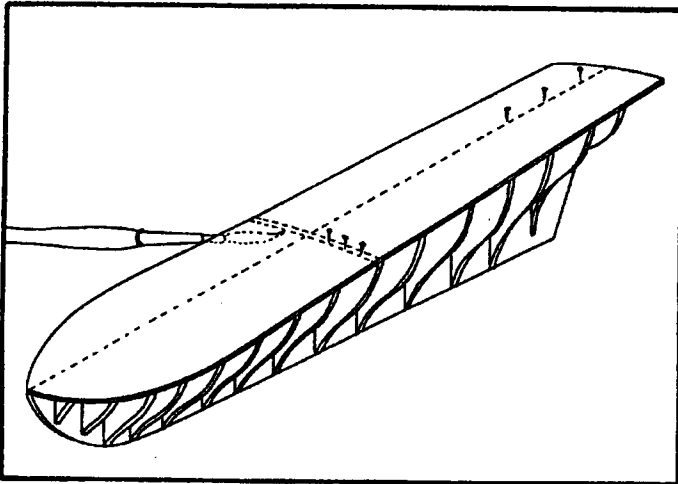
Remove these two decks from their plywood sheets in the kit. Now first of all dry fit these two decks into position to see its fit. The forward deck backing on to the break beam (No. 8a) and against frame 8. Once you are satisfied with the fit, hold it rigidly in that position and then draw an outline of the top of the false keel, timber frames and reinforcement blocks, on the underside of the deck with a pencil. Turn the deck over and lay in position again. You will then see where the frames are, and when you come to knock home some pin-nails through the deck, you will be able to see where to place them. Do not worry about the pencil marks as these will be covered up later on when you come to do the deck planking. However, before pin-nailing, use a good amount of wood glue and spread this over the tops of the frames, false keel and reinforcing blocks. Fit the forward deck into position as before and then start knocking in the pin-nails so as to reinforce the bonding of the glue. Knock these pin-nails in along a line at about 3 cm distance from each other and also along the line of each frame, working from the centre towards the outside of the frames. This is necessary because the bonding in itself will not be enough owing to the slight camber of the decks of the vessel.

Now repeat this for the quarter deck. The treatment is exactly the same except that it lies from flush on top of frame No. 8 to the end of frame No. 14 which you have previously levelled off. Leave this to dry out thoroughly





and once dried out you will find that you have a framework that is very strong, and strong enough to allow you to do any other work on the hull without fear of breaking any part.

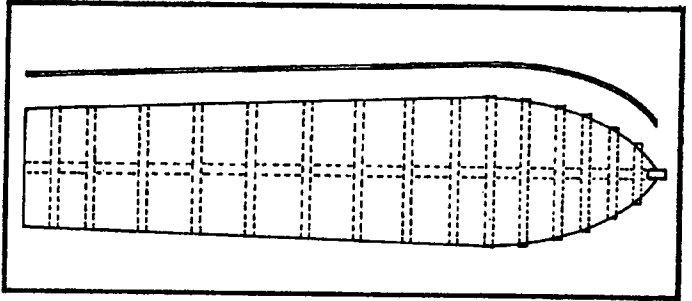


A.4. Preparation of the Hull.

To give the hull planks the best opportunity of adhering properly to the timber frames, it is necessary that the edges of the frames present the maximum of their width to the surface of the hull planks. As the framework stands at the moment, this would be difficult owing to the natural curvature of the vessel. Try it—just dry-lay one of the planks from the kit along the side of the framework from stern to stern and you see that some just barely touch one edge and particularly at the prow and aft. Well, you have to file down the edges of those frames in the direction of the curve of the hull. This is much easier to do than you think. First take a strip of old wood of about 50 cmns long and about 2 cmns wide on each of its four sides. Now cover this with rough sand-paper on all 4 sides, simply by wrapping it around the wood strip. Starting at the centre, file and smooth down gradually in the direction of the prow. You will find that the length of the home-made file will cover and lie across several frame edges at the same time, thereby giving you the smooth curved direction towards the prow. You can check how you are doing quite easily by simply laying a hull plank across where

you have obtained the necessary angle of the frame edges. Repeat this all the way down, then do the same in the direction of the stern until you are satisfied that you have got all the angles right. Do the same for the other side of the ship.

Next, you should smooth off the bottom edges of all of the frames with a smooth file so that at the point where the frame ends meet the false keel, it should give the appearance that they run into each other naturally as



if they were the same piece. Lastly smooth off slightly the bottom edges of the false keel along its full length and also where it comes up to meet the rudder. This is because later on you will be fitting a Keel and Rudder Post which is 6 mm wide—the same as the false keel—but when you have laid the last hull plank around this area, the width would be slightly greater than the keel and rudder post. The idea is that with a hull plank on each side of the false keel, plus the width of the false keel itself, should be about equal to the width of the keel which is 6 mm. Alright? Well, now you are ready to start planking the hull.

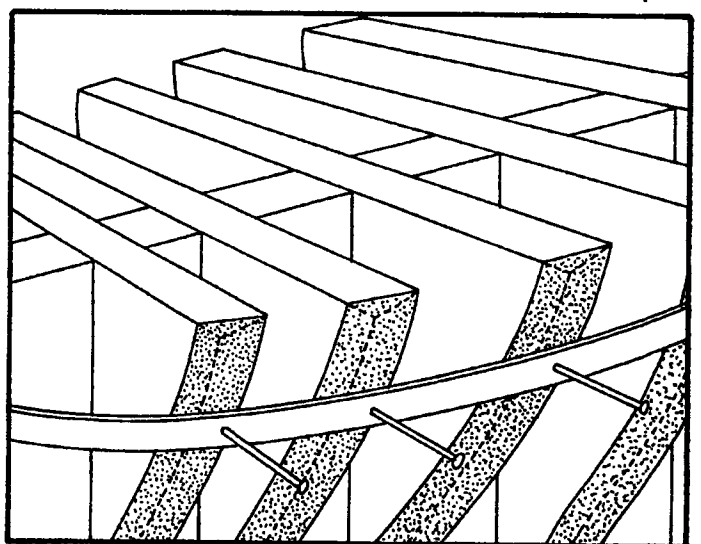
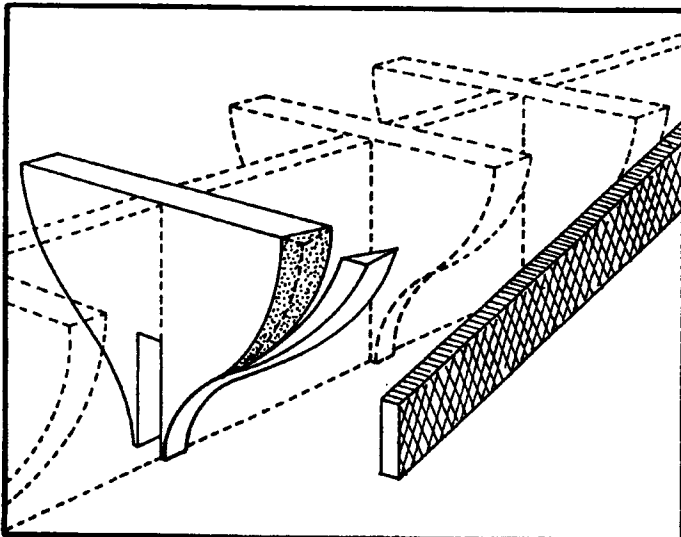
A.5. Hull Planking. (Fig. 4 and 5. No. 18).

The first thing we have to say is that this kit is provided with two layers of hull planking, to make the job easier for you. If you are not a very experienced model-maker and not accustomed to bending and soaking planks to take up the forms you need, then this job could be terrible for you. This is because hull planking woods are normally very tough and rigid. We looked for a very flexible wood for this and we found one—Oregon pine. Unfortunately it is white and a white hull would look out of place. So we supply another covering of very thin walnut veneers which are easy to bond into position over the first hull planking cover and also gives a beautiful finish to the hull. But the point is that if you make any mistakes on the first covering, you can always file down any bumps or fill in any delves you may have obtained, with wood filler, and this gives you the perfect opportunity to complete a perfect hull shape before bonding on the second cover with the thin walnut veneer strips.

However, if you are a very experienced model-maker and have had loads of experience in soaking rigid woods and shaping them with hot irons etc., you can always throw away the hull planks provided in this kit and buy rigid Bokapi strips from your local dealer. The choice is yours entirely. We are here to give you every assistance, and if you have any doubts, please do not hesitate to write to us. We are here to help you. Anyway, we will assume that you are going to use the woods provided in this kit, so let's start.

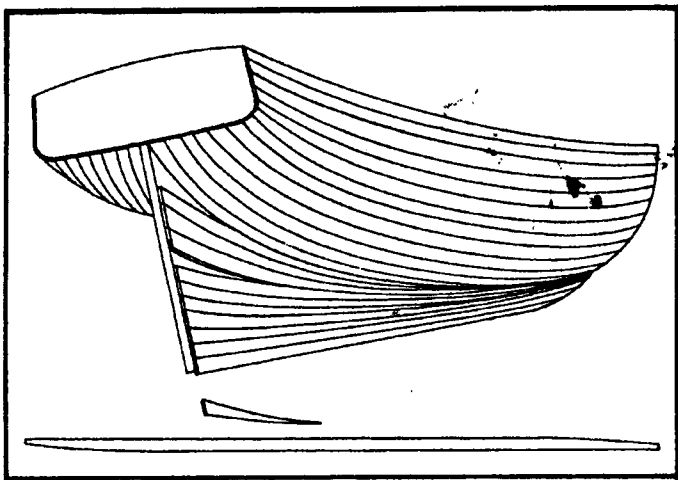
A.5.1. First Cover

Use the Wood strips of Oregon pine you will find in the kit (No. 18). First dry fit one of these along the length of the ship from stern to stern and at a point about 3 mm from the edge of the forward deck. This will be about 7 or 8 mm from the edge of the quarter deck when passing along that part of the vessel. When you have this right, apply glue to the underside of the whole length of the plank and fit it into position as you did before. Then knock in a pin-nail $\frac{3}{4}$ of its length through the hull plank and into the edge of the timber frame. Repeat this for all points where the plank contacts with every frame. Snip off the heads with pliers and knock home all of the pin-nails. Now you must repeat this for the other side of the ship and always remember when you lay a plank on one side of the vessel, immediately lay the corresponding plank of the other side of the vessel. This is impor-



tant so as to avoid the possibility of putting too much torsion strain on one side of the ship.

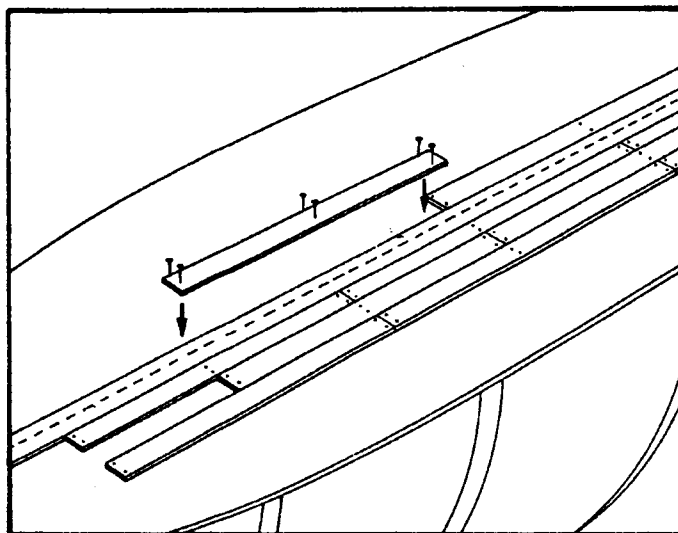
Do the same now for the next plank down and taking care that the edge of the plank is also bonded with glue so that it is not only bonded against the frames but also against the previous plank that you have just laid. Repeat for the other side. Now for the fifth plank (you have two on each side done), start about half way down the hull and let this plank take up the form of the hull, as here it is usually more pronounced. Do not force it into position, just let it follow the natural curve of the hull. Bond and pin-nail it into position as you have done before, and then repeat this in exactly the same way for the other side. This plank is called the master plank. Go on planking as before and working up from this master plank and then working downwards from it, always remembering to plank on alternate sides of the hull. Do not be alarmed if you see gaps forming, or that one plank tends to overlap its neighbour. This is quite natural owing to the curve of the hull and was the same on the original ship. You will just have to slowly slice off any overlaps or if gaps have open up, draw these on paper first and cut to fit. Use these papers as templates on which to make angled shapes from strips of hull planking and then carefully bond them and pin-nail them into position later on. Keep on planking like this until you have all of the surface of the hull covered. Snip off any surplus ends and examine the hull. If you have any filling in of any delves to do, now is the time to do it and let it dry out. Once dried out thoroughly, take a medium file and then your old home-made one and proceed to smooth off the whole surface you have planked so as to leave it smooth to the touch.



A.6. Deck Planking. (Fig. 6. Nos. 19 and 20).

To plank the decks of the ship, use the very thin white Mukali wood-strips of 0.6x5x600 mm (No. 19) that you will find in the kit. Use impact glue for this job. Take the first strip and apply impact glue to one side of the strip and when it is sufficiently "tacky", lay this all the way down the exact centre line of the ship from stern to stern, breaking it off at the 'tween deck step and continue down the centre of the quarter deck until you arrive at the stern. On this plank, mark with a pencil where the mast reinforcement blocks are so that later on you will know where to drill when you come to mounting the masts. A mark on this one plank is sufficient. Now the rest of the deck planking will cover up all the pencil lines you had to make earlier on to denote where the timber frames were to assist in fitting the decks.

With the rest of the wood strips for planking the deck, you should cut these off into lengths of 75 mm and after applying impact glue to one side of each plank, bond each one into place in a staggered fashion such as brickwork is done, and always working from the centre plank you laid first. Make sure that each strip fits flush with its neighbour and that the end joints of each are butted up against each other. If you have the patience and ti-



me to do so, you can add a touch of realism to this job by tinting the edges of each plank with a little ink so as to represent the caulking of the deck. The choice is yours, because to do this needs a deal of patience. We have seen for example, how one of our clients once used black thread between each plank to represent this caulking, and it was very effective. Although we are not recommending that you go to such lengths, it does show the ingenuity of some model-makers.

When all the deck has been planked, snip off all the overlapping parts, smooth them off with sand-paper and then smooth off the deck planking itself with fine sand-paper.

To finish off this part of the task, take the walnut strip (No. 20) from the kit, and dry fit it at the step between the forward deck and the quarter deck. Trim to size if necessary, as some shaping of the curve of the deck will be needed, and then bond into position.

A.7. Waterways, Bulwarks and Transom. (Fig. 7. Nos. 21 to 25).

The waterways of the decks and of the stern are made from three walnut strips of 1.5x4x600 mm that you will find in the kit. These waterways run round all the edges of the deck and flush to these edges. You will notice that the curve from the prow is quite pronounced and may cause some problems. So the wood strips will have to be bent into shape and then some assistance given to the bonding. The first thing you should do is to throw the wood strips into some water and leave them to thoroughly soak for a few hours. After this, wipe off any surplus water and then start to bend the wood strips into the shape that the edge of the decks have. If you can draw the shape of the decks on a piece of paper, then lay this paper on top of a wooden board, you can then knock in a few nails along the line of the edge of the decks. Then try bending the strips against these nails and as you go along knock in a few nails on the other side of the wood strips as they are bent to shape. You will find that the wood strips lend themselves to this bending when they are soaked well. Continue doing this until you have the wood strips in the desired position and held like this with the nails you have knocked into the board. When the wood strips have thoroughly dried out, you will find that they retain the shape given to them in this fashion. However, to give added support to the glue when you bond them into place, it is advisable to drill a few very small holes along the lengths of the wood strips at distances of about 3 or 4 cm apart in which pin-nails from the kit can be used to reinforce the bonding. These holes will be only of 0.5 mm diam. When the wood strips have thoroughly dried out, apply wood glue to their undersides and bond them into position flush along the edges of the deck and as you have shaped them. At the same time, knock in pin-nails from the kit into the holes drilled thereby reinforcing the bonding. These waterways are on the parts list Nos. 21-22 and 23, and can be seen on the plans.

A.7.1. The Bulwarks (No. 24)

Take the two bulwarks (No. 24) from the kit and dry fit them into position on both port and starboard of the ship and from the prow, with each one sitting on top of the uppermost hull plank and against the tops of the timber frames. You will see that they overlap at an angle at the prow. When you are satisfied with the position of these bulwarks, snip off these overlapping parts at the prow and immediately bond the joints together with ultra fast bonding agent, such as Loctite for example bond the remaining lengths of the bulwarks into position as required and then assist the bonding by knocking in a few pin-nails at positions where they make contact with the edges of the timber frames.

A.7.2. The Transom. (No. 25).

Make sure that the surface of the back of the timber frame No. 14 is flush with the end of the false keel and that the joint between its bottom end is smoothly in line with the end of frame No. 13. Then take the transom (No. 25) from the kit and dry fit it into place at the back of frame No. 14. Adjust it if necessary so that it lines up with the ends of the bulwarks at the stern. When satisfied with the fit, bond it into position over the end of frame 14.

A.8. Hull Planking - Second cover. (Fig. 9. No. 27-28).

It is at this stage when you can make the second covering of the hull with the hull planking of walnut veneer strips. These strips are darkish in colour and are very thin—0.6x5x600 mm. As they are thin, use impact glue for this job. Apply the glue to the surfaces and when "tacky" start to bond each one into position along the length of the hull and starting right at the bottom edge of the bulwarks that you have just fitted into place. Continue as before and make sure that each plank is flush with its neighbouring one. Slice off any surplus or overlap and fill in any space that may open up because of the curvature of the hull. Then continue to plank with the same strips, along the bulwarks that you have just fitted at the sides of the ship, and starting at their bottom until you arrive at their tops.

Before applying these strips to the transom, remember to apply the remains of the Oregon pine strips first and when dry, you can then apply the second covering of the thin walnut strips to finish off the job. Trim off and when dried out smooth off the whole surface with fine sand-paper to give you a satin touch finish.

A.9. Bulwark Stanchions. (Figs. 8 and 9. No. 26).

These stanchions should be cut to size from the walnut wood strips of 1x3x600 mm that you will find in the kit. There are 70 of them to be cut and you should measure off for yourself with one end resting on top of the waterways you have constructed and lying against the sides of the bulwarks to reach their tops. Normally they should be about 12 mm long, but it is better to cut them to size as you go along just to be sure. Use the plans to check the exact points where each of the stanchions (No. 26) should

be fitted into place. Use wood glue to bond them into position and as shown on the plans. When they have thoroughly dried out, file off at the tops and smooth off with sand paper to leave them at the same level as the bulwark tops.

A.10. The Stern, Under-stern, Stern Post and Main Keel. (Fig. 8. Nos. 29-30-31 and 32).

All these parts are to be found already cut in the kit with the exception of the main keel which you will have to take from a walnut wood strip of 6x10x260. To do this well, you should first of all dry fit the parts together in place and as shown on the plans. Mark the point where you should cut the main keel and carefully cut to size. Now bring the parts together and make sure that they all fit together with their ends as flush against each other as possible to give the appearance as if it was all one unit. When you have smoothed off any rough edges etc., and are satisfied with the fit, bond each part into place as shown on the plans with wood glue. If you think that this bonding needs some reinforcing, knock a few pin-nails through the parts so that their points enter and hold on to the false keel.

An important point when pin-nailing such woods. A pin-nail or any nail with a sharp point does not just force its way through the wood, but rather tends to wedge itself between the grain of the wood and very often causes the wood to split. To avoid this possibility, make a small hole in the wood with the point of a dart before knocking the pin-nail into that point. Alternatively, you can invert the pin-nail, point uppermost and blunt the sharp point by giving the point a sharp tap with a small tap hammer. The resultant blunted pin-nail will definitely force its way through the wood without splitting it.

A.11. The Rudder and Rudder Brace Hinges. (Nos. 33 and 34).

Take the pre-cut rudder (No. 33) from the kit and smooth off all its surface and edges with sand-paper. You will also find 3 pairs of hinges in the kit (6 parts) and (No. 34). These hinges go in pairs, and in each pair, lying back to back, the head of one should lie over the head of its neighbour. A small brass pintle, whose height is about twice the width of the hinge should be inserted through the heads as they lie one over the other so as to keep the pair of hinges united in place. As there are 3 pairs of hinges, you will see from the plans that you will have to cut 3 small recesses in the rudder and on its edge where it will come in contact with the rudder post (No. 31). These 3 recesses should be just sufficient to take the 2 heads of the hinge pair one on top of the other and when inserted will keep the pintle imprisoned in place, which in turn will keep the hinges in place. Use super redip glue to clamp the legs of the hinges over the blade of the rudder (one on each side) hold in position with pliers and knock in a pin-nail into each of the holes on the side of the hinge to hold its place on the rudder. When you have the 3 hinges on the rudder blade, do the same for the neighbouring hinges, only this time over the rudder stem post (No. 31). Wipe off any surplus glue with a damp cloth and smooth off with sand-paper.

A.12. Forecastle Breast Plate and Poop Cover. (Fig. 10-11. Nos. 35-36).

Take the Forecastle breast plate from the routed sheet in the kit and dry fit it in the place designated for it at the prow and as shown on the plans. Adjust if necessary and when satisfied with the fit, bore the holes as needed for the belaying pins and as are shown on the plans. You should then bond the part into position at the prow and against the edges of the bulwarks. (Fig. 10).

A.12.1. Poop Cover

This part is also obtained from the routed sheet in the kit (No. 36). As before, dry fit this into position at the stern transom and also against the sides of the bulwarks. Before bonding into position, examine the plans to ascertain the position of the holes for the belaying pins which should be drilled. You will also have to drill another hole in the centre line and as shown on the plans in order to take the pass of a double block later on. When this has been done, smooth off with sand-paper, apply wood glue and bond the poop cover into position and as shown on the plans.

A.13. Bulwark Rails and Taffrails. (Figs. 9-10-11. Nos. 37-40).

The wood strips to be used in this part are of Ramin, a whitish colour and of 1.5x5x600 mm long. Here you may have the same problem as with the waterways in that they will have to be bent to the shape of the hull. This wood however lends itself more easily to bending so it will not be so difficult. However, it is best to soak them for a little, wipe off the excess moisture and then starting at the prow, tentatively bend the wood strip along the top of the bulwarks which you now have in position. When you have these bent to almost the exact line of the top of the bulwarks, leave them to dry out well. They will retain their new shape. Apply super rapid glue and then start at the prow again and hold the wood strip in position until it is stuck, then continue bending slightly and holding in position until the bond is complete. Bit by bit you will find that the wood strip retains its position on top of the bulwarks. Cut off when you come to the division between the forward deck and the quarter deck bulwarks and start again at the prow for the other side of the ship. Start again for the top of the quarter deck bulwarks and continue until you have these two sides completed. Cut off a small strip of the wood strip to fit between the rails of the forward deck bulwarks and the quarter deck bulwarks. This is the shoulder rail (No. 40) and as you can see, it is quite small. You should do this for the other side of the ship too.

The last rail to be fitted is the Taffrail (No. 39) which is merely the same rail at the stern of the ship. Fit and shape this well to fit exactly between

the bulwark rails you have just fitted at the sides of the ship. When all this has been thoroughly dried out you should smooth off with some very fine sand-paper.

A.14. Topgallant and Stern Topgallant Rails. (Nos. 41-42-43).

In reality, the quarter deck bulwark rails are the topgallant rails, because what we are about to do now is to make a false continuation of the forward deck bulwark rails. For this you should use the Ramin wood strips of 2x2x600 mm and start to bond these on each side of the ship and starting exactly where the forward deck bulwark rails finished, so as to give the impression that it is a continuation of these. When you have this finished continue to do the same round the transom at the stern of the ship.

A.14.1. Trail Boards (No. 43).

Take the 2 walnut strips of 1.5x5x200 mm from the kit and cut off length of 75 mm. Then with a file, shape these parts to give them the form they have as seen on the plans. Smooth off and immediately bond them into position at the prow and on top of the forward deck bulwark rails (Fig. 10).

A.15. Belaying Pin-racks (Interiors) - (Fig. 9. Nos. 44 to 46).

Select the Ramin wood strips of 1.5x5x600 mm from the kit and looking at the plan view of the plans, take measures of these belaying pin-racks, and cut off the wood strips to these sizes. Round off the edges as shown on the plans. Then count the number of belaying pin holes on each of them and drill holes of Ø 1 mm at equal distances from each other, so as to take the belaying pins later on. While doing this, you should drill a Ø 2 mm hole at the place indicated on the plans where later on you will be fitting the catsheads (No. 56). Smooth off the prepared belaying pin racks with sand-paper and then bond them into position directly under the bulwark rails and using super rapid glue.

A.16. The Wales and Prow Exterior Reinforcement. (Fig. 9. Nos. 47 to 49).

Make the upper wales first by using the Ramin wood strips in the kit of 2x2x600 mm. Use super rapid glue as the bonding agent. Start at the prow and follow the line of the waterways that you have previously constructed on the deck edge of the ship. Apply the rapid bonding glue as you go along to ensure that the wale strips bonds properly along the line of the waterways. Repeat this for the other side of the ship. For the other lower wales use the same method but this time using the darker Sapelia wood of 2x2x600 mm, and bond these into position immediately below the upper wales and in such a way that they will cover the joint between the second hull plank covers and the second covering of the exteriors of the bulwarks. (Fig. 9).

A.16.1. Prow Exterior Reinforcements. (No. 49).

You should now take a Sapelia dowel of Ø 5 mm from the kit and cut off a length of 45 mm. Holding this in a vice, carefully cut this dowel evenly down its centre to give you 2 segments. One is for the starboard side of the prow and the other is for the port side. Now dry fit these against the prow ends of the ship and you will see if you have to form any curve on the base of these parts. If so, form them so that they will lie flush against the sides of the prow and once you are satisfied with the fit, apply wood glue and bond each piece into position and as shown on the plans. Make sure that at the prow they will fall into a position which allows them to be placed later on over the point where the bowsprit will emerge.

A.17. Bulwark Rail Stanchions and Propeller Group. (Fig. 12. Nos. 50 to 55).

In one of the plastic bags attached to the tray card in the kit, you will find some wooden stanchions of approx 8 mm. (No. 50). If you now look at the plans (Side elevation), you will be able to mark off the places on bulwark rails where these should be fitted. Before doing so however, you should drill a small hole through the heads of each of these stanchions so as to take the brass hand-rail that passes through each stanchion. Then bore a small hole through the bulwark rails at the places you have marked and where the stanchions will be inserted. Now bond each stanchion into position through the bulwark rail leaving the shoulder of the stanchion bonded to the bulwark rail and with the holes through the heads of them facing in the direction of the rails. These holes should not be more than Ø 1 mm. When you have the stanchions fitted into place, take the Ø 1 mm brass wire from the kit, carefully straighten it out and proceed to thread it through the holes in the heads of the stanchions to form the hand-rail. Bend round at the ends to meet the bulwark tops. Do the same for the other side of the ship.

A.17.1. Propeller Unit.

These parts are to be found in one of the plastic bags in the kit. First take the 2 propeller shafts (No. 52) and the shaft bearings (No. 53) and the propellers (No. 54). Take one of the propeller shafts and fit one of the bearings near to the extreme end of the shaft. Bond this with super rapid glue and let it dry out. Then slip another bearing over the other end of the shaft and bond it into position in the same way and leaving a distance of about 10 mm free at the end of the shaft to take the propeller. Now with the propeller, drill through the centre to assure that the diam., is Ø 2 mm to take the shaft, then immediately bond the propeller over the end of the shaft with the super rapid glue. Repeat all this for the second propeller unit. Now the next part could be difficult if you don't get everything lined up properly. As each of these propeller units have to be fitted one on each side of the stern of the hull, you will have to be very careful in aligning each one so that they lie equidistant and parallel to each other. The first thing

to take into account is that the propellers should lie at a point where they would not touch the sides of the vessel when they were revolving. From this point lead back horizontally until you meet with the spot on the hull where you will have to make a \varnothing 3 mm drilled hole to take the shaft and its bearing. These two points must be symmetrical on the hull of the ship. When you have obtained this, drill the \varnothing 3 mm hole on either side and bond in the propeller shaft units with super rapid glue. Now take the shaft supports (No. 55) and dry fit them into position, one on each side of the ship. Mark the points with a pencil and then carefully knock in some pin-nails through the holes provided to retain the groups secure.

A.18. Drilling the Scuppers.

As you can see from the plans, (Side elevation), the vessel has a series of scuppers to let the sea water run away back to the sea. These appear on the bulwarks of the ship and in line with the top of the waterways. Choose a drill of somewhat less than \varnothing 2 mm and drill through the bulwarks at the centre points of where you have decided to mark the scuppers and try and elongate them with the same drill. The length of these should be about 6 mm and when you have them open, try squaring them off and using a nail file or something similar so as to leave you with scuppers of about 2x6 mm and all at the places marked as on the plans.

A.18.1. Drilling for the Mastings.

You will of course have the centres of where the masts will go on the deck when you marked the first of the deck planking. You will need a twist drill of some \varnothing 8 mm for this. You should drill to a depth of some 15 mm and taking advantage of the mast reinforcing blocks, but before doing so take a reading from the plans to ascertain the angle from vertical of the masts. You should try and obtain this angle when you drill for the masts. Now change the drill to one of \varnothing 5 mm and drill through the prow of the ship and right in line with the top of the prow stem of the ship, so that the Bowsprit can be fitted.

Change the drill to \varnothing 3 mm, and select the scrollwork with anchor hole from the kit. Place this into position at the side of the prow and as shown on the plans and drill through the opening to allow for the anchor chain. Once this is done, shape and smooth off with a file. Repeat this for the other side of the hull.

Use a twist drill to make the chain hawse pipes. This drill should be of \varnothing 5 mm. There are two of these and their positions should be fixed by examining the plans (Plan view).

Change the twist drill for one of \varnothing 2 mm and make a small hole in the side of the bulwark near the stern and opposite the capstan. Repeat this for the other side of the ship and later on will serve as the stern hawse pipe (No. 57).

Smooth of all the edges with fine sand-paper.

A.19. Varnishing.

At this stage it is worth while applying some clear varnish to the vessel. Such a clear varnish should be thinned down to about half its consistency with adequate thinners. Apply the varnish and leave to dry out. When dried out, rub over the surface with a small piece of steel wool and apply another coat of varnish. When this has dried out, once more rub over with steel wool to give an even and smooth finish.

The colour scheme of the BLUENOSE II is given at the end of these instructions for those who wish to paint its hull as it is.

SECTION B

SUPERSTRUCTURE

This section describes the way in which all the items of the superstructure on deck should be built. It is advisable that each item be constructed and left apart until all of the items have been constructed and then fitted into position later on. Anything to the contrary will be specified in these instructions. The reason for leaving the final mounting until the end is that you will probably have some adjusting to do on the base of each item owing to the curvature of the decks so that all these items sit properly over the deck.

B.1. The Bowsprit Bitts. (Fig. 13. Nos. 61 and 62).

The 2 bitts are to found already cut in the kit, and all you have to do with them is to shape their top ends as in the plans. You should do this with a thin file and finish off by smoothing off with sand-paper. The cross-bar between the bitts should be cut from one of the walnut wood strips in the kit and measuring 1x4x600 mm. Take your measurement of the part to be cut off either from the plans or directly from the deck you have constructed. Make a small hole on the upper surface of the cross-bar and glue an eye-bolt (No. 138) into it and when dry attach a single block to this eye-bolt (No. 146), with a little galvanised wire. Smooth off and bond the cross-bar into the grooves of the bitts.

B.2. The Windlass (Fig. 14. Nos. 63 and 64).

The parts for this unit will be found in one of the plastic bags that are stapled to the tray card in the kit. Drill a \varnothing 3.5 mm hole on each of the sides of the windlass cover (No. 63), at a point at about half way up its sides. Bond the brass whipping drums (No. 64) to each side of this windlass by applying super rapid glue to the axle of each drum and allow them to bond themselves in that position.

B.3. The Companionways. (Fig. 15. Nos. 65 to 69).

The body of the companionway itself (a prefabricated walnut block No. 65) will be found in the kit. Most of the other parts are to be found in the die-cut

plywood sheet of 1.5 mm. Remove these parts carefully from the die-cut sheet and smooth off their edges with fine sand-paper. Bond the roof part (No. 66) on to the top of the block (No. 65) and as shown on the plans. Make sure that you have it well centred.

To make the booby hatch runners, take one of the Sapellia wood strips of 2x2x600 mm and cut off 2 lengths of 15 mm each and smooth off with sand paper (No. 67). When you have carefully removed the booby hatch cover from the die-cut sheet and smoothed off its edges, use this as a guide to determine the place where the hatch runners should be located and as shown on the plans. When you have these located, first bond the runners into position and then bond the booby hatch over these at the position you have just determined. (No. 68). After you have smoothed off the surface and edges of the companionway door (No. 69), bond this into position as shown on the plans. When this has dried out, construct a door handle in the appropriate place by knocking a pin-nail half-way in.

Construct the second companionway for the quarter-deck behind the main mast in exactly the same fashion.

B.4. The Prow Skylight. (Fig. 16. Nos. 70 to 74).

The body of the skylight (No. 70), a walnut block will be found pre-formed, in the kit. Smooth it off with sand paper. To make the lengthwise and cross transversal frames (Nos. 71 and 72), take measurements from the skylight block and cut off the lengths you need from the Flamin wood strips of 1x3x400 mm. Smooth off and bond them into place with wood glue and as shown on the plans (Fig. 16). When this has dried out, take the brass wire of \varnothing 0.5 mm from the kit and cut off 8 strips of approximately 12 mm to represent the skylight window bars (No. 73). Adjust to size if necessary and bond into position and as shown on the plans. To make the skylight central bar, cut a strip of appropriate length from a walnut wood strip of 1x4 mm. Smooth off and bond into position as shown on plans.

B.5. Main Hold Unit. (Fig. 17. Nos. 75 to 88).

The main body of the hold unit (No. 75) will be found in the kit, and as always, you should smooth off all its edges and surfaces first. Carefully remove all the parts for this unit that are on the die-cut plywood sheet of 1.5 mm and smooth off their edges. Now take the part that will represent the rooftop of the hold (No. 76), and locate it in place so that it sits correctly and when you have this done, bond it into that position with wood glue. This roofing should now be planked, using the thin Mukall white wood strips of 0.6x5 mm. Apply impact glue to one side of the planks (No. 77) and immediately start laying them across the roof cover and each one hard up against its neighbouring plank. Leave this to dry out, and once dry, cut off all the overlapping parts and smooth off with sand paper.

This main hold has two skylights, which are identical to the prow skylight you have already constructed, and these should be built in exactly the same way. Once these have been built, bond them into position over the rooftop of the main hold and as shown on the plans.

The storage locker (No. 83) will be found in the kit and after smoothing off its edges and surfaces, you should then bond the two locker covers (No. 84) into position and as shown on the plans. This too, should be bonded on to the rooftop of the main hold, between the two skylights and as detailed on the plans.

As before, the booby hatch runners y (No. 85) should be cut from the sapellia wood strip of 2x2 mm and to lengths of about 15 mm. But take your readings from the plans to be sure. As before locate their position on the rooftop by placing the booby hatch over them as a dry fit first to mark their positions and when you have it right, bond the runners and the booby hatch top (No. 86) into position with wood glue. When you have this done, immediately bond the companionway door into position just as you did before for the first one. (No. 87).

Now make the corresponding drill holes of \varnothing 2 mm on the bulkhead sides of this main hold to take the port holes (No. 88). The positions of these are clearly shown on the plans.

B.6. Boom Supports and Fife-Rail (Fig. 18-19. Nos. 89 to 95).

The parts for the boom supports are to be found in one of the plastic bags in the kit. File down the 4 faces of the wooden support in an even manner until it makes a pyramide shape but with a square flat top of about 3 mm. Smooth off with fine sand paper. Drill a vertical hole down from the top of this support with a diam., of about \varnothing 1.5 mm and to the depth of the foot of the boom adjusting rod (No. 90). Cut one of the \varnothing 8 mm brass rings from the kit in half and with a spot of super rapid glue bond this into position through the eye-top of the rod at its half-way point so as to produce the cradle for the boom. (No. 91). Then bond the foot of the rod into the hole you have just drilled on the top of its wood support.

Repeat this for the boom of the main mast, but this time the wood support will be shorter as it will stand on the roof of the cabins and not on the deck itself as the first one does.

B.6.1. The Fife-Rail.

Take the 2 larger bitt legs of the fife-rail (No. 92) from the kit and shape the heads of each with a thin file so as to give them the form as shown on the plans. Smooth off with sand paper. Then take a walnut wood strip of 1x4 mm and cut off a strip of 35 mm to act as the cross-bar of the two posts. Drill small holes through this strip as shown on the plan where the centre one will house an eye-bolt bonded into place. Smooth off this strip with sand paper and then bond it into place between the grooves of the two bitt stands (No. 92). Now remove the rounded pin-rail from the die-cut sheet (No. 94) and immediately start to drill the holes to take the belaying pins later on. When you have this done, smooth off with sand-paper. Then take the third and smaller leg of the fife-rail from the kit (No. 95) as the

file-rail support. Smooth off and then bond the curved rail on top of this and at its centre point. Apply wood glue to the ends of the curved rail and bond against the back of the file-rail bits and as shown on the plans. In the centre of the cross-bar where you have fitted an eye-bolt, attach a double block with a little galvanised wire. (No. 162).

B.7. The Bilge Pump and Chimney. (Fig. 20-21. Nos. 96 to 103).

All the parts comprising the bilge pump are to be found in one of the plastic bags in the kit. Bond the pump handle support (No. 97) to the side of the bilge pump (No. 96), fit the pump handle (No. 98) into place with its stay (No. 101), which will also pass through the eye of the connecting rod (No. 99). Finally bond the water exit to the side of the pump with rapid setting glue (No. 100).

To mount the chimney, take the 2 brass tubes (Nos. 102 and 103) and bond the smaller one horizontally on top of the longer one as the chimney and its cowl. Use super rapid glue for this.

B.8. The Cabins. (Fig. 22. Nos. 104 to 120).

The bulkhead walls of the cabins should be cut from the walnut wood strips of 3x13x300 mm. Take your measurements from the plan view guide. The port and starboard side are of the same size, but those of the stern end are shorter than those of the fore end, owing to the increase of the width of the deck at that end. The side strips are No. 104 and the transversal ends are Nos. 105 and 106. Smooth off these strips with sand paper and then bond the ends together in the form that you see on the plans. Leave this to thoroughly dry out. Now carefully remove the cabin roof (No. 107) from the die-cut sheet, smooth off and bond into position on top of bulkhead cabin walls that you have just constructed. This roof has now to be planked and for this you should use the thin white Mukali wood strips of 0.6x5 mm. Apply contact glue to this planking and when "tacky", start to lay each plank along the length of the cabin roof and being careful to lay each plank flush up against its neighbouring one (No. 108). As the roof is wider at one end, start your planking by laying the first straight down the centre of the roof, and the remaining planks on each side to maintain straight lines. Leave this to dry out and when ready, cut off the surplus strips overhanging the sides and lightly smooth off with fine sand-paper. To make the booby hatch covers (No. 109) cut off 4 strips of the sapella wood of 2x2 mm to lengths of about 15 mm and smooth them off with sand-paper. Now bond these into place at the edges of the indents of the roof of the cabin and from their edges facing inwards. Then take the booby hatches from the die-cut sheet (No. 110). Remove them very carefully from the sheet and smooth off their edges and bond them into place on top of the booby hatch runners and so that their forward edges lie in line with the edge of the cabin roof. Now carefully remove the cabin doors from the die-cut sheet (No. 111), smooth off their edges and immediately bond them into place as shown on the plans. As before, when all this has dried out, knock a pin-nail half way in, on the doors to represent the door handles.

B.8.1. Cabin Skylight.

The body of the skylight (No. 112) will be found in the kit already cut to shape and all you should do is to smooth off its surfaces with some sand-paper. Form the skylight window frames both longwise and transversal (Nos. 113-114) by cutting off the appropriate lengths of 20 mm and 8 mm from the ramin wood strips of 1x3x400 mm. Make sure of the sizes by taking your measurements directly from the skylight block itself. Smooth off the strips you have cut off and bond them into position and as shown on the plans with wood glue. Then cut off 8 strips of the brass wire of Ø 0.5 mm to be found in the kit and to lengths of approx 12 mm, to represent the skylight window bars and bond them into position with super rapid glue. (No. 115). Then finally cut off a wood strip of 1x4x20 mm from the walnut wood strip of this dimension to represent the skylight central bar (No. 116) and bond it into position along the top of the skylight and as shown on the plans.

B.8.2. Inflatable Raft Covers and Hand Rails.

The life raft supports are made by cutting lengths of 45 mm from the Sapella wood strips of 2x2 mm. Smooth them off with sand-paper and place them in position on top of the roof of the cabin. Use the round inflatable raft covers to fix their correct positions and when you have this done, bond each one into position. Before bonding the life raft containers into position, paint them white and later on paint their hoops in black. The supports are No. 117 and the life raft containers No. 118. Bond them into position and at the same time bond the Boom support (No. 89).

To mount the Post-rails and the hand-rail at the edges of the cabin roof, first of all, make small drill holes equidistant from each other as shown on the plans, where you should bond the post-rails into position, with rapid glue. Then take the brass wire of Ø 1 mm from the kit and thread this through the holes in the posts to form the hand-rail. These reference Nos. are 119 and 120. Keep this rail wire straight and round off at the ends to meet the deck roofing.

Finally make drill holes of Ø 2 mm on the cabin bulkhead walls to represent the port holes and into these bond the round brass rims (No. 88). Bond the skylight unit you have just mounted on top of the cabin roof.

B.9. The Steering Unit and Navigation Lights. (Figs. 23-24. Nos. 121 to 126).

Take the Taffrail Box (No. 121) from the kit and smooth off all of its surfaces. Now take the Helm (No. 122) from the kit and lay it hard against the fore face of the Taffrail box to ascertain its correct position. Drill a small hole at the centre of the helm and into the taffrail box and bond them together with the Helm rivet (No. 123).

The Navigation light boxes are to be found in the kit. All you have to do is to bond the light boxes to the lids (Nos. 124 and 125) and then bond one of the navigation lights (No. 126) into the box. There are two of them and will be fitted into place on the shrouds later on. (Fig. 24).

B.10. Deck Cleats and Anchors. (Fig. 25-26. Nos. 127 to 130).

In one of the plastic bags stapled to the card in the kit you will find the deck cleats (No. 127) and their ties (No. 128). Use a spot of super rapid glue to fit and bond the ties through the deck cleats.

Take the anchor units from the kit and with the same rapid glue fit the anchor stocks (No. 130) over the heads of the anchors (No. 129). When bonded into position, fit a brass ring Ø 5 mm (No. 160) to the end of each anchor.

B.11. Mounting the Superstructure.

Now that you have all the items of the superstructure built up, now is the time to try them out on deck. As stated before, with some of these items you may have to adjust their bases owing to the natural camber of the decks. So place each item in position and touch it with your finger. If it wobbles, then here is where you will have to make some adjustments so that the unit sits properly on top of the surface of the deck. When this has been done and you are satisfied with the position of each one, apply a coating of clear varnish to each piece into position on the deck.

B.11.1.

Take a good look at the plan view of the deck and note the places on the deck where the eye-bolts should be placed and also where the deck cleats should be fitted (Nos. 127 and 138). Before bonding these into place on the deck, make small holes with the point of a dart where the eye-bolts should be inserted and drill small holes where the deck cleats should be bonded into the deck. Each of the eye-bolts should have a fastening ring attached to each of their heads (No. 139). In the same way make the positions for the eye-bolts on the prow stem (No. 29) and the Prow exterior reinforcements (No. 49).

B.11.2.

Fit and bond the Ventilator shafts (No. 133) on deck at the places shown on the plans. You should make some Ø 2 mm drilled holes previously so as to take these. Use super rapid glue to bond them into position.

The Dory boats are stored upside down on each side of the main hold, but before you do so, make and fix their cradles on deck as follows: Use the Ramin wood strip of 2x2 mm and cut off approx 20 mm lengths. These are 4 of these, and you should take their measurements from the model itself, just to be sure. When you have these 4 strips, smooth them off with sand-paper and bond them into their respective positions with wood glue, the placed the Dory boats upside-down and over these cradles. (Nos. 136 and 137).

Find the Capstan in the kit (No. 134) and with a spot of super rapid glue, bond it into position at the stern of the vessel and as shown on the plans. At the same time fit and bond into position, the rim covers of the stern hawse pipe (No. 57) and the chain pipes (No. 58).

Fit and bond the anchors catheads (No. 56) into position with super rapid glue and through the holes that you have previously made to house each of them (1 for each anchor). Then bond the scroll-work with anchor hole (No. 59) into position (one on each side), into place with a few drops of super rapid glue and smooth off the rims of the anchor hole if you find it necessary.

B.11.3.

Rig up the anchors as shown on the plans with a double block (No. 162) and the anchor rigging (No. 131), and then immediately fit the anchor chains (No. 132). Then with the super rapid glue, bond the name-plate to each side of the ship and at the place indicated on the plans. With the same type of glue, bond the mooring chocks (No. 135) on top of the trail boards (No. 43) and another on top of the forward bulwark hand-rails. Their places can be seen on the plans.

SECTION C

MASTING

C.1. Preparation.

The masting has to be made from the Sapella dowel strips to be found in the kit. The lower Foremast (No. 149) and the lower Mainmast (No. 167), should be cut from the Ø 8 mm dowels, and 310 mm length for the foremast and a 340 mm length for the mainmast.

The top foremast should have a length of 190 mm cut from the Ø 5 mm dowel and another length of 195 mm of Ø 5 mm cut off for the top mainmast. (Nos. 158 and No. 169).

The Bowsprit should be cut from a Ø 5 mm dowel and to a length of 135 mm (No. 142); as should also be cut the foremast gaff (No. 163) to the same dimensions. The main gaff should be cut from a Ø 5 mm dowel and to a length of 195 mm.

The foremast boom (No. 166) should be cut from a Ø 5 mm dowel to a length of 135 mm and the mainmast boom from a similar dowel, but to a length of 310 mm (No. 171).

Now having cut off these mast sizes, the first thing you should do is to gradually reduce the diam., size of each one in a gradual tapering fashion, and as evenly as you can manage. The Ø 8 mm dowels for the fore and main lower masts, should be gradually reduced to Ø 4 mm at their other ends and all the other Ø 5 mm dowels gradually reduced to Ø 2 mm at

their other ends, with the exception of the two top masts of the fore and main masts. These should be reduced to almost a point.

Now this gradual tapering down from one end to the other can be a tedious job, especially if you try doing it exclusively with sand-paper alone. We at Artesania Latina, have found it much easier to do, by simply wedging a carpenter's plane, upside down and between the thighs of your legs and simply drawing the dowel across the bottom of the plane. Once you have obtained the measurements specified, the surface is a bit irregular, but by then it is much easier to round and smooth off with the sand-paper. Keep on smoothing down until you are satisfied that the tapering effect is gradual and that the masts are as round and uniform as possible. Leave them with a satin smooth finish.

C.2. Preparing and Mounting the Foremast and Mainmast Gaffs. (Figs. 27-31. Nos. 145-163-164-165-172).

Take these two gaffs which you have previously prepared and cut a groove from the end of their widest ends and at their midpoint, to a depth of 17 mm, so that the crab-jaws (No. 164) can be fitted and bonded into them and as shown on the plans. Previously you will have found these crab-jaws in the kit and they should be smoothed down first with sand-paper and then a small hole made on each side of the jaw. When the crab-jaw has been fitted and bonded into the groove you have made on the thicker end of the gaff, make the crab-jaw fastener (No. 165) with a piece of \varnothing 1 mm brass wire fitted round one of these holes, rounded round to represent the width of the mast and finally fixed through the other hole on the crab-jaw. (Fig. 27 and 31).

Take one of the mast end ferrets (a brass strip of 3x15 mm) No. 145, and carefully wrap it round the end of this foremast gaff. When you have obtained the proper shaping, bond it back into place with and eye-bolt jammed in and bent round, as shown in Fig. 27. Pierce the gaff with the point of a dart and into which you should bond an eye-bolt. The places on the gaff to do this should be taken directly from the plans of Fig. 27. At this point you should apply a coating of clear varnish and leave to dry out. When dried out fit some of the brass rings (No. 160) over the end of the gaff, then start to fit both single blocks and double blocks (Nos. 146 and 162) along this gaff. The blocks using the eye-bolts should be fixed with a little galvanised wire to be found in the kit whereas the others should be attached with cotton reel and as shown on fig. 27.

Now repeat all this for the mainmast gaff (No. 172) whose details and reference nos. are to be found on Fig. 28. of the plans.

C.3. Preparing and Mounting the Foremast and Mainmast Booms. (Figs. 27-28-31. and Nos. 138-145-160-164-165-171).

Take these two booms which you have previously prepared and just as you treated the gaffs, do a similar job with these booms. That is prepare the crab-jaws after smoothing them off with sand-paper, with the hole on each side of the jaw and forming its jaw fastener with the brass wire as before. Once more you will have to cut up a groove from the thicker end of the booms so as to take the crab-jaw which should be bonded into this groove. Use the brass strips of 3x15 mm (No. 145) as the boom end ferrets and when shaped, bond into place. You will see from Fig. 28 that the main mast boom has an eye-bolt jammed into the ferret when you come to bond that part into position, which is then bent round. Now you should apply a coating of clear varnish to the booms at this stage and when dried out fit a number of brass rings (No. 160) over the end of the booms. Fit a double block (No. 162) into position on the booms as shown on Fig. 27 and 28, and as before use a little galvanised wire to do this job.

C.4. To Mount the Lower masts to the Top masts. (Figs. 27-28-29-30. and Nos. 146-148-150 to 162-167 to 170).

The masts are united in their exact positions mainly by the mast caps (No. 159) for the foremast and (No. 170) for the mainmast. Take these parts from the kit and immediately insert the top end of the lower mast into the wider hole of the mast cap until it just appears above its surface. Bond this into that position with wood glue and immediately fit the lower end of the topmast through the other hole in the mast cap, until it passes down about 40 mm approximately, and bond that in position as well. This is clearly seen in Fig. 7. Now take the cross-trees and the trestle-trees of the masts (Nos. 156-157-155) from the kit. Each of these parts have grooves already made in them, and when you come to bond them into position around the junction of the lower and top masts and as shown in Fig. 29, they should mutually sit into the grooves that each have. This support is further supported by the trestle-tree hounds (No. 154), which you will find in the kit and should be bonded into place hard against the masts and directly below the bottom of the trestle-trees, and as shown in Fig. 29. When this group has dried out you should apply a coat of clear varnish and leave to dry.

When this has dried out, fit 4 of the \varnothing 5 mm brass rings over the top mast and on its very end bond one of the mast trucks into place. (No. 161). Now when you examine Fig. 28 of the plans, you will see where you have to add some eye-bolts, single and double blocks. As before, the places where the eye-bolts should be inserted should be marked and prepared with the point of a dart and when you have the eye-bolts bonded into their respective places, use some of the galvanised wire from the kit to fasten the single blocks and double blocks into place.

Complete the mounting of the masts by fitting in over the bottom of the mast, the following: the gaff, then its 5 mast rings (No. 158) and of \varnothing 8 mm, and then boom. Then pass one of the boom support wood rings (No. 148) over the bottom end of the mast and at a suitable distance up, (take measures from the plan Fig. 27), bond it into position with wood glue. When this has dried out, construct the mast cleat supports by cutting off parts

from a ramin wood strip of 1x3x300 mm. The immediate under supports are only of 5 mm long and should be shaped as shown in Fig. 27. Bond them into position and then cut off more strips from the same wood strip and to the length from the underside of the boom support No. 148 to the bottom of the lower mast. Smooth off and shape these as shown in Fig. 27. Drill \varnothing 1 mm holes down the length of these strips and as shown in Fig. 27 to take the mast cleats. These cleats should be cut from the length of brass wire in the kit and should be cut in 100 mm lengths. When cut, fit through these holes and bond into place with super rapid glue. Lastly fit another wood ring (No. 148) over the bottom end of the mast, apply wood glue to its underside and also into the mast hole you have previously drilled on the deck of the ship and fit and bond the whole mast structure into place and as shown on the plans.

The preparation and construction of the other mast is exactly the same as for this one. The reference nos. for the same parts are different just to distinguish one mast from another, but the procedure is the same. The mast also has 6 brass rings (no. 153) instead of 5 as has the first mast described above.

C.5. The Bowsprit. (Fig. 28. Plan and side elevation view. Nos. 138, 142-146).

Now you have previously shaped the bowsprit as described at the beginning in C.1., you should take the Bowsprit fins and the Bowsprit fin block from the kit (Fig. 28, Nos. 143 and 144). Form and bond them into place and as shown on Fig. 28 and then apply a light coat of varnish. Once this has dried out, take two of the brass strips (No. 145) and form them into brass ferrets with pliers and at the places indicated on the plans. (Fig. 28). Drill a very small hole on these ferrets into which you should bond the eye-bolts as shown on Fig. 28, and when dry tie on the appropriate single blocks and using a little galvanised wire from the kit. (No. 146).

At this point you should now introduce the end of the Bowsprit through the hole you had previously drilled at the prow of the ship to take this bowsprit. It should rest over the prow stem and lead back to the Bowsprit bitts which you have mounted on the superstructure. Use wood glue to bond it to the deck floor under the bowsprit bitts.

Lastly, take a strip of brass from the kit of 3x60 mm and form the Bowsprit Gammon (No. 147) with this strip. This is clearly shown on the plans, plan view and side elevation.

SECTION D

The Rigging

To distinguish between the fixed rigging and the working rigging, you should soak some of the rigging lines in the kit in a black dye and when tinted black, hang it up to dry. When dried out you should start with this rigging because as you can imagine, it is called fixed rigging because it keeps the masts and other fittings in a fixed position.

D.1. The Foremast Stay. (fig. 34. No. 173).

Tie one end of black \varnothing 0.5 mm line to the front of the foremast cross-trees and lead it down to an eye-bolt on the bowsprit. Tie fairly tightly and cut off.

D.2. Outer Jib Stay. (fig. 34. No. 174).

Tie one end of the same type of rigging to the foremast cap (No. 159) and then lead it down to an eye-bolt near the end of the bowsprit. Tie and cut off as before. In all of these tie offs, you may add a drop of glue so as to prevent the knot from sliding later on and making the line slack.

D.3. Flying Jib Stay (Figs. 34. No. 175).

Tie one end of the same type of rigging to the brass ferret round near the top of the top foremast, then run it down to tie off at the eye-bolt at the end of the bowsprit. Tie off as before and cut.

D.4. Fishermans Stay-sail Stay. (fig. 324. No. 176).

Use the same type of rigging and tie the first end to the top of the main topmast, then run it down to a point at the end of the lower foremast and just under the mast cap. (Fig. 34).

D.5. Fore topmast Stay. (Fig. 34. No. 177).

Continue using the same rigging line and tie one end to the ferret near the top of the top foremast, then run it down to a point just under the mainmast cap where the main topmast passes through. Tie off securely and cut.

D.6. Main topmast Stay. (Fig. 34. No. 178).

Use the same rigging and tie one end to just under the mast cap of one mast then lead it over to just under the mast cap of the other mast. Tie firmly and cut off.

D.7. Bowsprit Bobstays. (Fig. 34. No. 179).

These are of chain and will be found in the kit. They are easy to fit and all you have to do is to fix their position on the plans (Fig. 34), slightly open very carefully, the corresponding eye-bolts and slip the end link of the chain into place and once again close off the eye-bolt head with pliers. Lead the chain down to where it should be fixed over an eye-bolt on the prow. Open the head of the eye-bolt slightly, slip the corresponding link into place and close off the eye-bolt head with pliers. Cut off the excess chain and repeat this operation for the other length of chain and as shown on Fig. 34.

D.8. Martingale Back Stay. (Fig. 35 Nos. 180-181 and 139).

The chainwork is again used for this part. Take the martingale chain-plates (No. 181) from the kit and by looking at the side elevation of the ship on the plans, fix the position of these chain-plates. There is one for each side of the prow. Bond and pin-nail these two plates into position as shown, then fit a $\varnothing 2$ mm ring from the kit at the near end of each of them. While doing this, slip the end link of the chain over the ring and close off. Then lead the chain up to an eye-bolt near the end of the bowsprit, open its head slightly and fit the appropriate link into position, close off the head and cut off the surplus chain. Repeat this for the other side of the ship.

D.9. Bowsprit Foot-ropes. (plan view plans. No. 182).

Use ordinary cotton reel of $\varnothing 0.25$ mm for this. As you can see from the plans, these are simply tied at one end of the prow and pass through the fins of the bowsprit to the other side where they are tied off.

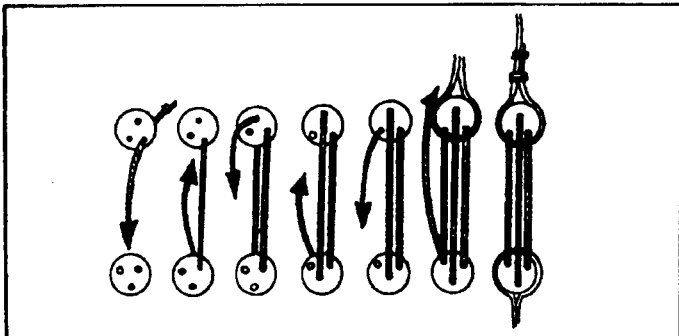
D.10. The Foremast Shrouds. (Fig. 35. No. 185).

The shrouds should be constructed using the fixed rigging you have tinted black and is of $\varnothing 0.5$ mm. However, before fitting these shrouds it will be necessary to fit the Chain-plates. (No. 184). If you look at Fig. 32. you will see at a glance how these should be mounted. Take 10 of the dead-eyes (No. 183) from the kit and fit a brass ring (No. 160) around the throat of each one. Then take the chain-plates and in each of them, introduce the narrow end through the edge of the brass ring that is around the dead-eye and then double it over to fit securely. When you have 5 of these done, take a look at the side elevation plans to determine the position of each of them on the side of the hull. Make the appropriate preparatory holes at the places indicated and pin-nail each chain-plate against the side of the hull and near its mast in question so that the shrouds can be constructed from them. Basically, these mounted chain-plates should be laid so that the dead-eye on each should lie on the same level as the bulwark hand-rail. Repeat this for the other side of the ship.

To construct the shrouds, you should now take the rigging line as specified before, and tie one of the dead-eyes around the throat. Then from a point some 20 mm above the dead-eye on the chain-plate you have just constructed, lead the line upwards towards the top of the lower topmast and turn it round the mast at its trestle-trees and immediately lead it back down again to a position of about 20 mm above the neighbouring chain-plate. Tie another dead-eye on the rigging line at this point, trim and cut off. Repeat this for the third and fourth chain-plate and in exactly the same manner until you have 4 shroud lines on one side constructed. Now repeat this operation for the other side of the ship.

D.10.1 Lanyards. (Fig. 35. No. 186).

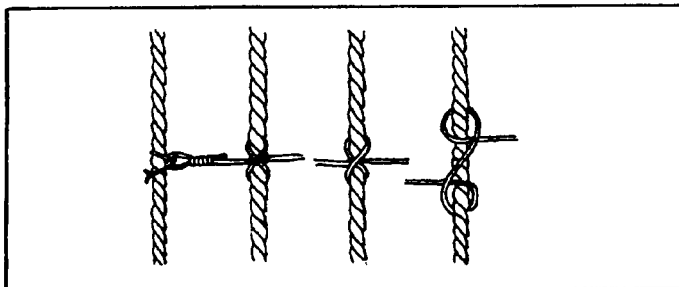
As you can see from the plans, the shrouds are held in position by the Lanyards (No. 186), and these lanyards are threaded between the two sets of dead-eyes that you left 20 mm apart. In this way, the shrouds were always ready for adjusting if the tension had to be varied. So take the ordinary rigging reel of $\varnothing 0.25$ mm and make the corresponding threading between the two sets of dead-eyes and as shown in drawing No. 9.



D.10.2. The Ratlines. (Nos. 187 and 188).

Now that the shrouds are fitted tightly, you can begin to make the ratlines. The first one immediately above the second row of dead-eyes is of wood. Take your measurement from the shroud lines and cut off a strip of wood from one of the ramin wood strips of 1×3 mm. Smooth off this strip and immediately bond it into position with a suitable glue. The remaining ratlines are made from the rigging reel of $\varnothing 0.25$ mm and fitted exactly as shown in Drawing No. 10. Continue doing this until you have all the ratlines fixed and fitted into place and as shown in Fig. 35.

Repeat all these operations for the shrouds on the other side of the ship.

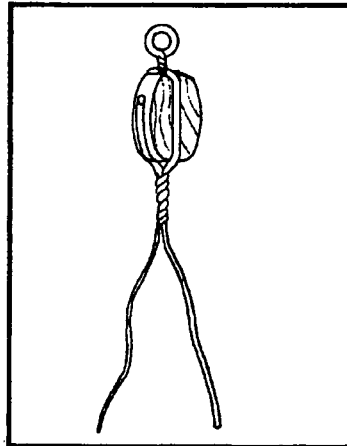


D.11. The Mainmast Shrouds. (Fig. 35. Nos. 160-183-184-189-190-191-192).

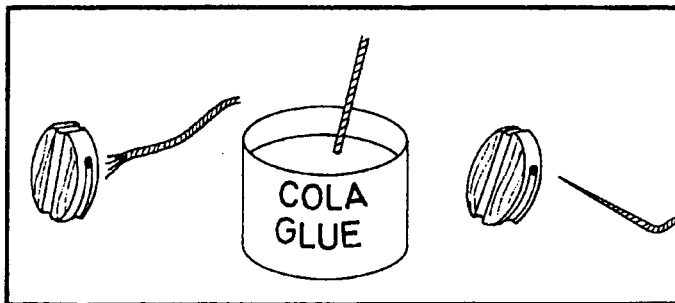
The Shrouds for the mainmast are constructed in exactly the same way as those described for the foremast including its chain-plates, shroud lines and ratlines. The only difference being the reference numbering and your guide on the plans should be directed to the mainmast.

D.11.1. Foremast Mobile Backstays and halyards. (Fig. 36. Nos. 162-193-194).

The foremast mobile backstay is mounted in almost the same way as for the shrouds and a sight of Fig. 36 should be enough for you to follow it quite easily. You should use the rigging line of $\varnothing 0.5$ mm as before for this stay and a length of ordinary $\varnothing 0.15$ mm line for the halyards (No. 194). As shown on the plan, you will have to use a couple of double blocks (No.



162) in rigging the halyard, and these should be attached to the main rigging line with some of the galvanised wire from the kit. In threading through the halyards, you may find some difficulty as the holes in the double blocks are rather small. This is easily overcome however. Just fray the end of the line with a sharp knife and dip it into some wood glue. Squeeze out straight with your fingers and leave to dry out. Once dry, you will find that the end of the line has set firmly like a very fine needle and making your job of threading very easy. Repeat the mounting for the other side of the ship.



D.12. Foremast Fixed Backstays. (Fig. 36. Nos. 183-184-195-196).

This procedure is exactly the same as that for the shrouds in that the ends begin with a chain-plate which you will already have fitted with its dead-eye when you fitted the shrouds. This line is the last one behind the shroud lines and can be seen in Fig. 36 of the plans. But whereas the shroud lines only go as far as the top of the lower mast, this fixed backstay runs up to the top of the fore topmast where it is tied off and then led down again on the other side to be tied to a dead-eye in the same way as you did for the shroud lines. Note that all these dead-eyes should all fall at the same level. When this backstay has been mounted, once again as with the shrouds, hold it in position by tying and threading an ordinary rigging line of $\varnothing 0.25$ mm through the dead-eyes and ensuring that the backstay is kept taught.

D.13. The Mainmast Mobile and Fixed Backstays. (Fig. 36. Nos. 197-198-199-200).

The description for the mounting of these lines are exactly the same as described for those of the Foremast in paragraphs D.11 and D.12, and the only difference being the reference numbering for the plans. All you need do therefore is to follow the plans as shown in Fig. 36 and also the complete side elevation plans, and read the description for their construction in D.11. and D.12., and being careful to take note of the reference numbers for the plans and as specified in the parts list.

D.14. Top Foremast Shrouds and Futtocks. (fig. 38. Nos. 208 to 212).

Continue to use the rigging line of $\varnothing 0.5$ mm. Now drill a small hole through the 4 ends of the two cross-trees of the mast, just wide enough to take this rigging line. Tie a dead-eye No. 208 (a smaller size than the other ones used before) to the end of the rigging line and then pass the line through the small hole in one of the ends of the cross-tree that you have just drilled. Pull it through until the dead-eye you have tied sits upright on top of the cross-tree and then tie the line taught to the corresponding shroud line below. Repeat this for the other 3 corners of the cross-trees, thereby having the main lines of the foremast futtocks mounted and as shown in Fig. 38.

Now tie another of these small dead-eyes to the end of the rigging line again, and taking a distance of some 15 mm above the dead-eye sitting above the cross-tree, lead the rigging line upwards to near the top of the Fore topmast. Tie off here and lead the line back down again on the same side to a position above the dead-eye sitting at the end of the aft cross-tree. Here, tie another dead-eye to the line, trim and cut off to leave this dead-eye some 15 mm above the other. Now repeat this operation for the other side of the fore topmast and when you have this done, you should then lace the two dead-eyes together with the line taught, trim and cut off. Now do this for the other three sets of dead-eyes around this position until you finish up with the topmast shroud lines mounted.

As you can see on Fig. 38, all you have to do now is to tie on the ratlines (No. 212) between the topmast shrouds with small strips of Ø 0.25 mm rigging line. As this is so small and if you find difficulty in tying off these ratlines, you may bond them into place and using adequate glue.

D.15. Top Mainmast Shrouds and Futtocks. (fig. 38. Nos. 208 and 213 to 216)

This operation is exactly the same as for those described for the top foremast in D.14. Just follow these instructions together with the plans Fig. 38 and taking into account the change in the reference numbers.

SECTION E

Making and Locating the Sails

Each of the sails correspond to their reference number in the parts list. Cut out each sail from the printed sail cloth in the kit and making sure that you cut on the outside of its lines—that is— the continuous line.

Now at this point, if you are lucky to have some friendly female assistance at hand with a sewing machine, so much the better, because the first thing to be done is to stitch up the hems of each sail. This is done by doubling the edge you have cut to the dotted line at the side and running parallel. When this is done, and your luck holds out, your assistant may be prevailed upon to run up the parallel stitching over the surface of each sail. This gives the sails a very realistic effect. After that, if you look at Fig. 33 on the plans you will see how you have to sew the bolt ropes round the edges of each sail and leaving an eyesplice at each corner (Fig. 33). We at Artesania Latina have discovered that our female friends can actually do this and watch television at the same time. We are at a loss to explain this art and how its done— but we can assure you that they can do it. We have seen it and seeing is believing. So perhaps if you ask nicely and use all the charm that we know you possess, you too will be able to observe this miracle.

However, lets imagine that its all done now, and you can get on with fitting the sails in their respective places. By the way, the rigging used for this sewing is the thicker Ø 0.8 mm reel.

E.1. The Main Sail and the Fore Sail (Nos. 225 and 228).

These are located behind each of the masts and between their respective booms and gaffs. Make use of the brass mast rings that you have previously fitted to that part of the masts (Nos. 153 and 160). Open them a little at their joints and fit them through between the edge of the sail and the bolt rope sewn there. Do the same thing along the line of the gaffs and using the brass rings for that purpose too.

Next fit the Fore gaff Top Sail and the Main gaff Top Sail into position (Nos. 224 and 227) and using the same procedure as before. Then mount the Fisherman's Stay Sail (No. 226), but this time fasten this sail to its stay (No. 176) and using some small Ø2 mm rings (No. 139).

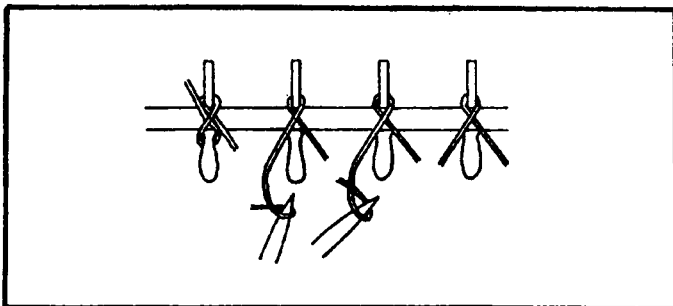
E.2. Remaining Sails.

Mount the Jib Top Sail, The Jib Sail and the Jumbo Sail on their respective stays and as shown on the plans. Use the small brass rings (No. 139) for this and these should pass not only round the stay ropes but also between their rope-bolts and the sail itself. Now you can leave the sails furled if you wish, in which case the gaffs would be lowered the sails furled between the gaff and the boom and also with the jibsails lowered. Or if you prefer, you may leave the sails unfurled as if the ship were sailing under full sail. You can do this with its working rigging in place, and also we would advise that you spray a little diluted clear varnish on the surface of the sails.

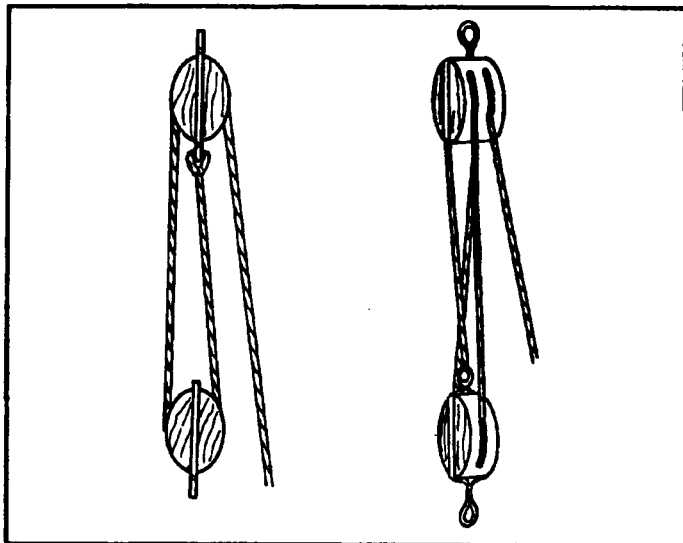
SECTION F

Working Rigging

The working rigging consists of ropes employed for the steering of the ship. It controls booms and gaffs and is also used for raising and lowering sails. Now we have tried hard to describe these lines in detail for you to follow, but with the best will in the world, we discovered that with such a conglomeration of words, we were only tending to confuse-so, on the principle



that one good drawing is better than a thousand words, we have drawn the various stages of the working rigging and you will find these in Figs. 34 to 42.



You should remember that for this rigging you should use Ø 0.15 mm. Do not cut off all the surplus rigging at the ends, but rather, wind them up and hang them over the belaying pins, or coil them from the deck cleats and leave fixed in position by applying a drop of glue.

Once the fixed rigging has been mounted, you should then be able to bond and fit the Navigation lights in their boxes, in position and as shown on the plans. Simply by looking at the plans, you will see that both the port and starboard lights sit flush on top of the first wooden ratline of the foremast shrouds. Use a rapid bonding glue and apply it to both the base and the sides of the navigation light boxes, then bond them into place with the bottom sitting on top of the first ratline and the sides against the lines of the shrouds.

The third individual light is merely bonded into place at the head of the mast cap of the foremast and directly in front of its top foremast.

Official Colour Scheme.

While you are at complete liberty to paint the vessel in whatever colour scheme you prefer, or even leave it with a varnished finish, we must however, advise you on the colours of the original BLUENOSE II.

It is as follows:

The Hull. From the Bulwark top rails to the water-line, the colour is black.

But it is a black to which some blue tint has been added so that the black colour is known as Midnight blue.

At the waterline, there is a very thin white line and below this for the rest of the hull is a reddish copper colour.

The Bulwark top rails are left varnished as are the decks as well.

The inside parts of the bulwarks are white as are the bits too, along with the top masts and the cross-trees and the trestle-trees. The part of the Bowsprit that lies over the deck is painted white.

The waterways are painted light blue, and the part of the Bowsprit that protrudes from the prow is painted black.

The Dory boats were painted in an orange-yellow colour. This was so that they could be sighted more easily when fog suddenly descended.

BLUENOSE II

Parts List and Reference Numbers

11

Ref. No.	DESCRIPTION	No. of Parts.	MATERIAL	MEASUREMENTS	Ref. No.	DESCRIPTION	No. of Parts.	MATERIAL	MEASUREMENTS
99	Pump handle connecting rod		Brass	15 mm	RIGGING				
100	Bilge water exit on pump		Brass wire	Ø 1.5x6 mm	173	Foremast Stay	1	Cotton reel	Ø 0.5x350 mm
101	Pump handle pintle		Brass wire	Ø 0.5x12 mm	174	O uler Jib Stay	1	Cotton reel	Ø 0.5x400 mm
102	Chimney	1	Brass	Ø 2x0 3x15 mm	175	Flying Jib Stay	1	Cotton reel	Ø 0.5x500 mm
103	Chimney Cowl	1	Brass	Ø 2x0 3x10 mm	176	Fishermans Stay-sail stay	1	Cotton reel	Ø 0.5x270 mm
104	Cabin wall bulkheads (Sides)	2	Walnut	3x13x80 mm	177	Fore topmast stay	1	Cotton reel	Ø 0.5x230 mm
105	Cabin wall bulkheads (Fore)	1	Walnut	3x13x56 mm	178	Main top mast stay	1	Cotton reel	Ø 0.5x200 mm
106	Cabin wall bulkheads (Aft)	1	Walnut	3x13x46 mm	179	Bowsprit bobstays (Chain)	2	Brass	1x120 mm
107	Cabin roof	1	Plywood	1.5 mm Die-cut	180	Martingale back stay	2	Brass	1x150 mm
108	Cabin roof planking	13	Mukali	0.6x5x85 mm	181	Martingale chain plate	2	Brass	3x15 mm pref
109	Booby hatch runners	4	Sapelia	2x2x15 mm	182	Bowsprit footropes	4	Cotton reel	Ø 0.25x200 mm
110	Booby hatches	2	Plywood	1.5 mm Die-cut	183	Fore and Main mast dead-eyes	✓ 48	Boxwood	Ø 5 mm
111	Cabin door	2	Plywood	1.5 mm Die-cut	184	Fore and Main mast chain plates	25	Brass	2x40 mm pref
112	Cabin skylight	1	Walnut	7x14x17 mm pref	185	Foremast shrouds	8	Cotton reel	Ø 0.5x270 mm
113	Skylight longwise frames	2	Ramin	1x3x20 mm	186	Lanyards	8	Cotton reel	Ø 0.25x150 mm
114	Skylight transversal frames	6	Ramin	1x3x8 mm	187	Foremast ahroud ratlines (large)	2	Ramin	1x3x40 mm
115	Skylight window bars	6	Brass wire	Ø 0.5x12 mm	188	Foremast shroud ratlines	40	Cotton reel	Ø 0.25x35 mm
116	Skylight central bar	1	Walnut	1x4x20 mm	189	Mainmast Shrouds	10	Cotton reel	Ø 0.5x300 mm
117	Inflatable life raft supports	2	Sapelia	2x2x45 mm	190	Lanyards	10	Cotton reel	Ø 0.25x150 mm
118	Inflatable life raft covers	4	Boxwood	Ø 8x135 mm	191	Mainmast shroud ratlines (large)	2	Ramin	1x3x45 mm
119	Post rails	8	Turned Brass	Ø 3x8 mm	192	Mainmast shroud ratlines	50	Cotton reel	Ø 0.25x45 mm
120	Hand rail	2	Brass wire	Ø 1x90 mm	193	Foremast mobile back-stays	2	Cotton reel	Ø 0.5x400 mm
121	Taffrail box	1	Walnut	15x23 mm pref	194	Backstay halyards	2	Cotton reel	Ø 0.15x500 mm
122	Helm	1	White metal	Ø 25 mm	195	Foremast Fixed backstays	2	Cotton reel	Ø 0.15x450 mm
123	Helm rivit	1	Boxwood	6 mm	196	Lanyards	2	Cotton reel	Ø 0.25x150 mm
124	Navigation light boxes	2	Walnut	7x7x18 mm pref	197	Mainmast mobile backstays	2	Cotton reel	Ø 0.5x430 mm
125	Navigation light box lids	2	Walnut	1.5x7x7 mm pref	198	Backstay halyards	2	Cotton reel	Ø 0.15x500 mm
126	Navigation lights	3	Turned brass	Ø 5x8 mm	199	Mainmast fixed backstays	2	Cotton reel	Ø 0.5x470 mm
127	Deck cleats	8	Turned brass	Ø 3x8 mm	200	Lanyards	2	Cotton reel	Ø 0.25x150 mm
128	Deck cleat ties	8	Brass wire	Ø 1x10 mm	201	Foremast gaff throat halyards	1	Cotton reel	Ø 0.15x390 mm
129	Anchors	2	White metal	20x28 mm	202	Foremast gaff peak halyards	1	Cotton reel	Ø 0.15x610 mm
130	Anchor stocks	2	White metal		203	Foremast gaff peak vangs. (port and starboard)	2	Cotton reel	Ø 0.15x280 mm
131	Anchor rigging	2	Cotton reel	Ø 0.25x80 mm	204	Mainmast gaff throat halyard	1	Cotton reel	Ø 0.15x440 mm
132	Anchor chains	2	Brass	1.5x180 mm	205	Mainmast gaff peak halyard	1	Cotton reel	Ø 0.15x710 mm
133	Ventilators	✓ 3	White metal	3x17 mm	206	Mainmast gaff vangs (port and Starb)	2	Cotton reel	Ø 0.15x350 mm
134	Capstan	1	Turned brass	Ø 11x12 mm	207	Boom lift	1	Cotton reel	Ø 0.15x1820 mm
135	Mooring chocks	3	White metal	2x10 mm	208	Topmast dead-eyes	20	Boxwood	3 mm
136	Dory boat cradles	4	Ramin	2x2x20 mm	209	Futtock shrouds	4	Cotton reel	Ø 0.5x60 mm
137	Dory boats	2	White metal	16x70 mm	210	Fore topmast shrouds	4	Cotton reel	Ø 0.5x190 mm
138	Eye-bolts	51	Brass	7 mm	211	Lanyards	4	Cotton reel	Ø 0.25x150 mm
139	Rings	50	Brass	Ø 2 mm	212	Ratlines	25	Cotton reel	Ø 0.25x35 mm
140	Belaying pins	35	Brass	12 mm	213	Futtock Shrouds	4	Cotton reel	Ø 0.5x60 mm
141	Pin-nails	650	Brass	10 mm	214	Main topmast shrouds	4	Cotton reel	Ø 0.5x190 mm
					215	Lanyards	4	Cotton reel	Ø 0.25x150 mm
					216	Ratlines	30	Cotton reel	Ø 0.25x35 mm
					217	Foremast boom sheet	1	Cotton reel	Ø 0.15x200 mm
					218	Mainmast boom sheet	1	Cotton reel	Ø 0.15x210 mm
					219	Flag halyard	1	Cotton reel	Ø 0.15x700 mm
					220	Flag	1	Cloth	
					221	Jib top sail	1	Cloth	
					222	Jib sail	1	Cloth	
					223	Jumbo sail	1	Cloth	
					224	Foregaff top sail	1	Cloth	
					225	Foresail	1	Cloth	
					226	Fishermans stay sail	1	Cloth	
					227	Main gaff top sail	1	Cloth	
					228	Main sail	1	Cloth	
					229	Sail bolt rope	1	Cotton reel	Ø 0.8x6000 mm
					230	Jib top sail halyard	1	Cotton reel	Ø 0.15x590 mm
					231	Jib top sail downhaul	1	Cotton reel	Ø 0.15x550 mm
					232	Jib top sail sheet	1	Cotton reel	Ø 0.15x240 mm
					233	Jumbo sail halyard	1	Cotton reel	Ø 0.15x330 mm
					234	Jumbo sail downhaul	1	Cotton reel	Ø 0.15x300 mm
					235	Jumbo sail sheet	1	Cotton reel	Ø 0.15x50 mm
					236	Fishermans stay sail halyard	1	Cotton reel	Ø 0.15x500 mm
					237	Fishermans stay sail sheet	1	Cotton reel	Ø 0.15x250 mm
					238	Jib sail halyard	1	Cotton reel	Ø 0.15x400 mm
					239	Jib-sail downhaul	1	Cotton reel	Ø 0.15x430 mm
					240	Jib sail sheet	1	Cotton reel	Ø 0.15x150 mm
					241	Foregaff top sail	1	Cotton reel	Ø 0.15x470 mm
					242	Foresail halyard	1	Cotton reel	Ø 0.15x400 mm
					243	Foregaff-sail tack line	1	Cotton reel	Ø 0.15x280 mm
					244	Main gaff top-sail hayard	12	Cotton reel	Ø 0.15x500 mm
					245	Mainsail hayard	1	Cotton reel	Ø 0.15x460 mm
					246	Main gaff top-sail tack line	1	Cotton reel	Ø 0.15x280 mm
					247	Galvanised wire (for seizing lines and blocks)	1		Ø 0.25x3000 mm

MASTING

142	Bowsprit	1	Sapelia	Ø 5x135 mm
143	Bowsprit fins	1	Ramin	1x3x35 mm
144	Bowsprit fin block	1	Ramin	1.5x5x35 mm
145	Mast end ferrets	6	Brass	3x15 mm
146	Single blocks	✓ 30	Boxwood	4 mm
147	Bowsprit gammon	1	Brass	3x60 mm pref
148	Mast hole covers and boom support rings	4	Boxwood	Ø 8xØ 12 mm
149	Lower Foremast	1	Sapelia	Ø 8x310 mm
150	Mast cleat support	2	Ramin	1x3x5 mm
151	Mast cleat spar	2	Ramin	1x3x24 mm
152	Mast cleats	8	Brass wire	Ø 1x10 mm pref
153	Mast rings	15	Brass	Ø 8 mm
154	Fmast and M/mast trestle-tree hounds	4	Walnut	1.5x12x20 pref
155	Fmast and M/mast trestle-trees	4	Ramin	1.5x5x25 mm
156	Front Fmast and M/mast cross-trees	2	Ramin	2x3x65 mm pref
157	Aft Fmast and M/mast cross-trees	2	Ramin	2x3x50 mm pref
158	Top Foremast	1	Sapelia	Ø 5x190 mm
159	Foremast cap	1	Ramin	2x10x24 mm
160	Mast rings	60	Brass	Ø 5 mm
161	Mast trucks	2	Boxwood	4 mm
162	Double blocks	✓ 25	Boxwood	4 mm
163	Foremast gaff	1	Sapelia	Ø 5x135 mm
164	Gaff and Boom crab-jaws	4	Walnut	1.5 mm pref
165	Crab-jaw fasteners	4	Brass wire	Ø 1x25 mm pref
166	Foremast Boom	1	Sapelia	Ø 5x135 mm
167	Lower Main Mast	1	Sapelia	Ø 8x335 mm
168	Main mast cleat support	4	Ramin	1x3x5 mm
169	Main topmast	1	Sapelia	Ø 5x195 mm
170	Main mast cap	1	Ramin	2x10x18 mm pref
171	Mainmast Boom	1	Sapelia	Ø 5x310 mm
172	Main gaff	1	Sapelia	Ø 5x195 mm