

PINTA, 1492
SCALE: 1/72
Length: 385mm
Width: 180mm
Height: 320mm

HISTORY:

The Pinta was a ship in a fleet of Christopher Columbus on his voyage to America. Other ships were flagship Santa Maria and Nina. The voyage of the Christopher Columbus starts in August 1492 in port Palos de la Frontera. After two months at 12 October sailors saw a land. There are no exact drawings of the Nina but it is supposed that a length of hull of the ship was about 20 meters and displacement about 100tons.

Recommended tool list:

- 1) Modeler's knife or scalpel
- 2) Mini drilling machine
- 3) Drill bits
- 4) Selection of abrasive paper
- 5) Scissors
- 6) Pliers
- 7) Clothes pegs or crocodile clips
- 8) Pencil
- 9) Rule
- 10) Set of needle files
- 12) Sewing machine
- 13) Electric plank bender

Before you begin:

Before you begin to build the model it is necessary with a vengeance read building instructions and plans. Also chronology of assembly steps is necessary to keep. You check if the parts go together before you glue it respectively you make any corrections with sandpaper. During the gluing, painting, lacquering and at work with another chemical materials is necessary well ventilated in your working room. You cut the parts from sheet until actually required for fitting. You cut by knife only in direction off ward your body so that you head to injury risk.

Coloring:

Medieval ships were protected against influence of salt water and woodworms by a mixture of tar and thanks to it the hull of ships was a reddish-brown or brownish-black color. This effect it is possible to get by staining of the wood by dark wood stain. It is recommended to use the wood stain before gluing of the parts. Decks of the ships were probably in naturally color of wood. Anchors and other metal parts were a black color.

Bending of wooden strips:

The Wooden strips will be more flexible if you will boil it in hot water about 10-15 minutes. You can bend the strips along any cylindrical area but ideal is using of special plank bender (it would be best to use electric plank bender). If you need to do very small radius so you must bend it in more steps.

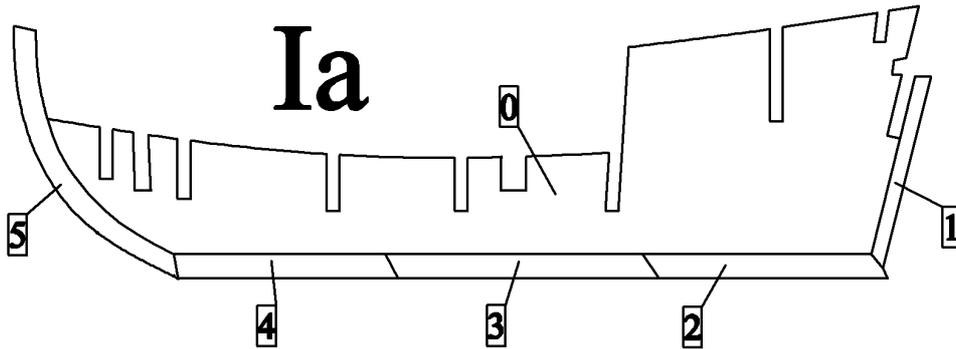
Work with photo etched parts:

Very carefully cut out parts by a pliers or scissors from a sheet. The photo etched parts glue by fast-drying adhesive.

Model building process:

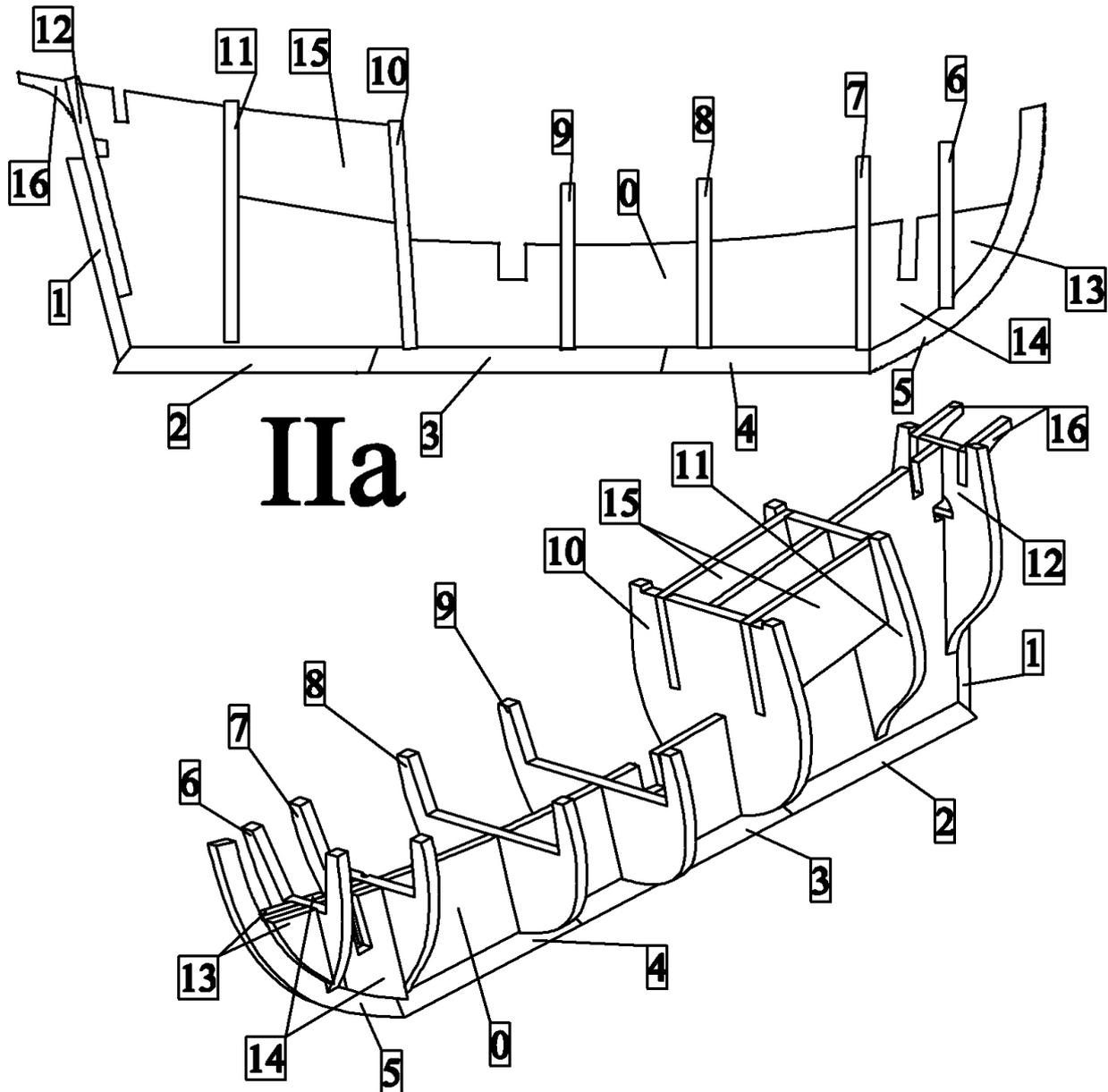
I) Keel:

a) First glue a keel which is compound from parts 0-5.

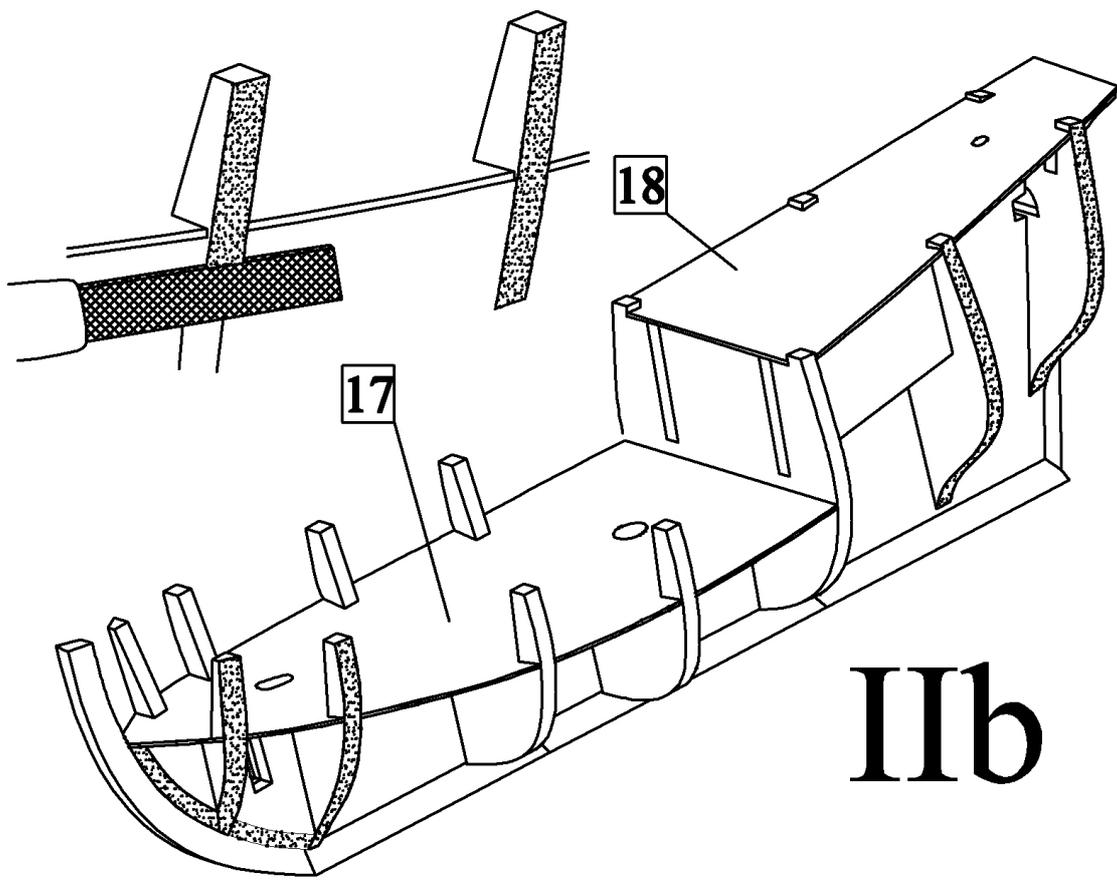


II) Framing of a hull:

a) First glue reinforcements 13 and 14 to the keel 0. Then glue frames 6-12 to the keel 0. Finally glue to the frames also reinforcements 15 and 16.



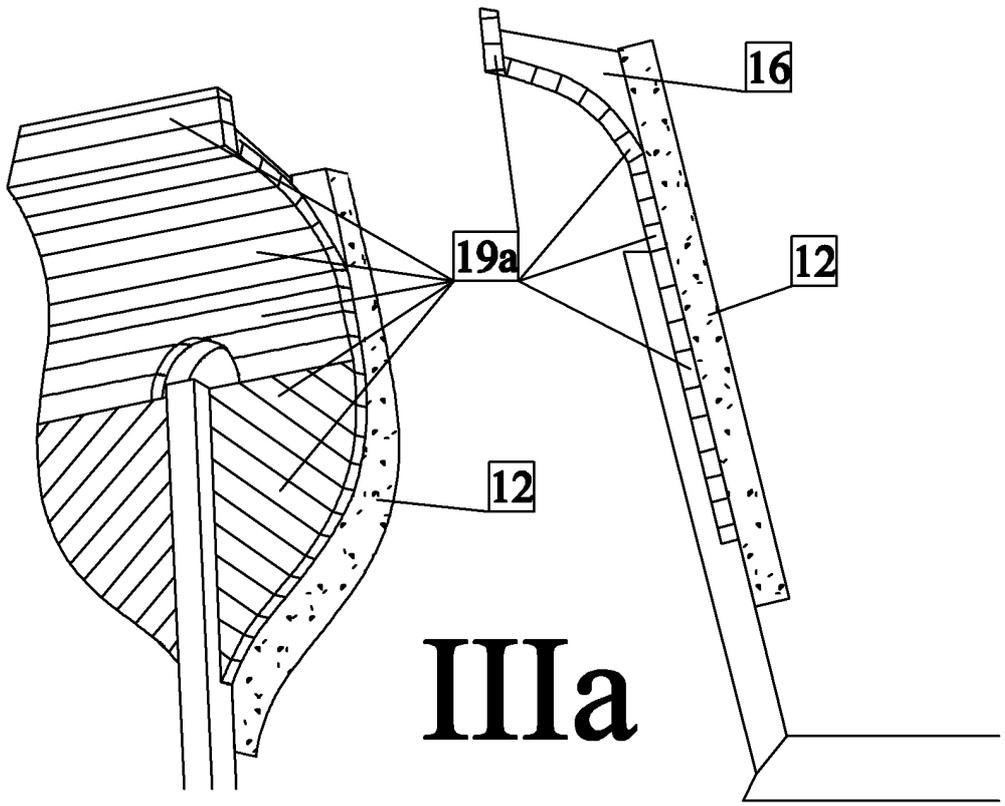
b) First glue decks 17 and 18 to the frames. Then sharpen the frames and reinforcements as it is shown below.



IIIb

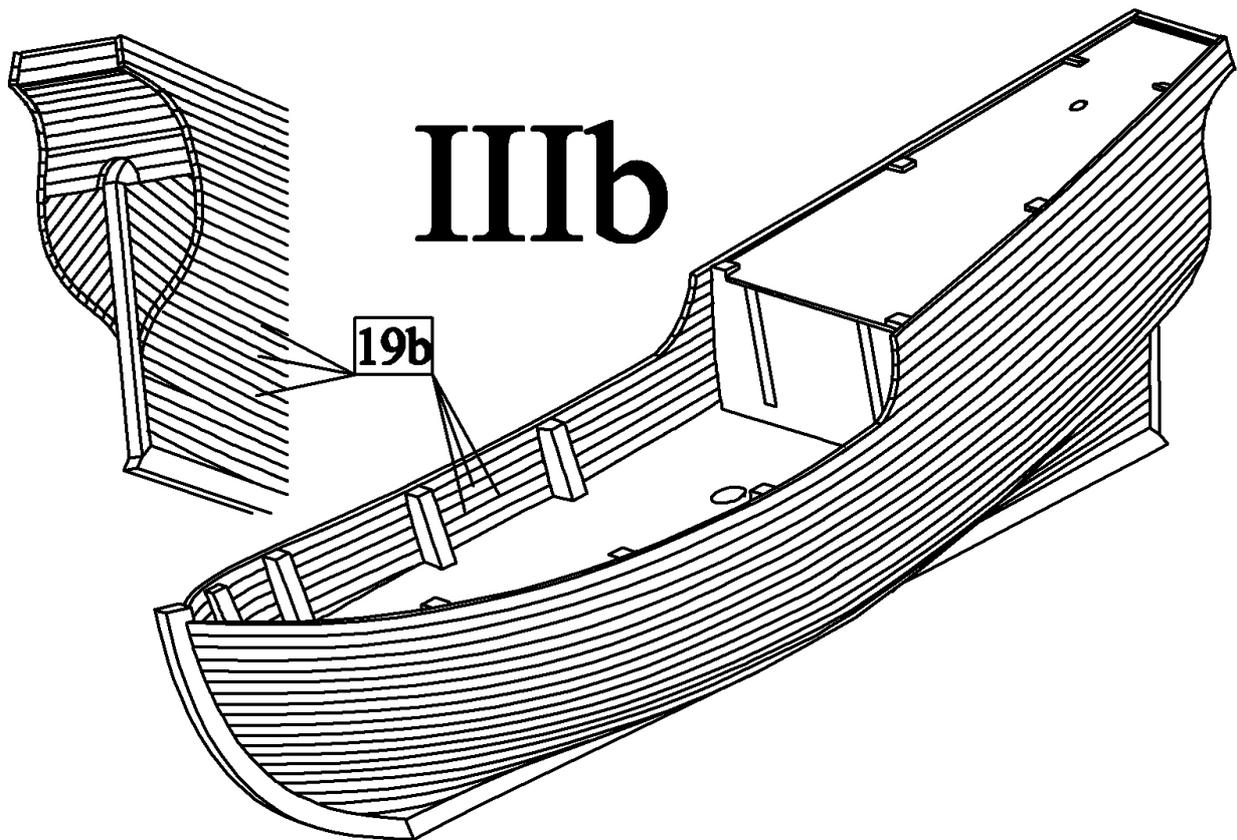
III) Hull planking:

a) First plank a stern of the ship by strips 19a.



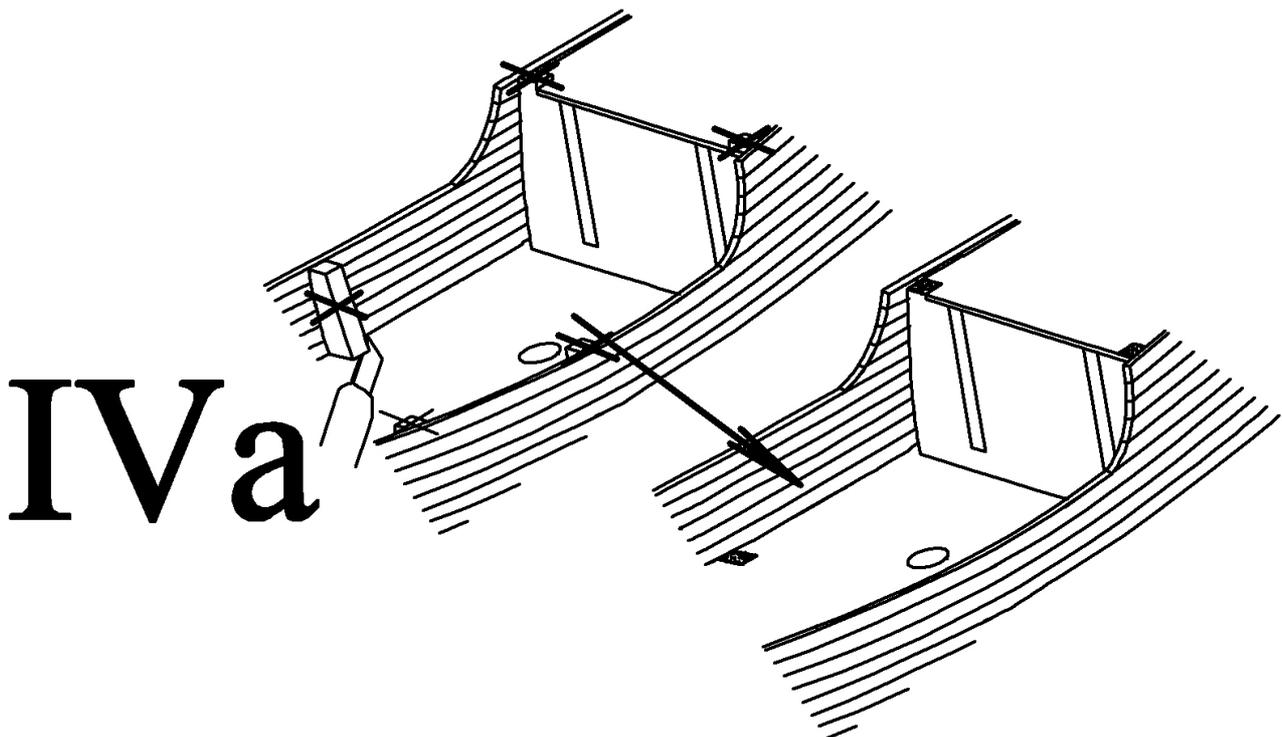
IIIa

b) Plank a hull of the ship by strips 19b. Before planking bend the strips into required shape (A procedure of the strip bending is described in a start of this document). Start the planking from stem with strips on upper edge of the hull. Then continue with planking to the stern.

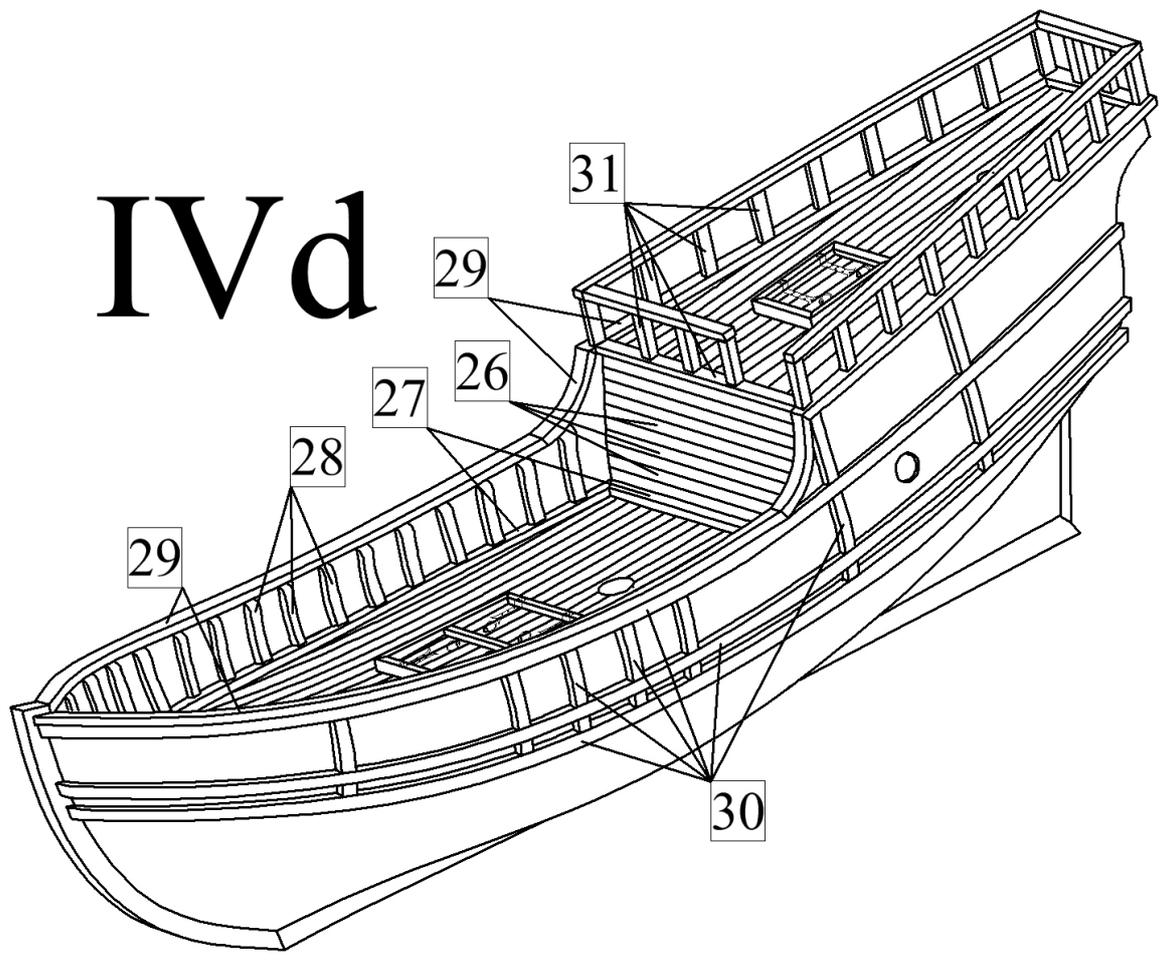


IV) Deck:

a) First cut out parts of the frames which stick out from the deck and then sand remains of them by a sand paper.



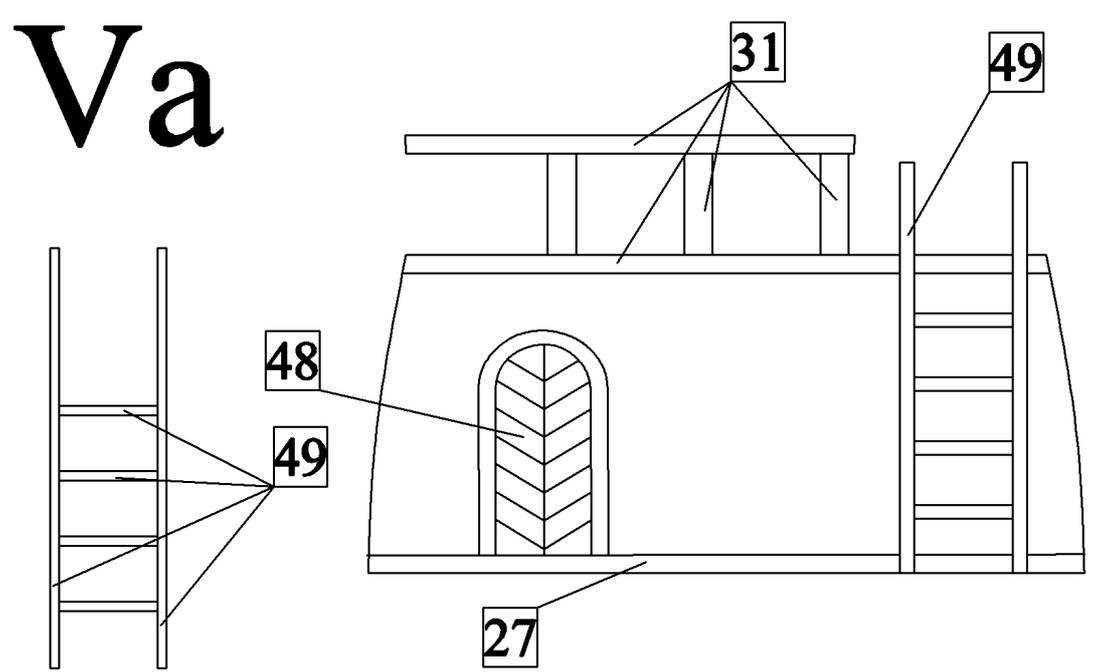
d) Edge the deck by waterways 25. Then glue to the inner sides of the hull frames 28 and glue planks 26. Finally glue edging 29a-e to the hull. Finally glue railing 31 to the poop deck and make holes for guns into the hull.



IVd

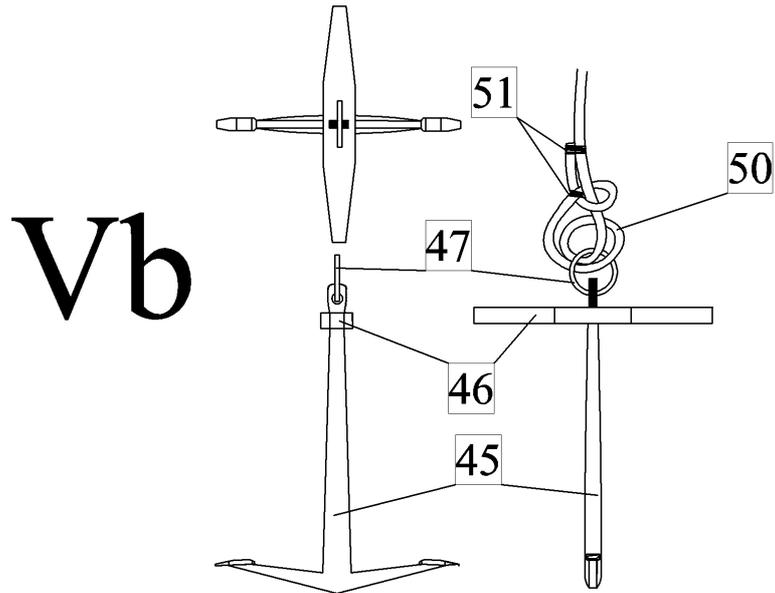
V) Details:

a) First Make ladder 49 and then glue it together with door on their places.

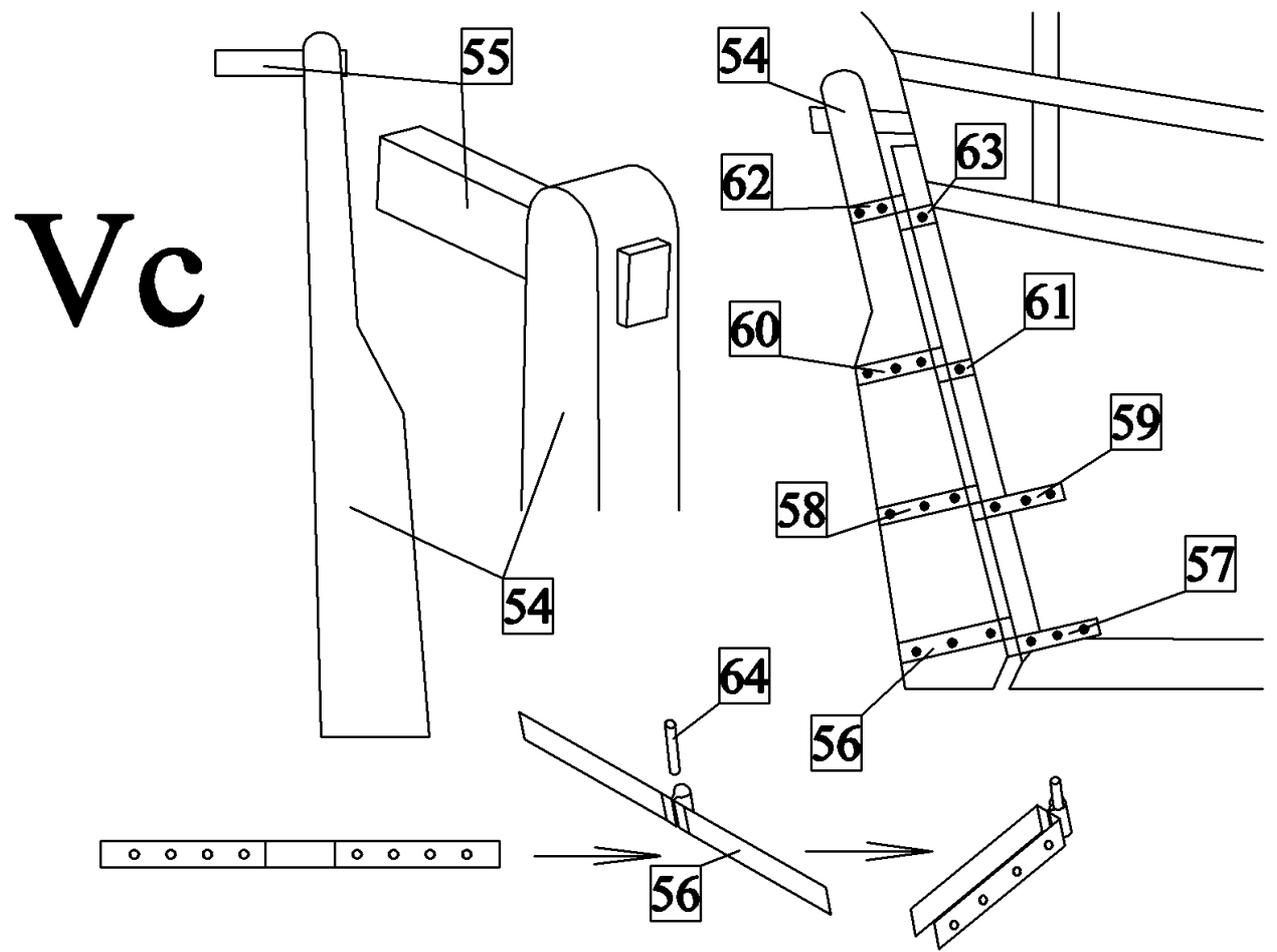


Va

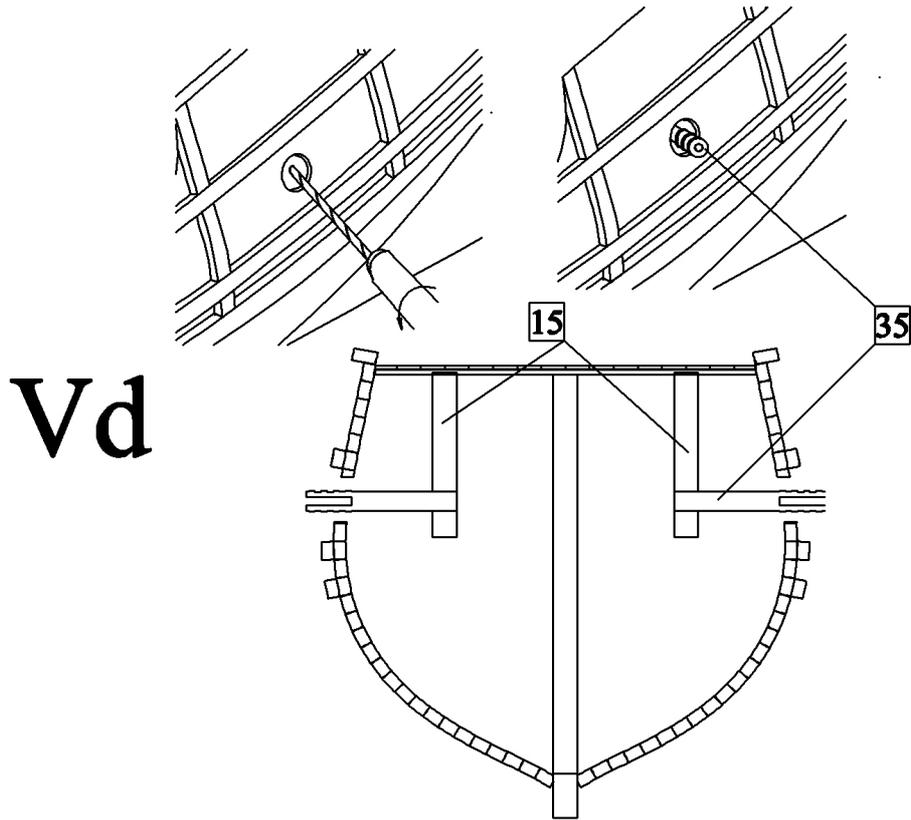
b) Make anchors. Glue together parts 45 and 46. Then run a ring 47 through the hole in the anchor. Finally tie a rope 50 to the ring 47.



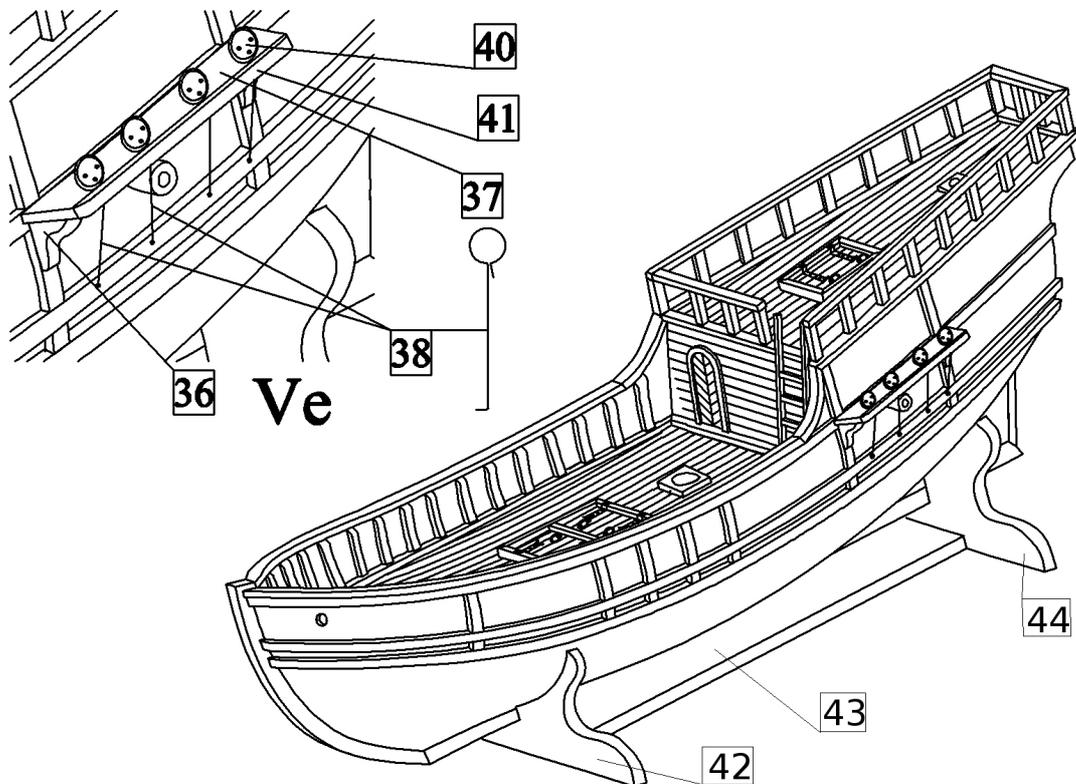
c) Make a rudder. First glue together parts 54 and 55. Then glue hinges of the rudder 57, 59, 61, 63 to the stern and hinges 56, 58, 60 and 62 to the rudder. Then glue pins 64 to the hinges 56, 58, 60 and 62 and then whole rudder install to the stern.



d) First drill to the frames 15 holes for the gun barrels. Then glue the gun barrels 35 into the holes.



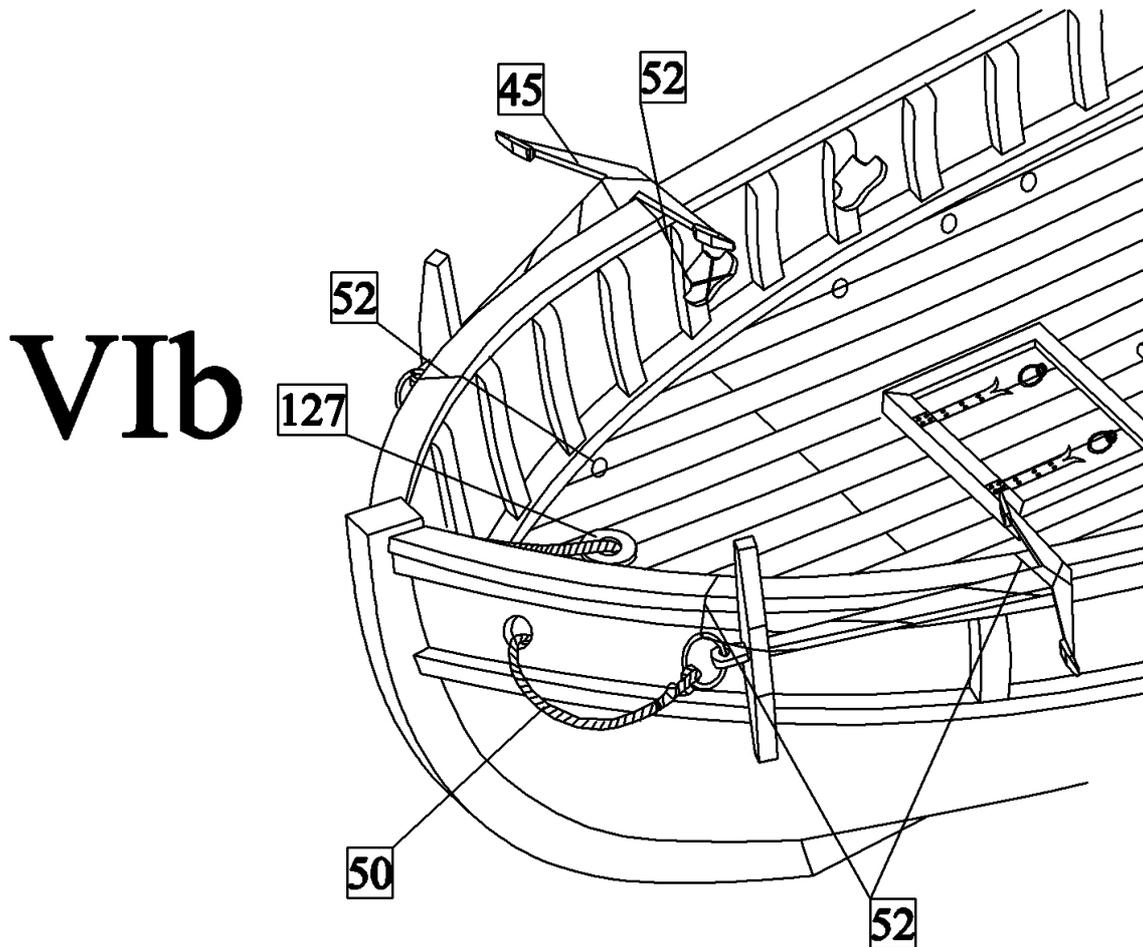
e) First glue channels 37 with reinforcements 36 to the hull. Then make dead eyes felloes 38 and install them together with dead eyes blocks to the hull and channels. Then make edging of the channels by strips 41. Finally make hawse holes on the prow. Make stand from parts 42-44.



f) Glue parts 127 and mast foots 32-34 to the decks. Exact position of the parts is shown in the plan.

VI) Anchors and cleats:

- First glue cleats and eyebolts to the deck and hull. An exact position of the cleats and eyebolts is in 1:1 scale shown in the plan.
- Install anchors to the hull. First run a hawse rope through hawse holes in the bow and in the parts 127. Then tie the anchor to the cleats and eyebolts by a rope 52.

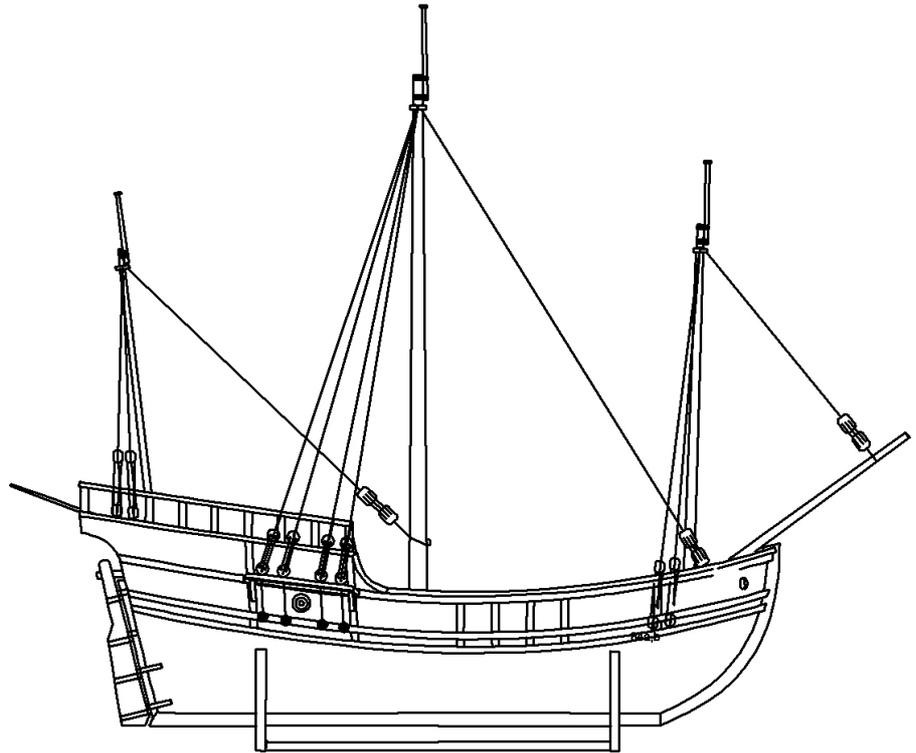


VII) Masts and yards:

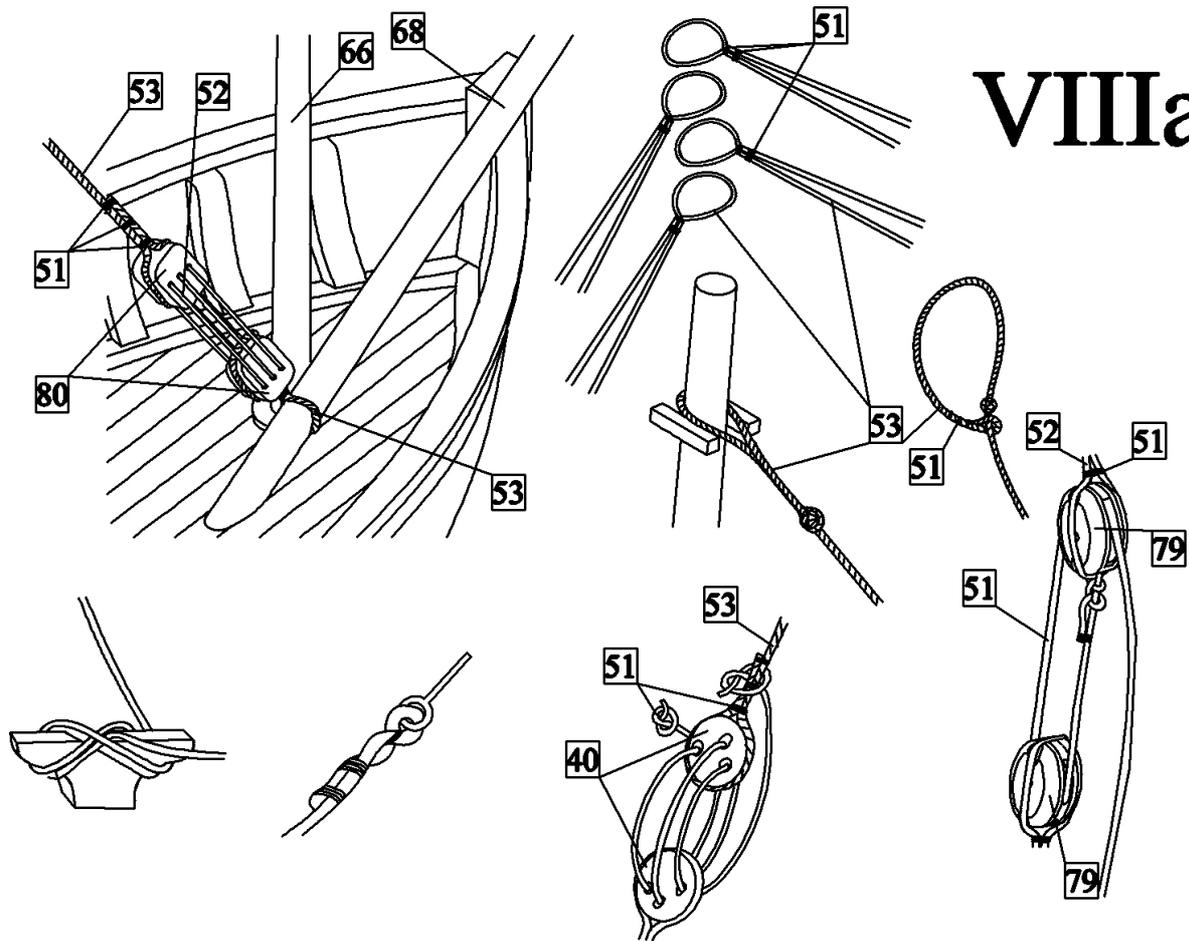
- Make masts 65-67, bowsprit 68 and outrigger 126. First sharpen the mast by a sand paper into a conical shape. Then drill on a top of the masts a 1mm holes. Then glue trees 77 to the masts. Finally make flag masts 69-71 and tie them to the top of the masts. The masts are in 1:1 scale shown in the plan.
- Make yards 73-75. First sharpen the yards by a sand paper into needed shape. Finally tie blocks 79 and rollers 78 to the yards. The yards are in 1:1 scale shown in the plan.

VIII) Standing rigging:

VIII



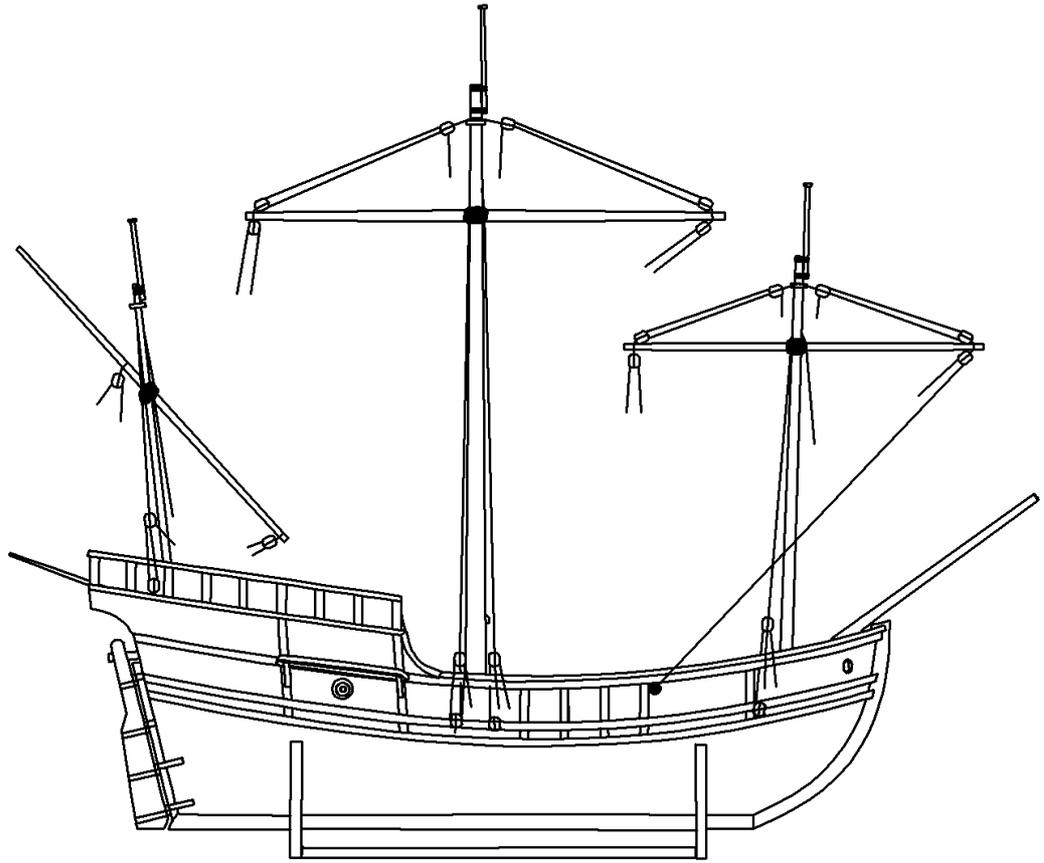
a) First glue masts to the hull and then tie also shrouds to the masts.



VIIIa

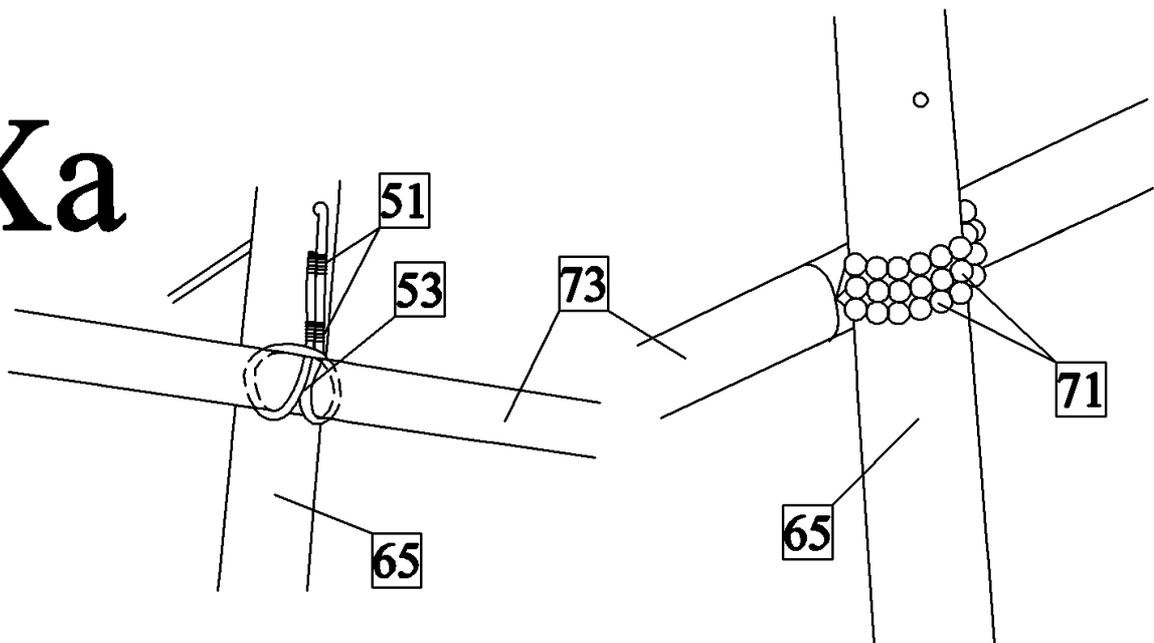
IX) Running rigging:

IX

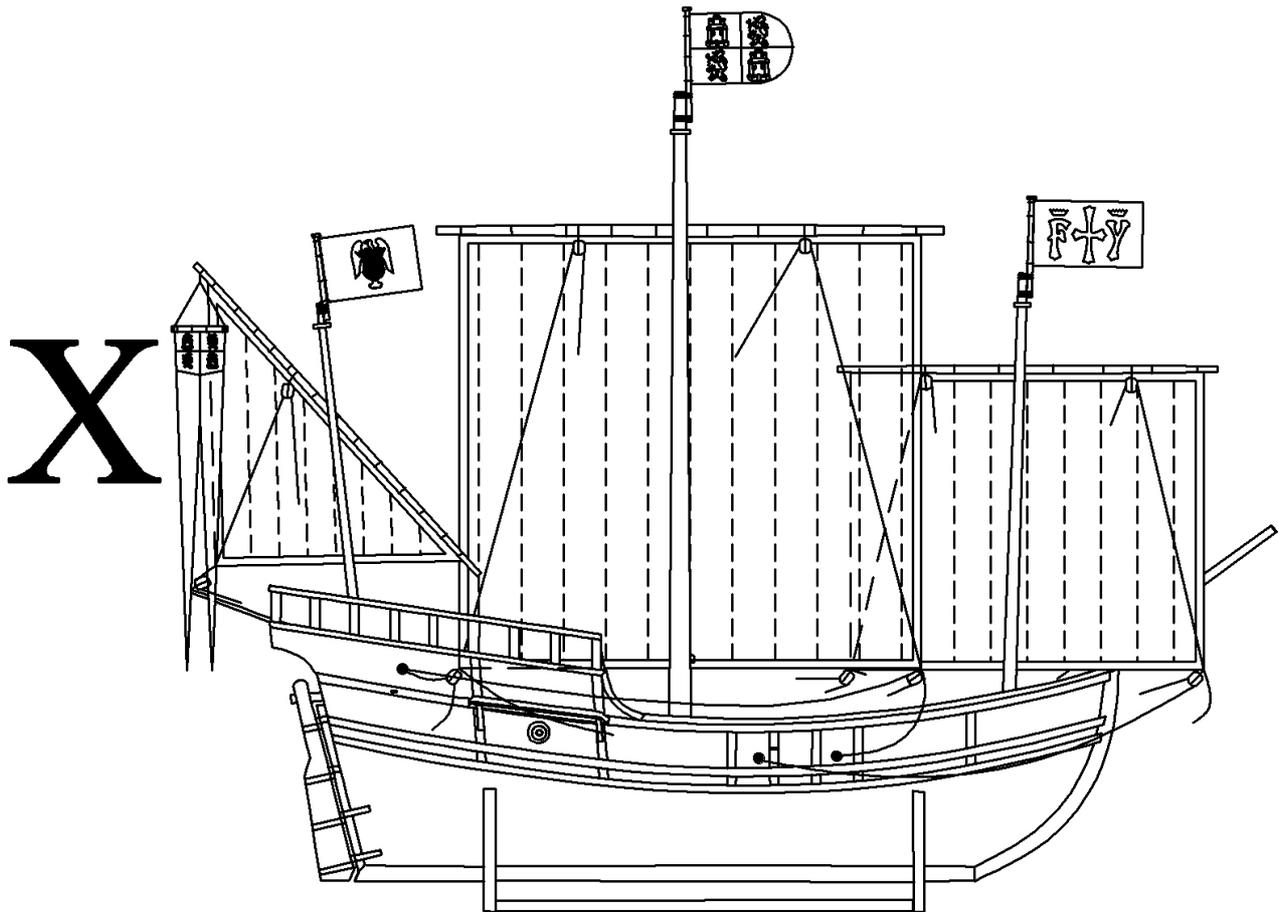


a) First tie yards to the masts. Then run the ropes for raising and lowering of the yards through holes in the masts and then tie them to the blocks 117 and 79. Finally tie also the rest of ropes to the yards.

IXa



X) Flags and sails:

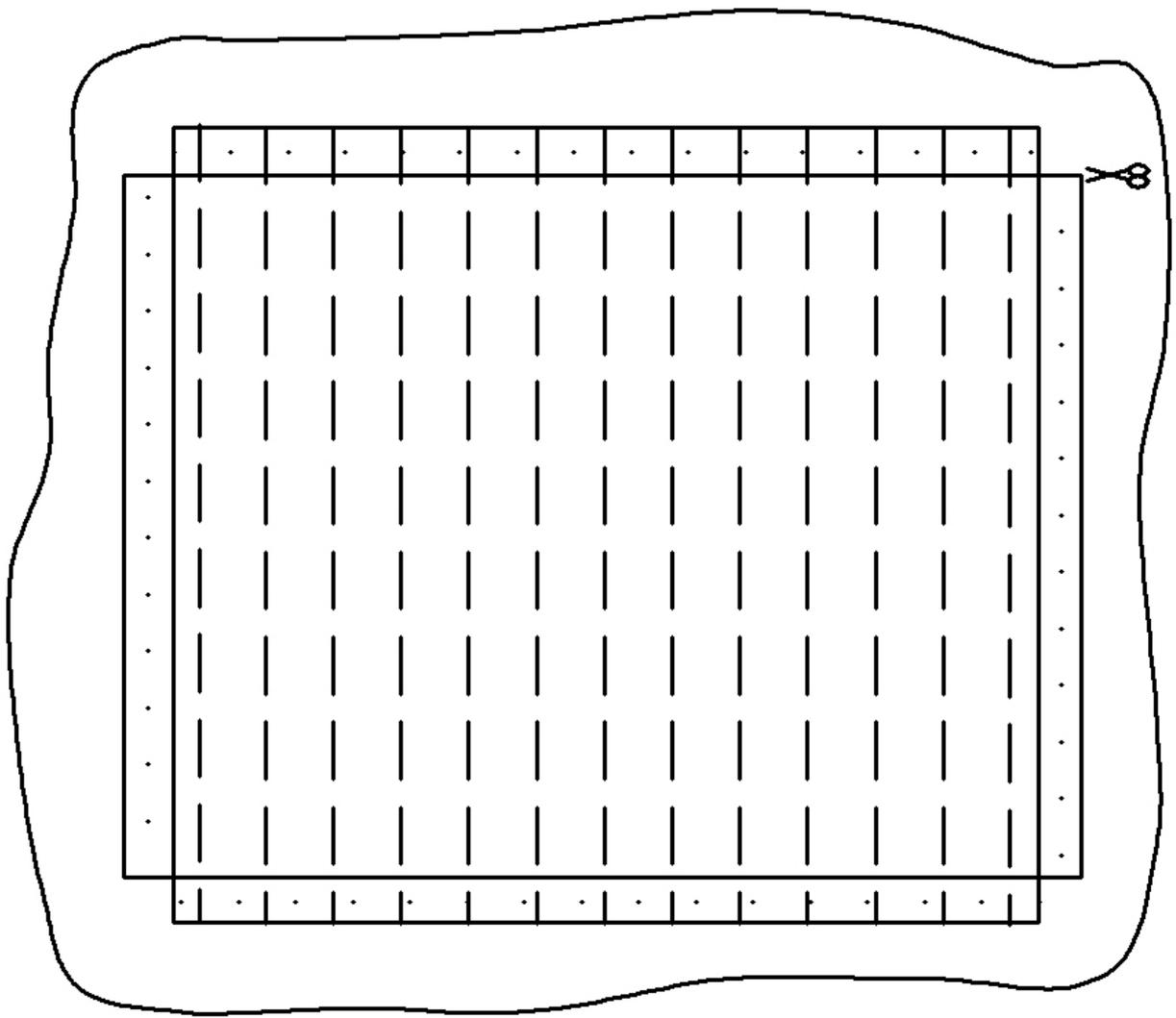


a) Make a sail 118-120. First draw by pencil contours of the sail on the. To the border of the sails add about 10mm for fell. By the pencil draw on the cloth also seams which divided the sail into simple segments. Then scissor the sail with fells and sewn it like it is shown below.

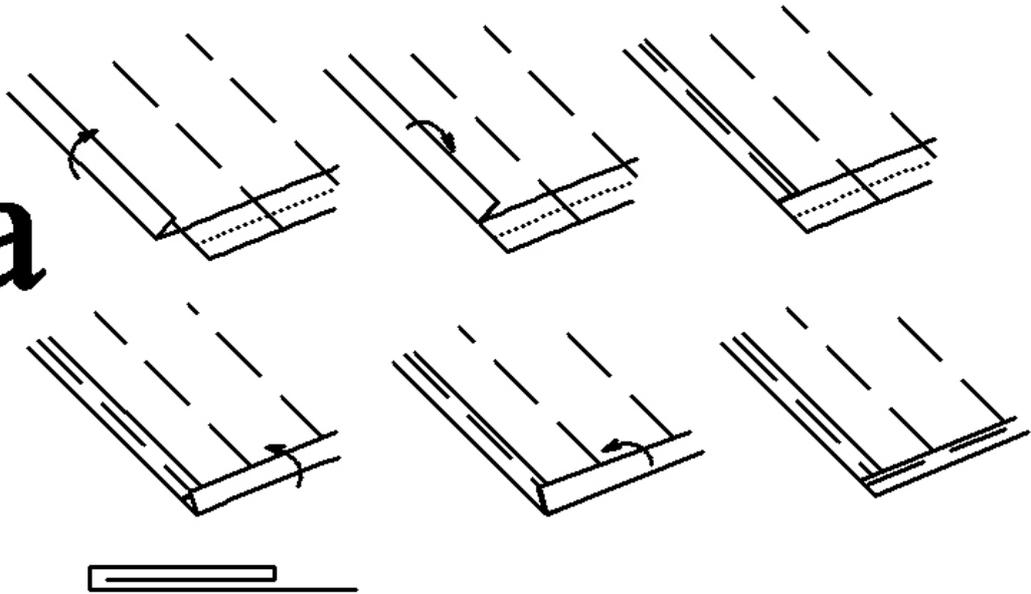
b) To the circumference of the sails sew on ropes 53 so that in the corner of the sail will eyes with diameters about 3mm.

c) Tie the sails to the yards.

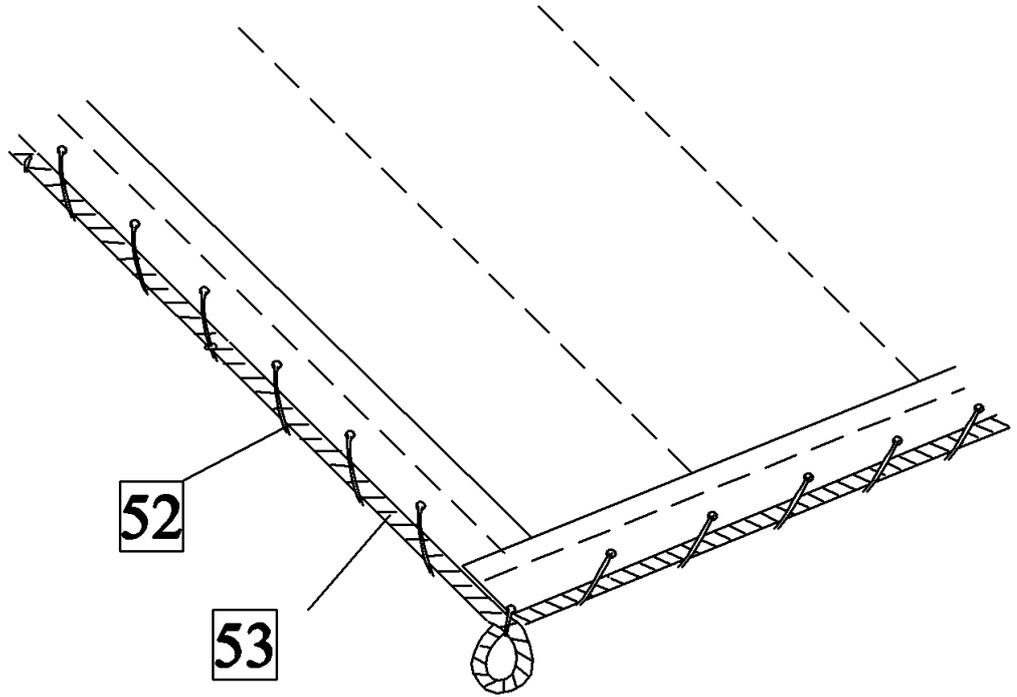
d) Tie fags to the flag masts.



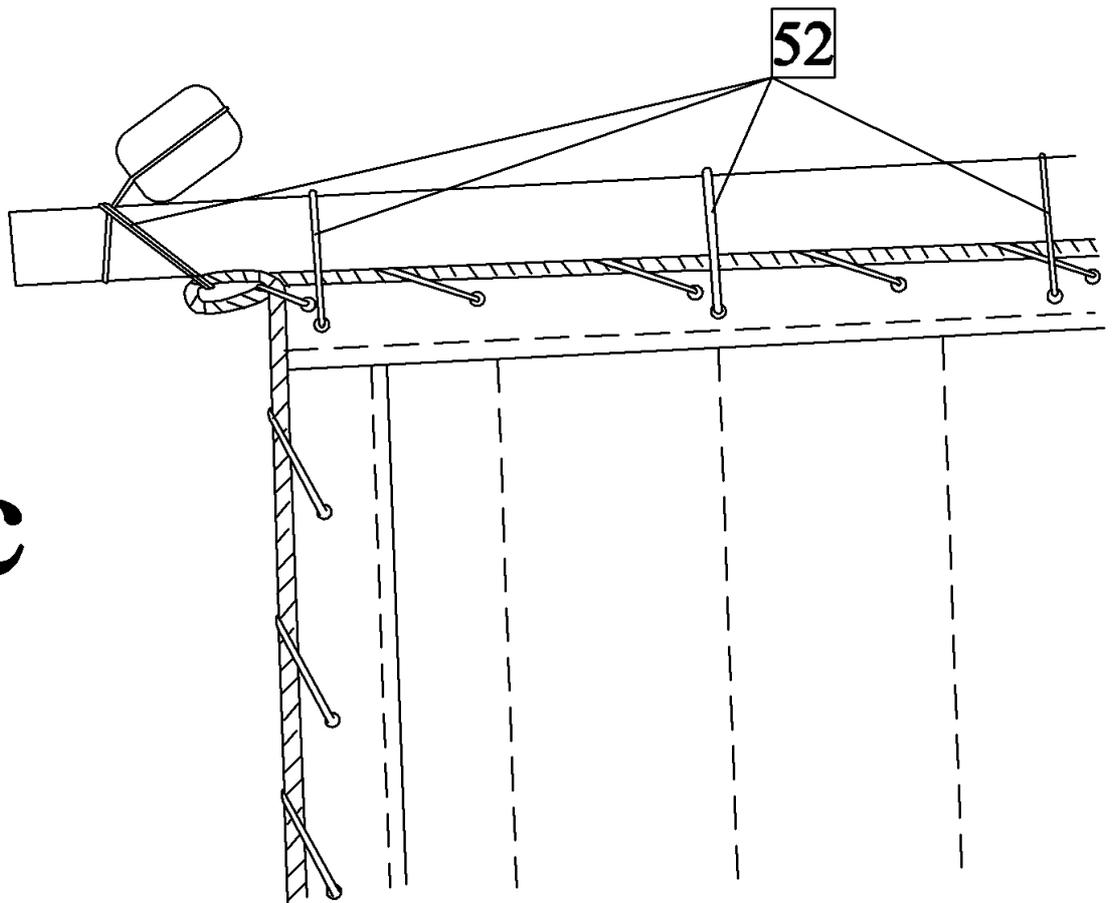
Xa



Xb



Xc



Part list:

0	Keel	plywood 4mm	1pc.
1-5	Keel	wood 4mm	1pc.
6-12	Frames	plywood 4mm	1pc.
13-16	Reinforcements	plywood 4mm	2pcs.
17,18	Deck	plywood 1mm	1pc.
19a,b	Planking	strip 2x3mm	65pcs.
20	Deck	veneer 0,5	1pc.
21	Hatches	strip 2x2mm	2pcs.
22	Hatches	veneer 0,5mm	1pc.
23	Eyebolts	eyebolt	50pcs.
24	Hatches	photo etched part	6pcs.
25	Rings	ring4mm	6pcs.
26	Planking	strip 2x3mm	65pcs.
27	Planking	strip 2x3mm	65pcs.
28	Planking	strip 2x3mm	65pcs.
29a-d	Edging	wood 2mm	2pcs.
29e	Edging	wood 2mm	2pcs.
30	Planking	strip 2x3mm	65pcs.
31	Railing	strip 2x3mm	65pcs.
32-34	Mast foot	wood 2mm	1pc.
35	Gun barrels	cast	2pcs.
36	Channels	wood 2mm	4pcs.
37	Channels	wood 2mm	2pcs.
38	Dead eyes felloes	wire 0,5mm	0,5m
39	-----		
40	Deadeye blocks	deadeye 5mm	16pcs.
41	Channels	strip 2x2mm	1pc.
42-44	Stand	plywood 4mm	1pc.
45	Anchors	cast	2pcs.
46	Anchors	wood 2mm	4pcs.
47	Rings	ring 6mm	2pcs.
48	Door	wood 2mm	1pc.
49	Ladder	strip 1x1mm	4pcs.
50	Rigging	rigging 1,75mm	0,5m
51	Rigging	rigging 0,25mm	20m
52	Rigging	rigging 0,5mm	20m
53	Rigging	rigging 0,75mm	5m
54	Rudder	wood 4mm	1pc.
55	Rudder	strip 2x3mm	65pcs.
57-63	Rudder hinges	photo etched part	1pc.
64	Rudder hinges	wire 1mm	0,1m
65	Mast	dowel pr.8mm	1pc.
66	Mast	dowel pr.5mm	1pc.
67	Mast	dowel pr.4mm	1pc.
68	Bowsprit	dowel pr.6mm	1pc.
69-71	Flag masts	dowel pr.2mm	1pc.
72	Cap	dowel pr.3mm	1pc.
73	Yard	dowel pr.4mm	1pc.
74	Yard	dowel pr.3mm	1pc.
75	Yard	dowel pr.3mm	1pc.
76	-----		
77	Trees	strip 1 x1mm	1pc.

78	Rollers	roller 2mm	cca 100pcs.
79	Blocks	block 5mm, 1hole	55pcs.
80	Blocks	block 5mm, 3 holes	4pcs.
81	Blocks	block 5mm, 3holes	2pcs.
82-96	Eyebolts	eyebolt	50pcs.
97-116	Cleats	wood 2mm	25pcs.
117	Blocks	block 5mm, 2holes	2pcs.
118-120	Sails	cloth	1pc.
121-124	Flags	flag	1pc.
125	Flag pole	dowel pr.2mm	1pc.
126	Outrigger	dowel pr.2mm	1pc.
127	Hawse holes	wood 2mm	2pcs.
128	Hatches	plywood 1mm	2pcs.
129	Hatches	plywood 1mm	1pc.