

# S P E C I F I C A T I O N S.

X 414

For the

Wasp

Construction of one racing Cutter.

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Length on water line, Between 45 and 46 ft.

Length over all.....About <sup>71</sup>70 "

Beam,....." 13 "

Draft of water,....." <sup>10</sup>10'3"

KEEL to be of white oak 6" thick, rabbited 2" deep to receive planking.

STEM to be of white oak about 7" X 8", and worked to form of vessel.

STERN POST to be of white oak 6" X 12". The stem and stern post to be connected to keel by oak, or hachmatack, knees well fastened with bronze bolts.

FRAME to be 1-3/4" X 1-3/4" steel angles through the body of yacht and decreased in size towards the ends. They will be re-enforced by 2" X 2" reverse bar at keel, and 1-1/2" X 1-1/2" reverse bars across the top of floor plates and to extend above the hollow of the floor of the vessel.

The frame angles to which the chain plates attach will be 1-<sup>2</sup>3/4" X <sup>3</sup>2-1/2" X 1/4".

FLOOR PLATES will be 5/32" and 3/16" thick, and will be placed on all frames through the body of the yacht.

DECK BEAMS, of 1-3/8" X 2" steel angles, will be placed at every frame and secured to them by gusset plates 5/32" thick.

There will be 4 steel diagonal straps on each side, about 6" X 1/8", reaching from shear strake to keel and secured to the frames by rivets, and to planking by bronze screws. There will also be a system of diagonal straps on the deck beams.

The frame is to be secured to the keel by bronze screw bolts.

2. *third*

PLANKING:- The lower one quarter of planking to be of Yellow Pine 1-3/8" thick, and the rest to be double, the inner course of White Pine 1/2" thick, and the outer 7/8" Yellow Pine tapered in thickness towards the ends. The planking to be laid together with White Lead, and held by bronze screws, and screw bolts, and carefully bunged on the outside.

DECK to be of White Pine in long lengths and as free from knots, and shakes, as possible, rabbeted and caulked with cotton and oakum, and seams payed with "Jeffries" patent Marine Glue.

WATER WAY of white oak 1-3/8" thick, and to have a plank rail bolted to it, about 6" high at the forward end and tapering in height aft.

DECK FITTINGS to be as follows:- Begining near the bow and next aft of bowsprit heel, is to be a geared Capstan with sprocket wheel controlled by a friction clutch for chain cable, made of galvanized Malleable Iron and Steel.

Next to be a Mahogany, quadrant, deck hatch and coambings about 24" X 27", with a flat hatch, and frame and screws for tarpaulin cover.

Next aft to be a Brass, flush, deck hatch about 12" diameter to dip the Spinnaker pole in.

Next to be the mast partners.

Aft of the mast will be the chain pipe, also pipes for the main hal-yards, fore hal-yards, top-sail out-haul etc, pipes to be fitted with covers when not in use.

Next aft to be a Mahogany Skylight on coambings about 24" X 30", which will be half over the cabin and half over the forward state room and passage way, and to have a light hatch to take the place of sky-light in racing.

Next aft to be the main Companionway, built of Mahogany and as low and light as possible.

3.

Next to be a sky-light over the after state room, similar to the forward one, only shorter, then a small yacht Binnacle similar to Gloriana's, and next a steering cock-pit, about 3' 6" long 2' 8" wide, and 12-1/2" deep, to be surrounded by an Oak rising, about 8" high 7' long and 5' 9" wide, of oval form.

The RUDDER STOCK will pass up through the deck aft of the cock-pit rising and will be worked by a Tiller, of hard wood, about 5' long. A spare Tiller to be furnished also.

All deck-eyes, cleats and fair leaders required, are to be of Bronze and well secured.

BALLAST:- The ballast is to consist of about 47000 pounds of Lead moulded and finished, and secured to the bottom of the keel by 19 copper, or bronze, bolts, 8 of which are to be through bolts, and 11 are to be screw bolts into the lead keel, also by about 16 bronze straps let into the outside of planking and side of lead, well fastened with bronze screws and rivets.

Fastening of floors to main keel:--Bronze bolts will go through the main keel, the heads flush with its bottom side, and having nuts on top of angle frames so that the lead keel may be removed at any time.

Finish, and furnishings, below deck.

Fore-castle to contain 6 folding berths for the crew, and furnished with Mattresses, Pillows, Blankets, Sheets and pillow slips, for the use of the crew, also a light stove, of approved type, set in place ready for use, all ordinary stove utensils, sink with pump connected to fresh water tank, and pump discharge, ice chest with drip vessel, pantry closet, dish racks, dishes and cutlery for crew.

Next aft the mast, to starboard, will be a state room for Sailing Master, fitted with berth having mattress and pillow, blanket, sheets & pillow slips, wash basin etc., and to port a

4.

"Vannevar", or "Sands", water closet.

The cabin will have the companion stairs at the after end with a clothes closet to starboard, and space for oilers to port, fitted with clothes hooks.

There will be a settee, on each side of the cabin, with cushions upholstered in Mohair Plush, or other material not more costly, and swing backs to make berths similar to Gloriana.

The after state room to have a stationary berth on each side with mattress and pillows. There will also be a set wash bowl, with Pitcher and slop jar.

The wood work in cabin, and state rooms, to be of butternut and every thing as light as possible.

Below the floor, aft of the mast, will be room for the chain cable, and next aft a copper water tank tinned inside, of about 100 gallons capacity.

Aft of the water tank will be storage room for spare anchor, cable, sails etc.

#### Painting.

The hull to be thoroughly painted inside and out. Below the water line to be a mercurial Anti-fouling paint, and above water to be painted white, or black, with a Gold, or red, stripe as desired.

#### S P A R S.

Mast about 11-1/2" diameter, 58' long, of Oregon Pine.

Bowsprit about 7-3/4" do 28' do do do do

Boom about 10" do 56' do do Spruce.

Gaff about 36' long and 6-1/4" diameter, of Spruce.

Spinaker boom about 44' long, 6-1/2" dia., of Spruce.

Topmast about 36' long, 6-3/4" dia., of Spruce.

Top-sail Yard about 36' long, 5-1/2" dia., of Spruce.

Top-sail Club, or Yard, 28' long, 4-1/4" dia., of Spruce.

Top-sail Club, 13' long, 3-1/4" dia., of Spruce.

5.

S P A R S, con.

Gaff, and Top-sail Yard, if deemed necessary, to be built hollow.

All spars to have two coats of Varnish.

CROSS TREES, of Oak, of suitable size and length, will be put in place, and a suitable "Crutch" for main boom, properly leath-  
ered, will be provided.

#### RIGGING.

Standing rigging to be of the best crucible steel wire rope galvanized, each shroud to be single, with eye spliced to go over mast head, and to be adjusted by steel turn buckles.

Running rigging to be of the best Manilla, except part of throat and peak, jib, and top-sail hal-yards, jib out-haul and quarter lifts, which are to be galvanized wire flexible rope.

#### BLOCKS.

BLOCKS to be manufactured by the "Boston & Lockport Block Co"., or Blocks of same type, of equal manufacture, also to have two patent brass purchase Grip's similar to the Gloriana.

#### SAILS.

Sails, to be made by "Wilson & Silsby", or any other first class sail maker, of the best duck, as follows:---

Mainsail, #6, -14"	Cotton Duck,	Aprox.,	area	1935	sq. ft.
Fore Staysail, #9, -14"	"	"	"	385	" "
No. 1 Jib, #10, -14"	"	"	"	540	" "
No. 2 Jib, #8, -14"	"	"	"	398	" "
No. 1 Club-topsail, 6-3/4 oz.	Cot' Duck	"	"	814	" "
No. 2	"	8 oz. Cotton	"	558	" "
Working topsail	8 oz.	"	"	400	" "
No. 1 Jib topsail	4-1/2 oz	Cot' Drill	"	700	" "
No. 2	"	6-3/4 oz.	"	300	" "
Baloon Foresail	6-3/4 oz.	"	"	473	" "

6.

SAILS, Con.

Baloon Jib-topsail, Union silk, Aprox' Area. 1730 sq. ft.

Spinnaker " " " " 2020 " "

Try-sail No. 5 Cotton Duck.

ANCHORS.

There are to be 3 steel Anchors, of the Herreshoff Mfg Co. make, fitted to be easily taken apart, as follows:--One working Anchor of about 110 lbs, one spare anchor of about 150 lbs., and one kedge of about 30 lbs.

CABLES.

One galvanized "B B B" Chain Cable 1/2" diameter, 45 fathoms, tested to 8550 lbs and certified, the inner end to be secured to a spare shackle, or eye bolt, to the hull.

One Manilla cable 4" cir., 60 fathoms, one Warp 1-3/4" cir., 60 fathoms. 60 Fathoms of 2-1/4" cir. for spare hal-yards or mainsheet, and about 40 lbs of various small sizes.

To be 2 Cork Life Rings and 10 Life Preservers.

Running and Anchor Lights as required by law, of Brass, cabin and forecastle lights, bilge pump, two draw buckets, two ordinary buckets, swing table in cabin and drop table in fore-castle.

Row boat, 10' long, to be carried on deck, and to have oars and row locks, rudder and necessary boat hooks with brass ends.



