# 8 METRE

Fox's Secound Boo 1935

## CONEWAGO

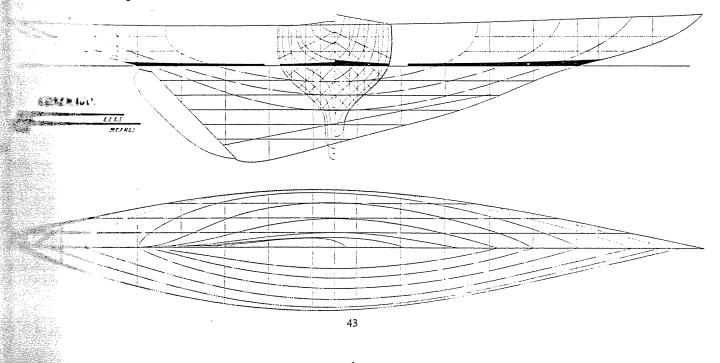
Length, overall Beam -				•	Length, water-line Draught		- 30 ft. 4 in. - 6 ft. 6 in.
Displacement				,	Sail area		- 872·5 sq. ft.
Owner GEORGE	н	CLAR	ĸ	Designer, OLIN	STEPHENS B	uilder.	Robert Jacob

**B**'s successfully defending *Canada's* Cup for America in the last two contests against Canada, *Conewago* has **shown** herself to be a good "Eight" in all weathers, for the 1934 series of races were sailed in three different kinds of wind and sea. The first day the wind blew 25 and then 30 miles an hour from the North-West, with the spiteful we the Great Lakes produce. The second race was sailed in a light true breeze and smooth water, while the third face was in a shifting wind that blew and then faded away in fits and starts, and *Conewago* won all three races, the **Canadian** "Eight" being the *Invader*, designed and built by Fife of Fairlie, and steered by Tom Wade, who is one of the **Royal Canadian** Yacht Club's best helmsmen. He was assisted by a very fine crew, so Wilmot Castle should feel proved of his victory in three straight races, for he had a fine 8-metre and good helmsman against him.

**Canada's** Cup takes its name from the cutter **Canada** which won the Cup off the Americans in 1896, and so this **Cup is in a way similar** to the **America's** Cup, and exactly like it in the fact that America holds and seems likely to **both**, for she could sing Britain's old song if she felt like it, "We've got the ships, we've got the men, and we've got the money too."

### LINES

Concrago takes hardly any girth penalty at all, and though her lines are very kind to the eyes, it seems a pity in that designers should be cramped, and have to study at all times the rules they are designing to, yet there

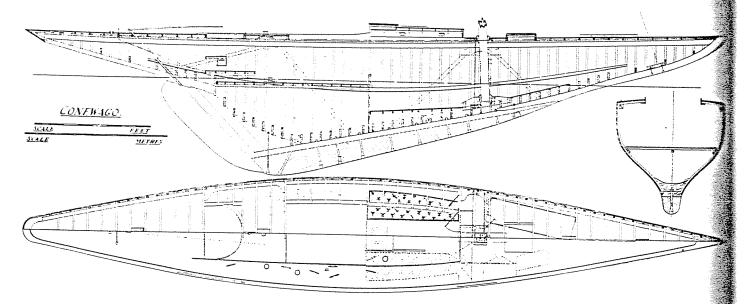


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seems to be no help for this, as rules are very necessary, as the past history of yacht racing teaches, and it is only fair to say for the rule makers that never before have yachtsmen had such good vessels in all classes as they now race and sail, for they are not only of good proportions and shapes but they are also well built:

### CONSTRUCTION

The two sets of diagonal bracing, one at the mast and the other at the runner, is the first thing that a Britisher notices, for though we here use this in our decks we seldom use it in a yacht's sides, though our farmers have for generations found it necessary for their five-barred gates. We are a very slow-moving nation, but in time our yacht designers, builders and owners will appreciate the reasons for which a farmer puts diagonal ties on his five-barred gate.



Conewago's planking is of  $\frac{15}{16}$  in. mahogany (almost an inch thick) and her frames are  $1\frac{5}{8}$  in.  $\times 1\frac{1}{4}$  in., spaced 8 in. apart. Her lead keel is fastened with ten 1 in. dia. bolts, and two  $1\frac{1}{8}$  in. dia. bolts, these two larger bolts taking the wire slings, which are used for hoisting her on to a train or out of the water, and as two of her keel bolts alone are capable of lifting her bodily, lead keel as well, the margin of safety in her keel bolting arrangement is very high.

### ACCOMMODATION

There is no doubt the small cabin on an 8-metre is useful, for in strong winds it forms a shelter, while on light days with strong sunshine it forms a fine place for lunch where the butter does not melt and run off the bread. *Conewago's* mainsheet is double ended, one part leading down through the counter aft to a winch on the fore cockpit floor, while the other end comes down off the boom to the bridge deck, which divides the long cockpit in two, the after cockpit being for the helmsman, while the fore one is used by the crew.

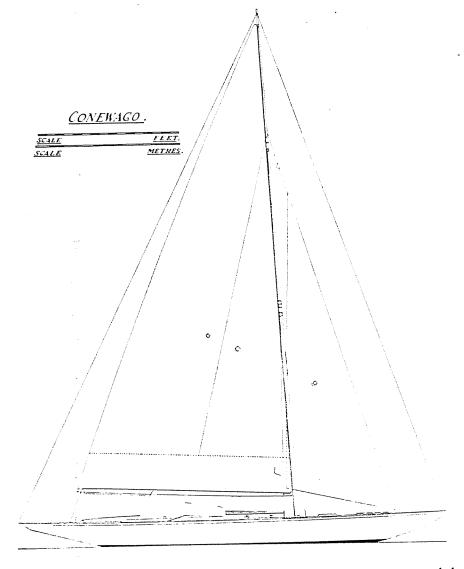
### SAIL PLAN

The sail plan is quite normal, for the mainsail luff is only just over twice the length of the main boom, though it goes to its full rule height of 17 metres or 55 ft. 3 in., and the height of the fore triangle is the 43 ft. above deck that it is allowed to be.

The mast has only two crosstrees, one at the hounds and the other halfway between this and the deck. The runner holding up the head stay leads well aft where it can do its work well. On *Conewago* the topmast stay leads down to the stem head while the topmast backstay runs down to the end of the counter. Seven headsails are shown; the largest, reaching aft to halfway along the mainboom, is no longer than the largest shown on *Bob Kat*, the 6-metre by the same designer, and this brings up the thought I expressed in the chapter on two 8-metre races on the Solent, that is, that overlapping headsails are of greater value on the wind than they are off, for with the wind abeam half of the headsail is hidden behind the mainsail.

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In looking over *Conewago* it will be seen that there is nothing startling about her excepting her phenomenal **speed**, which has enabled her to beat everything she has so far raced against (the best 8-metres of Canada and **America**) for in being twice chosen for America's defender of *Canada's* Cup, she is acknowledged as their best, and, in defeating the Canadian "Eight" in 1932 and 1934, she has proved herself better than any 8-metre in Canada.



Though these racers have cabins and are manly enough to take part in the Regattas round the coast, they do to so, but confine their activities in British waters to the Clyde and the Solent, and so comparatively few socie have the chance of seeing this fine little class.

On the Solent the Wye was top boat while Saskia, the old Clyde "8," won the Jubilee Cup, and was from the top, and though Violeta, the top boat for last year, was generally in the picture, she did not do as a she did the year before.

With a dozen racing in this class the sport was keen, and the speeds are so close that the slightest mistake with a dozen racing in this class the sport was keen, and the speeds are so close that the slightest mistake so the helmsman many places. So the racing in this class was keener than in the "12's" or the "J's," for so the there are taking part the keener and better a man has to be to win any game, whether it is running, boxing so to beat, so, generally speaking, the smaller and more numerous classes are better training grounds for so to beat, so, generally speaking, the smaller and more numerous classes are better training grounds for however, this is not exactly true, as is proved by the Royal Yacht Squadron, for this Club is select many few members, and many thought, when the King's Cup race was opened to all British subjects,

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"8" of the north and the champion of the south, the race being in the north one year and south the next. Such a race, as well as being worth watching, would keep a check on the helmsmanship, for now we do not know if the 8-metres are being sailed better in the north or in the south. It is probable that they are better sailed on the Clyde, for having no "J" class or 12-metres there, all their energies are thrown into the 8- and 6-metre classes, and this should bring the helmsmanship in these two classes above the southern level, where the energy is spread over "J's," " 12's," " 8's " and " 6's."

Counting 4 points for 1st, 2 points for 2nd and 1 point for 3rd, we get the following positions for 1935:

	8-M	etre Class			-
	Starts	ist	2nd	3rd	Points
Fulmar, J. S. Aspin -	 37 37	27 3	5 18	1 8	119 56
Esme, I. F. Marshall - Amita, J. D. MacKechnie	 34	3	3	4 5	22 17
Falcon, John Buchanan Ailort, Geo. Jackson -	 25 26	I	4	4	16 . 13
Thora, J. W. Hamilton Caryl, W. F. Robertson	 26 1	I	0	0	4

Ailort won No. 1 Tarbert Cup; Caryl won the Bryce Allan Cup.

Across the Atlantic the American "8" Conewago successfully defended Canada's Cup against the Canadian challenger Invader, who was a Fife boat.

The first of the three races was sailed in a hard breeze, as it was blowing 25 miles an hour. Both boats had a reef tucked in their mainsails, and even then did not like to sheet down hard and sail to windward.

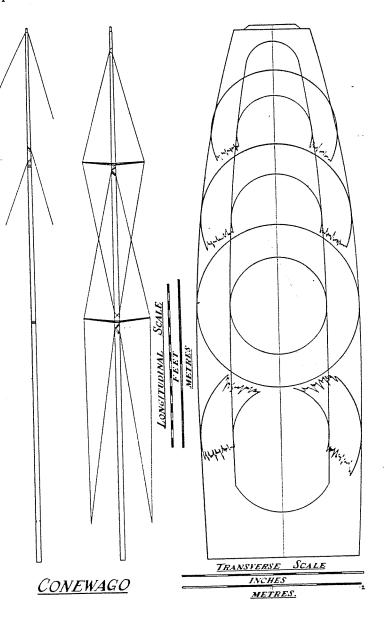
Until this race Conewago had been considered a light-weather boat only, but now she stood up well to the breeze, and pointing higher and footing faster, led at the windward mark by  $2\frac{1}{2}$  minutes. She did not set her spinnaker on the run, but Tom Wade, skipper of Invader, set his small spinnaker, and on this one run alone gained **about**  $2\frac{1}{4}$  minutes, so that *Conewago* was only just ahead at the end of the run. The second beat to windward was harder than the first, for it was now blowing 30 miles an hour, and in this Conewago again opened up a lead of 4 minutes, and though she did not set her spinnaker on the run home, she won by  $2\frac{1}{2}$  minutes.

The next race was in a light wind of about 6 miles an hour, and Conewago won this race as well.

In the third race the start was off the wind, and Invader, the fastest boat down wind, took the lead, and might mily have won this race, but the wind faded away and dropped from 4 miles an hour down to 2 miles an hour. Then thunder squalls produced a lot of fluky winds, and in these flukes, Castle, one of Rochester's finest helmsmen, \*to was steering Conewago, caught and passed Invader and won the third and final race of the series by some 10 minutes, so as well as the International Cup for the "J" boats, America still has the equivalent of the America's Cup for the 8-metre class in her keeping, for Conewago had successfully defended the Canada's Cup.

Perhaps one of our 8-metres will challenge, and bring this Cup away from the States, for our strong fleet of wood boats and helmsmen should be able to produce a challenger able to do this, since if that argument of mine, that greater numbers make greater competition and better helmsmen holds good, then we are in a strong position schallenge for that cup, for we have the finest fleet of 8-metres in the world.

A round spar is far better aerodynamically than a stream-lined spar, because, as masts do not revolve, the stream-lined mast sets up eddies about the luff of a sail as the sketch will illustrate, and so a designer has to choose between the steadier and more even flow of wind on to the mainsail the round mast gives, or the greater strength given fore and aft by the pear- or streamline-shaped mast.



Nowhere have the two schools of thought stood out more definitely and clearly than in the last America's Cup contest. In this the British boat had a small diameter round mast, while the American defender had an enormous streamlined mast. Our mast was the better, though the defender won the series. We had caught the Americans with their pants down, and *Endeavour's* mast should have brought back the cup, for it was stepped in a hull that matched the mast. The Americans admitted *Endeavour's* mast was the better, for Frank Paine put into Yankee a start practically the same. So though this mast of Conewago's looks very ordinary and round, it should not be passed swert lightly; it has won many races, some of them important International events.

At the jib halyards 43 ft. 6 in. above the deck is the upper crosstree, which is 40 in. long and spreads the top tamond shroud to that width. Twenty feet below this is the lower crosstree, this spreading the main shrouds 42 in. If this point, and these are the only crosstrees on *Conewago's* mast, for she has a topmast stay to the stemhead and

# MASTING AND RIGGING 12-METRE — MARINA STANDING RIGGING

ITEN	ſ				Size	Construction	BREAKING STRAIN
Upper Backstay - Jumper Stays - Top Diamonds - Forestay Top Shrouds - Intermediate Shrouds	-				1" dia. 1" :> 3" :> 3" :> 3" :> 3" :> 3" :> 3" :> 3" :>	6 × 7 ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2·2 tons 2·2 ,, 5·8 ,, 5·8 ,, 5·8 ,, 5·8 ,, 5·8 ,,
Lower Shrouds - Lower Backstays -	-	-	-	-	$\frac{3''}{8}$ 23 $\frac{3''}{8}$ 25	>> >>	5·8 ,, 5·8 ,,

## RUNNING RIGGING

	ITEM	4				Size	Construction	Breaking Strain
Main Halyard	-		-		-	$\frac{5}{16}''$ dia.	6 × 24	3·4 tons
Topping Lifts	-	-	-	-	-	1″ 4 >>	>>	I·9 "
Staysail Halyards	-	-	-	-	-	$\frac{5}{16}''$ >>	***	3.4 »

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# STANDING RIGGING

	Ітем				Size	Construction	Breaking Strain
Top Backstay Headstay - Backstays - Jibstays - Diamond Shrouds Upper Shrouds		-			 $ \frac{1''}{8} dia. $ $ \frac{3''}{16} ; $ $ \frac{1''}{4} ; $ $ \frac{1''}{4} ; $ $ \frac{3''}{16} ; $ $ \frac{9''}{32''} ; $	19 strands ,, ,, ,, ,, ,, ,, ,,	20 cwt. 45 » 90 » 90 » 45 »
Lower Shrouds	-	-	-	-	 $\frac{7}{32}$ 22	22	55 >>

# 6 - M E T R E — H A K A H A L A STANDING RIGGING

Upper Backstay       -       -       -       3 mm.; $\frac{1}{8}''$ dia.       19 strands       20 cwt.         Lower Backstays       -       -       -       5 mm.; $\frac{13}{64}''$ 60 ,         Headstay       -       -       -       3 mm.; $\frac{1}{3}'''$ 60 ,         Jumper Stays       -       -       -       2 mm.; $\frac{3}{32}''$ Jib Stays       -       -       -       5 mm.; $\frac{13}{64''}$ Upper Diamond Shrouds       -       -       4 mm.; $\frac{5}{32''}$ Upper Shrouds       -       -       4 mm.; $\frac{5}{64''}$ Upper Shrouds       -       -       4 mm.; $\frac{5}{64''}$ Upper Shrouds       -       -       -       6 mm.; $\frac{16}{64''}$ Lower Shrouds       -       -       -       6 mm.; $\frac{16}{64''}$ Lower Shrouds       -       - <th>ITEM</th> <th></th> <th>Size</th> <th>Construction</th> <th>Breaking Strain</th>	ITEM		Size	Construction	Breaking Strain
	Lower Backstays Headstay Jumper Stays Jib Stays Upper Diamond Shrouds - Lower Diamond Shrouds - Upper Shrouds Intermediate Shrouds	 - - - - - - - - - - - - - - - -	5 mm.; $\frac{13''}{64''}$ ,, 3 mm.; $\frac{1''}{8}$ ,, $2\frac{1}{2}$ mm.; $\frac{32''}{32''}$ ,, 5 mm.; $\frac{13''}{64''}$ ,, 4 mm.; $\frac{5''}{54''}$ ,, 2 mm.; $\frac{5''}{64''}$ ,, 4 mm.; $\frac{5''}{32''}$ ,, 6 mm.; $\frac{15''}{64''}$ ,,	2) 2) 2) 2) 2) 2) 2) 2) 2) 2) 2)	60 ,, 20 ,, 10 ,, 60 ,, 30 ,, 10 ,, 30 ,, 75 ,,

No. Upper Interm: I 2 Lower 2 Jumper 2 Jib Sta 2 Diamo: Upper 2 2 Interm 2 Lower 4

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No.	
I	Foresti
2	Main :
I	Topm:
2	Jumpe
6	Diamc

No.	
I	Main
I	Jib H:
I	Spinn

No.	
1 2 4	Fores <sup>:</sup> Main Diam

No.	
I	Main Jib H