

Tern III

One good Tern...

Insisting his design must be ‘moderate in every way’, Worth’s legacy is a well-honed and carefully considered compromise

BY JACK GIFFORD

Tern is a yacht that has become inescapable for me these past few years. Along with most other readers of *Classic Boat* I have never seen her in the flesh, yet she seems to me, and no doubt many others, to be very familiar.

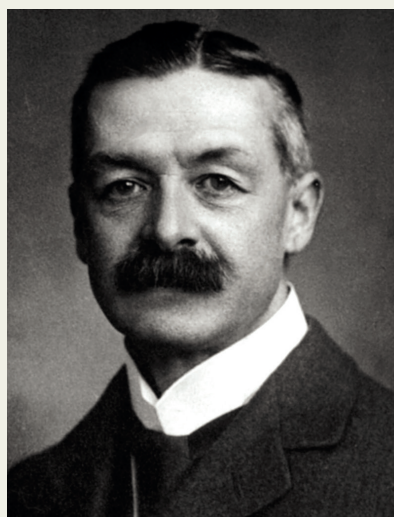
Since her launch there have been several versions of *Tern*. Whether replicated, shortened, lengthened or drawn heavily upon for inspiration, Claud Worth left quite the legacy in this boat. He himself developed the design into the larger and equally as influential *Tern IV*, both boats the result of many years of thoughtful sailing, a critical eye and brilliant intellect. *Tern III* followed two yachts of the same name (by different designers) because “One good *Tern* deserves another”.

Claud Worth is considered an ‘amateur’ yacht designer, if only because he already had a career of distinction in ophthalmology. He nevertheless practised yacht design with a detailed knowledge and appreciation for what it takes to create a good seagoing yacht. He would keep detailed records of measurements of his own yachts and of others he visited and sailed, and in 1927 stated that he had “visited at some point in construction, the majority of the cruising yachts which have been built in the south of England during the last 30 years”.

Tern’s fame results in no small part to her featuring in Worth’s seminal book *Yacht Cruising*, but it was a well-deserved fame. She was a well-honed and carefully considered compromise. Racing rules make yacht design very easy by nicely defining the edges of the box. Achieving such optimisation in the design of a cruising yacht is not so straightforward. Objectivity and the all-important attention to detail are essential to what will always be a compromise, the success of which is a point of very fine balance.

To this end, Worth insisted that his design “must be a moderate in every way”. The familiar gaff cutter rig that was chosen for the boat was no less evolved, with Worth going to efforts to ensure that individual lines would not chafe and that excess weight aloft was avoided. The position of the rig was also carefully considered to result in a well-balanced boat, regardless of her sail set, with the mast “well inside her” for better weight distribution.

Tern has uncomplicated and sweet lines that are not unusual for a yacht of her time, with little turn in the

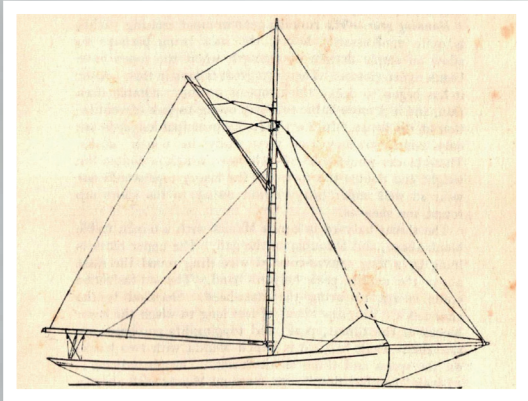


Above: Claud Worth was an ophthalmologist by profession but demonstrated no lack of talent as a yacht designer

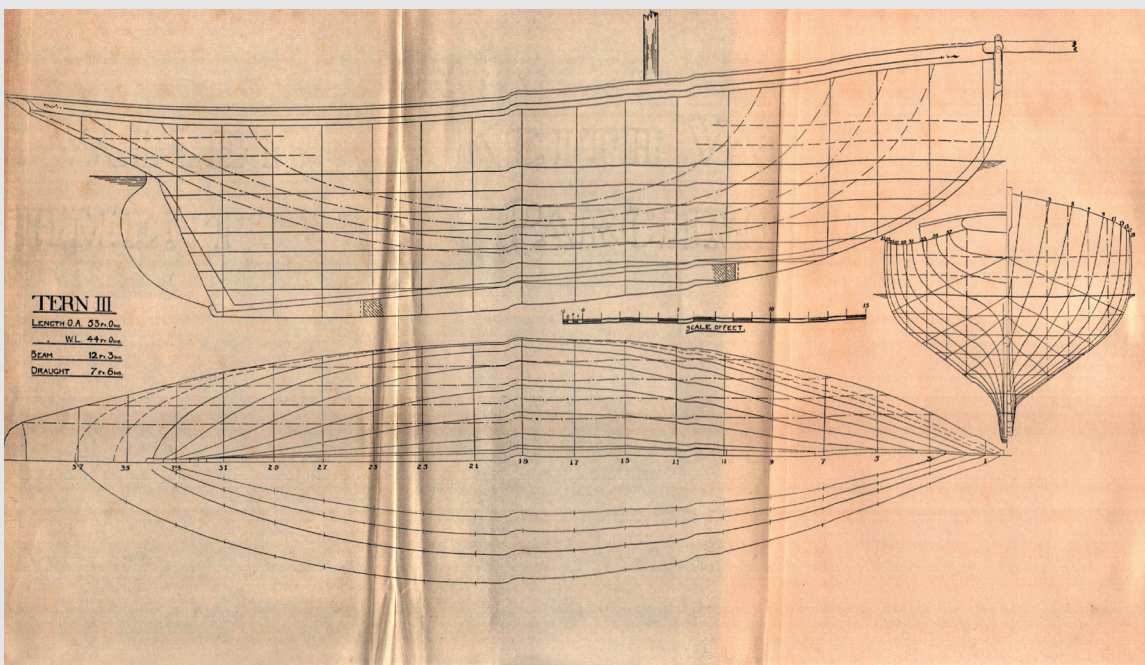
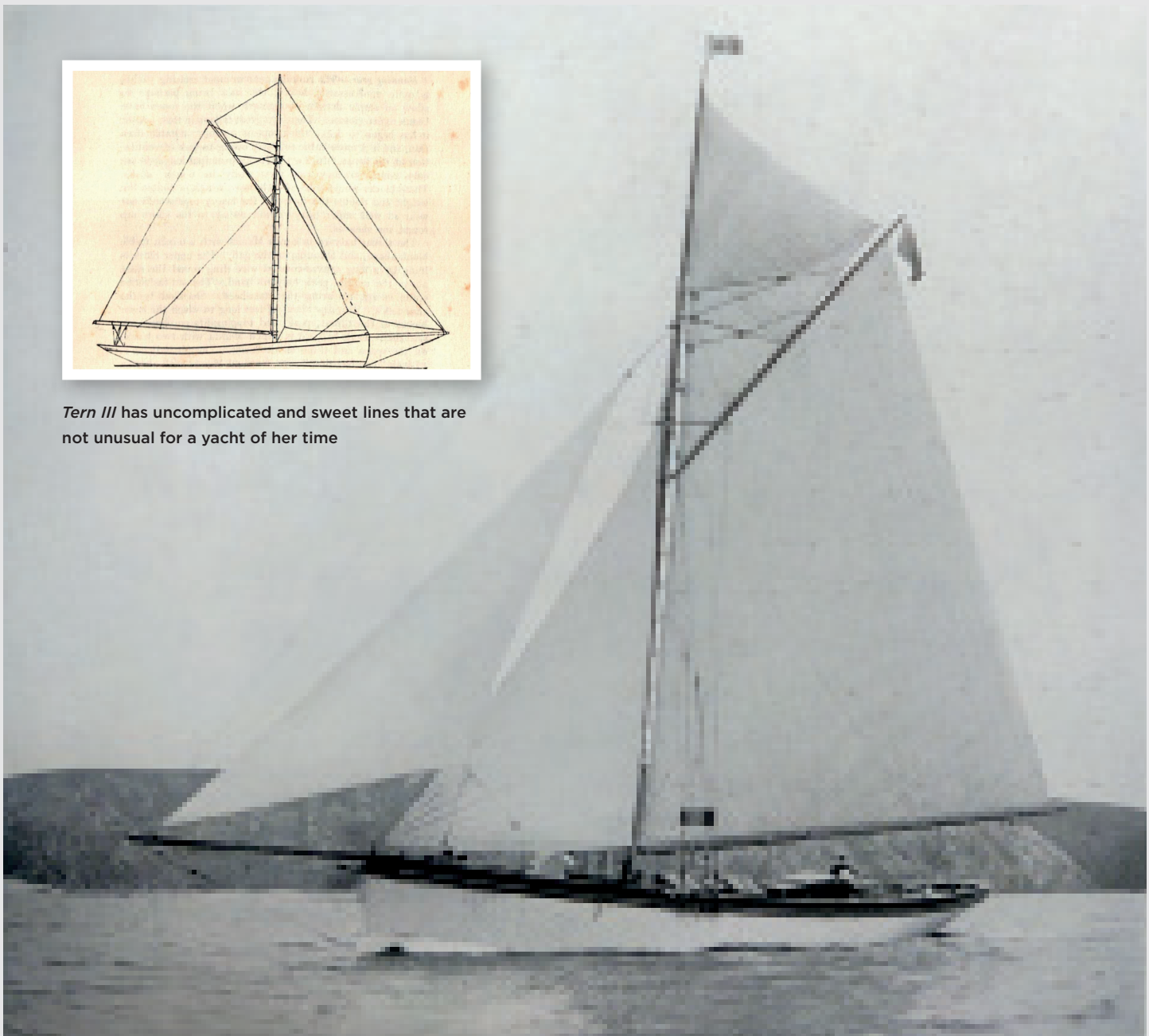
bilge and quite straight sections down to her keel, where there is a nicely worked but not overly pronounced turn in her garboard plank. The short bow overhang teamed with the quite highly raked overhanging counter stern are primarily for comfortable motion in waves. These qualities reduce slamming in the bow and give fine waterlines, carrying her way into oncoming swell. The counter is long enough to pick up additional waterline length when heeled, but is primarily to improve the flow of the stern wave without being so long that she’d get ‘pooped’ by following seas.

Sea-kindliness was one of Worth’s key considerations and something he put a lot of thought to throughout his yachting pursuits. Perhaps most important to this is the ballast ratio – the percentage ballast of the overall displacement of the yacht. Worth opted for 42 per cent, this being (today at least) right in the middle of what you would expect for a cruising yacht of this type and size. Interestingly though, 40 per cent of this ballast was in an external keel but the majority was fitted inside as ingots between the floors. Internal ballast is now largely a thing of the past, but was not uncommon then. What makes these proportions most interesting is that they show Worth’s attention to the vertical centre of gravity. All of these decisions were made with a full appreciation of the effect of weight characteristics on vessel motion. All external ballast would result in a low centre of gravity, too stiff a hull for the sail plan and a violent, jerking motion. Too much internal ballast and she would not be stiff enough, rolling excessively and taking a large toll on her gear and crew. This proportion in *Tern*, it would seem, was just right.

I could go on to write about construction, interior layout, fittings etc, all of which received an equally high attention to detail, but I have run out of space. Suffice to say, Worth was quite the yachtsman and, in his designs for *Tern III* & *Tern IV*, demonstrated no lack of talent as a yacht designer.



Tern III has uncomplicated and sweet lines that are not unusual for a yacht of her time



TERN III
 DESIGNED
Claud Worth
 BUILT
**The Whitstable
 Shipping Company Ltd**
 LOA
53ft (16.2m)
 LWL
44ft (13.4m)
 BEAM
12ft (3.8m)
 DRAUGHT
7ft 6in (2.3m)
 DISP.
31.7 tonnes
 SAIL AREA
1,290sq ft (120m²)