## METAMORPHOSIS OF "MASHNEE"

How an "Old Lady" Kept Up with the Style in Spite of Her 42 Years

By HENRY LEE NORRIS



OR twenty-four years, the Skipper has been the happy possessor — first in part, then in full — of the Buzzard's Bay "30" sloop — Mashnee, one of thirteen sister yachts designed by Nat Herreshoff and built by the Herreshoff Manufacturing Company of Bristol, Rhode Island, in 1902, for a group

of Eastern yachtsmen. Her original owner, Robert Emmons, managing owner of the Cup Defender Resolute when she raced Shamrock IV in 1920, named her after Mashnee Island at the head of Buzzard's Bay which had been in his family since pre-Revolutionary days. With her he won many races under her original double head rig and gaff-headed mainsail.

A cruise in 1924 took *Mashnee* into Morris Cove where she was promptly hailed by the fleet captain of the New Haven Yacht Club as the former flagship for five years, and the Skipper and his crew were cordially entertained at the clubhouse where many of her photographs and trophies were on display.

On August 28, 1924, while returning from Newport, R. I., with a crew of only three men including the Skipper and the then co-owner, Mashnee encountered one of the worst tropical disturbances to which the Eastern seaboard had been subjected and which has only been surpassed by the storm of 1938. She rode out the gale, which at times reached a velocity of 70 miles per hour and, although her dinghy gnawed through its heavy painter and was lost, her Herreshoff anchor on 50 fathoms of chain held her safe. Mashnee crept into Greenport Harbor late the following afternoon under three-reefed mainsail and storm jib to find the breakwater and beach strewn with the wrecks of many boats which had dragged ashore, the death toll in local waters being reported as forty.

The following winter the owners weakened in their previous aversion to power, and installed a 30 hp. engine, only to be chided by their nautical friends with the accusation that they had "given up yachting."

The next innovation was a change from double to single head rig with resultant shortening of bowsprit and main boom. The new headsail was fitted with jib boom operated by a single sheet rigged from boom to traveller to boom to end of bowsprit, thence back to quarter, thus eliminating double sheets for both jib and staysail. With both backstays set up and jib and mainsail trimmed flat, the man at the stick could maneuver alone without touching a sheet.

In 1939, the Skipper, then sole owner, was sold to the idea of a Marconi rig but, upon investigating the cost of a built-up hollow spar 61 feet high, he realized that there might be some truth in the answer to the old wheeze, "Why is a yacht called she? Because her rigging is worth more than her hull." Preliminary inquiry as to the practicability of using a solid mast developed the universal opinion of those alleged to know that it would

At 42 years of age, "Mashnee," with a jib-headed rig set on a specially made solid mast, was as modern as a 1943 debutante

be too heavy if made strong enough to withstand the strain and too weak if made light enough to maintain equilibrium.

Necessity being the mother of invention, the Skipper conceived an idea which, when proposed to the head of a large mast and spar company, brought forth the explosive ejaculation, "Hell's delight, man! Are you crazy? I've been building masts and flag poles for thirty-eight years and never have I heard of so screwy a plan!"

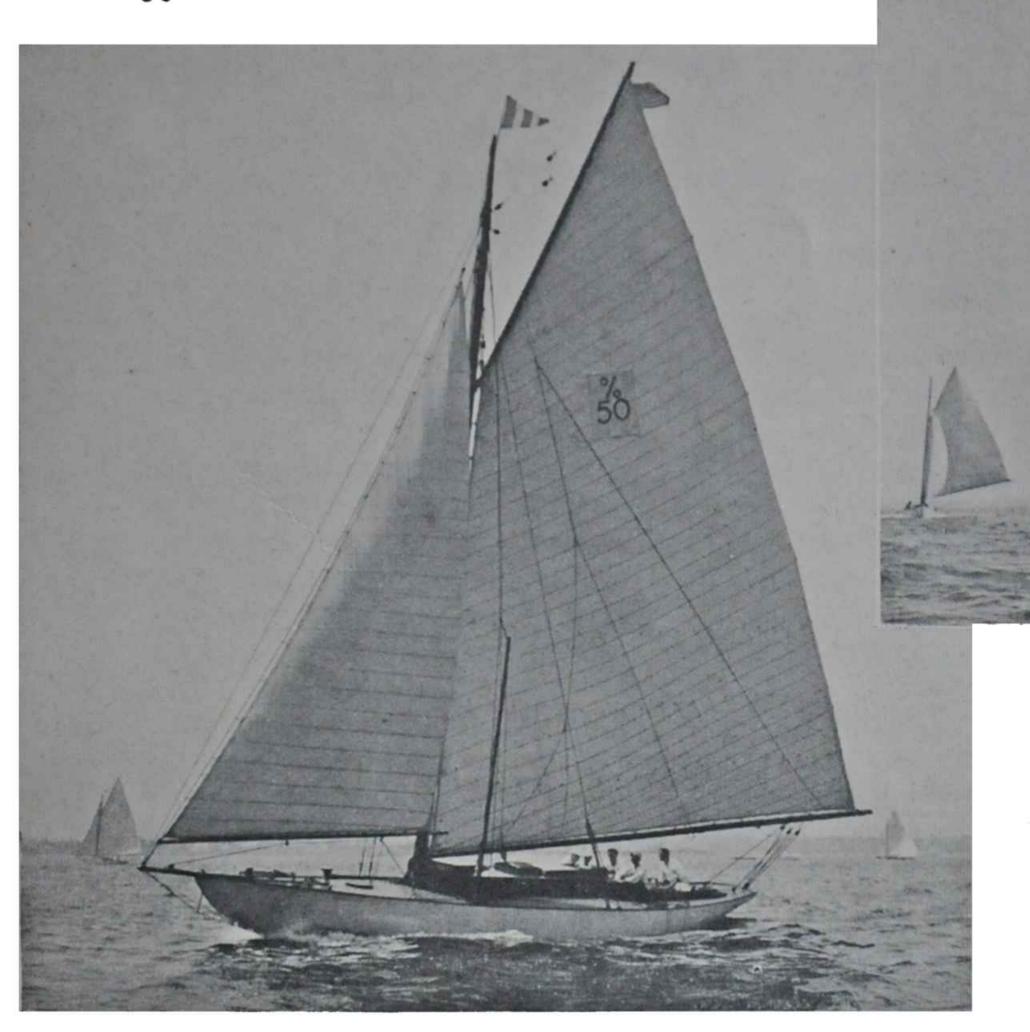
The Skipper replied, "Yes, I probably am; but I want my new mast built upside down in the tree. Can you make it that way?"

"Sure I can make it, but it will cost you twenty-five bucks more for the stick alone, and I want to know why."

"You've just answered your own question. If you sell me a mast 8" in diameter at the step and  $2\frac{3}{4}$ " in diameter at the truck, you'll select the smallest tree from which it can be cut. The uppermost fifteen feet will not exceed six years old growth and will be full of knots where the branches have been lopped off; whereas, if you must use a trunk that measures 10" to 12" in diameter 61 feet above the ground, and taper it down to  $2\frac{3}{4}$ " at its base, it will take a powerful big tree!"

The officer of the mast and spar company was so intrigued with the possibilities that he entered into the spirit of the project and had four Oregon fir trunks of adequate size shipped from the West coast in his next cargo. When they arrived, the Skipper and his invaluable afterguard, Joe, made their selection. A count of the





Above, "Mashnee" as she came from the Herreshoff shop in 1902. Her big rig made her a handful in a breeze. Left, the intermediate rig, with single headsail, improved her efficiency and simplified handling

annular layers or rings in the ends of the trunk before it was placed in the lathe disclosed that the mast would be 34 years old at the step and 78 years old at the truck, tapering up through heartwood, straight-grained and free from knots, the heartwood being old enough to give strength rather than weakness, and the cylindrical disposition of the layers affording the strongest possible structure. Furthermore, when the center of the tree is used as the center of the mast, the spar does not twist under alternating wet and dry conditions.

The process of manufacture was simple and required only six hours to complete. The trunk was placed in a lathe with a massive central chock five feet in diameter and centered between head and tail stocks as in an ordinary lathe, the cutting knife moved forward and back along the trunk, actuated longitudinally by an automatically driven screw, and manipulated towards the trunk by an operator who gauged the diameter by calipers and made successive cuts until the mast was reduced to the required size. A solid spool 8" in diameter and 14" long was left at the upper end.

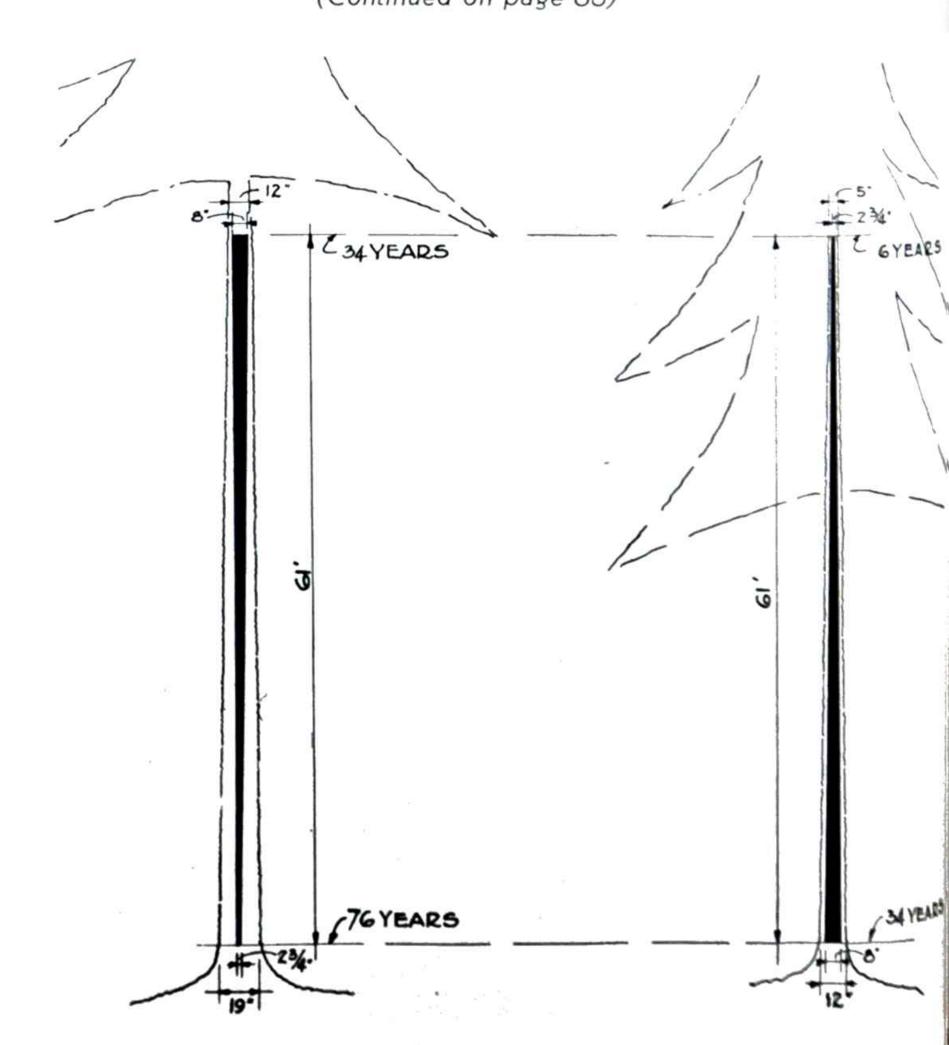
The mast was then shipped by trailer to the home of the indefatigable Joe, and placed on trestles in his back yard. For the next six weeks Joe devoted his entire spare time, evenings, Sunday and holidays, hand-finishing that mast. The "spool" was worked down to provide cheek bearings for the main halliard sheave, shoulders were carved out to form integral cheek blocks for the fore-stay and the permanent back-stay, and tracks were fitted to the mast and the jib boom. Not satisfied with stock fittings, Joe also made patterns for extra heavy turnbuckles, crosstree knee brackets and deck plates, had these all cast in bronze and then machined them himself. He also fashioned the single spreaders of 1" white oak and made all of the splices of the plow-steel rigging, 26 in all: fore-stay, jib-stay, permanent backstay, eight shrouds and two runners.

How "Mashnee's" 61-foot mast was cut "up-side-down" from the tree

There is but a single pair of spreaders with no forward strut or intermediate bracing or return shrouds as required when hollow masts are used, with the result that wind resistance is reduced to a minimum, the cross-section of a solid mast being considerably less than that of a hollow spar. The matter of wind resistance is of much greater importance than is generally realized, as it not only affects the speed of a yacht under way but the strain on the cable while at anchor. The main halliard is equipped with a jig on the port side of the mast, but to obviate the intolerable annoyance caused by jig-twisting, a sail slide was brazed to the upper jig block, which travels on a 4' section of track attached to the starboard side of the mast.

For five years, the upside down mast, which weighs little more than the original 43-foot solid stick and 30-foot solid gaff, has weathered many a squall without developing weakness and, insofar as the Skipper has been able to ascertain, it is the only one of its kind afloat.

Just a few words about Joe, referred to above. For 25 years he has been guide, counsellor, friend and sailing (Continued on page 66)



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companion of the Skipper. He is strictly an amateur yachtsman, master craftsman, skilled mechanic, chef extraordinary whose chowders, both New England and Manhattan, are unsurpassed, and believe it or not, have been lauded on the Boulevards of Paris.

Many a dowager, "fair, fat and forty," with contours resembling "a busted lounge," might well envy *Mashnee*, the old girl now in her forty-third year, who, despite the pounding to which she has been subjected, is still as sound, as graceful, as streamlined, and as fast as she was on her maiden voyage in 1902.

