

hind the lighthouse on his way back to Sag Harbor. We hoisted sail and took our course N. E.  $\frac{1}{2}$  N. across Gardiner Bay for New London. Running wing and wing, as usual, we soon sighted the white tower of the light, passed it, and dropped anchor off the New York, New Haven & Hartford station just as the clock struck six bells.

The regular yacht anchorage at New London is off the Pequot House; the railroad station is about two miles further up the harbor.

The next day was Monday, the sixth. After a 9 o'clock breakfast, we sent Rudolph ashore to lay in a stock of everything. He did, returning with the dinghy loaded to the gunwale, and a receipted bill for \$41.80. As soon as the stuff had been stowed in the lockers we ran up the sails, and in a light southerly breeze started to beat out to Race Rock. Once outside the harbor we found everything hidden by a thick haze, which, however, lifted a little after we had made a long board to starboard. Coming about, we found that we could just fetch the Rock.

Leaving Race Rock some two or three hundred yards to the starboard, we kept off a bit, and reaching along past the hotels and cottages on Fisher's Island, soon lost the light in the haze.

Keeping a mile or so off shore, we slipped along, until, about 4 o'clock Watch Hill hove in sight. Seeing breakers to port, we kept a sharp lookout, and, with frequent references to the chart, crawled along past the bell-buoy and dropped the hook off the bathing beach. The sun went down just as we anchored, and we thanked our lucky stars that the ledges between Fisher's Island and Watch Hill had been passed by daylight.

There is an anchorage at Watch Hill away around behind Sandy Point, but the channel is hard to find. The best place, in ordinary weather, is about a quarter of a mile directly off the bathing beach.

At supper, the coffee pot kept sliding from one side of the table to the other as the boat rolled in the swell, finally sliding off into Shave's lap, spoiling a brand new pair of white flannel trousers and causing that gentleman to use much hard language as he arrayed himself again for the trip ashore. The people we wanted to call on were out, and the town being deadlier than it was on the water, we put back to the Nerine and spent the evening reading.

The next morning we laid out a course E.  $\frac{1}{4}$  S., from Gangway Rock, off Watch Hill, to the whistler off Point Judith. Keeping about three miles off shore, we reached over in a fresh southerly breeze, rounded the buoy, and winged the mizzen for the run up to Newport. Owing to a haze we had quite a bit of trouble in distinguishing between Whale Rock and Beavertail Lights, but remembering our experience at Sag Harbor, we paid close attention to the chart and finally located Beavertail as the one dead ahead. On the run up from Point Judith we passed a long string of barges that had been just distinguished ahead of us when we left Watch Hill.

There is plenty of water all along through here, and no attention need be paid to the charts, except as a means of locating the lights.

The straw colored sides of Brenton Reef Lightship now loomed up through the mist off to starboard, and, giving it a berth of about a mile, we soon passed Castle Hill and the Dumplings and rounded Fort Adams. Keeping an eye out for two buoys off the end of the torpedo station, we wound our way in through the hundred and one vessels in the harbor and rounded up off the New York Y. C. station. This seemed to us the best anchorage. We lowered sails, put the covers on, and set the awning for first time since leaving New Rochelle.

About midnight Shave and I rowed ashore to meet Jack Munn, who was to arrive on the Fall River boat, due at 2:30 A. M. After a long wait, spent in fighting mosquitoes, the boat came in. Jack was the first man off, and all hands put back to the Nerine and turned in.

After breakfast next morning, all four of us went ashore to look the town over, and at the first corner we turned ran into Potter, a club mate at Princeton. Pot. insisted on our sailing over to Jamestown and anchoring off the Conanicut Y. C., so taking him with us, we went back to the boat, hoisted jib and jigger, and started to beat over to Jamestown in a heavy west wind, full of wicked puffs. Even under our shortened sail we had all we wanted, and had to luff her several times. There is good water at Jamestown, and we dropped the hook in 3 fathoms some 200 yards from shore, directly off the Conanicut club house. Then all hands went ashore for dinner at Pot's.

We laid at anchor off Jamestown from Wednesday, July 8, until Sunday, July 12. Jack received word on Saturday which made it necessary for him to give up the trip, so we persuaded Pot to come along with us. After bidding farewell to our friends at Jamestown, we weighed anchor early Sunday morning, and started to beat out of the harbor in a fine southeasterly breeze. We made the course from Brenton Reef to Vineyard Sound Lightship E. by S.  $\frac{1}{4}$  S., and leaving Brenton Reef Lightship about half a mile to starboard—to give it more of a berth would mean trouble with Brenton Reef—we could just hold our course on a close reach.

It was a perfect day, with no swell to speak of, and with lee rail awash, we tore along at a tremendous clip. We kept about five miles off shore, and just before lunch Cuttyhunk appeared to port, and we soon made out Vineyard Sound Lightship dead ahead. Gayhead loomed up to starboard, the red tower of the light looking about a mile high. We rounded the lightship and started sheets for the run up Vineyard Sound. Several long tows passed us, making fine time to the westward, while at times we seemed to be standing still. A glance at the tide tables explained this—the tide had turned. Besides this, the wind had dropped a bit. The tide runs about three miles an hour through the Sound, and to make any sort of headway one must have a good breeze on the quarter.

We slowly crept past Gayhead, then Quick's Hole and Tarpaulin Cove. The wind dropped a bit and we stayed off the latter for almost two hours, only leaving it when the breeze freshened again. Keeping well off shore to avoid the big bar on the Vineyard side of the

Sound, we reached along past West and East Chop, and rounded the latter for the beat up into Edgartown Harbor. The sun was just going down as we made out the Squash Meadow buoys to port.

Owing to the long sand bar, persons attempting to beat up Edgartown Harbor in the dark should take tacks of not more than ten minutes each, and should keep at least one man in the bow to watch for buoys. There is plenty of water in the channel.

With Shave and I up in the bow, and Pot at the tiller, we kept on, Rudolph keeping the lead going. On one port tack we passed within 3 ft. of a huge spar buoy. Coming about we passed close to another spar and thought that we were in a pretty mess, until Pot discovered that we had come about in thirteen points instead of eight, and that we must have passed the same spar twice. Edgartown and Cape Poge lights helped us, and after a long beat we dropped anchor, as we thought, some quarter of a mile from Edgartown Light, and almost on top of shore.

The next morning we were much surprised to find that the light was a good mile away, and the other shore about half a mile. After breakfast we ran in the anchor, hoisted the jib, and finally dropped the hook just outside of a lot of catboats, some hundred yards from shore.

[TO BE CONTINUED.]

## The South Bay Scooter.

How to Build One.

BY H. V. WATKINS.

FOR the past ten years the baymen and residents along the south shore of Long Island, particularly those down at the eastern end of the Great South Bay near Bellport, Brookhaven, and Smith's Point, have had a "cinch" on a sport that has just begun to awaken widespread interest. The craft used is called a scooter, the sport "scootering."

Nowhere else in the world will be found a craft in design, method of handling, speed, capability, and safety, like the South Bay scooter. The boat was primarily designed for winter use, but many make an all the year round gunning and rowboat of it, as in smooth water its rowing and sailing qualities are all that could be expected in any sailing boat of the same size.

While ice yachting at a mile-a-minute clip will never cease to be exhilarating, there is always present an element of danger from cracks and air holes which, to a certain degree, lessens the pleasure of the sport.

In a scooter one is entirely free from fear of these dangers to the ice yacht; in fact, you pass over them at full speed with hardly any perceptible difference in the sailing, except a slight jolt or two, according to the size of the crack or air hole passed over.

The sensation of absolute safety in a scooter is indescribable to a novice; it must be experienced to be appreciated.

While of peculiar design, the scooter is not a difficult craft to construct. From diagrams and instruction given herein any amateur builder can easily put one together. The materials needed will be as follows for a plain, substantial scooter:

125 sq. ft.  $\frac{1}{2}$  in. clear pine for deck and bottom; 20 sq. ft.  $\frac{1}{4}$  in. boat cedar for deck and bottom frames; 12 sq. ft.  $\frac{1}{4}$  in. oak for runner woods, mast step, etc.; 2 pieces  $\frac{3}{4}$  in. by  $\frac{3}{4}$  in. by 16 ft. planed oak for outside strips; 1 piece  $\frac{1}{2}$  in. by  $\frac{1}{2}$  in. by 16 ft. planed oak for coaming; 2 pieces 1 in. by 3 in. by 15 ft. clear pine for side pieces; 10 gross 1 in. No. 8 brass flat head screws; 1 gross  $1\frac{1}{2}$  in. No. 10 brass flat head screws; 1 gross  $\frac{1}{4}$  in. No. 10 brass flat head screws; 1 gross 3 in. No. 16 brass flat head screws; 1 dozen  $\frac{1}{4}$  in. by  $\frac{3}{4}$  in. galvanized or brass carriage bolts; two  $\frac{1}{4}$  in. by 1 in. by 10 ft. spring brass or steel runner shoes; 10 pounds white lead; 1 quart each of oil and turpentine; 3 pounds of putty; 2 balls candle wick; small piece 3 in. oak for stem; 1 4 in. galvanized cleat for halliards; 2 deck plates with staple; 2 shroud plates with staple; 1 pair galvanized or brass rowlocks and sockets; 3 galvanized  $\frac{3}{4}$  in. single pulleys for main sheet; 1 galvanized  $\frac{1}{2}$  in. single pulley for jib halliard; 1 pair 6 ft. spruce oars; 15 fathoms  $\frac{1}{4}$  in. diameter manilla rigging for main sheet, halliards, shrouds, etc.;  $\frac{1}{2}$  pound small cotton rigging for bending sails, etc.; mast, boom, gaff, jibboom, bowsprit, and pike poles as shown in diagram B.

First get out stem of oak 3 in. thick, as diagram shows, with grain of wood running horizontal, then join (plane) 1 in. by 3 in. side pieces straight on one edge, tapering other edge as shown in diagram. Mark the straight edge, top. Now snap a chalk line on the floor 15 ft. long far enough away from the side of the building to give room to work around the boat, as this mark will be the working center. Nail side pieces to the stem and lay them down with the straight or top side down, keeping the point of the stem exactly on the center mark. Now get any strip about 1 in. by 2 in. and cut off exactly 3 ft. 9 in. long. Make center mark and lay at right angles across chalk line 7 ft. from the stem. Draw in the side pieces until the ends are about 14 in. apart and faster so that they will remain in place while the stern is being fitted. Make this out of  $\frac{1}{4}$  in. oak and fit at an angle of 45 degrees, leaving width sufficient to receive a slight crown in deck and bottom, and nail sides firmly to it.

You now have the outside lines and are ready to put in bottom frames. First get the exact width near the temporary crosspiece, and on one of the  $\frac{1}{4}$  in. cedar boards,  $\frac{3}{4}$  in. from the top edge, make a straight line from point to point of width indicated. Now,  $\frac{3}{4}$  in. above this line, and for 9 in. each way from the center, make a parallel line, from the ends of which mark an easy curve down to the frame end marks. This will give the swell of the bottom at its widest point, the flat center being made to prevent dragging on the ice between the runners.

Saw out frame  $\frac{1}{2}$  in. in depth. This done, using frame for a pattern, mark out on  $\frac{1}{2}$  in. pine a duplicate, but only one-half the length of whole frame, which will give you a pattern for the other bottom frames fore and aft until the narrowness of the boat cuts out all the flat part. Cut the first frame snugly between side pieces, dropping ends flush with edge, keeping square with working center line. Put one  $1\frac{1}{2}$  in. brass screw through side piece into each end of frame to hold in place. Now space off the

rest of the frames 10 in. from center to center each way. Get the length of each and mark them out on the  $\frac{1}{4}$  in. cedar plank, bearing in mind to keep straight part of pattern up  $\frac{3}{4}$  in. as in first frame. Keep curved end of the pattern to outside mark each time. When the frames have shortened sufficiently to overlap the straight part of pattern at center mark, you will have cut in 7 or 8 frames. Now take a light batten strip as long as your boat and lay along the frames over center mark from stern to bow; press down at ends and trim the oak stem to the bevel as indicated by the strip. Trim the stem or transom also, giving it about 1 in. crown in center.

Now, fasten batten down at each end, and it will then indicate the sweep on which to get out all remaining timbers fore and aft. When these are in, take another batten and slide over the frames to get proper bevels for trimming side pieces. The boat is then ready to be planked. Rip up and plane straight the  $\frac{1}{2}$  in. pine into strips  $\frac{3}{4}$  in. wide; lay the center strip first, fasten with 1 in. brass screws (two in each frame), and not more than 2 in. apart along the ends at edge of the boat. Set each plank up snugly before fastening, and when all are on, caulk each seam with the candle wick, and prime with white lead paint.

At this stage the boat can be raised from the floor and placed on saw horses or boxes for convenience in doing the rest of the work. The runner woods can now be put on.

Snap a line along the center of the middle bottom plank 10 ft. long, beginning 2 ft. 6 in. from the stem (bow); ten inches from this line on each side make a parallel line of the same length. These two lines mark the inner edge of each runner wood. Now take the  $\frac{1}{2}$  in. oak plank, and, placing it on edge, exactly following the runner line, brace it so it cannot move, then scribe it down the whole length of the runner mark so that it fits perfectly on each side. Sixteen inches from each end make a "spot mark" (on inside), keeping bow mark  $1\frac{3}{4}$  in. up from bottom edge and aft mark up  $1\frac{1}{2}$  in. From these two dots sweep an easy turn with  $\frac{1}{2}$  in. raise in center by using light batten. Taper the ends from these marks down to extreme ends of runner wood with a gradual turn. Rip along this line carefully, tipping the saw so that when wood is in place on the boat it will bevel away from the center of boat about  $\frac{3}{4}$  of an inch on the width of oak. The wooden runner is now dressed excepting that the edge on which the steel shoe is to be placed is too wide. Take the surplus wood from the outside, leaving base full width for strength. Fasten in place with the 3 in. brass screws and  $\frac{1}{4}$  in. by  $\frac{3}{4}$  in. bolts, alternating with each timber. Be very careful to keep inside edge of wood to the mark, and get the two runners exactly parallel, for on this point depends the success of all scooters. In drilling the metal shoes have the screws about 6 in. apart, avoiding each large screw and bolt in runner wood by at least 2 in. Use  $1\frac{1}{2}$  in. No. 12 screws for the shoes. Brass screws for brass runners; steel screws for steel runners.

Turn the boat over now and frame deck. Put the first frame across about 4 ft. 6 in. from point of bow, or directly over bottom frame that comes nearest to that distance. Give this a crown sufficient to make the boat roin. deep from inside of bottom planking to top of the deck frame. Keep ends down flush with side piece, as was done with bottom frames, and put  $1\frac{1}{2}$  in. screw in each end also.

The next frame should be put in 6 ft. aft of this one, and have crown sufficient to give a depth of 9 in. from the bottom. To get the proper crown for the frames to fill out each end, spring the small batten, as was done on the bottom frame, the length of the boat.

The 6 ft. space is left for the cockpit or hatchway, but must have deck timbers along each side. The hatchway may be cut round at ends, pointed or square, as per diagram. The latter is easiest.

To get the sweep of these short timbers, a section of the first deck timber may be used as a pattern. In cutting to fit against side pieces hold up inside end to conform with sweep of the timbers already in place. For strength to support the deck, screw  $\frac{1}{2}$  in. by 4 in. pieces pine on the sides of these and the bottom frames close out against the side pieces. When all the deck timbers are in place, trim off the outside strip to proper bevels, as was done with bottom edge, and proceed to lay the deck. For rowlock socket pieces there are several devices, but the strongest is to fit a piece of 3 in. by 3 in. pine upright 16 in. forward of the back end of cockpit, and right against outside piece before you lay all the deck. These may be tapered to symmetrical proportions at any time after they are in place, first sawing ends down to a level line of coaming.

For coaming use  $\frac{1}{2}$  in. by  $\frac{1}{2}$  in. by 16 ft. oak. Keep this level all around on top, letting lowest points be 2 in. from center of deck forward and  $1\frac{1}{2}$  in. from center of deck aft. Caulk the deck seams as was done with bottom. Now plane the edges of deck and bottom off flush with the side piece. Paint well with thick paint, and, while the paint is fresh, screw the  $\frac{3}{4}$  in. by  $\frac{3}{4}$  in. by 16 ft. oak along the entire length of the boat; when fast, trim top and bottom edges down flush with deck and bottom. A small rail about  $\frac{1}{2}$  in. by  $\frac{1}{2}$  in. with frequent scupper holes will now put the finish on the hull of the boat, excepting paint and putty. All the seams and screw holes should be filled with white lead putty, and the whole boat given two coats at least of best white lead paint. Now make the mast step of 1 in. oak by  $\frac{1}{2}$  in. wide, long enough to cross two spaces of the floor timbers. Bore two holes each 6 in. from either end, 2 in. diameter, then screw the step firmly to the floor timbers, as shown in diagram. Make two upper steps of  $\frac{1}{4}$  in. cedar 6 in. wide, and cleat to the coaming so that ends will not press above the line of the deck. Bore  $\frac{3}{4}$  in. hole in each exactly plum over the bottom step holes. These upper benches may be made to drop on cleats easily, so that one may be removed when the other is in use.

Two places for the mast are provided because the entire control of the boat when on the ice is wholly by the trim of the sails, and it often happens that with reefed sails moving the mast to the after hole gives the boat a more perfect balance.

For deck and shroud plates cast brass fittings are the best. There are several good substitutes which will answer every requirement, however. For shroud plates



## British Letter.

THERE has been a good deal of discussion lately in the leading yachting papers as to the desirability of having a standard of classification for yachts which could be applied with benefit to the modern racer, and the Yacht Racing Association recently interested themselves in the matter sufficiently to appoint a committee to inquire into this subject among other matters, but, so far, without tangible results. The only system of classification which has been recognized over here, during the last twenty-five years, has been that of Lloyds, but as the rules governing this system had not been altered since their inception until last summer, and the form of racing yachts has undergone a complete metamorphosis during that period, Lloyds rules have been utterly inadequate as a means of classifying racing yachts for many years. Last year the committee of Lloyds undertook the complete revision of their rules, and in August they issued a new set of rules for the building and classification of wood, steel and composite yachts, in which they have endeavored to cope with the difficulty of providing a code of rules which can be applied with benefit to the construction and classification of the modern racing yacht.

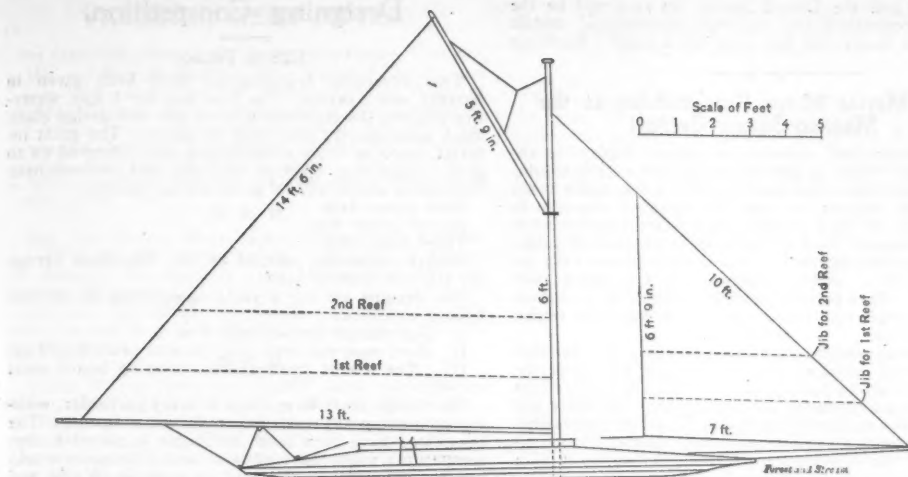
In this matter they have only partially succeeded, and it will require the cooperation of the Yacht Racing Association to make a complete success of the new scheme. The Y. R. A. have more than once had thoughts of formulating a set of scantling rules to prevent the flimsy construction which has done so much to kill class racing in British waters; but their efforts have always been half-hearted and they shrink from anything like drastic changes, however much the changes may benefit the sport in the long run. There is a golden opportunity now for the governing body to combine with Lloyds to evolve a satisfactory system of classification for racers, and to make it compulsory for every racing yacht above a certain size, say 36ft., to be built sufficiently strong, with due regard to the stress and strain imposed by the heavy lead keel and big spread of canvas, to stand the wear and tear of one or two seasons' racing, and afterward be fit for use as a fast cruiser. Class racing in anything above a 36-footer is at a very low ebb, with the exception of the 52ft. class, and vested interests would by no means be hard hit by such a healthy innovation, besides which people would be much more willing to build if they could only be certain of getting the hall mark of Lloyds classification with their vessels, and knowing in that respect, all yachts would be treated alike, and the bandboxes rigidly excluded. Until something of this sort happens and the Yacht Racing Association exercises its undoubted authority much more freely than it has done of late, it will be quite hopeless to expect a renewal of class racing in Great Britain. It was hoped that something definite would have been done at the annual general meeting of the Yacht Racing Association, which was held on February 2, to try and establish class racing on a firm basis, but a motion by the chairman, Mr. A. Manning, that all yachts over 30ft. rating should be built to Lloyds new rules, and classed, did not meet with a second. It is true that Lloyds new rules as they stand are not quite suitable to the modern form of racing yachts, but very little alteration would be necessary to make them all that is desirable, and it is certain that until the Y. R. A. modify their rating rule so as to produce a more wholesome type of vessel, and put themselves in touch with the committee of Lloyds for the purpose of evolving a suitable code of rules for building and classification of racing yachts, prospective owners will not build big vessels for anything but the handicap class.

With the death of Mr. Robert Hewett, which took place at Salcombe, S. Devon, on January 21, there has been removed one of the best known yachtsmen of the old school. Mr. Hewett was Commodore of the New Thames Y. C. and Vice-Commodore of the Royal Thames, and his well-known figure was always a prominent feature on the club steamer in the river matches on the Thames at the opening of the season when his sound, common sense and good judgment were always in request and never withheld from the sailing committees. Mr. Hewett was more than a mere yacht sailor, for he was responsible for the design of the famous 10-ton cutter Buttercup, one of the most successful of the old plank on edge type of boats in vogue in the early eighties, which he sailed himself with a very large measure of success during four seasons. Buttercup was a big, full bodied boat, with high freeboard; and she differed from all the other boats in her class in that she had a short schooner bow which was afterward copied and called the "Buttercup bow." She was very fast to windward and a particularly powerful boat in a seaway. Mr. Hewett will be deeply regretted by a very large circle of friends in the yachting world, where he was deservedly popular. He did not take an active part in yacht racing of late years on account of his advanced age, but to the last he used to cruise quietly in his 40-ton Terpsichore.

There is a rumor that the new 65-footer, building at Fairlie, for Messrs. Connell is to be fitted out, and that the old Watson cutter Carina will be raced against her, so as to give the class a start. Unfortunately, no sport can result from such a combination if they sail on even terms, and the 52ft. class will have the chief place once more in class racing. Moyana, Lucida and Camellia will be under fighting colors. It is extremely doubtful if Viola will join them; but Fife has an order for a new boat for Mr. Samuel Butler, of Bristol, so that the class will muster four vessels and some excellent racing is sure to result.

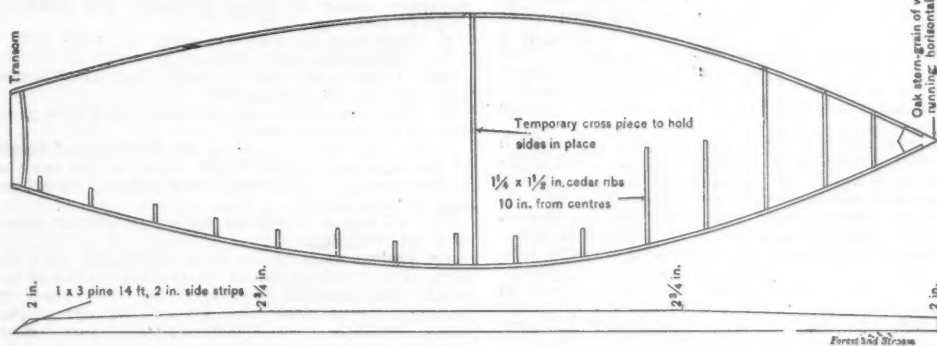
E. H. KELLY.

The annual meeting of the San Francisco Y. C. was held on February 10, and the following officers were elected: Com., A. C. Lee; Vice-Com., H. H. Jennings; Rec. Sec'y, W. H. Gray; Fin. Sec'y, A. G. A. Mueller; Treas., F. A. Robbins; Port Capt., Dan Miller; Meas., F. Raisch. All of these candidates are yacht owners, and for several years have been prominently connected with the affairs of the club.

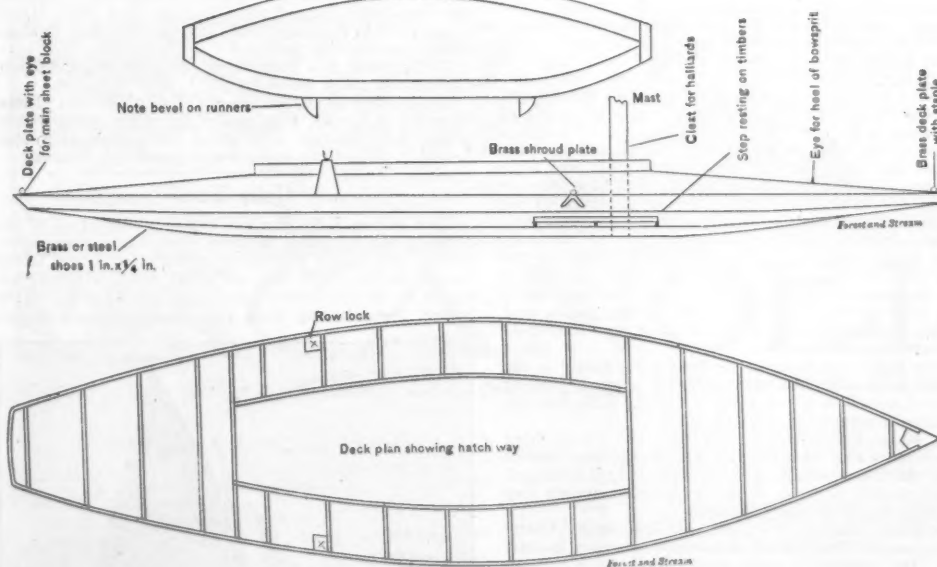


All spars to be made of spruce.  
Mast 2 1/2 in. circumference from heel to jaws; total length 11 ft.  
Boom 1 1/2 in. circumference from jaws to within 2 ft. 6 in. of outer end; total length, 14 ft.  
Gaff 1 1/2 in. circumference from jaws to within 1 ft. 6 in. of outer end; total length 6 ft. 6 in.  
Bowsprit 2 1/2 in. by 3 in. at stem, slight taper to outer end; total length, 7 ft.; 2 ft. on deck and 5 ft. outboard.  
Main halliards hoist through holes in mast; no pulleys; 1/2 in. pulley for jib halliard as stay and halliard are one piece. A separate jib for each reef is much more satisfactory than reefing the large jib.

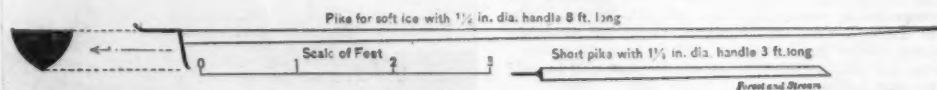
SOUTH BAY SCOOTER—SAIL AND SPAR PLAN.



Cross Section showing curve of deck &amp; bottom



SOUTH BAY SCOOTER—CONSTRUCTION PLAN.



SOUTH BAY SCOOTER—STEERING PIKES.

two 7 in. galvanized door hasps will answer by drilling each for screws. To put on, place perpendicular against outside oak band opposite aft mast hole, letting eye project above deck far enough to receive 1/4 in. S hook, then bend lower end under and snug up to bottom planking and fasten one on a side.

For deck eyes, a heavy galvanized 1/2 in. screw eye will answer for the bow, screwed well down into the oak stem piece. For the aft end, a heavy galvanized staple drove through deck into the oak stern will hold the main sheet pulley.

A 1/4 in. brass screw eye placed on the second deck timber from bow will hold the heel of bowsprit. Cut out underneath the bowsprit where it goes over the large screw eye so that the bowsprit will rest on the deck. Bore a 1/4 in. hole through the bowsprit exactly opposite the large eye so that a bolt will pass directly through eye and hold the bowsprit down. The bolt holes in the

bowsprit can be strengthened by bending a piece of tin band iron over top and down each side where the bolt passes through, reaming out the bolt holes.

Now make spars and hooks, bend sails, and you will behold a typical Great South Bay scooter. For a first trial select a moderate breeze. Trim the mainsail fairly flat, twisting the sheet around rowlock. Take the jib sheet (which is always a single part about 8 ft. long), and, giving the boat a little start on the ice, jump into the cockpit. Watch closely the effect of trimming in or letting out the jib, and before you have sailed two miles you will have discovered the art of sailing a boat without a rudder. Find a small air hole of open water, and practice going into the water and out on to the ice at various speeds until you have gained full confidence in the scooter's safety under all conditions. After a few trials you will become master of the situation and an enthusiastic devotee of the new sport called "scootering."