June, 1945

Yachting

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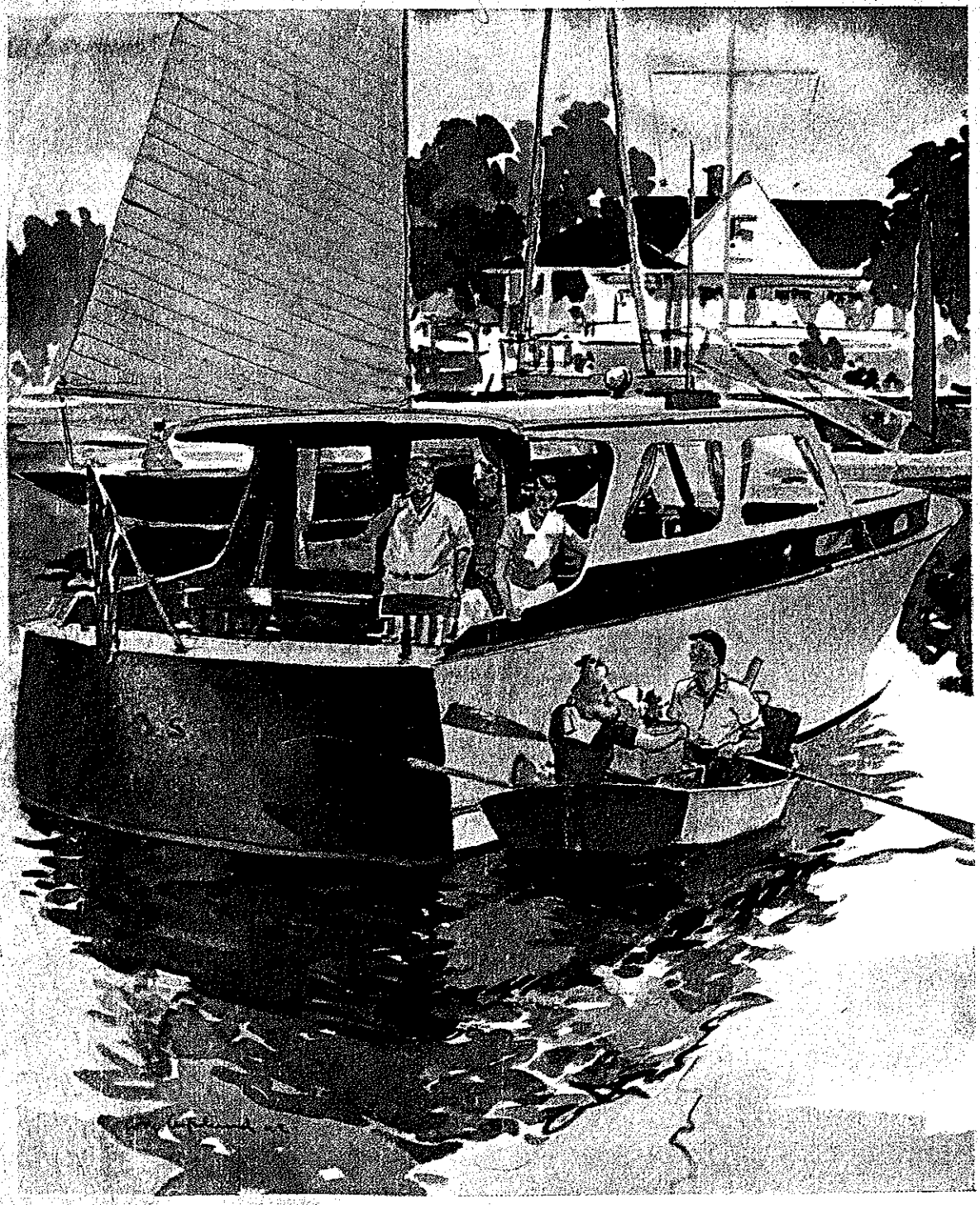
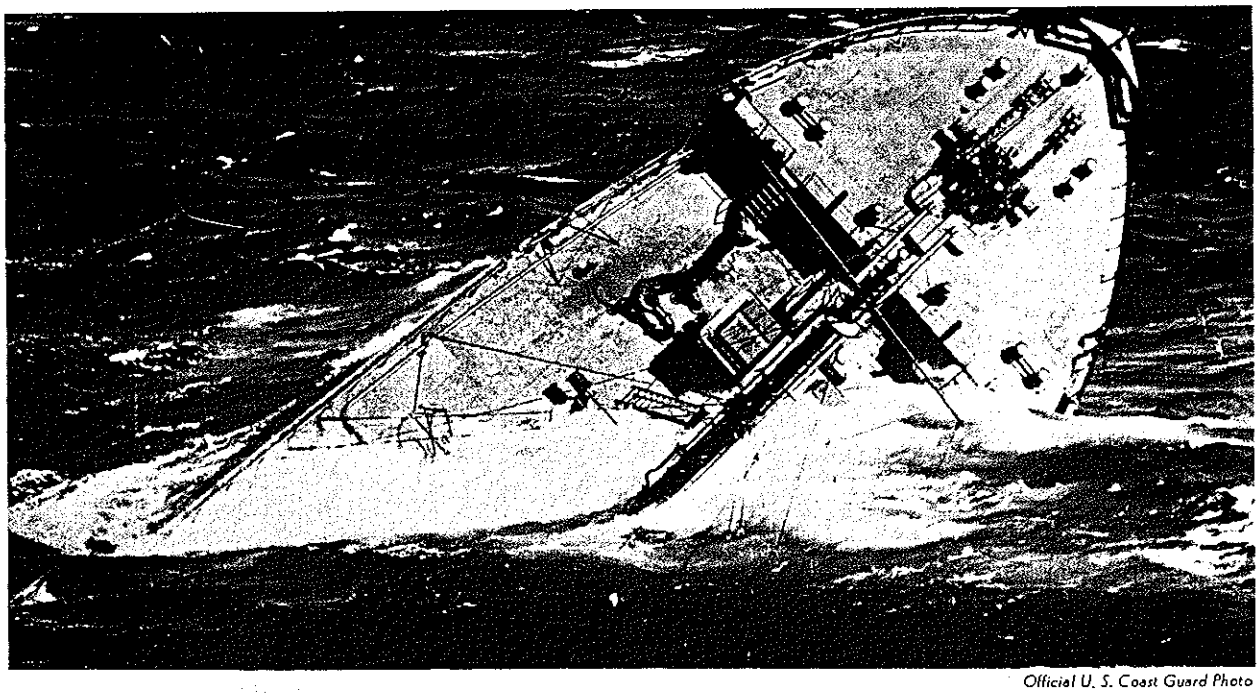


FEATURES IN THIS ISSUE



Official U. S. Coast Guard Photo

A moment before the end! Merchant vessels have been known to go down in an extremely short time which means that all lifesaving gear must be so designed and stowed that it can clear the ship with a minimum of delay

LIFE BOAT PASSAGE

Wherein a Deep Water Yachtsman Discovers That Commanding a Life Boat in Mid-Atlantic Involves a Degree of Seamanship Not Normally Required in a Bermuda Race

By GEORGE G. BREED

(The author is a well-known Atlantic coast yachtsman. Although a graduate of the Naval Academy, his desire for immediate sea duty inspired him to leave civil life and to join the Merchant Marine as a Second Officer early in the war. With becoming modesty, he here describes an eventful life-boat passage, but does no more than touch on his own outstanding conduct, despite a serious and painful injury which all but immobilized him. Ed.)

"KEEP away from the ship," warned the submarine captain as his buff-colored monster pushed her ugly nose into the choppy sea and drew away from our life boat. "I intend to use artill-éry." His pronunciation of the word would undoubtedly have inspired W. S. Gilbert instantly to reply: "A plague on this va-gary. You'll now use artill-éry."

We had suspected he was up to no good when he surfaced a hundred yards or so from us as we lay alongside our ship, rolling about in the Atlantic swells and abandoned after her bow had been blown off by a torpedo. So we took his advice. Indeed, we immediately proceeded to widen the gap of water between ourselves and the ship as much as possible, for we were aware that just one round of his "artillery" might produce a chemical reaction in that cargo of ours that would be as violent as it was sudden. He didn't have to plant many salvoes in that cargo and, soon after he opened fire, her stern disappeared beneath the waves.

So that was that. It was up to us to "smell our way to Gloucester" — or to the nearest land. This was the Azores, the submarine captain had told us in reply to our question. We had been torpedoed at night, and it was now the next day. The sky was overcast and the wind light from the southwest — fair for a course to the Azores. The sea was sufficiently choppy to preclude any beautifully rhythmic performance at the oars, but not heavy enough to cause discomfort. The air was mild and the water by no means numbing.

Through a lucky circumstance, we had been able to go back aboard the derelict ship some hours before she finally went down and had supplemented the equipment of our life boat with a number of extremely useful accessories: a sextant, a chronometer, navigation books and the ship's standard compass. The latter was a particularly valuable item in a steel life boat, for with its 7½-inch card it was obviously much less subject to deviation than the 3-inch model provided for the boat.

The submarine having made off, we set about taking advantage of the fair breeze. But the boat's sail was not to be found. Unfortunately, the boat had been swamped on lowering and had lain awash alongside the ship for half an hour or so, in which condition we boarded her from the raft in which we had left the ship. During that time I imagine that the sail had floated off. Although it was in a bag of fairly heavy canvas, I suppose the bundled-up sail had enough air trapped in it to give it buoyancy. So it was probably somewhere to leeward drifting into limbo along with the rudder, which (among other things) was also gone when we boarded the boat. Fortunately all of the oars — one steering sweep and eight standard oars — were still there. Also, we had the mast. We stepped it and rigged the shrouds and forestay, and then looked over the possible substitutes for a sail. The obvious one, which we proceeded to hang up, was a tan-colored weather screen of fairly heavy canvas.

The standard rig for these life boats is a jib and mainsail, the latter being gaff-rigged with no boom. We laced our jury

Wide World

Eight men in a 30-foot life boat seeking the nearest landfall or rescue by any passing ship. This picture was made by a member of the crew of a torpedoed American merchantman

sail to the gaff. Being somewhat longer than the gaff, the outboard corner hung and flapped loosely like a bloodhound's ears. This was accentuated by the fact that the "leach" of our sail — which had, after all, been cut for a different use — had an angle in it which ran out to second base and back to third. So we had two clews. For the benefit of those who like to experiment in sail design, let me say that two clews are as necessary and useful in a sail boat as two rudders.

In general, our ersatz sail reminded me of a suit which a friend of mine bought in Liverpool during the last war, after being torpedoed. It fitted him swell, all but the coat and pants. But, combined with the oars, the sail gave us steerage way, and a little steadier motion.

There were two other life boats in sight. Both these had set their sails and borne off to the northward, but one — Number 3, in charge of the boatswain — hove to, to "gam" with us as we lumbered after her. We came alongside and I took five men out of her, bringing the number in our boat to 14. Before leaving the ship, I had determined with fair accuracy the course and distance from the point at which we had been torpedoed to the center of the Azores, and gave this to the deck cadet who was to be the navigator for No. 3. We passed over to them some of the cigarettes we had collected on the ship and then stood off on our course for the Azores. We had agreed to keep together, which obliged No. 3 to heave to at frequent intervals. She gradually drew ahead, was a red blotch on the horizon at dawn, and disappeared later that morning.

Hoping to add a tenth of a knot to our speed, we took another rectangular screen — about the proportions of these long, useless pieces of lace they put on a dining table — and rove it on the forestay, as a jib, but it was quite useless. We were considerably handicapped in adapting the canvas to our immediate needs. Apparently while the boat lay awash alongside the ship a sea had smashed the locker containing emergency equipment and strewn its contents in the bilges or on the surface of the water. Among these was the sailmaker's kit which was now not to be found.

The following morning I took some sights. It was something of a shock. After the experience I had had as a navigator on ocean races, I thought celestial observations in a small boat would be as easy as a ride uptown with the Fifth Avenue Coach Company. But even in light air the yacht is a far steadier platform than that life boat was, and I had to work at it a long while before I could catch the sun as it danced about the horizon. I finally got a fairly consistent sequence of sights that gave a longitude. This I later crossed with a latitude sight which was only fair, as it had commenced to blow late that morning and the boat was already bobbing about "like a cork," as one of my companions put it. "A what?" said I. "A cork, a — cork." This particular expletive so generously flavors the American merchant mariner's conversation that he comes to feel that no object is adequately described without it.

The fix showed us a few miles northeast of the ship's last position. As I knew that our last fix on the ship was a good one and that we had not travelled far since then, these sights served chiefly to reassure me that sextant, chronometer and technique were probably adequate.

We had spent the previous afternoon in inventory. In most respects we were exceptionally well provided for a long voyage. We had supplemented the uninteresting standard rations with two and a half crates of delicious Florida oranges and a crate of the tastiest, juiciest apples I have ever had. These, especially the apples, were wonderful thirst-quenchers.

The water situation was also reassuring. Besides the two metal tanks built into the boat, we had picked up on the ship two wooden water breakers. Another comforting accessory was a complete outfit of blankets. Besides the six which were part of the boat's equipment, practically every man had brought along at least one blanket in our second abandon-ship. In fact, we sat upon great mounds of blankets, a good part of which I had been obliged to drop into the Deep Six, as they seriously interfered with the management of the boat and an inventory of its equipment. Later on, they were followed by the bulky suitcase containing the portable transmitter. I was loath to do this, but it occupied a space into which a man could squeeze himself for a few hours' sleep. Besides, the ship's radio operator, whom I had taken from No. 3, had declared emphatically that it "wasn't no damn good anyway."

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Wide World

This photograph tells the story of the rescue of eight survivors who were first sighted by a U. S. Army plane which thereafter notified the Navy's blimp patrol. Note the small sail being lowered

during war scarcities is going to be most keen. Every effort by both industry and government will be made to keep all plants operating at or near their present high level. This means that prices will be forced as low as possible. We have all seen in many cases, such as high octane gasoline, synthetic rubber and even aluminum, how the prohibitively high prices of today may crumble before the technological advance of tomorrow. We can only assume that the uses being made of synthetics today under war pressure will be economically practical when the war is won.

Neither have we made any important reference to new metallurgical developments and the effect they are bound to have on our post-war boat. While these developments are certainly taking place, they seem less spectacular because they are less apparent to the eye. The improvement in the properties and characteristics of the various metals and alloys and their possible new low prices will be felt largely through the better and more general use that will be made of such things as bronze fastenings, shafts and so on. Stainless steels and other non-corrosive alloys will no doubt be much more prevalent, both in structural parts and non-structural uses such as dresser tops and stoves. We do not, however, look for new large structures such as hulls or cabin houses to be generally made of metal in the small boat of the immediate future. One reason we do expect this of the resin bonded or laminated materials is because of new low cost methods of forming and manufacturing in small quantities such as the bag process of making low pressure mouldings. It is true that great developments are taking place in metal working fields but they are largely directed towards production in such quantity and involve tools so costly they are beyond the reach of the boatbuilder.

While it is our belief that all of the ideas or new features put forward here are theoretically possible and probably will be economically practical, it is not our belief that they will all necessarily become actualities. The public as a whole and sailors in particular do not take readily to changes. They have to be educated to accept them. Such an education or promotional program takes time and costs money. Many new ideas just do not "take" regardless of their merit. Quite possibly, the cost of development or promotion may constitute too great a risk for the possible return. The pleasure boatbuilding industry is made up largely of comparatively small units which do not have resources for extensive promotion of new products. For these reasons, many possibilities will be slow in appearing or may never see the light of day. Building small boats is still a handicraft in many ways and their use is a sport, so the course of their development may not necessarily follow the path of normal economic and technical progress. There is, however, one almost universal feature possessed by all of the developments that we have proposed, and that is light weight. Weight is such a fundamental factor in boat design and the possible total savings seem so great that, when the effects are fully realized, we may expect them to be fundamental in themselves and far-reaching.

LIFE BOAT PASSAGE

(Continued from page 27)

Despite the boat's initial mishap, most of the other emergency equipment was there, if a trifle wet: lantern and kerosene, distress signals, bilge pump and bailer, flashlights, signal lamps and mirror, a chart in a watertight container and fishing tackle. But we lacked two important accessories: neither the sea anchor nor any storm oil were to be found. We therefore set about to improvise an anchor out of a piece of canvas and some metal canisters. But without a palm and needle we weren't able to do much.

The next morning gave early indications that we should soon have what a Swedish friend of mine would describe as "planty o' vind." We did. By noon, the seas were slopping over the gunwale fairly frequently. This kept us quite busy with the pump and a couple of buckets. There was no way of shortening sail, so early in the afternoon we doused sail and hove to, keeping her into the sea with the oars. This was not so hot. She fell off continually and we got some unpleasant slaps from breakers and it was constant "pully-hauly" at the oars to keep her into it. The watch-in-three that I had set up the day before was changed to watch-and-watch, but it was obvious that the men couldn't keep that up long. So we turned her stern into the sea, and found it a lot easier to swing her into an oncoming roller with a "Give way starboard, hold water port," or vice versa.

We had put my not very ingenious sea anchor over the bow, but I think it only irritated an approaching wave. I soon replaced it with a bucket on a bridle, using our sea painter, and this was better, especially when we swung stern to. I think it was something of a deterrent. Later on — during that awful night — I can remember looking back on that tumbling waste of water and foam. Just astern of us was the one cheering sight in that whole grim panorama: the phosphorescent glow about that bucket as it seemed to dig its heels in and pull back on the bridle.

By nightfall, it was blowing a fresh gale from the southwest, with the wind still growing. So far, we had been all right, for in the daylight both

the helmsman and the men at the oars could spot a big one coming, and get the stern swinging toward it. Even so, we'd had a couple of unpleasant jolts when a wave broke against our metal hide with the "pong" of some grisly jackpot. With darkness coming on, it would be difficult, if not impossible, to see a roller far enough off to get set for it. To say that I considered our situation grave would be a gross understatement. As the gathering gloom announced that the sun was, as the Portuguese say, "going to bed," I no more expected to see him return than if I had just stepped off Bunker Hill monument.

This was probably an unnecessarily dismal estimate of the situation. But as I listened to the roar of those seas grow louder and more ominous — thinking "Now would I give a thousand furlongs of sea for an acre of barren ground, brown furze, anything" — I didn't see how we could possibly keep from being capsized. The seas were already coming from a wide angle. All we had to do was to fall off so that one of those horizontal cataracts could catch us broad on the quarter, and we'd be rolling over and over like a piece of driftwood on the beach at Easthampton. However, we lashed everything and prepared for the worst.

Early in the evening casualties began. The bushings that held the rowlocks were of brittle iron, and one by one they fell apart under the heavy strain when a wave caught the blade of an oar "full and by." Before the night was over, every one of them was broken and we had been obliged to lash the rowlock to the gunwale. This was not efficient but it enabled the man to work the oar. No. 2 port was the last one to go and, in that dark welter of men and gear and water, there was nothing to be found in the way of a lashing except a short length of wire. So, for two hours thereafter, a pint-sized engineer squeezed himself into a pretzel shape between the men at the oars and held that rowlock in place with the wire.

It was probably around three o'clock in the morning that the gale reached its full fury. Peering anxiously into the blackness astern, I saw seas converging upon us from either side, baring their teeth with a menacing roar, like the wolves pursuing the Russian nobleman's flying sleigh, in which there were no babies to be thrown overboard. Which of these ravening crests would reach us first? Often my first guess was wrong and I had a few seconds to get the boat swinging in the right direction. Half a dozen times the boat heeled at a fearful angle as one of those white-fanged wolves crashed against our side, and time and again the oarsmen were up to their waists in foam as a breaking wave savagely swept the boat from stern to stem. It was no longer watch-and-watch, for all hands were continuously at the oars or bailing, with a chance for one or two at a time to drop out for a few minutes "blow." A couple were actively sick.

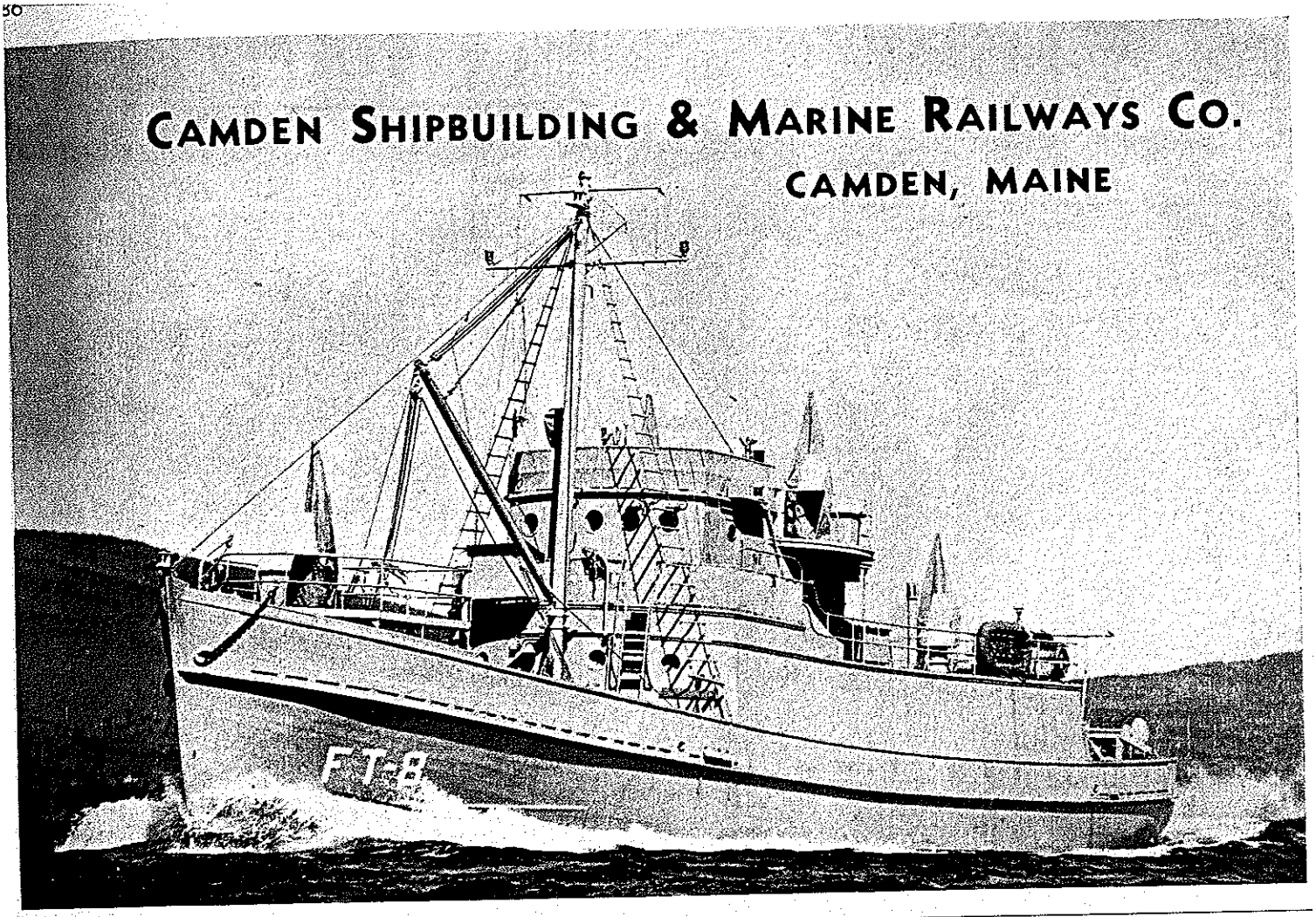
To the ominous snap of ruptured bushings was soon added the noise o rending oars. Picking the boat up bodily, a sea would slide it sidewise. Per haps one of the men had his oar too deep. The next instant, the blad was buried vertically, the handle flew upward and, before he could boat it the oar was snapped. Before the night was over, we had three oars left.

When daylight broke the next day it was blowing from the northwest a very chill wind, but it was obviously moderating and within an hour we were sure that the worst of it was over. After thirteen hours at the helm I practically fell asleep in the middle of a command to the oarsmen. I awakened that evening to find my hand badly swollen and painful. During the gale I had been aware of a pain in my thumb, on which there had been a small burn. It was now obvious that this was a virulent infection. At any rate, that was the end of my left hand as far as any useful function was concerned, as it had swelled to three times its natural size. This was inconvenient, to say the least, as I am (or perhaps was) left-handed.

Sometime around noon the next day my temperature, which had risen with the infection, fell enough for me to think and talk lucidly, which must have been a tremendous relief to my companions. I found that the wind had dropped to a light breeze and, while the boat continued to bounce around for the rest of the day, we shipped no more seas — except when a bucketful or two slopped over from one of those bastards bred of every gale that suddenly leap at you from practically any direction. We therefore stepped our mast and set the sail. It was disappointly ineffective; scarcely gave her steerage way and didn't steady her appreciably. And it was a pain in the neck to have to use a steering oar under those conditions; about like using snowshoes on an inch of wet snow. But fortunately the wind was fair for the course to the Azores and the weather promised to be good for some time. Pending results from celestial observations, I assumed that the gale had pushed us 25 or 30 miles to the east, and accordingly set a new course to the left of our original one.

It was about this time that we ate our last oranges and I can tell you we were sorry to see them go. They and the apples had been nectar for, although the temperature was around 70°, you would be surprised to find how thirsty you get when you have only a few ounces of water a day. Furthermore, emergency rations, though bursting with vitamins, tend to produce a savage thirst. These rations are carefully checked, renewed each time the ship returns to port, and sealed in two watertight metal boxes. They are sufficient for a minimum of 30 days for a full boat's crew.

We did not start on ours until we had been out three days, the crew subsisting for two days on the fruit — which obviously couldn't last — and a great quantity of peanut bars, which two of the men obtained by breaking



into the "slop chest" upon their return to the ship. We decided to have three meals a day, at each of which each man would receive three ounces of water. Breakfast was at 7:30 and consisted of two malted milk tablets and a biscuit or cracker known as the "C-type ration." Malted milk tablets are tasty in a glass of hot milk but they are exceedingly dry by themselves. The C-type ration, in shape and size like a graham cracker, is somewhat harder than a dog biscuit and nowhere near as toothsome.

Lunch, at noon, comprised two more milk tablets and a square of milk chocolate. It was good chocolate, but have you ever tried to get real tough clay off the anchor and the deck? It takes a hell of a lot of water.

Supper offered two more tablets and the one appetizing viand in our larder, pemmican. Though many of you may have eaten it, I'll venture to describe it. It is made of raisins and meat and other concentrated and highly nutritious foods, and it's greasy and wet, which makes it go down easily. It tastes like some sort of plum pudding with hard sauce.

Two days later, we bent a critical eye upon our sail and became extremely dissatisfied with it. Everybody was encouraged to suggest improvements and we thereupon began a series of experiments in which we hung up that amorphous polygon in half a dozen different ways. The winning design went to a seaman who made a yard of the gaff and spread it as a lug sail. The new rig was a great improvement — grace itself compared with the previous one — and we immediately began to foot faster.

In the morning, I undertook to find out where the gale had taken us. The navigational accessories were a limp and soggy lot. Although I had lashed them under the thwarts, they were all, in the police reporter's phrase, "suffering from immersion." The chronometer was still ticking but the face was half full of water, and the navigation books were soaking wet.

As I could not use my left hand, I instructed a signalman in the use of the sextant. It was no easy trick in that choppy sea. I can only compare it to taking a sight some Saturday night in one of the denser parts of Times Square, constantly thrust about, with one's elbows jostled by the surging throng. And the evening and the morning were the fifth day.

During the early hours of the next morning I devoted some time to determining the bearing of Polaris. I think it was in about these same waters that Columbus was alarmed to discover an unsuspected deflection of the compass. I can understand his consternation at finding, after several days at sea, that he'd put his faith in a treacherous set of corrupt and fickle magnets. The cause of error in our case — as important as his, so far as we were concerned — was that that confounded iron bathtub of ours had pulled the needle 15° or 20° to the westward.

It was the following noon that we got a latitude sight which looked quite reliable. For the first time, the sun had been unobscured for a good half hour on either side of the meridian, so we could be almost sure we'd caught her at top center. This showed us in the latitude of the Azores. Combined with a debatable longitude, this put us northwest of San Miguel Island. I therefore swung around to a course of 140°.

I think that that navigation was, for me, the worst ordeal of our entire boat ride. With my *Almanac* and "Ageton" soaking wet, the pages were stuck together as if they had been glued by some humorous Belial. It was therefore a temper-searing task to find your place in the tables. However carefully you pried the pages apart, half of a page would often come up in your hand. Not infrequently, the entry you sought was illegible, and you'd start over, with another sight. But, bless that galaxy of learned gray heads at the Naval Observatory, they print the *Air Almanac* on non-coated stock which stands up well under a wetting and is nowhere near as sticky as the coated paper of the *Nautical Almanac* and the Ageton tables.

Observations during the next two days consistently put us east of San Miguel. I was now faced with the most unpleasant choice I ever hope to make. Should we turn back and hunt for these islands, wretched little fly specks on that chart of ours? We might easily wander about for weeks. Or should we launch out upon a thousand-mile journey to the continent (which we couldn't *possibly* miss) with all its hazards of starvation and storm? I was fairly sure we were in the latitude of the islands; I wasn't sure that we were east of them. If we *were* west of where I thought we were, a course to Gibraltar might bring us within sight of one of the islands.

We inventoried the rations and found we had more than 30 days of everything but pemmican, of which we had 15. Of water, we had about 25 days at our established rate of consumption, which could probably be cut in two — with no allowance made for what just one heavy rain might do for us. I consulted the crew. Should we put her on the course for Gibraltar? I must confess, I felt it was as big a piece of hypocrisy as a Nazi election, for they hadn't any idea as to whether our navigation was good or bad. But the Fuehrer got a unanimous vote, and we swung over to a course of 97°. As it proved, it was a most fortunate decision.

During the next two days the clouds prevented any satisfactory observation except for fleeting glimpses of a couple of stars, which I was un-

able to identify. Then, about 9 o'clock at night, eleven days after leaving our ship, we picked up a flashing light a little to starboard. We stood toward it, and after two hours I caught a rhythm to it, proving it to be a navigational light. Not wishing to raise hopes unduly, I pointed out that, while it was probably a lighthouse, it might be an offshore buoy.

At the height of the discussion, we picked up another light, on the port bow. They were loath to quit that other one, but this was a steady light, and the other (which we later learned was the lighthouse on the northwest corner of San Miguel) was still a long, long way off. So I swung her over. During the next hour that light assumed some fantastic shapes, but at last we realized that it was a ship. We set off a parachute flare and I sent the signalman forward with a flashlight. What he sent I don't remember, but they came back with: "What do you want?"

The light of another flare must have given them their answer, and a few minutes later we were basking in the glow of a great rectangle of lights surrounding the legend "RED CROSS ✚ INTERNATIONAL."

It was a Red Cross ship, engaged in carrying food and clothing to prisoners of war. As my crew scrambled up a sea ladder, I patted her steel plates — to show my affection and to be sure they were real. Then the boatswain, bronzed, lean and kindly Portuguese who had once lived in Brooklyn, came down and took me on his back, for it was a job for two good hands going up that ladder. Near the rail, other hands grabbed me and pulled me over the bulwark and onto the deck. I stood erect to find a steward standing deferentially before me with a bottle of cognac poised above a goblet. "Would you like a drink, sir?" he asked.

Such an account should end "That's all I remember."

SAFETY AT SEA

(Continued from page 33)

attached to the garment. Of particularly sturdy construction, they zip up the front and by reason of the fact that the life preserver is inside the suit, the wearer is actually "nonsinkable." Not only do they provide both buoyancy and warmth but, for some strange reason, sharks will have nothing to do with the wearer of these marine "zoot suits." It is a matter of repeated record that sharks have attacked men wearing regular clothing but have studiously avoided men wearing life saving suits.

Speaking of sharks, the Navy reports that a substance has been discovered which will drive sharks away from men adrift in shark-infested waters. Developed in experiments at Woods Hole, Mass., in the ocean off Florida and in Guayaquil Harbor, Ecuador, its nature is a closely guarded secret. The Navy reports that: "Hungry sharks were found to refuse a bait, which otherwise they would have taken voraciously, if a small quantity of the shark repellent was suspended in the water near by. Three identical fish baits, the regular food of sharks, were used in the experiments."

Of endless variety are the other devices and types of equipment which are each day saving the lives of countless seamen and aviators who have been fortunate enough to get away from their ship or plane before she foundered. For example, H. G. Morner, who was one of the originators of the life saving suit, has recently devised a buoyant "Abandon Ship Kit." Large enough to hold medical supplies, cigarettes and other small objects, yet small enough to be swung over the shoulder, it is a bright-orange-yellow color and hence is quickly visible when floating on the surface.

There are first aid kits of every conceivable size and type, and all of them must measure up to the Coast Guard's rigid standards. Not only do these kits contain the latest types of approved drugs and dressings but, what is more important, the cases themselves are absolutely watertight. The law specifies that such kits shall "maintain their water-tightness when submerged at least 1 foot deep in water maintained at approximately 70° F. for a period of 2 hours."

Never has the matter of life jacket design and construction been more important than it is today. Of particular interest to the wartime mariner is a report from a recent issue of *The Journal of the American Medical Association* which advocates the use of longer life jackets to cover the abdomen as well as the chest. It is pointed out that one of the new hazards of war is the blasts from depth bombs.

In addition to the life preserver "clip-on" lights which have been described in recent issues of YACHTING are a wide variety of lights which can be used in the water or in the life boat or life raft. One such device is the Wakefield "Man Overboard" lantern.

Another such product is the Emergency Light Corporation's Huls Automatic Marine Emergency Light Unit, which has already been credited with saving many human lives. Approximately 9" by 6", and weighing but five pounds, it is a self-actuated lighting unit and lights automatically on any interruption of the normal lighting circuit.

The calcium water light, long a standby of the yachtsman, is one of the first victims of the new wartime safety at sea regulations. A recent ruling specifies that all such lights shall be removed from both ocean and coast