

Devoted to the rapidly growing power boat and yachting interests of the English Speaking Countries of the Pacific

PACIFIC MOTOR BOAT

A Territory that covers Two-thirds of the Globe and is Rapidly Becoming the Arena of the World's Greatest Events

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Vol. 11. No. 7

SEATTLE, U. S. A., APRIL, 1919

15 Cents a Copy

THE EXPERIENCES OF A YANKEE SUB-CHASER



"Y" Guns and "Ash-Cans"

Type of ordnance used by the sub-chasers to sink the submarines.

Story of the First American 110-Footer That Went Into Operation in European Waters.

✦✦

By CAPT. M. S. BROWN
Engineering Editor Pacific Motor Boat



Four of the "Big Six"

The fleet of 110 footers at anchor before leaving New London.

Brest, France, Feb. 15.

NOW that the submarine warfare is over, and the censorship regulations consequently greatly modified, I can tell the readers of *Pacific Motor Boat* a few things of interest about our S. C. boats and their work over here.

The boat I came across on and served the longest on, *S. C. 177*, was one of the first six to reach Europe, in fact, due to an episode I shall go into later, she reached France twelve hours ahead of the other five.

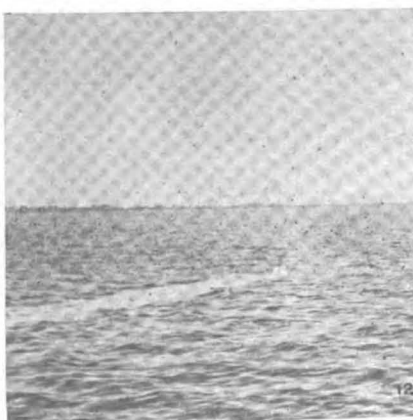
We left New London, Conn., on February 22, 1918, and after a hard tussle with ice packs dropped anchor at Point Judith that evening.

The morning of the 24th we weighed anchor, and started on the 680-knot run to Bermuda. We ran on one engine most of the time, and although there was a heavy northeast swell we made good progress until we touched the Gulf Stream on the evening of the 25th. Here we encountered a stiff nor'easter which by the next morning had developed into an 80 to 90-mile gale.

A few of us had suspected the S. C.'s of being good sea boats, and this storm proved it very conclusively. The boats were badly scattered, and had a pretty tough time of it generally, but they rode the seas much easier than the tugs accompanying



Bow View of a 110 Foot Chaser



Periscope Sighted in English Channel

us. This was the storm in which the naval tugs *Cherokee* and *Mariner* foundered, the latter within a mile of us. I had previously been out in some pretty tall water, but this storm was the worst ever. An 80 to 90-mile gale blowing against the set of the Gulf Stream can better be imagined than described.

We had no serious engine troubles, and after four days of continuous gales arrived at Hamilton, Bermuda, on March 1st. After the snow and ice and 20 below zero weather of New London, this balmy climate surely was a treat.

April 8th saw us on our way to the Azores, a distance of 1,960 knots. As the *Leonidas*, our "mother ship," could maintain but six knots, it required 14 days to reach Ponta Delgada, Azores, but as we were favored with fine weather nearly all the way we didn't mind it much.

Refueling was easily accomplished by taking the gas though a hose while towing behind the tanker *Chestnut Hill*. Incidentally 177 had the lowest fuel consumption, or 2.6 gallons per knot. We ran on the center engine mainly, at an average speed of 300 revolutions.

We left Ponta Delgado, with its two for a nickel pineapples and \$1.25 per quart champagne, April 27th,

TYPES OF SUBMARINE CHASERS AND SCOUT BOATS USED BY THE ALLIES

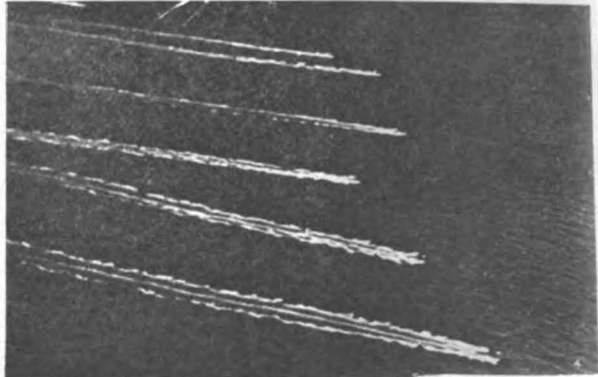
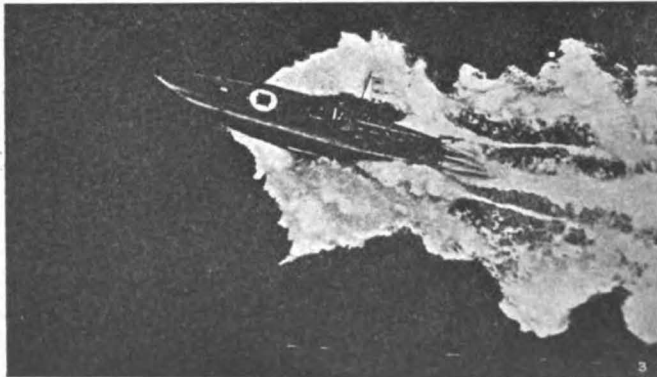


Photo by Central News Service

The Fast British Coastal Patrol Boats Commonly Known as the "C. M. B.'s"
These boats are very highly powered and capable of terrific speed. The picture at the left shows one of the boats at top speed and at the right a fleet of them are shown combing the coastal waters in search for a submarine.



One of the 110 Footers Adopted by Uncle Sam
When the armistice was signed, 406 of these boats had been commissioned. They were powered with three 250 h. p. Reversible gas engines manufactured by the Standard Motor Construction Company

Type of Sub-chaser Used by Russian Government
These were built by the Greenport Basin & Construction Co., at Greenport, Long Island, and are 60 ft. long, 9 1/2 ft. of beam and with two 8-cylinder Duesenberg engines made a speed of 30 knots



Two Views of the British "M. L.'s" in Operation in the English Channel
Five hundred of these boats were built for England by the Elco Co. of Bayonne, N. J. They are 80 feet long and are equipped with twin 250 h. p. engines built by the Standard Motor Construction Company. The contract for building and delivering them was executed by the American company in 501 days from the time the order was placed.



Copyright by Brown & Dawson, Stamford

Sub-chaser Used by Italian Government
These were built by Gio Ansaldo & Co. of Genoa, Italy, and were powered with motors built by the Sterling Gas Engine Co., Buffalo.

Type of Private Yacht Used by America for Patrol Service
A 71 footer turned over to the government by Ralph Pulitzer. She was powered with two 8-cylinder Duesenbergs. Speed, 25 miles.

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Part of the Crew

dant French wines and champagne,
and then on May 8th the "Big Six"
were off for England and some real
sub-chasing right in the hottest part
of the submarine zone.

We arrived at Portsmouth, where
the greatest navy yard in the world
is located, on May 9th. Just as we
were entering the harbor the liner
Olympic rammed and cut in two a
sub that was about to torpedo her.
The *Olympic* was literally sur-



Exploding a Depth Bomb

rounded by destroyers, and the sub
evidently became confused and came
up directly ahead of the great ship
and so close that she could neither
escape nor fire a torpedo. One-half
of the sub floated and was towed in,
and the German skipper and about
half the crew were rescued.

This seemed to augur well for
some sport for the chasers, and we
were not disappointed. While at
Portsmouth I had an opportunity to
visit a big English submarine, which
actually mounted a short 12-inch
gun.

While here we were treated to our
first air raid, and also saw the cruis-
ers and M. L.'s that took part in the
raid on Zeebrugge. A shell hit an
M. L. in the engine room, killed
nearly every man on deck, but nei-
ther of the two engineers were touched.
The motors were completely demol-
ished, but another M. L. towed her
to safety.

We lay close to Lord Nelson's
flagship, the *Victory*, and visited her
several times. After we made our
debut in actual patrol work we
worked in units of three boats, a
unit working for four days up and
down and across the channel, and
then going into port for four days'
rest and repair, while the other unit
took up the patrol.

While in this portion of the chan-
nel we were favored with excellent
weather, and began to think that the
terrors of the English channel were
much overdrawn. We had good
reasons for changing our minds lat-
er on, however. When on patrol, as
a rule we ran from 8 a. m. till dark,
which at that time of year was
about 10 p. m. We would run for
a period ranging from 10 minutes to
a half hour at a pretty good pace,
then all boats stopped simultane-
ously, dropped their listening tubes,
and listened for a predetermined period,
usually five or ten minutes, then
away we went on another brief dash.
We ran abreast about 600 yards
apart, and if we heard a sub the
game was to get a bearing on it and
drop a few charges of T. N. T.
where they would do the most good.

We got numerous "contacts" but
before we could get a good bearing
a big cross-channel convoy usually
came along and the sub would easily
make its getaway under cover of the
noise. They were evidently very
much afraid of our hydrophones and
big depth charges, and bothered the
convoys very little while we were
around. The channel is very shoal
between Portsmouth and the Straits
of Dover so a sub could very readily
lie on the bottom during the day and
come up as soon as it became dark

to charge batteries, or to catch a lone coaster or, better yet, a hospital ship.

After dark we drifted silently with the tide, all lights out, listening intently, and ready for business instantly. We put in several quiet nights in this way, but on the night of May 29th our vigilance and our perseverance were rewarded by a rare piece of good fortune.

The destroyer *Alwyn* usually patrolled near us so that if a super-sub should decide to give battle on the surface she would be within call. On this night she made her last round as usual about 10 o'clock, and the wily Hun resting serenely on the bottom of the channel waited until his hydrophones could no longer detect the sounds of the destroyer's propellers, and then quietly and confidently ascended to charge batteries,

EDITOR'S NOTE

Capt. M. S. Brown, the author of this article, was for a number of years the editor of the Gas Engine Department of Pacific Motor Boat. He is an experienced motor boat man both in engineering and navigating, and when the war broke out he immediately enlisted in the Naval Reserve force and after a number of months of training at the Puget Sound Navy Yard, was assigned to "Sub-Chaser 117," one of the first six to leave for Europe and the first one to arrive on the other side. His article herewith gives an excellent relation of the experiences of this boat during the war.

severely if it was worse than we got.

We immediately stopped and listened, and both us and 143 heard our game very distinctly. A couple of short bursts of speed and more listening gave us a good bearing, and we made another wild race toward the sound, and almost ran over him

attempting to stop a leak.

Just before daybreak both chasers got underway and let go about a dozen "ashcans" on the spot which we marked with a barrel for a buoy. After the first bombs exploded fuel oil came up in huge quantities, gushing a foot above the water, and a few small pieces of wooden deck grating came up after the last explosions, and the surface of the channel was soon dotted far and near with the white bellies of thousands of fish.

There was no doubt in the mind of anyone on either ship as to the fate of the U-boat, and two weeks later the British trawlers found the wreck of her, and the divers found that she was literally split wide open. She mounted a short 4.7-inch gun, and was about 225 feet in length, and 18 bodies were found in



Italian Submarines Equipped With American-built Engines (Sterlings) at Their Base on the Mediterranean

supposing of course that the coast was clear.

It so happened, however, that he popped up alongside of 177 about 60 yards away. No one will ever know who was the most surprised, out watch or the sub's skipper. However, the Hun got over his astonishment first and decided to ram us, but when within about 25 yards of us he evidently got a bad case of cold feet, and began submerging. Before he got much way on, or was more than half submerged the "Y gun" watch pulled the lanyard and dropped an "ashcan" almost on the sub, and the bridge watch shook up the engine room telegraphs almost before the flash of the Y gun had died out. All three motors kicked off on compression, but we had scarcely got them up to speed before an explosion took place that knocked everyone in the engine room flat, but did no damage except to put out all our lights. The bomb was set at 50 feet depth and must have shook up the U boat pretty

running awash on his Diesels; his batteries were no doubt badly damaged by the concussion of the depth charge so he could not run submerged. We rained machine gun bullets on the conning tower and deck so that it wouldn't be healthy for her crew to bring her gun into action, and as we had too much speed for her the only thing they could do was to submerge, and they did it in a jiffy. We only had time to fire one shell and we were not sure whether it hit, or not. We stopped immediately, but heard nothing for about a half hour. Then, almost directly beneath us we heard the sounds of hammering very clearly, and soon after we heard her propellers make a few revolutions, then dead quiet reigned again. We took a sounding and found twenty fathoms. As a strong tide was running we dropped anchor on the spot and waited about three hours hoping she might come up and surrender, but heard nothing aside from a few more spells of hammering, as if they were

her, but no doubt many were washed away, or blown to pieces. This was the first sub which the chasers received credit for destroying from the British Admiralty.

After this episode this portion of the channel was very quiet, and we patrolled many days without hearing anything of the Hun, and no ships were attacked for three weeks. We patrolled up to the Straits of Dover, and several times were within sound of the heavy guns on the front.

Once a German seaplane circled high above us, but a few shrapnel shells drove it off. After several monotonous weeks the U-boats came back strong and we had more than enough excitement for a period of about a week, and all hands were so nearly worn out when the armistice was signed that we could almost sleep standing up.

When I return I hope to have much more to write that will be of interest to the readers of *Pacific Motor Boat*.

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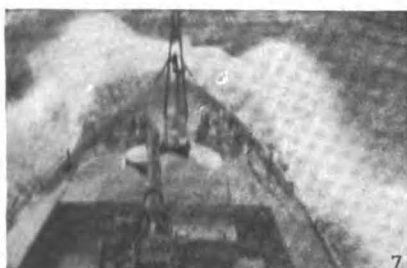
25 Cents a Copy

LIFE OVERSEAS ON THE YANKEE SUB-CHASERS

By CAPT. M. S. BROWN



Editor's Note.—This is a continuation of a series started by Capt. Brown in our April Number, 1919. The first installment was written overseas and the continuation of his account has been obtained from him since his return.



Bucking Head Seas at 15 Knots.



More Deep Sea Action.

AFTER the affair off St. Catherine's Head in which Unit One earned a star and a letter of commendation from the British Admiralty, and incidentally proved the worth of the chasers to the skeptical, we had several quiet weeks with but few "contacts," which we invariably lost owing to interference by the numerous cross-channel convoys and British patrols. They made so much noise that the Fritzes always got away under cover of it without difficulty, but if we didn't get them we kept them down pretty effectually, as the almost total absence of sinkings in that immediate vicinity proved very conclusively, although we were sure of at least two of the smaller type of subs being in our vicinity all the time.

But after the fate of the one we bombed so successfully the U-boats were very cautious about when and where they came up, and apparently only moved when sure their noise was fully covered by ours or that of other vessels. The weather throughout June was almost ideal and many of our days were as lazy as any old motor boat man could wish for. Day after day the channel was as smooth as glass and we drifted nearly all day and took life easy, but always kept a careful watch and



Taking Heavy Weather Head-On.

had the motors always ready for instant use. In fact, there was considerable friendly rivalry between the different boats as to which could get under way the quickest. I am not prepared to say which boat took the most laurels, but it is a matter of record that 177 once had three cold motors running 450 revolutions per minute within three minutes from the time "stand-by" was rung—and the engineers were all on deck when that signal was given. The Delco intake heaters were a great help in starting a cold engine expeditiously; very little priming was necessary and we got quick action.

The monotony of the remainder of our stay in the upper part of the channel was relieved by but two incidents worthy of note; both of them were good examples of the ruses we learned to expect so much later on. The first one occurred about in the middle of the channel in mid-afternoon of one of the most perfect days I ever saw anywhere except in the Sound country. There wasn't a ripple on the water and the three boats were drifting languidly about a mile apart, and everything was so peaceful in appearance that it scarcely seemed possible that there was a war on.

A few pieces of old wreckage were scattered here and



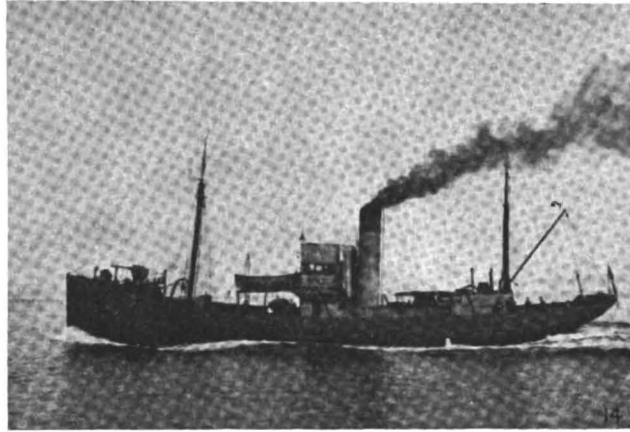
The Finish of One of the Hun Submarines Off "The Lizard."

PACIFIC MOTOR BOAT

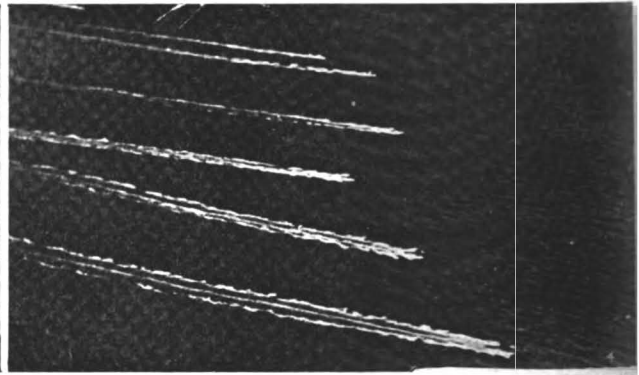
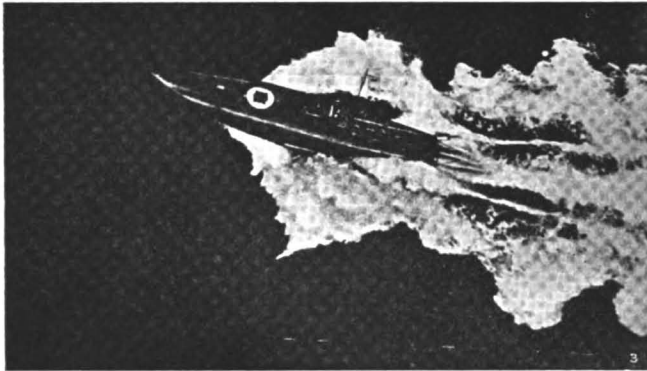
there, but none of it seemed worthy of investigation as we had not at that time learned the desirability of attention to the minute details that we learned after more experience with the wily Hun. Among the miscellaneous flotsam was a large barrel probably three hundred yards off our port beam that looked as innocent as any barrel that has out-lived its usefulness could look. Some one suggested that it be utilized as a target for our gun, but at this time attention was attracted to the smoke of a large convoy on the Western horizon. Soon after the look-out in the crow's nest happened to glance at the barrel again and it seemed to be somewhat farther away. Pretty soon he took another look and he was sure it had moved more than it should under natural conditions; sure enough, it soon developed enough speed to leave a wake after

the chase. The fish came in very handy, however, and all three chasers picked up all they could use in a very few minutes. As it happened to be our fourth and last day of the period, we soon afterwards got underway and returned to Portland.

At this time, and in fact all the time in which we were based at the British bases, we were out on patrol four days and in port four days for rest and repair. Our repairs were not very numerous, so we were able to do plenty of resting. In most cases "resting" meant some pretty strenuous touring and sight-seeing in near-by inland towns for some of us, but of course there would be no use of denying that some of the crews "relaxed" in the time honored way of sailors the world over. Most of our crews were reserves, but before they had seen a month of active service

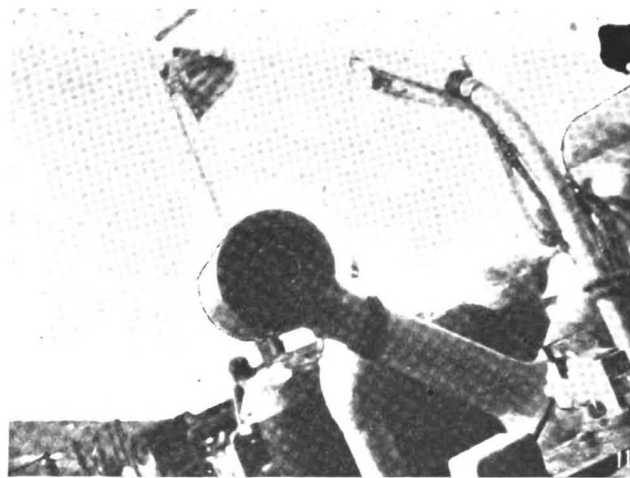


British Trawler Used for Mine-Sweeping.



The Fast British Coastal Patrol Boats Commonly Known as "C. M. B.'s" in Action.

it. General Quarters were called and after it we went. Its speed increased rapidly, but we rapidly overhauled it and began firing at it with our 3-inch, dropping two shells very close to it, whereupon it suddenly lost its headway, and as we passed it close—we noticed that it had several fresh auger holes two inches in diameter in its side. Fritz had lain there all the afternoon very comfortably with his periscope covered by the barrel taking in all the details of the Chaser and her crew, as well as getting his bearings of the convoy. The other Chasers closed in and we got a fairly good sound bearing and laid a barrage of depth charges which produced no further apparent results than to bring up thousands of dead or stunned fish, whose white bellies soon dotted the sea in all directions. Before we could secure another good bearing the convoy had approached so near that the noise of it interfered too much and we were very reluctantly forced to give up



A Heavy Roll to Port in a Beam Sea.

they were fully as "salty", in port, at least, as any of the Regulars. By the time we had arrived in Europe the Reserve men were as "seagoing" as any old-timers, and as all-around efficiency, the work the chasers actually performed in the Channel and in the Mediterranean shows very conclusively what intensive training can accomplish with men who are enthusiastic and eager to learn as these men were.

During our stays in port we formed many highly pleasing friendships among the officers and men of the Royal Naval Reserve and Royal Naval Volunteer Reserve, who manned the famous M. L. and C. M. B. (Coastal Motor Boat) fleets. Among many other highly diverting experiences, I once was privileged to go out for a night's patrol in one of the C. M. B.'s. They were 45 feet long, were single step hydros, and were powered with two 275 H. P. Thornycroft motors; 34 to 36 knots were claimed for them, but when bucking a little chop

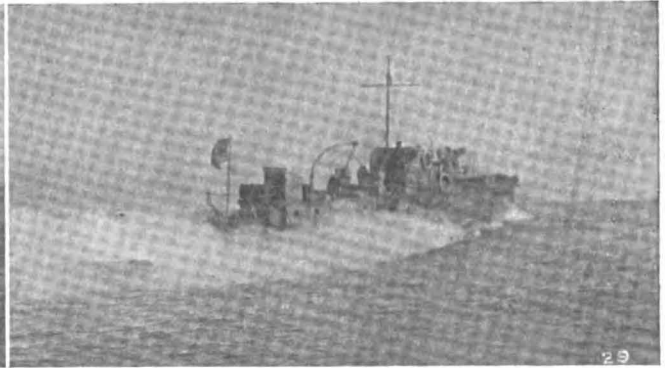
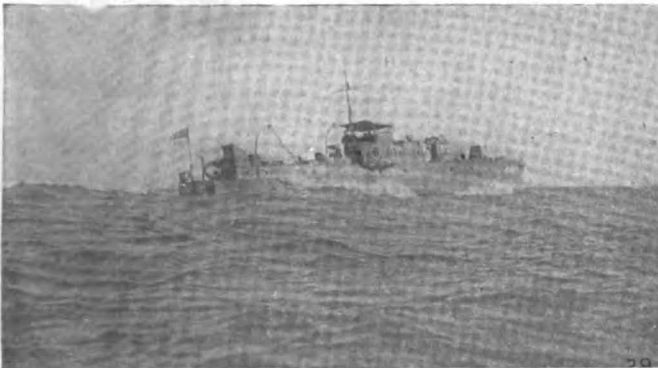
they seemed to be making 60 m. p. h.; they surely did get over the water. For armament they carried four small sized, but exceedingly effective depth charges, two Lewis machine guns, and a torpedo which was launched from the stern and headed in the same way that the boat was running, being avoided by a quick turn hard over. I didn't see it tried out, and was very thankful therefor as the system left much to be desired from the standpoint of safety to the operator, it seemed to me. The C. M. B.'s were also equipped with hydrophones, and wireless phones, and were altogether very efficient little boats, and did much to thwart the smaller types of subs that infested the waters close inshore. The night I was out we made no contacts, but speeding around in a rather choppy sea provided plenty of excitement.

One of our "rest" nights



Fast in the Ice Off Long Island.

upper part of the Channel during the early part of the summer were unfavorable to the subs in that they found it very difficult to locate their victims, but it had its compensations, for them, as it helped to eke out the short hours of darkness and gave them an opportunity to come to the surface to charge their batteries, and to use their radio. With their hydrophones they could hear the chasers and destroyers when miles away, so they were practically immune from the element of surprise, except in the rare cases where they happened to come up near a chaser that was on drifting patrol and keeping more than ordinarily quiet. In six solid months of patrol such a thing occurred but twice with Unit One—once in the engagement off St. Catherine's Head, where we made good, and once over a month later a few miles further up the chan-

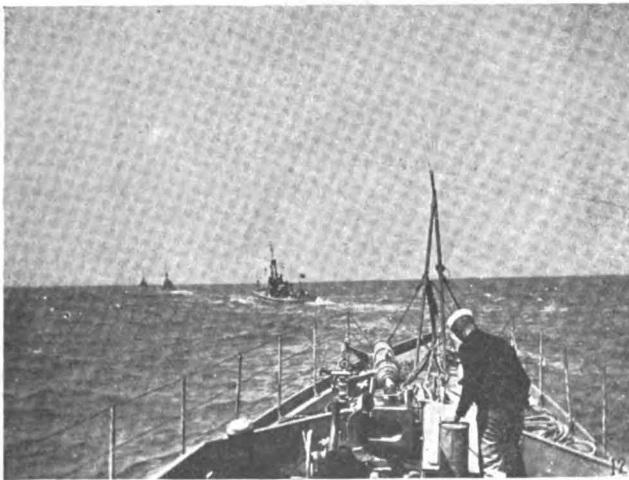


View of the British "M. L.'s" or Sub-Chasers in Action in the English Channel.

at Portland was rudely disturbed by a Hun submarine coming up just outside of the anti-sub nets and dropping a few shells close to where we were moored; as soon as the search lights and guns of the forts began to search her out she calmly submerged, and as the gates were never opened at night we had to wait till day light to look for her, but of course then she was undoubtedly miles away.

A few days after this episode a large French steamer limped into port and sunk in shoal water after an engagement with a sub on the surface a few miles outside the harbor. One of the shells from the sub had struck one of the depth charges on the stern of the steamer and set off about a dozen of them; the explosion ripped off the whole upper works as far forward as amidship, and opened her up badly, as well as killing 24 men; the wonder is that she was able to make port at all.

The still foggy mornings that are so prevalent in the

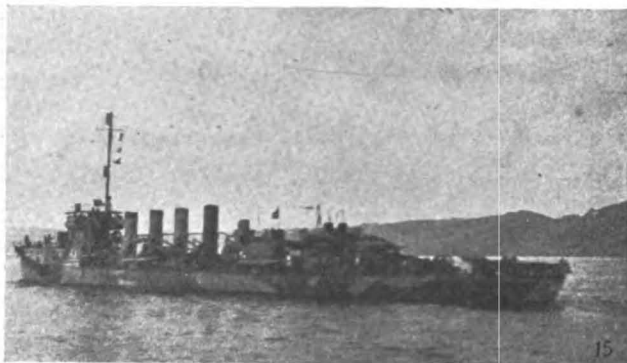


A Squadron of 110 Footers Off for a Four Days' Patrol.

nel, but in which instance we failed to score.

We had been drifting all night, and all the morning, on an oily, gently-heaving sea blanketed with a fog so dense that not even a Frisco Bay "tule fog" could compare with it; the jack-staff was invisible from the chart house. The other two boats were somewhere near us—we were about a mile apart at dusk the previous evening, and there had not been a breath of wind to separate us since then. The hourly soundings varied but little showing an average of 15 fathoms, sandy bottom, assuring us that the set of the tide must be about parallel with the shore. Not a sound broke the stillness which was so profound that it could almost be heard; the "listeners" standing careful watches at their tubes had heard absolutely nothing since daybreak when a large convoy had passed a few miles east of us. Men on other watches may become careless when nothing

happens day after day, but never with the radio men, or the listeners. There is a certain fascination about the hydrophones, especially, and it doesn't usually take long for the men to realize just how much depends upon their careful and patient listening. No foe can steal upon us, nor a friendly destroyer or cargo vessel cut



The U. S. Destroyer "Parker" on Patrol.

us in two during a fog as long as the listeners are on the job.

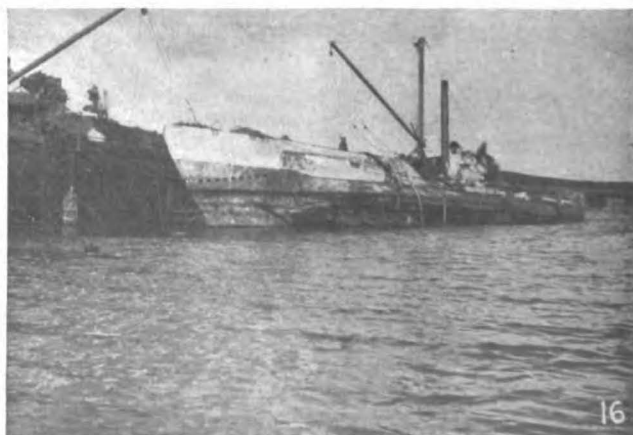
The man on watch in the crow's nest was patiently waiting for a chance to see something, but at present to wait was all he could do. Usually such fogs do not really lift, but are blown away and dispersed by the breeze that comes in from the ocean about noon, but today was an exception. Suddenly, without any warning the sun broke through quite powerfully and almost in a minute the mist began to thin rapidly, and almost before we realized it was almost entirely gone. Imagine, if you can, the surprise of the lookout, as well as everyone else on deck at seeing a submarine lying about two hundred yards astern of us with a small balloon attached to it and perhaps a hundred feet above. I didn't hold any stop watch on the engine room force to see how long it took to start those engines, but I am sure that if I had it would have recorded less than ever it was done on drill. Evidently the sub was fully as much surprised as us—also fully as quick to action. Our gun was on the bow, so couldn't be brought to bear until we got underway and turned partially around. The sub made no effort to man its solitary gun, but just opened her ballast tanks wide and her conning tower disappeared at the very moment we began to swing around. By the time we reached the spot the balloon was just striking the water, but it refused to be dragged under and broke away, shooting skyward with great speed. We fired our "Y" gun, and rolled two "ash-cans" off the stern, and stopped immediately after the explosions, but no debris was seen, or any sounds heard, except the sounds from the other boats which were by now rushing toward us. We signalled frantically for them to stop, which they did after some delay, but perfect quiet reigned in the water beneath us. The Hun simply laid comfortably on the bottom awaiting his chance to sneak off under cover of the next disturbance from a destroyer or a convoy. We listened carefully till evening, but heard nothing whatever of the wily Fritz, and at dusk the inevitable cross-channel convoy of a dozen or more freighters and four destroyers came up from the south, passing within a mile of us. We drifted quietly all night in the vicinity, but it was fruitless, as without a doubt the "U" boat made good its escape under cover of the noise interference of the convoy. But at any rate we had the satisfaction of keeping him down, and therefore out of mischief. We had heard upon very good authority that the Ger-

man subs often made use of small balloons to support their radio aerials, but as far as I know this was the first time that they were actually caught doing so. If we had but mounted a 3-inch gun aft, what a wonderful opportunity we would have had! But still, we should have all been sorry to see the "Y" gun displaced; they were great weapons.

As I look back upon it all, it seems to me as if this portion of our patrol service was easily the most enjoyable of our activities in foreign waters. The narrower and upper part of the channel was calm for the greater part of our stay, the weather was fine, and the natural hardships incident to life on a small boat and in cramped quarters was therefore reduced to a minimum. There were but the two units—six chasers—and one unit was in port while the other was on patrol. Occasionally one of our destroyers came nosing around to see how we were getting on, but for the most part a destroyer was only in the way and a nuisance on the real hunting grounds; the chasers had all the best of it. In the first place it is impossible for a destroyer to shut down all of her auxiliaries as she would be obliged to do if she made good use of her listening devices. Even if this difficulty could have been overcome, she cost too much, had too many men aboard, and drew too much water to risk drifting like a chaser; she made a good target, and was well worth a torpedo.

But in convoy work the destroyer surpassed even the fondest expectations and did more in the actual winning of the war than any other one weapon. Although they accounted for a very goodly number of U-boats, their value and effectiveness, as with the chasers, could not be gauged simply by the number of "knowns" placed to their credit, but by the protection from successful submarine attacks that they afforded to transports as well as food and munition cargoes. And our destroyers were side by side with the Britishers as to absolute efficiency in service.

It was almost laughable to see how quickly the crews of the S. C.'s became inured to the dangers, as well as the discomforts of the life. When we first entered the U-boat zone, at the Azores, orders were given for all men to wear life jackets at all times when on deck and never to have them out of reach day or night. On the voyage up from there, convoying the *Julia Luckenback* and her valuable cargo, this order was quite faithfully observed, and in fact it was quite the fashion to turn in without as much as removing shoes or life jacket



Type of German Mine-Laying Submarine.

and the deck was a very popular sleeping place when it wasn't too rough and then it was said that we were safe from subs. During the day the lookouts had plenty of help, and the periscopes sighted were countless—the

first few days; after that they began to grow scarcer. More than once a porpoise darting across our bows sent the men to general quarters without waiting for the alarm, and whales—well they make every bit as good practice for a gun crew as a real U-boat, and we saw plenty of them in all stages of emerging, submerging and putrefaction; many other convoys had preceded us, but the sport was still good.

If any one became the least bit skeptical about there being a war on and got careless, the fresh wreckage and the scores of floating bodies of men, women and horses that we encountered almost every day after we entered the Bay of Biscay would set them right again.

But when we actually got into the very center of the zone of the U-boats' most pernicious activities even the most timid quickly became inured to the ever-present possibilities of danger. In fact, in my own case, the U-boats lost half their power to terrify after the first real encounter, and like many other members of the crew, I looked forward to the days of patrol as the time for catching up on both sleep and correspondence after a strenuous round of social activities ashore. But even after our nerves became thoroughly toughened, I was never able to note, even on the part of the most slothful, any very pronounced hesitation about tumbling out and getting on deck when the alarm gongs sounded; at such times it was rather a common occurrence to omit various articles of raiment if one had been so careless as to remove them. More than once the hatches were inadequate to accommodate the volume of ascending traffic.

There came a day, after a prolonged dull period, that we received orders to leave the happy hunting grounds of the upper channel and proceed to the newly-established subchaser base at Plymouth, for service in the more boisterous waters around Eddystone, The Lizard, Land's End and the Scilly Isles. It required sometime for us (as well as our stomachs) to become accustomed to the changed conditions, but this base had at least one compensation: we had plenty to boast of to the crews of the fleet of S. C.'s which had just arrived in the war zone, and if I say so myself, we had a pretty good "line."

By this time, owing to improved nets, mines, a myriad of M. Ls. and depth-bomb barrages, the U-boats found the Straits of Dover practi-

cally impassable, so they nearly always reached their favorite hunting grounds by going around the north end of Scotland. The larger types of submersibles, the particulars of which we knew but little about before the armistice, seldom worked either in the channel or in the Irish Sea, but cruised directly to the Bay of Biscay to lie in wait for the transports. The smaller "U," "U C" and "U B" types, and "U" mine layers confined their activities principally to the waters immediately surrounding the British Isles, and the southern part of the Irish Sea, and the extreme western end of the channel were their favorite hunting grounds during the summer of 1918.

Throughout the summer and early autumn the mine-laying sub-



Just Killing Time.

marines were particularly active around all the harbor entrances, and so crafty and persistent were they that frequently they followed up the mine-sweepers, planting new ones as fast as the sweepers garnered their harvest of potential death. Several ships were sunk before these tactics were discovered. These anchored mines were usually too deep to be a source of menace to patrol craft, but for our special benefit the Huns made a practice of strewing large numbers of small floating mines when they were being chased at night. We were extremely fortunate in escaping contact with any of them, but only the unceasing vigilance of our lookouts saved us upon several occasions. Several M. Ls. and trawlers came to their end without any warning whatever before night operations became unpopular.

The life on the chasers was so strenuous in these turbulent waters

that we were given an eight-day rest period after four days out, and it was surely appreciated. After four days of being continually tossed and thrown about I have come in with every muscle in my body as sore as a boil. No one pretended to sleep until the last night out, and by that time we would be so completely worn out that we managed to catch a few winks. It was impossible to stay in our bunks without lashing ourselves in. Unless we got a "contact" we usually drifted between dusk and dawn, and in those choppy cross seas and tide rips a subchaser develops a motion all its own which no one without open sea chaser work can appreciate at its true value. I had been accustomed to going to sea in small craft, often smaller than a chaser for years, and therefore considered myself fairly "salty," even to the extent of being able to retain the equilibrium of my internal economy during a prolonged session in the engine room of a gas boat, including working with my head down in the bilges if need be, but I must confess without apology that I felt any thing but well upon a few occasions. The 110-footers have such narrow beam—only 15 feet—that you would certainly expect them to roll some—and they do, often as much as through an arc of 120 degrees. But they have a fairly good draft (about seven feet with all stores aboard), which keeps them from being in the least degree "cranky." The principal weights—engines and fuel—are very low, and no matter how far over they roll one is never in any doubt about them recovering quickly enough, although not so jerkily as to be tiresome in anything except a very choppy sea.

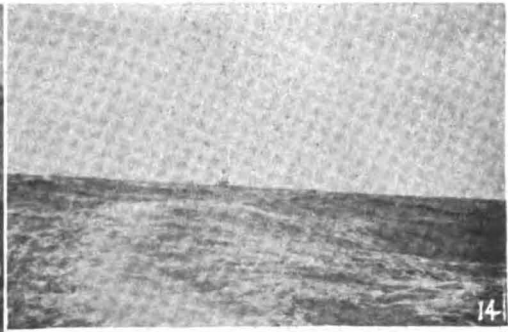
If the chasers were a disappointment as to speed, they were surely an agreeable surprise as to seaworthiness, and I have a suspicion that the designer designed better than he knew. The same stern that let them "squat" awfully at any speed above 14 knots effectually prevented them from diving unduly in a bad headsea. They have often been spoken of as being "wet" boats by people who never went out of sight of land in one, and the number of men, which, unfortunately, were lost from them at sea, were continually being referred to as an illustration of their proneness to wallow in a sea, but in almost every case these men were lost because of defective life rails. I should call these craft remarkably "dry" myself.

(To be Continued)

LIFE OVERSEAS ON THE YANKEE SUB-CHASERS



A Lumpy Sea Off the Coast.

By CAPT. M. S. BROWN
(Concluded from April Issue)

A Sister Boat Bringing Up the Rear.

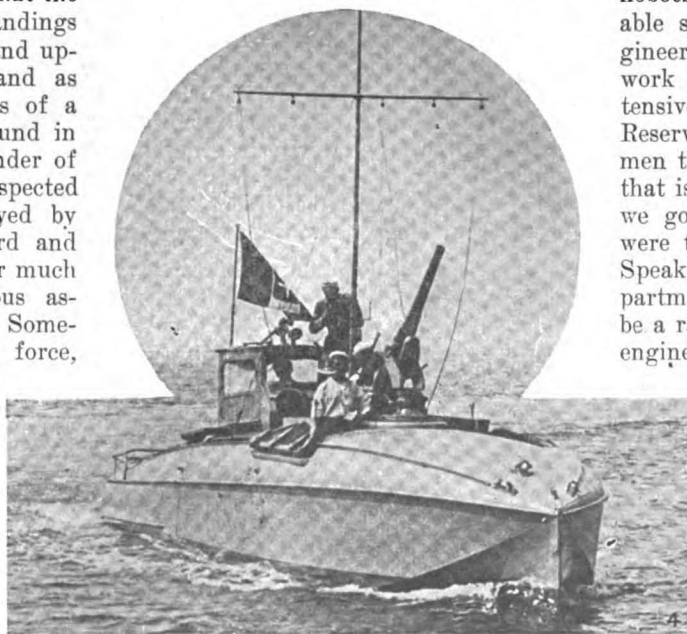
MUCH has been written about the work that the destroyers did in the rough seas of the Channel, and it was very creditable, but it seems that comparatively few people are aware that the chasers worked side by side with them, and cases of seeking shelter in even the worst blows were extremely rare. During the months my unit was on patrol out of Plymouth we sought shelter but once. Upon this occasion we were on patrol near the Lizard, and after being buffeted by a raging Sou-wester for 24 hours, gave it up and ran into a little bay near the mouth of the river Helforth. It was very nice in there and we congratulated ourselves upon finding such a good haven close to our patrol area, until the next morning, as we were weighing anchor, we pulled up an anchored mine. We ascertained later that this secluded little harbor, some distance from any settlement, had at the beginning of the war been much used by German subs as a safe place to effect a landing, as well as to rest on the bottom during the day, and discovering this fact the admiralty forthwith strewed the place thickly with mines. After this experience we found it easy to endure any kind of weather without grumbling. We preferred it to casting our anchor promiscuously among a bunch of miscellaneous mines.

It was freely suspected that the crews of U-boats made landings in both England and Ireland upon numerous occasions, and as proof of this, ticket stubs of a Plymouth theater were found in the pocket of the Commander of a U-boat by divers that inspected the wreck of one destroyed by chasers between the Lizard and Falmouth. There was never much choice between the various assignments on a chaser. Sometimes some of the deck force, after being wet to the skin for days continuously, might look upon the engineers as having a soft snap, but one experience with the heat and gas of the engine room was sufficient to convince them of their error. The only men, however, whose jobs were seldom coveted,

were the cooks. Imagine, if you can, trying to get out a course dinner in a 6 by 10 galley when the ship is rolling 30 or 35 degrees at nearly every roll, and often as much as 55 degrees each way (I have seen them roll 65). Well, they didn't often give us a soup course, it's true, but not because they couldn't; not many of the crew had any decided hankering for soup, or any other article of food at all liquid in nature at such times. In fact I have known of many meals at sea on a chaser when the principal viands were "canned bill," sea biscuit, and sour pickles—with the pickles easily the most popular. On some four-day sessions we consumed a whole barrel, and if any of my readers have ever been to sea under like circumstances they will appreciate this statement. Lemons would have done as well, but citrus fruits were not a part of our commissary.

If, in future years, I hear any one as much as hint that the Reserve men were less "sea-going" or "salty" than the Regulars I shall be ready to say that they don't know anything about life on subchasers. Perhaps at first they suffered by comparison in various ways, but in most cases they were apt pupils; it was a distinct surprise, not to say shock, to many of the most skeptical officers to see how quickly farmers, clerks, bankers and hoboese could be converted into able seamen, quartermasters, engineers, etc., able to do the same work as the Regulars. The intensive training applied to the Reserves appealed far more to the men than the older methods, and that is, I believe, the main reason we got results, and results that were the envy of the old school. Speaking strictly of my own department, it did seem, at first to be a rather stiff contract to make engineers out of some of the material furnished, but after all I can't say as the Ford drivers burnt out any more bearings, or broke more connecting rods than the "salty" Regulars, considering them both on an average.

About two weeks before the signing of the Armistice I was trans-



Bow View of One of the Italian Government's Subchasers.



Dressed for Cold Weather and Other Eventualities.

ferred to S. C. 148 for the purpose of rejuvenating her motors, if possible, after she had been given up by several "experts," both commissioned and enlisted. She was surely a tough nut to crack, but I enjoyed the work, having been given a free hand with both the engines and the personnel. If life on patrol had been strenuous before it was far more so now. We managed to keep two engines running more or less steadily during the day, and worked day and night overhauling the third one. As the channel was living up to its reputation most of the time, perhaps some of the old-timers can realize in some degree what we were up against. During the night of November 8 our unit

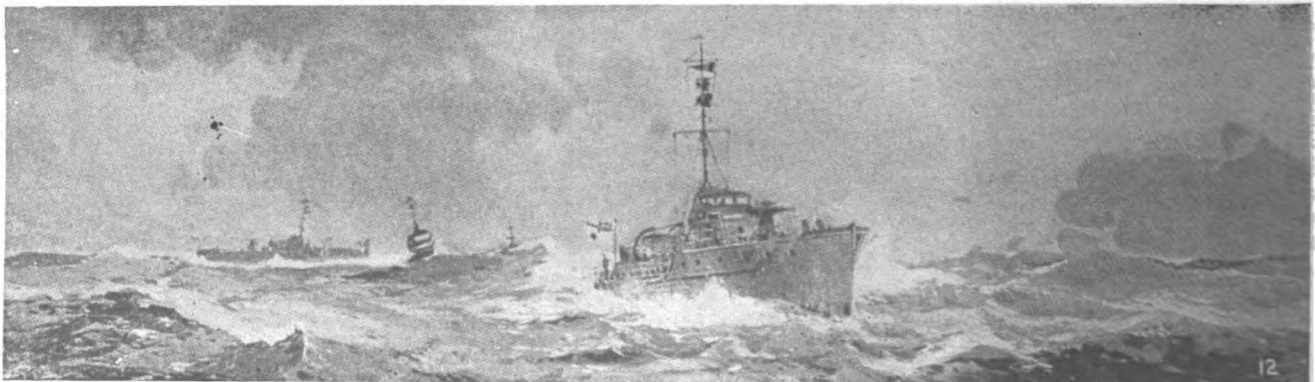
came in contact with, and chased a U-boat which proved to be the last one engaged in the war. She escaped, but in a badly damaged condition, as was ascertained upon her surrender after the Armistice.

During this chase, I had, as far as I know, the narrowest escape of all. As usual we were limping along on two engines with two or three cylinders missing, and about three hundred yards astern of S. C. 143. The night was dark, and a stiff east wind made the channel somewhat more than usually boisterous. We had been running about ten minutes after having made a good "sound contact," and 143 crossed a phosphorescent wake, apparently made by a sub, and immediately rolled a couple of ashcans off her stern, and at once showed her red truck light as a warning for us to stand clear of her wake. For some unaccountable reason none of the deck watch saw this light immediately, and the wind blew too hard to hear her warning whistle, so that we were unaware of their having dropped any charges until we reached the spit immediately over them, and then 143's signals were seen. It was just at the time they should have exploded, and those of us who were aware of our predicament fully expected each second to be our last, but there was no confusion, and I'll never forget how coolly every one stood at their posts. One of the men in the engine room voiced my sentiments when he yelled at me above the roar of the engines, "Gee, but I'm glad I've got \$10,000 insurance." Seconds extended into minutes and nothing happened, and the fact is, those charges never did explode—the only ones out of several thousand our chasers dropped in the channel that failed to explode. Investigation proved that the safety forks of the charges had been pulled, so there could be no more suitable explanation than just pure good luck—none of us being very religious.

I will leave my readers to judge as to what our fate would have been had those charges exploded under us, or nearly so. They were set for fifty feet and there was about twelve fathoms of water at that particular place, so that it can readily be seen that the force of the explosion would have been mainly upwards.

In the course of this engagement we dropped eight charges, and having but two engines in commission, we were not able to get very far from them before the explosion, so we received an unusually severe shaking up. Everyone has read much about shell-shock, and its effect upon our soldiers, but how many have heard of depth bomb shock?

It is well known that T. N. T. is the most powerful explosive in general use, and 200 to 300 pounds of it was used in each depth bomb. Then consider that water is a better conductor of vibration than air, and that this amount of explosive is several times greater than the



"M. L." Boats Built in This Country for the British Sub-chaser Service.

amount contained in the average heavy shell on the Front, and some conception may be formed of the effect upon the men below decks. The chasers seldom succeeded in getting farther than 300 yards, and often much less, from the charges at the time of explosion. Men were knocked flat, and badly injured in many cases, besides experiencing all the well-known effects of regular shell-shock. Imagine, if you can, gas engine operation under such conditions. The engines had to run and did it!

At 10:45 A. M., November 11, while we were plunging along on patrol about ten miles south of Eddystone Light we picked up the following radio message from Admiral Sims:

"Armistice signed; enemy submarines proceeding on the surface not to be attacked unless hostile intentions are obvious."

No words could ever express our elation over this news, although it was not entirely unexpected. We asked for, and were granted permission to return to our Plymouth Base, and arrived in time to take part in the great celebration.

The long standing enmity between our "Gobs" and the "Limies" was for the time forgotten, and former contenders in bloody street encounters for possession of the belles of Plymouth could be seen everywhere arm in arm, or drinking out of the same bottle. All of the "pubs" were dispensing their liquid cheer free of charge, and I doubt if old Plymouth with all its great historical lore ever saw such an animated occasion before, not even when Sir Francis Drake defeated the Armada.

The English people surely had every reason for joy although their condition was considerably better as far as rations were concerned than during the early summer when the sinkings of food ships reached the maximum.

When the chasers first arrived upon the scene in April, 1918, the English were almost starved into surrender. Anyone that was in a position to see, must concede that the chasers were really the principle means of vanquishing the U-boats. Although they sank many subs, the success of our campaign is better judged by the number of food ships that escaped destruction, before and after our arrival.

Before we left America the S. C. boats were often slurringly referred to as "Slackers' comfort," but after it the "salty" regulars that in many cases spent their European service behind submarine nets at Scapa Flow were glad to "hand it to us." As to casualties, the S. C. Roll of Honor includes as high a percentage of the number actually at sea on subchasing duty as the percentage in the Army. A large number of men were lost overboard, the Flu claimed many victims, several were fatally gassed in the engine rooms, and fire, collision and



Communicating With the Balance of the Fleet.

depth bomb explosions accounted for many fatalities.

And then, too, as an Admiral once said, "Every man that crossed the ocean, and lived on a chaser for a year deserves a D. S. M."

From November 23, 1918, to June 30, 1919, my unit was based at Brest, France, where our duties consisted of mine-sweeping and boarding all the ships entering the harbor.

For boarding duty they were extremely well adapted, being so easy to handle, and a smaller or less seaworthy vessel could not have withstood for long the fierce tide rips of the outer harbor.

After the months of the most strenuous outside work



Type of Sub-Chaser Built in America for the Use of the Italian Navy.

this harbor work was much appreciated and the chasers were very comfortable, even there where rain fell continuously for weeks at a time.

When at last Peace was signed and we received orders to prepare for the voyage to the States no one was the least bit sorry.

The evening of June 30 saw the last of the Channel Detachment of chasers, fourteen in number, leaving Brest with its Bolsheviki, on the horizon. The 400-odd miles across the Bay of Biscay were strenuous enough in point of weather to remind us of old times in the channel. A whole barrel of sour pickles was consumed the first two days, so it may be inferred that several months of inside work had had its effect. The Bay of Biscay was never known to be calm, so we were not disappointed.

After sighting the Spanish coast there was a vast improvement in the weather and with the exception of our "correspondence school" skipper, who had been inflicted upon us after hostilities ceased, all the indisposed members of the crew quickly recovered.

I was Executive Officer on S. C. 143 at this time, having been transferred from S. C. 148 shortly before leaving Brest,

The voyage along the coast of Spain and Portugal was uneventful, though pleasant, and we arrived at Lisbon on July 4. Here we found 12 of the Mediterranean chasers, and we spent two very enjoyable weeks comparing experiences, attending bull-fights, official balls, and cock-fights, "bucking the tiger" and sight-seeing. Lisbon is a beautiful city in spite of revolutions, and earth quakes. On July 21 we got underway on the long voyage (about 3400 miles) to the States. The fleet consisted of 26 chasers (including five of the original Big Six, 177 having been sold in France), the Pacific Coast tugs "*Ontario* and *Undaunted*, the tenders *Hannibal* and *Leonidas*, and the tanker *Chestnut Hill*. Just before we left Lisbon I was transferred to S. C. 262 and had an opportunity to combine a little navigation with my engineering duties.

In a fleet there are few navigation problems to worry the S. C. skippers, although they were supposed to give their position to the Fleet Commander each day at 1 P. M. Those who were a trifle weak on navigation only had to copy the hoist of some boat whose skipper was known to be skillful. It was mainly a case of "follow the leader," in this case the *Chestnut Hill*, which maintained her nine knots to a revolution, so the main problem was to maintain our positions.

As we were able to get the Eiffel tower "time tick" by radio every day and our Local Mean Time from the *Leonidas* each day, the latitude sights were a very simple proposition as the weather was clear night and day. For longitude the Summer Line method is the easiest for me, and has the advantage of checking up the compass with some observation.

At night the fleet resembled a brilliantly-lighted city—some contrast to the voyage over with darkened ports. Ponta del Gada, Azore Islands, was our first stop, July 25. According to the East Atlantic Pilot there are, on an average, but ten calm days per year in this vicinity, and I believe we timed our voyage just right because I never saw the ocean prettier.

During our stay there the Portuguese held a regatta, the events in which included swimming and rowing races, and a tug of war between an American and a Portuguese cutter crew.

The Americans won all of the swimming contests, but were badly outclassed in the other events. The Azorean fishermen are in a class by themselves.

We left there July 31 on the 1900-mile grind to Bermuda, and for the most of the time we had the wind on our starboard beam or quarter, and it varied in strength from ten to thirty knots so it can readily be imagined that we rolled some. I wish I knew how many times we rolled 25 degrees or more during the entire voyage. Much of the time it was impossible to stay in one's bunk without being lashed in, but I don't recollect that we shipped a drop of solid water at any time. Taking gasoline from the "*Chestnut Hill*," in a rough sea was exciting work, as she held her course and speed under all conditions. Four chasers were fueled at one time—one on each side, and two astern. The fuel was received through a 3-inch hose, and the utmost care was necessary to avoid parting the hose, or overrunning it and chopping it with our propellers.

Two chasers were lost by fire while fueling prior to our crossing, but we met with no mishaps. There wasn't even any serious engine trouble on any boat in the fleet to vary the monotony as we plugged along day after day on two engines at about 300 R.P.M. Land never looked nicer than did the low-lying shores of Bermuda which we raised through a haze at about noon of the eleventh day out. Five days were spent here resting up, painting ship, etc., as well as improving to the utmost our last opportunity to indulge in nice, cold American beer.

We were ready for sea a couple of days before the weather conditions looked favorable for a start. This portion of the Atlantic is by far the most dangerous of any stretch we covered, at this time of year, owing to the chances of running into a West India cyclone. Six chasers were selected to race to New York in an effort to lower the existing motor boat time of 65 hours, but 262 was not among them. We left August 15 at six P. M., and the racers started 24 hours later. The weather was fine until we passed out of the Gulf Stream when we encountered the edge of a cyclone that gave us an uncomfortable night, but it was nothing to the storm we rode out on our way down eighteen months before.

On one occasion two seagoing naval tugs foundered a short distance from us. Just before we raised Navesink Highlands Light, early in the morning of August 19, during a severe electrical storm, we just missed colliding with a derelict schooner that was just awash.

Soon after this we ran into a bank of fog that lasted until we reached Ambrose Channel about 10 A. M. Here we found that all of the racers had got in, the winning S. C. 131 at about 1:30 A. M., having made the 675-knot run in 57 hours—very good time considering the rough weather they encountered.

The people of New York evidently had forgotten that there had even been a war, or at least that the Navy took part in it, for as we glided up the Hudson with rails manned, and homeward-bound pennants flying there was no one to meet us aside from a small tug with the Mayor's Committee and a band. The welcoming committee were so accustomed to meeting returning heroes that they waved their hats in time with the music.

We came to anchor near old Fort Lee on the Jersey side and I was once more in God's country after twenty months of subchaser service with 22,000 miles of cruising in the roughest waters in the world.

We were all glad to get home, of course, but I shall always look back with pleasure upon my service in the "Chaser Navy", even with all its discomforts and perils, as by far the most interesting motorboating in my experience.