

TRIP ON 'U'-BOAT IS RACKING TO THE HUMAN BODY

Like Living Inside the Mechanism of a Watch.

EVER ON WATCH FOR ENEMY

Correspondent Says Human Beings Could Not Remain Submerged in Submarine Fifteen Hours a Day for Many Days—Heart of the Ship Centers About the Two Periscopes.

Wherever one sees a Frenchman these days, whether on land, on water, or in the air, the thick of the fighting is near. The same is true of fighting under the water. I have just returned from passing two days and three nights under the Adriatic sea in the M—, a French submarine, says A. R. Decker, in the Chicago Daily News. We were cruising for hostile undersea craft that sail on their practical expeditions from Cattaro to the Mediterranean and the Atlantic, and for enemy surface ships which might dash out at night from behind the Dalmatian islands to attack the southern Italian bases, or the drifter line across the Otranto straits. Commander R— of the submarine in which I was to sail led the way down a perpendicular ladder into the main corridor of the M— and showed me the compact but comfortable quarters—three small, wood-trimmed staterooms for the officers and a locker where I could install a shakedown. It was already hot as sin and I was glad to strip and don the blue jumper and overalls which were loaned me. Then I could at least perspire without thinking of my clothes.

Slipping Out of Harbor. I gave but a hasty glance around at the countless valves and conduits, and then hastened above, taking care to protect myself against the cold. We are getting under way. Commander R— was in the conning tower. He had slipped on a tunic over his jumper and wore his service cap, as did the other officers, one of whom was at the stern and the other at the bow, superintending the departure. I climbed out of the conning tower and took a place amongst the crew grouped near the wire railing. The evening air was cool and refreshing, as we backed, turned and went ahead until we swung on our course toward the outer harbor. The silent-sunning electric motor brought us along so smoothly we seemed to slip through the water, gathering headway until neat, well-turned waves fell off the bows.

With much puffing and snorting the duty of turning the screws was taken from the electric motor and turned over to one of the oil engines, while the remaining oil engines charged the accumulators against the time when we should have to submerge. Our speed increased and in a half hour the old castle and the landmarks of the quaint southern Italian town had faded in the glow of a vivid sunset. When the moon rose I was still breathing the cool salt air, for one stay of five minutes in the heat below decks had driven me above. I stood in the conning tower, ready at a moment's notice to dive out of sight. Sailors were in a forward hatch, the only remaining one left open. Not a soul was on the bare decks which seemed weird in the moonlight. Long ago, the wire railing had been dismantled and stowed below. Our sharp prow cut its way through a slightly ruffled sea, spreading a gloom of phosphorescence in our wake. A full moon lit up the Adriatic, enabling us to see a long distance.

But the call of sleep won over the rareness of the situation. Before daylight I was awakened by the stopping of the oil engines. Climbing into the conning tower, I found that Commander R— was preparing to submerge. Sailors Won't Close Hatches.

We already had been partly submerged, that is, a sufficient number of the water compartments had been filled so that the filling of a few more would cause the M— to dive. We were nearly balanced. During the night hours the Diesel engines had been storing energy into the accumulators and now the switch was made. A last order came through the speaking tube and we slowly sank. Commander R—'s arrival told me that we were entirely under water. He was the last man to descend the conning tower ladder after he himself had closed and bolted the hatch. It is strange but sailors on submarines do not like to open or close the hatches. They fear that the water will enter and engulf them. However, the weight of the water is such that it is impossible to budge the hatches once the ship is partly under water.

At 4:30 o'clock we were under the Adriatic and our real submarine life began. No physical sensation told me that we were below the sea. My breathing was normal and the only objectionable feature was the heat. But as the hours wore away I began to realize that submarine life is one of the most painful that human beings can endure. The heat is terrible, 32 to 35 degrees centigrade (89 to 95 degrees Fahrenheit) in the section of the Adriatic at this time of the year, and the humidity is as bad, condensing on the structural work and trickling down one's neck unnoticed because of the perspiration that is already pouring down. It was so hot

that most of my photographic films were spoiled.

Gradually I became somewhat accustomed to the heat and started out to explore the M—. As I progressed my confidence increased and I soon felt as safe as if on dry land. The M— is a real ship and as stable as a destroyer. As I walked down the long corridor from the officers' quarters I felt as though I were inside the works of a watch, so complicated did the machinery seem. There were two inner decks, the lower one for the heavy accumulators and the upper for the two sets of engines. On the upper deck aft was a narrow lane banked by the two Diesel engines and the two electric motors. The torpedo tubes were set in the sides. Forward were the oil tanks and storerooms. A rapid firing gun was attached to a trap, ready to be swung rapidly into position on the outer deck. The crew's quarters were forward and aft. Here the half-naked, sweating men off duty lay on the ceiling, or in hammocks, trying to get some sleep. The cook was busy in his electric kitchen preparing light food that gave out no odor and did not require an oven. The wireless room was not occupied, as we were submerged.

Watching for the Enemy. But the heart of the ship centered about two periscopes, thick, electrically operated shafts whose lower extremities terminated in the navigation room. Here the commander or his officers and underofficers kept half-hour watches which were painful in their intensity. Our existence depended upon our seeing the enemy the fraction of a minute before he saw us. However, this was not the spirit of the ship. Our aim was to find enemy submarines, and never in all my experience have I seen men so intent upon finding the Germans. Perhaps it was because the loneliness of our position welded us into one family. The little navigation chamber housed a number of men. Two sailors sat on little benches on the starboard side before two vertical dials, which, by flashing lights, told our angle of forward pitch or side roll. We were traveling about seven knots an hour with our periscopes five feet above the waves. The two men controlled the side planes which governed our depth. As the angle lights flashed to zero, 5 or 10 degrees, they would whirl the wheels and bring up to the desired depth.

The M— was very sensitive because Commander R—'s first care when we submerged had been to balance the ship—that is, to fill the compartments with just the right amount of water to make the M— a shade heavier than water. This is the French and also the German method. Many navies maintain the submarine slightly lighter than water. Our side rudders and speed kept us at the required depth, like a dirigible balloon. On the port side one sailor controlled our course by means of a Sperry gyro-compass and a wheel operating the vertical stern rudder. Other sailors stood by at pumps and valves ready to aid us in diving, or to empty the water compartments if we needed to mount to the surface very quickly. An officer directed the motors and distant valves through speaking tubes and buzzers.

Silence Is Necessary. All these men were in a circle of about fifteen feet. Silence reigned and the discipline was severe, for in a submarine one must act quickly; seconds may be precious. When one conversed it was in whispers and briefly. On a platform Commander R— stood gazing intently through the periscope, a hand on either support turning the shaft so as to sweep a little more than half the horizon. His head was in a sort of cavity and it was hotter there than elsewhere. He was perspiring as in a steam bath. A few feet away an underofficer was searching the other half of the horizon.

I took the underofficer's post and glued my eye to the lens. It surprised me that one could see so well. It was like looking at a moving picture, the leaping waves that made no sound, the salt spray which had no odor of salt and the distant low shore which sent us no breeze. Soon my eyes tired from the strain of the lens and I was glad to stop.

Then Commander R— decided to emerge for a quarter of an hour. This was possible since we were far from the enemy's base and his airplanes could not see us. We all received this news with joy and the valvemen jumped with alacrity to expel the water. As we mounted, Commander R— first carefully scanned the horizon through the periscope, then he himself opened the conning tower hatch and searched the Adriatic with his glass. There was nothing in sight, so we came to the surface and remained quietly rolling in the trough of the sea. One by one the sailors came out for a breath of air and I am sure it was needed. A strange fact is that the pure salt air actually smelled putrid, like burning flesh. I can only account for this by the theory that the mucous membrane of the nose was burnt by the sudden excess of oxygen.

Our breathing spell was over all too soon, and in less than a minute we were again under the Adriatic, perspiring and watching. The long afternoon hours wore on and the air became vitiated. From time to time a can of oxylyte, a dangerous, inflammable, high oxygen compound, was placed before the ventilator and there was a temporary exhilaration as the air became surcharged with the precious gas. But the effect soon wore off.

Then I was introduced to tea and I was surprised to find that tea is the submarine sailor's life saver. Bowls of hot tea brought our morale back to normal and made life endurable once more.

That night at 8:30 we emerged and transferred to the crude-oil motors for

the purpose of recharging the batteries. At 4:30 in the morning we submerged once more and recommenced the agonizing watch for the enemy submarines.

Up at Nightfall. At noon we came up for another breathing spell of a quarter of an hour and, much to the relief of everyone, we emerged completely at 8:30 p. m. after a preliminary look through the periscope. The first part of the night we cruised about our rectangle, keeping a sharp lookout for the enemy, without seeing anything more suspicious than a low star, which fooled me for a time. So in the early morning we shoved the two oil motors into high speed and hurried for port at 18 or 19 knots an hour, picking up the old castle around 6 a. m. Our number was hoisted to the flagstaff and soon we were reporting at the first sentry boat in the harbor.

This cruise on the M— confirms my belief that the German U-boats navigate almost entirely on the surface. They must do so in order to endure the month-long cruises and more than that the Germans undertake. Human beings could not remain in a submerged submarine 15 hours a day for more than a few days. And it is not necessary for the Germans to remain submerged. They have plenty of time to disappear long before a patrol boat could approach them. The Germans' task is simple—to watch for a steamer's smoke and place themselves ahead of its course until the merchantman comes within torpedo range. Given the right atmospheric conditions, the U-boat runs no risk. Its action is limited only by its torpedo-carrying capacity and its range of vision.

Seaplane Can Find Submarine. A campaign of submarines against submarines is effective only to a limited extent, for the very reason of the invisibility of a submarine. From a periscope one can see only within a radius of 2½ miles, and a five-mile circle on the sea is nothing. Perhaps there is something to be done with submarines working in conjunction with scout planes, for to date submarines, while submerged, cannot watch the sky. In clear water a seaplane, by flying low, can see a submarine 18 fathoms below the surface. But a seaplane finds it impossible to bomb a submarine and its efforts are confined to scouting.

The secret of successfully combating the U-boats consists in increasing the means by augmenting the number of patrol boats, seaplanes, dirigibles, drifters, trawlers and mine fields and by bombing the submarine bases from vast squadrons of airplanes.

Future operations of the German U-boats are going to cause the allies to regret that the fighting material was not increased during the summer months, when U-boat fighting was easiest. Enemy submarines are now cruising in squadrons of six or more and are audaciously attacking convoys. This coming winter, I learn from a reliable source, 2,000-ton U-boats, armed with 11-inch guns, will be operating in the mid-Atlantic. Winter storms will soon decrease anti-submarine fighting, but they will not decrease U-boat operations. However, it is still time for the United States to build the material for next spring's campaign. And this is America's task, because the allies lack the necessary resources.

MAKING ICE FOR THE UNITED STATES ARMY



Our soldiers in France will have cold drinks and properly preserved food, as the government has ordered a number of portable ice machines. The largest one is capable of making 500 tons a day. The picture shows a soldier holding a cake of manufactured ice.

WOOL FROM OWN SHEEP

Women Had to Sheer Flock Before They Could Knit.

When members of the Akra branch of the Pembina county, N. D., Red Cross chapter ran out of knitting yarn they did not stop their knitting, but they sheared the wool from their own sheep, carded and spun it and now are busy as before, knitting socks and wristlets for the soldiers from the gray wool which they made by carding white and black wool together and later dyeing it blue to conform with the Red Cross regulations.

This announcement was made by Mrs. B. S. Thorwaldson, who is chairman of the branch, which is composed mostly of Icelanders, who are known the world over for their knitting.

AT 64 AMERICAN WINS WAR MEDALS

Story Furnishes Material Worthy of Modern Odyssey.

FIGHTS AGAIN FOR FRANCE

Veteran of the Franco-Prussian War Returns to Native Country to Join French Hosts in Battle Against Germany—Takes Pride in Fact That He Is Also Fighting America's Battle.

At sixty-four years of age he was a second-class private in the French army. Today at sixty-seven he is a lieutenant and wears on his breast the French military medal, the Croix de Guerre with palm, and over his shoulder hangs his regimental fougasse.

That but darkly silhouettes the remarkable story of George Le Mesnager, an American, of Los Angeles, Cal., who has become attached to the headquarters of the Alpine Chasseurs, the instructors of the American army, to act as an English interpreter. For three years he has fought in the French army and always as an American citizen.

His own story, as he narrated it with a simplicity unadorned and a delightful current of humor carrying it along, was material worthy of a modern Odyssey and a tale that made you proud that your country had given France such a man.

"At seventeen, I landed in San Francisco," he told me. "Then," he continued, "all the world was young and all the trees were green. America became my young wife; France was my mother. And when in 1870 I heard my mother was attacked I hastened to her defense."

"With a limp in my right knee from a wound and a tiny medal of honor that my country gave me, I came back to the good U. S. A. and located in Los Angeles when it was an adobe town of 2,500 people, 2,000 of whom were Mexicans."

"California has been good to me. I have prospered. I have raised a good American family and they are today all residents of California. At sixty-three I was nursing the delusion that the best part of life trailed behind me. But the rumors of war, and then war itself, swept me away from my life's quiet moorings."

Joins French Army.

"I saw the final act of the play, the first act of which I had seen staged in 1870, was to be enacted. I knew that in this struggle I would not only be fighting for France but for America as well. I made up my mind to get in it. 'Employing a stratagem, I left home without worrying my family.'

"I landed safely in Havre, but had not been on the street an hour before a gendarme halted me and asked me my business. 'I have come to enlist and fight for France,' I told him. He scowled at me and said: 'Old man, don't get funny with me—these are dangerous times, and I want to know your errand here.' 'Take me to the nearest enlistment office, my good man,' I said, 'and I will show you.' Not knowing what else to do with me he did as I suggested.

"We entered the office, and fortunately a colonel was in charge. I walked up to him and said: 'Colonel, I have come five thousand miles to fight for France, and if your regiment will take me, I'd like to get at it right away.' The colonel laughingly said: 'Why didn't you come earlier?' 'And I retorted: 'Why didn't you start the war earlier?' 'Well,' he said, 'maybe we can use you as a cambion driver.' 'No, you won't,' I said, boldly. 'I didn't come all the way from Los Angeles, California, to drive a pair of mules. I've come to fight.'

"'Bravo,' he says, 'that's the spirit we want.' When I joined my new regiment they were fighting at Verdun; men were needed; no one asked me any questions; within a week after I had arrived I was in the hospital nursing a wound."

How He Won Medals.

He was very reticent in explaining how he had obtained his medals, but by dint of persistent prodding I found that he had won the Croix de Guerre when in a front line position his commander discovered they were short of ammunition and asked for a volunteer to creep rearward over a shell-swept field to notify headquarters. He successfully made the perilous trip, receiving only a slight wound. His palm came to him when he left a position of comparative safety to rescue his wounded colonel and install him in his retreat while he guarded him during the night until relieved in the morning.

"This medal militaire I never expected to win," he said. "The action in which I won this I never believed I would live through. Three hundred of us took a German advance trench, and before we had consolidated it a thousand or more Boches, springing from the ground like the famed harvest of dragons' teeth, had surrounded us. They called on us to surrender. Our answer was voiced with lead. Of the three hundred, twenty of us got back to our own trenches, and I, who was then a sergeant, was the senior officer in command.

"Three times I have been wounded. 'I am happy beyond words that I have escaped death so as to be able to serve my own country in this war.'

ARMY OF WOMEN TO BE SENT TO FRANCE

England Recruits 8,000 to 10,000 Workers Every Month.

England will soon have an army of women in France comparing favorably in numbers with "the contemptibles" who constituted the first male contingent sent to France. This same epithet, which the Kaiser applied to England's first army, has been frequently used in referring to the first female contingent, but that has been changed now to the highest words of praise from the army commanders.

The first steps were taken to recruit women of all classes for service overseas, the war office asking for between 8,000 and 10,000 monthly. A giant scheme of substitution is progressing behind the lines, women being placed in men's positions in freight stations, warehouses, clerical offices, even in the Royal Flying corps.

Minister of Labor Roberts declared in an address to women that he marveled at women's adaptability, which not only exceeded all expectations but had reached a point where they were invaluable.

As many as possible would be utilized near their homes, but the greater proportion would be sent into districts where the man power was being largely diluted. For the last six months women had been cooking for the officers' and men's messes in France. Every report shows that where they have taken up this work the food has been better prepared, the cook houses are in better sanitary condition and the men are better satisfied. Furthermore, it has been discovered that three women occupy less space in the hut than two men. Despite all forecasts and expectations, the use of women with the army has proved a big economy as well as increasing military efficiency.

DISCHARGES COOK FOR NOT SIGNING PLEDGE



Mrs. Daniel Griffin, a patriotic woman and wife of Congressman Griffin of New York, is now cooking her own meals. She discharged her cook for refusing to sign a food conservation pledge recently. Mrs. Griffin will do her own cooking hereafter.

MESOPOTAMIA'S HOT SPELL

Mercury Last July Touched 122.8 at Bagdad.

This has been the hottest season in Mesopotamia of which record exists. The highest temperature at Bagdad was 122.8 in July, and at Basrah 122, while in the tents of the soldiers the thermometer rose to 10 degrees higher. This was 10 to 12 degrees higher than in 1916. August was also severely hot, and September opened with a heat wave which drove the thermometer to an average of 8 degrees above normal. The mercury at Basrah on August 28 was 118 and on September 5 was 116 in a damp atmosphere. In spite of the abnormal conditions the spirit of the troops has been excellent, and in the hottest weather sports have been enjoyed as usual. Early in June a football cup series was played at Samarah. The first week of September was marked by a regatta and race meeting at Bagdad and a large number of men are now in training for a big boxing tournament.

PARLEZ FRANCAIS MODIFIED

English May Now Be Spoken Into Paris Telephones.

Wartime regulations in France prohibiting conversation over the telephones in any language but French have been modified. English can now be spoken over the wires within the limits of the city of Paris, but not in communicating with other cities or towns or in the war zone.

The unsuspecting American will now be saved the annoyance of having his talk over the phone broken into almost as soon as begun by the shrill command of the demoiselle du telephone: "Parlez Francais, s. v. p., monsieur."

OLD LINER NOW HOUSES SEAPLANES

Is Mother of Eyes of the British Grand Fleet.

VISIT TO SHIPS BY AIR

Newspaper Correspondent Goes Out to Meet Returning Battle Cruisers—Views Greatest Concentration of Fighting Vessels in the History of the World—Is an Inspiring Sight.

Far up in the North sea there is an old Atlantic liner which has been converted into a mother ship for seaplanes guarding the fleet and scouting ahead in times of peril.

The New York Sun correspondent visiting the grand fleet was taken aboard and saw the wonderful work of reconstruction done by the admiralty in transforming a vessel which at the outbreak of the war had been scrapped as absolutely useless. Today she houses scores of aircraft, grading from small, baby seaplanes to the big American type capable of carrying three passengers.

It is almost with the sense of entering an old cathedral that one boards today this rejuvenated liner and passes down the long aisles which formerly held hundreds of passengers traveling between New York and Liverpool. The cabins now house in the spacious quarters forward men who operate balloons or pilot aircraft. All the after portion of this vessel is occupied with giant gas bags, which are used for observation purposes.

Can Speed at 18 Knots.

Decks and cabins are filled with the paraphernalia of flying. So far in this war there has been little said of the work of the grand fleet, but a visit to this ship gives an idea of the efficiency to which its work has been carried.

This high-speed mother ship is capable of housing aircraft for all necessary observation work. She speeds into the wind at a rate of 18 knots until the air pressure of her headway, in combination with the speed developed by the huge seaplane motors is sufficient to carry them from the deck before they reach the end of the floating ship. Big derricks hoist planes from a portion of the deck upon which passengers formerly played quills or shuffleboard. Their engines are started and keyed up to flying pitch while deckhands hold to the stays or wheels attached to the floats until the signal is given for starting. Then the released plane soars from the deck out over the harbor.

It is almost uncanny to sail out over vessels which looked huge when tenders were alongside, then watch them gradually diminish in size until they become mere pygmies dwarfed by distance and lowered into insignificance by the great altitude. As we ascended a battle cruiser's siren screamed out and could be heard even above the roar of our engine. We circled about the battle cruiser squadron, looking down upon ships which ordinarily would have been impressive, but now were tiny ellipses on the broad expanse of the harbor.

Visiting the Battle Cruisers.

Another plane, just leaving the water, looked like a fly attempting to get above the smoke of the surrounding vessels. All the auxiliary craft disappeared or became mere dots upon the blue table. Far out toward the harbor entrance a long line of smoke marked approaching vessels.

We circled down toward the smoke and made a line toward the battle cruisers we knew were returning from patrol duty in the North sea. It was the perfect alignment of the battle fleet which struck the observer most forcibly, each vessel taking a position exactly to the rear of the one ahead, and giving some idea of the perfect system of co-operation between the units which has made the British grand fleet supreme in naval affairs. Outspread upon the forbidding-looking harbor was the entire fleet of vessels which has been guarding England's shores for the last three years, although the harbor looked small from a distance of 3,000 feet.

This is the greatest mobile concentration of fighting vessels in the history of the world. Even when seen together it is hard to realize that this aggregation has kept England safe from attack and has prevented the German high seas fleet from coming from its harbor. Considering its size from the great height aided materially in realizing what an enormous treasure Britain has poured out in building such a tremendous fighting machine and what fortunes are being spent daily in maintaining it. Inspired by the spectacle, it was possible to visualize this greatest unit of the British sea force co-operating with the American warships in making the waterways of the earth safe for all traffic.

Just as in the days gone by, when Britain conquered piracy and made the lanes places of comfortable travel for American clippers, the same outrageous piracy exists today and it is with the help of American men-of-war that the British grand fleet once more will make the water routes immune from base depredations.

Anthrax Germs in Bandages.

Quantities of anthrax germs have been discovered in bandages made by Red Cross workers in North Carolina.