Long Range Guns on U-Boats Menace Armed Merchant Craft Must Combat

Recent Attack on Express Liner Made at 8,000 to 9,000 Yards, While Near Victim's Weapons Were Limited to 7,000 Yards-Experiences of Tankers Confirm New Danger

By ROBERT G. SKERRETT. OMEWHERE on the Atlantic

coast a liner flying the American flag errived a short while manifestly the worse for wear. explosive shells, so the circum tantial report goes, had ripped big ents in her steel work, and but for

wing faint boom of a distant gun foremost into the deep.

In that case the commanding officer man submarines carry guns of five or owing faint boom of a distant gun

thousand yards away, scarcely nore than a speck against the horizon German submarine was taking nge-finding shots. Every succeedprojectile fell nearer and nearer the defenceless liner-defenceless she carried rifles so mounted maximum renge of 7,000 varda!

in return. Before the liner could

able to score four times with her su-

perior armament, and luck more than

anything else saved the fleeing mer-

No mention of this case has here-

tofore appeared in the daily press

has been underscored by happening

The ship under discussion managed

to escape because she can make twenty knots an hour; but we have few vessels of this sort carrying the

Stars and Stripes; and how will our

when the American tanker Moreni en-

According to the official report: "The

Moreni was first fired upon from an estimated distance of 8,000 yards. The

steamship, which was armed and car-

ried a gun crew, returned the shots

and attempted to escape. There was a

light breeze and a smooth sea. The

submarine was hardly visible. The

attack opened about 4 o'clock in the

morning of June 12. After 150 shots

in reply to some 200 fired by the sub-

marine the crew abandoned the vessel,

which was all ablaze, taking to the

For quite two hours the running

stern rife the naval gun crew did their

st to retaliate, but their projectiles

It was like an uneven boxing match

when approaching her destination in

the Mediterranean, a submarine was

sighted from the bridge of the Silver

Shell 7,000 yards, two and a half sea

miles, distant. The U-boat hoisted no

lag, but immediately opened fire on

the tanker, and for an hour and a half

the "brush" continued, the submarine

The Silver Shell was armed with 4 inch

variously stated to have been 5 inch

and 6 inch. The submarine, no matter

what the calibre of her weapons, was

was inaccurate.

steadily overhauling the steamship

was waged. With the ship's

lifeboats in a flery sea."

gaged a U-boat.

hantman from disaster.

ploughed her way undeterred toward her quarry through the rough seas.

Just when the U-boat was in a fair way to sweep the decks of the Silver Shell with her shrapnel, and the energy to sweep the decks of the Silver shell with her shrapnel, and the energy to sweep the decks of the Silver shell with her shrapnel, and the energy to sweep the decks of the Silver shell with the torpedo was none too reliable, and they were shrely the shrapnel was a shigh explosive might be expected to do telling work and to score frequency.

Inasmuch as both the British and the shigh explosive might be expected to do telling work and to score frequency. my gunners were working desperately, obliged to calculate upon 50 per cent. at times waist deep in the surging of misses. With an initial allowance Mediterranean, the hostile craft was of eight torpedoes this did not promise lifted high by an exceptionally big well for a heavy toll of British ships,

speed her fate might have been to shock the nation.

wave and silhouetted sharply against and in order to conserve the torpedo the sky. At that instant the gunpointers at the tanker's after 4 inch Admiralty set about making the guns The ship in question is an armed rifle got her fairly upon the cross of their submarines more potent, steamship, and she was 500 hairs of their telescopic sights, and their piece barked savagely. The shot, notable degree, and the markmanship aimed true, bored the U-boat abaft her of the U-boat gunners upon many ocwhen surprised by the shrick of a conning tower. Instantly her stern casions has been of a very high order, shell that broke the ocean's silence settled, her bow rose into the air and notwithstanding the difficulties under good many seconds before the fol- a few moments later she plunged stern which they have labored. Whether or

> of the U-boat failed to take advantage six inch calibre is debatable, but that of the longer range of his guns, and the weapons are mounted so that they because of the stormy sea and the have a very long range is indisputable difficulties of scoring at a safe distance. The first of the Krupp twelve feebler weapons. Happily for the Sil- pifies of 2.95 inch calibre. They were ver Shell, which for the nonce proved cleverly arranged to sink into the caught at the very moment when his this being radically unlike the 14 inch uccess seemed all but assured.

battled with the Moreni took precious mount was probably brought home to for it in no wise warrants the assump-good care to keep well beyond the the Germans at ap early date after tion that the U-boats are being fright-

In this they have succeeded to a

The first of the Krupp twelve he pushed within reach of the tanker's pounders were stumpy but powerful a better gun platform, the enemy was superstructure when not in service, in The U-boat had nearly a mile and good care to keep well beyond the the Germans at an early date after their enemies adopted defense nets, &c.

Adopted Disappearing Mount.

The British learned the same thing when their submarines were operating in the Dardanelles. The E-2 got her forward gun fouled in a wire hawser at a depth of eighty feet, and in the hull plating beneath the gun that the boat leaked at a serious rate when diving afterward at a sufficient depth to cit ar the mine fields and escape the until circumstances favor her own at-Turkish batteries on her return journey to the British squadron.

The Germans, therefore, soon adopted universally a disappearing gun mount for their U-boats and at the same time they set about providing them with more powerful rifles. The next step after the 2.95 inch weapon was a 3.2 inch gun, and then followed the 4.1 inch. It is conceivable that the guns that sank the Moreni and attacked the Silver Shell and the unnamed twenty knot liner may have been of 4.1 inch calibre and is not now the prime field for action; not 5 inch or 6 inch guns, as has been instead the U-boat is taking her toll shown resourcefulness, and they know full well that a submarine can ill afford the burden of unnecessary weight. Five inch and the 6 inch guns are heavy pieces of ordons. The object in the careful designing of a U-boat is to save weight a half of margin of safety in which | range of the American tanker's 4 inch in every direction.

Seven years ago the Krupp engineers produced an anti-balloon gun having a calibre of 4.1 inches, capable of firing projectiles weighing forty This weapon had a pedestal pounds. mount permitting all round training horizontal range, when elevated 45 de-grees, was 14,000 yards, and the rifle, Because of the character of the arm- with its mount, weighed something ments now carried by our transat- less than three tons. It is not unlikely

ly with the recent records of fights those that were relied upon for offen-that have lasted one or two hours, sive service a year ago. At the out-

German ordnance experts have devised disappearing mounts for four inch -mounts that are shielded from aerial attack and protect the gun ners in large measure from the surge of a rough sea-there is every reason to suppose that installations of this sort are characteristic of the newest and largest U-boats. Not only are the guns thus stowed away so that they cannot be fouled by wire nets or hawsers when the craft are running submerged, but the barbette mounts make it possible to bring them into action speedily and then to house them quickly, so that the submarines can dive with a minimum of delay.

Submerging Not Cowardice

From the Government's publicity bureau in Washington has recently emanated a declaration that German submarines are wary of our destroyers and not disposed to accept the gage of battle, being prone, instead, to sink rapid firers, which were set upon fixed out of sight promptly when our patrol that their shells were limited to so foe, for we see that the submarine that ened away. The manœuvre is, on the contrary, only cumulative evidence of the cunning of the Kaiser's U-boat manders

To bag a destroyer would be of fractional military value compared with the sinking of a laden transport or the destruction of a large freighter The hostile submarine, therefore, wisey seeks cover when the destroyed threatens, knowing full well that she can afford to wait beneath the waves tack; and the time and place for this are sought now where the surface fighter is least likely to be in evidence Thus we come to the really disturb ing phase of the U-boat campaign as it concerns us directly.

The long range gun of the U-boat has in a large measure supplanted the uncertain torpedo for attack upor merchant craft, and increased radius of action is placing the German submarine in parts of the Atlantic where it is least expected. The Irish coast variously reported. The Germans have far out beyond the British Isles, along ing part played by the Teutons in the open ocean lanes of shipping. developing the Diesel engine, that in-Shortly after the beginning of the hibits the construction of submarines present campaign of frightfulness a of substantially 2,000 tons submerged 6 inch guns are heavy pieces of ord-nance, weighing, with their mounts, and sent to the bottom by gunfire 280 have undoubtedly evolved, should be probably anywhere from five to nine miles west of the Irish coast, and her nile to make at full speed twenty crew were set adrift in her boats to Pnots an hour upon the surface, and make the best of their way to land! might be counted upon for eighteen this was well beyond the patrol zone knots when driving along through a of the protecting destroyers.

On June 15 a big German submarine captured the Norwegian steamship Benguela in the mid-Atlantic and turned that craft into a mobile base of operations. The significant part of the exploit lay in the greatly extended zone of underwater activities We know that hostile submarines have operated near the Azores, and therefore there is nothing surprising in the lantic ships of commerce the Mer- that the Krupps have adapted this attack upon the twenty knot liner

torpedoes but by shell fire, and that the guns placed by our navy on board been fired without scoring. At the 1,500 ton submarines at their disposal, 7,000 nautical miles. What, then, closer ranges, however, 4.000 yards boats of the F class, credited with a would prevent a U-boat of double that began the construction of one, the Proand less, a gun of this character firing radius of action of 6,000 miles. It is displacement taking her station in the tector, which was actually equipped

therefore well within reason to as-| mid-Atlantic and waiting there two or | with a small gun to demonstrate his, Germans, however, and when it suited sume that the Germans have boats of three weeks in order to intercept vesting size and possibly others bigger. sels bound to and from our shores? with the Russian Government to build and found ways to overcome certain this size and possibly others bigger.

There is nothing of a technical nature, when we remember the lead-Scandinavian ship, whose loss has not displacement. Vessels of this sort, with

> pretty rough sea. Indeed, more would be gained in military value in this way than by a conspicuous increase in the number of torpedoes or the carriage of notably larger guns. Long range 4 inch rifles would enswer admirably for attacking merchantmen, and with higher submerged speed U-boats of this description would be better able to get within torpedoing distance of naval craft and transports.

yet the instance is nothing more than chants Association of New York has the logical climax to U-boat warfare. The writing has been plain upon the wall for months, as changing conditions have imposed new methods of the enemy's weapons.

As the association puts it: "It ap
The instance is nothing more than chants Association of New York has deapted this weapon for submarine service. True, then the figure of this sort is wastended upon President Wilson the need when 500 miles away from her port of the Germania type, and was, in the second instances—just a few among the scores and scores—make it clear that the enemy has at the enemy's weapons.

This limitation squares pretty close—that the Krupps have adapted this weapon for submarine service. True, the second upon the twenty and the when 500 miles away from her port of the Germania type, and was, in all climates the second upon the twenty and the when 500 miles away from her port of the Germania type, and was, in all climates the second upon the twenty and the twenty and the when 500 miles away from her port of the Germania type, and was, in all climates the second upon the twenty and the way of the upon the twenty and the twenty and the twenty and the was possible and the second upon the twenty and the way of the upon the twenty and the second upon the departure.

The U-53 was built after the 900 ton the twenty and the second upon the departure.

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The U-53 was built after the 900 ton the twenty and the second upon the twenty and upon the twenty and upon the twenty and upon the departure.

The U-53 was built after th The U-53 was built after the 900 ton supplies during her brief stay on this underwater boat armed with a gun side of the Atlantic. The total run

If success has not been their reward when confronted by mine fields
and deep nets, these defences have
merely served to shift the theatre of
wardare by compelling the U-boat to
wardare by compelling the U-boat to
fore these craft were completed the
wardare by compelling the U-boat to
fore these craft were completed the
with and an effective answer provided

with bigger displacements. That the Germans have solved their strategic problem in this way is pretty well established by the recent performances of their underwater ves-

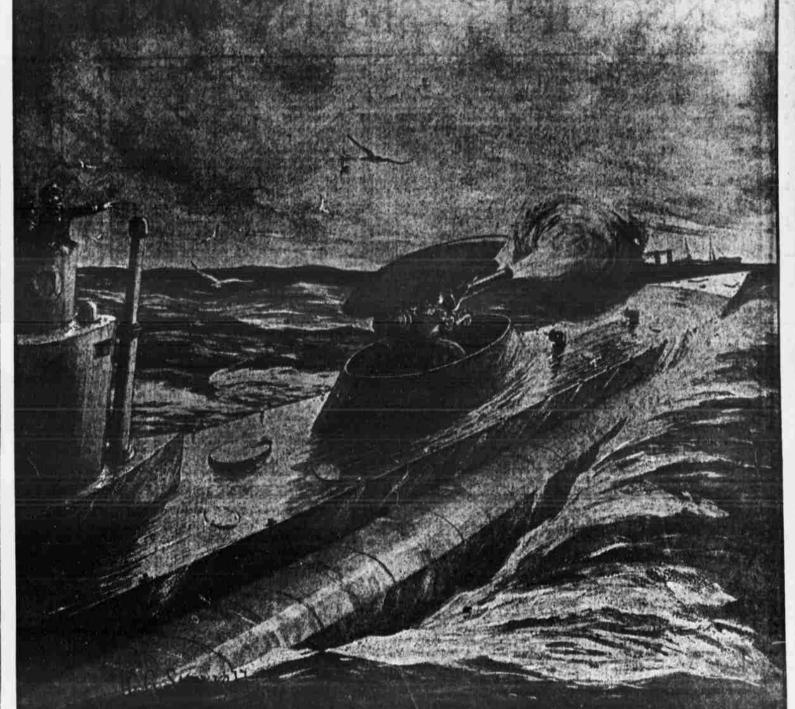
The situation brings out still more forcibly the value of speed in the cargo carrier and emphasizes the grave disadvantage of the slower freighter. Until lately the twelve knot merchantman had chance of getting away from the pursulng U-boat, but with submarines doing eighteen and possibly twenty knots on the surface the odds against slower vessels are greatly augmented. unless these ships are so armed that they can battle on even gun range

terms with the submarine. to the Navy Department plans for an mounted in a revolving turret. In military submarine and about that date

work still further seaward. Greater guns were given up. habitability and increased range and The foregoing fac even though naval experts generally fighting men across the Atlantic with failed to recognize the practical value all possible security but we must conof guns on submarines.

The idea was not lost sight of by the ing a stream of unfailing supplies.

unless we are ready to make unneceshabitability and increased range and The foregoing facts are interesting sary sacrifices. These we cannot af-seakeeping power go hand in hand because of their prophetic character, ford, for we must not only get our tinue to safeguard them by maintain-



"The U-boat fired from a range of 8,000 or 9,000 yards and well beyond range of the liner's guns." The merchant craft was saved only by her superior speed.

By T. ORCHARD LISLE, I ply of liquid fuel apart from lubri-

A. M. I. Mar. E.

victory was spelled in three position in a year. words, ships, ships, and Considering the enormous amount of ships, he should have added the pre-fix "tank" to at least two of the three. Will be the amount when the United

instant action cerned activities toward America's navy was obliged to was openly stated recently by Sir rine chasers will need from five to

Indorsement of the opinion exa Senator of France, who says that tionary forces is easy roughly or nearly half the amount, due to the Fiske has stated "that the oil supply of the British fleet is so seriously menaced that the use of her newest

vessels is threatened." Oil is vital to ultimate victory. Gasoene, crude oil and lubricating oil are among the most important necessaries to the allied armies and navies. Withoperations would be at a standstill.

Because the Rumanian off fields are tow in the hands of the Central lowers and oil cannot be shipped in ny quantity from Eussia to the Allies and because the supply of Scottish shale oil is limited as is the supply of about a similar amount. In America's benzole, a by-product of coal, both the total I have not included any fuel for sky to the dewy field below. There morning workers waved at us as a dusty road before we reached the Allies and our own forces in Europe big oil burning battleships and gruiswere six of them piloted by monitors, we passed; over a railroad track, cafe. Set back a bit from the road- are almost entirely dependent upon ers, if such are sent to Enropean time one would ordinarily the men who were to be my instructors where a toy train puffed pompously side, white, cool looking and next, it diransported across the men who were to be my instructors where a toy train puffed pompously side, white, cool looking and next, it diransported across the men who were to be my instructors where a toy train puffed pompously side, white, cool looking and next, it diransported across the men who were to be my instructors where a toy train puffed pompously side, white, cool looking and next, it diransported across the men who were to be my instructors where a toy train puffed pompously side, white, cool looking and next, it diransported across the men who were to be my instructors where a toy train puffed pompously side, white, cool looking and next, it diransported across the men who were to be my instructors where a toy train puffed pompously side, white, cool looking and next, it diransported across the diransported

Obviously Germany-to judge from ordinary steel built ships) no fewer her recent actions-now fully realizes than seventy-five tank ships each of At 8:30 we climbed The room was filled with aviators, that if she can stop a majority of oil 10,000 tons cargo capacity (or 11,000 once more into the camion and jostled officers, monitors, cleves. There was a carrying vessels from reaching Europe The rest of the morning was spent a feeling of a restful lull in conven- whether food and ammunition ships months from now, each vessel making in making up my bed, reading the or- tionality before resuming discipline get by her submarines, for Great Brit- nine return voyages a year. This ders of the day and writing letters. and work. Then home again and sleep ain and France can now produce suf- apart from our Allies' enormous needs ficient food to prevent actual starva- and without allowing for any sinkings. At 5:39, dressed once more in leather tion, but not enough oil to operate Consequently if we do not foil Ger- of the great steel fleet to come and

morning's performance was repeated. many's intentions it will put her in a thus save conversion later? Every one brings his own knife, fork. More sorties, more speeding through position to dictate her own terms be- with tankers to supply the Allies than the air with the sunset all around us fore another year and a half is out. total oil carrying tonnage eventually It is well to send over 20,000 aero- needed will be about 200 ships of 10,000 was once more in the barracks talk- planes for blowing up the submarine to 11,000 tons capacity each, or 400 ing aviation to those in the bunks near bases, but aeroplanes cannot fly with- ships of 5,500 tons, of which nearly 50 by, listening to talk of aviation from out gasolene, nor can the submarine per cent. is now in the service of

to whispers and laughing "good pedo boat destroyers, many of the portion before many months are over, from a menu and be served by har- nights." I lay on my bunk and dreadnoughts, airplanes, trucks, gun Only retently was announced the assed French waiters. And there are thought of aviation, knew that I would tractors, tanks, motor boats, despatch sinking of the Standard Oil tanker dream about the same. And as I boats, motorcycles, "blimps," officers' Motano and that a French tanker, had dropped off to sleep I saw through half automobiles, submarines, supply and been twice attacked by submarines. closed lids the brilliant lights of a ammunition hauling vehicles, coastal and arrived in port with a thirty foot

cants. Without steady replenishment HEN Lloyd George said that of the stocks in hand the allied armies and navies would be in a very sorry

Guns on submarines were first suggested by an American genius, and as far back as 1893 Simon Lake submitted ships a critical situation will arise in States has sent over a million men, most of the 22,000 lorries just ordered, ships a critical situation will arise in western. Europe within algebras and some content when the United States has sent over a million men, most of the 22,000 lorries just ordered, ships a critical situation will arise in particular contents.

That there are not enough tankers It is not hard to discover a reason in service or building in this country for the German Government's uncon-, is fairly evident. Only last week the plans for building an enormous cargo seven large tankships from private fleet. It is only necessary to follow owners. We must remember that the recent U-boat policy. Oil carrying each destroyer needs from eight to ten tankers are receiving special atten- tons of crude oil fuel an hour, accordon, both from submarines and from ing to the cruising speed in the U-boat plotters, with the result that quite a district. There are building for our serious number of vessels of this class navy about thirty new destroyers; recently have been sunk. That the many more will soon be ordered, while tanker situation is becoming grave each of the 340 new 110 foot subma-

seven tons of gasolene a day. The minimum amount of liquid fuel pressed by me comes in a statement that will be required each month by recently made by M. Henry Berenger, the American army and navy expedi-France's demand for gasolene is 50,000 conservatively to calculate. As a mintons a month, and that there is a imum we can reasonably assume that shortage in the supply of 20,000 tons, each power unit, whether boat, truck or aeroplane, will operate for half the shortage of tonnage and tank vessels. number of hours in a month, namely, Furthermore, Rear Admiral Bradley 360 hours, which gives the following monthly total consumption of fuel

alone:

2.000 lorries, sutos, &c 1.00 ambulances. Menthly total Allowing a reserve for countless

other motor driven units it means that a minimum of at least half a million tons of crude oil and gasolone must be shipped each month for the American forces alone, while the Allies require

cating oil can be carried as case off in

tons D. W. C. if steam driven) must comparatively unimportant be in regular service in about fourteen Therefore is it not wise to make tankers outright of at least 100 ships We have to supply oil for the tor- Germany intends sinking a big pro-Only recently was announced the

hole in her bow. Great Britain doos

First gun ever installed on a submarine. The Protector, built by Simon Lake, running with part of her conning tower above

were restricted to a range of about 7,000 yards. The U-boat, on the other hand, was able to score from distances varying from 8,000 to 9,000, and although her practice was far from excellent, still she managed to make her target and set the tanker aflame.

tween a long armed and a snort armed man. The enemy scored fortyodd times before the tanker settled be-Silver Shell Had Better Luck. The story of the tanker Silver Shell owever, shows that fortune favored her just when her doom seemed nearly tances spurred them on.

able at the start to outrange the Silver Heligoland were compelled to pass around the north coast of Scotland and Shell's battery, but happily the foe's thence down to the south coast of Ireland, their operating ground, a dis- hangar the red ball of the sun popped tance of about 1,350 miles, the round bursting shrapnel began to score on tance of about 1,850 miles, the round the bridge and upper works of the trip being 2,700. That meant substantially a nine days run outbound and larger, we could see were airplanes starts, three landings. Down below try side—but the best of all is the Cafe tanker, and in spite of the fact that the latter was landing her shots all returning and imposed a stay of twelve

to pot away without fear of a blow rapid firers. And this other U-boat commander who tried to waylay our 20 knot liner resorted to similar tacstart zig-zagging and crowd her en- tics, but the superior speed of the exgines to full speed, the submarine was press steamship saved her, although she was seriously enough damaged to cause docking for repairs after she and allowing elevation from the hori-reached her home port. Longer Range Guns Wanted.

Type of disappearing mount for U-boat guns. Top view shows

gun housed; lower one, gun ready for action with

hitch cover as shield.

yet the instance is nothing more than The writing has been plain upon the

As the association puts it: "It apattack from the underwater craft; and pears that many ships sunk by subwithin the last few weeks the warning marines are being destroyed not by character of the peril confronting us in merchant vessels have a lesser range

than that of the guns with which the ubmarines are armed." This state of affairs is, indeed, s

erious one, and will show how quickly and shrewdly Germany has provided a new menace for our armed merchantman. How surely the foes have been slower steamships fare if their guns be outranged by those of enemy leading up to this climax is a matter U-boat? The question was answered during the first half of June just past of record.

Toward the end of March two years ago the British steamship Crown of Castile was sent to the bottom in the neighborhood of the Scilly Islands by shell fire. The attacking submarine was the U-28.

Up to that time none of the German rines had brought into play guns larger than the 12 pounder, and many boasted nothing bigger than a rapid fire weapon having a calibre of an inch and a half. But when the Crown of Castile was sunk the enemy used pro jectiles of 4 inch calibre, weighing thirty odd pounds and capable of do ing a great damage to an unarmored The advent of the 4 inch gun aboard German submarines was fair warning that commerce destroying was to be speeded up effectively, and at a lower cost and lessened risk to the Imperial navy.

Since then the annals of the losses of merchant ships disclose the growing frequency of successful gunfire attack by U-boats, but only within the last few months has it become eviden how greatly the Teutons have improved this method of attack on hos-ille merchantmen or neutral freighters

aden with contraband. The arming of the ship of trade has forced the change, which we have furher stimulated by placing guns both forward and aft upon our mercantile craft. The Germans simply had to order to lessen the odds against them. It is not unlikely that other circum-

To begin with, the Germans counted on limiting their U-boat operations mainly to the North Sea, but the French and British Channel defences, the employment of the trawler and extensive mine fields forced the subnarines further and further out to sea. That is to say, it was needful, in order these underwater craft might reach their field of action that they should cover very long distances in going from and returning to their

In other words, the boats based upon about her assailant the submarine days off the Irish coast, provided the side the school.

The Coudrons arrived in a few min-, above it was always cool. Our route | It was a hot walk through sunny

of the Vigilantes. HREE-THIRTY A. M. is not a awake listening to the mingled sounds front seat for my first ride. around me. It was quite dark in the barracks, everything was in sleepy turned on the electric light. There followed greans and curses and the sound of reluctant dressing as twenty sons of Uncle Sam prepared for the daily task of learning to serve France. The ponderous gray army tractor which carried us to the flying field was filled with glant Russians, dapper little Frenchmen and two Americans, As it rumbled along over the dusty road the gray light around us turned to pink and as we reached the Coudron up above the horizon. Tiny specks flying toward us from the fields be-

and a French student flyer as well to him I had already been assigned the church steeple; over woods and corn our fill of steak and potatoes served fested waters. must be done. I sleepily opened my dially when I went up to speak to him gesticulating Frenchmen and the stalmprove the guns on their U-boats in eyes and saw the squat figure of a after the hospitable custom of the swarthy Ananite standing at the foot French. Then the motor was started, of my bunk and bearing a steaming the huge propeller whirled rapidly back to camp. can of black coffee. Coffee helps a around and, adjusting my goggles and lot at that hour and I was soon wide leather headgear, I climbed into the

Last summer I trained in the States confusion, till some thoughtful person a new sensation, but there was someon a Thomas hydro, so flying was not thing different about this. Then I was an American flying for fun; now I was at least haif a Frenchman, flying because I must. The controls are different on a French machine. In America we use a wheel and allerons on our wings. On the Coudron, as on all French airplanes, the machines are banked and steadied by means of a lever. There are no allerons on a obedience to the lever.

We made three sorties that mornappeared in the sky, which, growing ing, three trips around the field, three tered here and there about the counthe newly risen sun was already des Aviateurs. So it was there that spreading heat upon the ground; up I went to lunch.

utes, volplaning down the brightening passed over a hay field, where early fields and a cherry orchard and along day before. He shook my hand cor- fields and then down to the fields, the by a demure looking little French girl wart Russians.

> There are meals served at various from 1 to 4:30. convenient times for the mechanics wholesome and plenteous spoon and drinking cup; every one waits on himself. A buxom French girl stands before a basket in the middle of the room cutting long French bread into convenient bits with dextrous strokes of her knife. An army canteen is also open in the camp, from a menu and be served by harvarious little inns and taverns scat-

cheary atmosphere of good fellowship, it

and, in a smaller room, the student clothes, I boarded the army tractor their fleets and armies. air pilots. The fare is plain, but and soon arrived at the field. The instead of breaking dawn. By 9:15 I the furthest corners of the room, chasers chase without fuel. Lights went out at 10, the voices sank night flier, moving like a giant firefly patrol craft, ploughs. &c. among the scattered stars,

All these require an enormous sup- not announce tank ship sinkings.