













THE ACHIEVEMENT OF THE BRITISH NAVY IN THE WORLD-WAR

JOHN LEYLAND



ILLUSTRATED

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THE ACHIEVEMENT OF THE BRITISH NAVY IN THE WORLD-WAR



CHAPTER I

DUTIES AND RESPONSIBILITIES OF THE SEA SERVICE

Had I the fabled herb That brought to life the dead, Whom would I dare disturb In his eternal bed? Great Grenville would I wake, And with glad tidings make The soul of mighty Drake Lift an exulting head.

William Watson.

THEN King George returned from the visit he paid to the Grand Fleet in June, 1917, he sent a message to Admiral Sir David Beatty, who had succeeded Sir John Jellicoe in the command, in which he said that "never had the British Navy stood higher in the estimation of friend or foe." His Majesty spoke of people who reason and understand. But it is certainly true that the work of the Sea Service during this unparalleled war has never been properly appreciated by many of those who have benefited by it most. The silent Navy does its work unobserved. The record of its heroism and the services it renders pass unobserved by the multitude. Sometimes it emerges to strike a blow, engage in a "scrap," or, it may be, to fight a battle, and then it retires into obscurity again. Its achievements are forgotten. Only the bombardment of a coast town or the torpedoing of a big ship, which the Navy did not frustrate, is remembered. Such has been the case in all the naval campaigns of the past. Englishmen, who depend upon the Navy for their security and the means of their life and livelihood, as well as for their power of action against their enemies, are but half conscious of what the Fleet is doing for them. On this matter, British statesmen, when they speak about the war, almost invariably fail to enlighten them.

Who can wonder that people in the Allied countries are still less able to realise that behind all the fighting of their own armies lies the influence of sea-power, exercised by the British Fleet and the fleets that came one after another into co-operation with it? Without this power of the sea there could have been no hope of success in the war. As the King said, the Navy defends British shores and commerce, and secures for England and her Allies the ocean highways of the world. The purpose of this book is to show how these things are done.

On the first day of hostilities the British Navy laid hold upon the road that would lead to victory. There is no hyperbole in saying that the Grand Fleet, in its northern anchorages, from the very beginning, influenced the military situation throughout the world, and made possible many of the operations of the armies, which could neither have been successfully initiated nor continued without it. But in the early days of August, 1914, when, from the war cloud which had overshadowed Europe, broke forth the lurid horrors of the conflict, the situation was extremely critical. What was required to be

done had to be done quickly and unhesitatingly, lest the enemy should strike an unforeseen blow. Happily, with faultless knowledge, the strategy of the emergency was realised, and with unerring instinct and sagacity it was applied. The foresight of great naval administrators, and chiefly of Lord Fisher, who had brought about the regeneration of the British Navy, shaping it for modern conditions, was justified a thousandfold.

Never was the need of exerting sea command more urgent than at the outbreak of war. Everything that Englishmen had won in all the centuries of the storied past was involved in the quarrel. Only by mastery of the sea could the country be made secure. Its soil had never been trodden by an invader since Norman William came in 1066. The very food that was eaten and the things by which the industries and commerce of the country existed demanded control at sea. If the British Empire was to be safe from aggression it must be safeguarded on every sea. If England was to set armies in any foreign field of operations, and to retain and maintain them there, with the gigantic supplies they would require; if she was to render help to her Allies in men or munitions or anything else, whether they came from England, or the United States, or any other country, and were landed in France, Russia, Italy, or Greece, or in Egypt, Mesopotamia, or East or West Africa, for the defeat of the enemy, that must be done by virtue of power at sea. Therefore, in this war, as John Hollond, writing his Discourse of the Navy in 1638, said of the wars of his

time, "the naval part is the thread that runs through the whole wooft, the burden of the song, the scope of the text."

The moment when the First Fleet, as it was then called, slipped away from its anchorage at Portland on the morning of Wednesday, July 29th, 1914, will yet be regarded as one of the decisive moments of history. The initiative had been seized, and all real initiative was thenceforward denied to the enemy. The gauge of victory had been won. "Time is everything; five minutes makes the difference between a victory and a defeat," said Nelson. "The advantage and gain of time and place will be the only and chief means for our good," Drake had said before him. By a fortunate circumstance, which should have arrested the imagination as with a presage of victory—a circumstance arranged five months before, as the result of a series of most intricate preparations—time and place were both on the British side.

The First, Second, and Third Fleets, and the flotillas attached to them, had been mobilised as a test operation, and inspected at Spithead by King George, on July 20th. The First Fleet had returned to Portland and the other fleets to their home ports, where the surplus or "balance" crews of the Naval Reserves were to be sent on shore. Then had come the now famous order to "stand fast," issued on the night of Sunday, July 26th, which had stopped the process of demobilisation. Dark clouds had shadowed the international horizon. Austria-Hungary had presented her ultimatum to Serbia. She declared war on the 28th. The Second Fleet remained,

therefore, in proximity to its reserves of men, and the men were ready to be re-embarked in the Third Fleet.

Few people realised at the time the immense significance of the memorable eastward movement of the squadrons from Portland Roads, or of the assembly of those powerful forces at their northern strategic anchorages. Those forces became the Grand Fleet, that unexampled organisation of fighting force, under command of that fine sea officer, Admiral Sir John Jellicoe. War was declared by Great Britain on August 4th. Successive steps of supreme importance were taken, which, in very truth, saved the cause of the Allies. Disaster and surprise attack were forestalled. The Fleet, fully mobilised, and growing daily in strength, was already exerting command of the sea, and the safe transport of the Expeditionary Force to France was assured. Co-operation with the French Fleet was immediately established—its cruiser squadron in the Channel and its battle squadrons in the Mediterranean.

Fighting episodes were not delayed, but for many months the operations of the Grand Fleet remained shrouded as by a veil, lifted only on rare occasions. Few people knew the tremendous anxieties and responsibilities of the British Commander-in-Chief. His vast command of vessels of all classes and uses had to be organised into a mighty fleet, complete in every element-battle squadrons, battle-cruiser squadrons, light-cruiser squadrons, flotillas and auxiliaries, transports, hospital ships, and every ship and thing that a fleet can require. A whole series of intricate dispositions had to be made. Officers were to be

inspired with the ideas of the Commander-in-Chief and the whole Fleet was to be so trained, under squadron and flotilla commanders, that each would know on the instant how he should act.

If Nelson, in 1789, spent many hours in explaining to his "band of brothers" his plans for his attack at the Nile, with fourteen sail-of-the-line, what must it have been for Sir John Jellicoe to communicate to his officers, and discuss with them, all his plans for every emergency or call for the service of every squadron and ship in his vast command? All this must be realised now. And during the anxious early months of the war, as the winter was drawing near, the great anchorages were as yet unprotected, and safety from hostile submarines could often only be found in rapid steaming at sea. The mining campaign of the enemy had also to be overcome. The anxieties were enormous, and it was only the power of command, the sea instinct, the deep understanding, the readiness to act in moments of extraordinary responsibility, and the resource and professional skill of the Commanderin-Chief and his staff and officers in command, that enabled the tremendous work to be accomplished.

While this was in progress other work of immense significance had been going on. The Admiralty had undertaken a gigantic task of supreme importance with complete success. Great defensive preparations were made in British waters, where all traffic was regulated and controlled. The vast maritime resources of the country were added to the naval service. Two battleships building for Turkey, another for Chile, and certain flotilla leaders and other craft



DRIFTERS WORKING AT SEA

building in the country, were taken over. Officers and men in abundance were ready. The magnificent seafaring populations of the merchant marine and the fisheries were drawn into the naval service, and subsequently the whole mercantile marine was brought under naval control, and for practical purposes was embodied with the Navy. Officers and men of these services showed splendid heroism in situations of terror and responsibility never anticipated.

A wide network of patrols was brought into being; the blockade was organised and strengthened; the examination services were set on foot and perfected; and the coast sectors of defence, with their flotillas, were raised to a standard of high efficiency. Minesweepers and net-drifters were at work. Every shipyard in the country and a multitude of engineering and ammunition works began to buzz with work for the Navy and the mercantile marine. Provision was made for dealing with the raiding cruisers and armed merchantmen of the enemy.

At the time, the public knew little or nothing of what was in progress. Imagination fails even now to grasp the magnitude of what was achieved. naval share in the campaign was of baffling obscurity, while the stage of the war on land became crowded with fighting men, locked in a terrible conflict, which at that time seemed to bode no good to the Allies. After the brush in the Heligoland Bight on August 28th, 1014, the Fleet was lost to view. Not at first, but slowly, did it become realised that the prognostications of peace-time alarmists had proved baseless. There had been no "bolt from +h

the blue," as had been foretold; neither invasion, nor raid, nor foray was attempted upon British shores, and there was no anxiety about food. There was always, with economy, enough to eat.

But popular confidence seemed for a time to be unreasonably disturbed by a record of successive alarming and generally unexplained incidents-the escape of the Goeben and Breslau in the Mediterranean, the sinking of the Aboukir, Cressy, Hogue, Formidable, and other vessels, the depredations of German raiding cruisers on the distant lines of our trade, the bombardment of Hartlepool, Whitby, and Scarborough, and other disquieting episodes. Strange as it may seem, there were people who went about asking, "What is the Fleet doing?" Was it not the ancient inspiration of the Navy to seek out the enemy and to capture or sink or burn his ships wherever they were to be found? Yet there was no battle. The German coast was not attacked. Allied shipping to the value of millions of pounds was being sunk. Why, then, was the Navy inactive? When, later on, the submarine menace assumed formidable proportions, alarm began again to seize upon the newspapers, when there was justification only for precaution.

The hidden truth was not comprehended. Victories were expected when, owing to the coyness of the enemy's strategy, none were possible. The Seven Years' War—the most successful in British annals, the turning-point in British history, the war in which Horace Walpole asked each morning what victory there was to record—began with the

disaster of Minorca, followed by the tragedy of Byng. The central facts of naval history were but little known. Yet the Navy was, and is, in truth, all in all to the country, the Empire, and the Allies.

Before we enter into the main purpose of this book, in which we shall discover in several theatres of war the real nature of sea-power, as well as the character and momentous consequences of the antagonism which grew up between England and Germany, we may inquire what services could in reason have been expected from the Navy in the great cataclysm which was about to sweep with destruction over the nations. It would not have been expected to fight a battle every month or even every year, for battles are rare events in naval history. It would not have been expected to attack fortified coasts, though it might do so on occasions, because ships are designed and built to fight at sea. The Navy would not have been expected to forestall every untoward incident. Fish often slip through the net, as raiders have slipped through our guard in this and other wars. Nor, in these days of the stealthy submarine and the blind death-dealing mine, could the Fleet have been expected to remain immune from every misfortune. No one could have expected the Navy to devise a single conclusive defence against the attack of the submarine, any more than it was asked to find an infallible remedy for the effects of gunfire.

What we should have expected was that it would make the sea again the protecting wall, as Shakespeare says, of the British Isles,

Or as a moat defensive to a house Against the envy of less happier lands.

We should have expected it to safeguard the incoming of the supplies without which neither the people nor their industries could exist—to be the panoply of all trade and interests afloat, whether in the nature of imports or exports. We should have expected it to deny all external activity to the enemy at sea-we might not have anticipated the advent of the submarine as a pirate commerce-destroyer—to shut off his sea-borne supplies, and to exert that noiseless pressure on the vitals of the adversary of which Admiral Mahan speaks-"that compulsion, whose silence, when once noted, becomes to the observer the most striking and awful mark of the working of sea-power." We should have expected the Navy to become the support, in thrust and holding, of the armies in the field—the shaft to their spearhead; their flank and rearguard also. Inasmuch as the war is world-wide, and we have powerful Allies, we should have expected naval influence and pressure to be manifested in the oceans, in the Mediterranean, and, indeed, wherever the enemy is and the seas are. Finally, we should have expected the Navy to be to the British Empire what it has always been to the Empire's heart-its safeguard from injury and disruption, and the bond that holds it together.

Each one of these functions has been executed by in Navy with triumphant success in the war, and history would show that it is executing them now as the Sea Service has accomplished them in all the wars of the past.

CHAPTER II

THE CENTRE OF SEA-POWER

Of speedy victory let no man doubt, Our worst work's past, now we have found them out. Behold, their navy does at anchor lie, And they are ours, for now they cannot fly.

Andrew Marvell, 1653.

F all the theatres of the war, on sea or land, the North Sea is the most important. It is vital to all the operations of the Allies. Command of its waters and its outlets is the thing that matters most. In that sea is the centre of naval influence. It is the key of all the hostilities. From either side of it the great protagonists in the struggle look at one another. There the great constriction of the blockade is exerted upon Germany. It is the mare clausum against which she protests. Geography is there in the scales against her. She rebels against British sea supremacy. The "freedom of the seas" is, therefore, her claimthough she is endeavouring to qualify to be the tyrant of them. Her only outlook towards the outer seas is from the Bight of Heligoland and the fringe of coast behind the East Frisian Islands, or from the Baltic, if her ships pass the Sound or the Belt, issuing into

the North Sea through the Skager-Rak. But they cannot reach the ocean, except through the North Passage, where the Grand Fleet holds the guard. Only isolated raiders, bent upon predatory enterprise, have stealthily gone that way after nightfall. At the southern gate of the North Sea, through the Straits of Dover and in the Channel, the way is barred. The guns of Dover, the Dover Patrol, and certain other deterrents forbid the enemy to adventure in that direction.

The new engines of naval warfare—the mine, submarine, airship, and aeroplane—found their first and greatest use in the North Sea; and only by employing craft which hide beneath the water, and, on rare occasions, by destroyers which seek the cover of darkness for local forays, have the Germans been able to exert their efforts in any waters outside the North Sea. At the beginning of the war they had raiding cruisers in the Pacific and Atlantic, and a detached squadron in the Far East; but the British Fleet reached out to those regions, and, aided by the warships of Japan and France, it drove every vestige of German naval power from the oceans.

In the North Sea, therefore, sea-power has exerted its greatest, most vital, and most far-reaching effect. There the Germans, if they had possessed the power, could have struck a blow which, if successful for them, would have proved a mortal stroke at the British Empire and would have rendered useless all the efforts of the Allies. Millions of men, incalculable volumes of guns, munitions, and stores of every imaginable kind for the use of the greatest armies ever

set in the field, have entered the French ports solely because the Grand Fleet holds the guard in the North Sea. The whole face of the world would have been changed by German naval victory. England would have been subjected by invasion and famine. If the heart of the Empire had been struck, what would have been the future of its members? If sea communication with the Allies had been cut, what would have been their fate at the hands of the victors? The attacks of sallying cruisers and destroyers upon the coast towns of England, the "tip and run" raids, as they have been called, and the visits of bomb-dropping airships and aeroplanes are the signs of the naval impotence of Germany.

The situation in the North Sea is, therefore, of absorbing interest. It may be studied chiefly from the two points of view of the strategy of the opposing fleets and the exercise of the blockade. There is a peculiarity in naval warfare, which is not found in warfare upon land, that a belligerent can withdraw his naval forces entirely from the theatre of war by retaining them, as with a threat, or in a position of weakness, behind the guns of his shore defences. Nothing of the kind is possible with land armies. A general can always find his enemy, and attack or invest him, and, if successful, drive him back, or cause him to surrender, and occupy the territory he has held. The Germans have chosen the reticent strategy of the sea. They have never come out to make a fight to a finish, to put the matter to the touch, "to gain or lose it all." The animus pugnandi is wanting to their fleet. It was necessary that they

should do something. They could not lie for ever stagnant at Kiel and Wilhelmshaven. They could keep their officers and men in training by making brief cruises in and outside the Bight of Heligoland. They might, with luck, meet some portion of the Grand Fleet detached and at a disadvantage.

In any case, they were bold enough to take their chance on occasions, always with their fortified ports and mined waters and their submarines under their lee. They might succeed in reducing British superiority by the "attrition" of some encounters. Such was the genesis of the Dogger Bank battle of January 24th, 1915, when that gallant officer Sir David Beatty inflicted a severe defeat upon Admiral Hipper, and drove him back in flight, with the loss of the Blücher and much other injury. The same causes brought the German High Sea Fleet, under Admiral Scheer, into the great conflict, first with Sir David Beatty, and then with the main force of the Grand Fleet, under command of Sir John Jellicoe, on May 31st, 1916. The events of the great engagement of the Jutland Bank will not be related here. All that it is necessary to note is that the Germans had so chosen their time that they were able to avoid decisive battle with Sir John Jellicoe's fleet by retreating in the failing light of the day, and that their adventure availed them nothing to break the blockade or otherwise to modify the impotent position in which they are placed at sea. That action operated to the disadvantage of England and her Allies in no degree whatever. The superiority of the British Fleet as a fighting engine had been placed beyond dispute.

The mine and the submarine have put an end to the system of naval blockade as practised by St. Vincent and Cornwallis. No fleet can now lie off, or within striking range of, an enemy's port. Battleships cannot be risked against submarines, acting either as torpedo craft or mine-layers, nor against swift destroyers at night. That is the explanation of the situation which has arisen in the North Sea. The blockade is necessarily of a distant kind. There are no places on the British coasts where the Grand Fleet could be located, except those in which it lies and from which it issues to sweep the North Sea periodically. The first essential is to control the enemy's communications, which is done effectively at the North Passage-between the Orkneys and Shetlands, and the Norwegian coast-and at the Straits of Dover. If the enemy desired a final struggle for supremacy at sea, with all its tremendous consequences, he could have it. But he can be attacked only when he is accessible. "There shall be neither sickness nor death which shall make us yield until this service be ended," wrote Howard in 1588. That is the spirit of the British Navy to-day. But, then, the Spanish Armada was at sea. It was not hiding behind its shore defences. Be it noted that the Germans, thus hiding themselves, enjoy a certain opportunity of undertaking raiding operations in the North Sea. It is not a difficult thing to rush a force of destroyers on a dark night against some point in an extended line of patrols and effect a little damage somewhere. What advantage the Germans hope to gain by such proceedings is difficult to discover.

The magnificence of the work of the British patrol flotillas and the auxiliary patrols must be recognised. In the North Sea these are subsidiary services of the Grand Fleet. Day and night, in every weatherin summer heats and winter blasts and blizzards, when icy seas wash the boats from stem to stern and the cold penetrates to the bone—these patrols are at work. The records of heroism at sea in these services have never been surpassed, and England owes a very great deal to the men who came to her service. The mercantile marine has given its vessels to the State, from the luxurious liner to the fishing trawler, and officers and men have come in who have rendered priceless services. The trawlers have carried on their perilous work of bringing up the strange harvest of horned mines by the score. The patrol boats have examined suspicious vessels, controlled sea traffic, and watched the sea passages. The destroyer flotillas have been constantly at work and ready at any time to bring raiding enemy forces to action. The Royal Naval Air Service has never relaxed its activity and has engaged in countless combats.

It has sometimes been wondered why the Grand Fleet did not take some aggressive action: Why did it not attack the North German sea coast, or rout out the pestilent hornets' nest of Zeebrugge, which the enemy, by internal communications impregnable to sea-power, had provided with the most powerful guns, besides defending it by great mine-fields? This matter requires to be examined. Naval history abounds with evidence that to attack coast defences is not the proper or even the permissible work of warships. It

is the business of military forces, though naval forces may often assist, and even give the means of victory. Moreover, what was once possible is not possible now. Would Nelson have attacked the French Fleet at the Nile if it had lain under the powerful guns of these days, and behind mine-fields, through the secret passages of which submarines could have issued to destroy him? It would be absurd to compare Nelson's attack upon a line of block-ships and rafts at Copenhagen, covered by a few forts armed with old smoothbores, to an attack upon coast positions defended by modern guns.

When old Sir Charles Napier was in the Baltic in 1854 he was denounced at home because he did not destroy Kronstadt or Helsingfors. He rightly refused to play his enemy's game by endangering his ships. Captain (afterwards Admiral Sir) B. J. Sulivan, who was with the fleet, put the situation quite clearly in a letter written at the time. A military operation was really required then, as it would be now, to accomplish such a task.

We know that two guns have beaten off two large ships with great loss. Had Nelson been here with thirty English ships he would have blockaded the gulf for years, without thinking of attacking such fortresses to get at ships inside. Brest, Toulon, and Cadiz were probably much weaker than these places. . . . I suppose there will be an outcry at home about doing nothing here, but we might as well try to reach the moon.

But the Navy has never left the Belgian coast secure from attack. It has never lost its aggressive

spirit. It has attacked from the ship and the air. The seaplanes of the Royal Naval Air Service spotted for the guns when the monitors were bombarding. Bombs have repeatedly been dropped on Ostend, Zeebrugge, and the places in the rear. When the guns were silent there were reasons for it. A conjoint naval and military expedition was required. The enemy began to feel his hold on the coast precarious. Continued operations by sea and land might compel him to relax his grasp. Ships may not attack places defended by big guns, mine-fields, and submarines and destroyers issuing from secret passages through them, but it is certain the British naval offensive will never be paralysed.

Such is the magnificent work of the British Navy in blockading the German Fleet, molesting the enemy's coast positions, and controlling his communications with the oceans.

The commercial blockade, by which the enemy's supplies and commodities are cut off and his exports paralysed, is too large a subject to be dealt with here. The object is to bring the full measure of sea-power to bear in crushing the national life of the enemy. It is vital but "silent" work of the Navy, and does not lend itself to discussion or description. Questions of contraband and the right and method of search, which arise from the blockade, caused discussions with the United States before the States came into the war. The only object of the British Navy and the Foreign Office was to put an end to the transit of the enemy's commodities, and to do so with the utmost consideration for the interests of neutrals, and complete pro-

tection for the lives of the officers and crews in their ships and in the examining ships. For these reasons neutral vessels were taken into port for examination, safe from the attentions of the enemy's submarines. One great hope of the Germans was that the neutrals would become more and more exasperated with England. They remembered that the war of 1812 arose from this very cause. But they were completely disappointed in all such hopes, and they themselves, by interfering with the free navigation of other countries, brought the United States into the war against them.

The blockade work of the examination service and of the armed boarding steamers has been extremely hazardous. It has called for the greatest qualities of seamanship, because conducted in every condition of weather and when storm and fog have made it extremely perilous to approach the neutral vessels -which, moreover, have sometimes proved to be armed enemies in disguise. Hundreds of vessels have been brought into port by the Navy in those northern waters. Sleepless vigilance has been required and the highest skill of the sea in every possible condition of the service, while the seaman has become a statesman in his dealings with the neutral shipmaster. It has been for the Navy to bring the ships into port, and for other authorities to inquire into their status and to take them before the Prize Court if required.

The German High Sea Fleet having failed, the submarine campaign was instituted, and began chiefly in the North Sea. It has never answered the expectations of its authors. It has not changed the

strategic situation in any degree whatever. Great damage has been inflicted upon British interests, and valuable ships and cargoes have been sunk, and officers and men cast adrift in situations of ruthless hardship. The tale of the sea has never had a more terrible record, nor one lighted by so much noble self-sacrifice and unfailing courage.

CHAPTER III

SWEEPING THE ENEMY FROM THE OCEANS

Far flung the Fleet then,
Freeing the seas,
Clearing the way for men,
Merchantmen these.
Sinking or flying,
Broken their power,
The enemy dying
Left England her dower.

J. L.

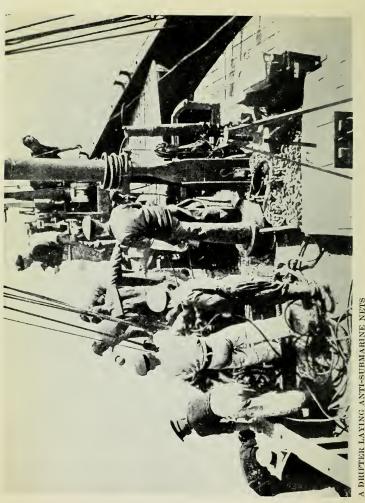
N the foregoing chapter some reference was made to the campaign of the German raiding cruisers and armed liners against British and Allied commerce in the distant waters of the Atlantic and Pacific during the early months of hostilities, and before we go any further this aspect of the war must be discussed. One object of the enemy was to lead to a scattering of British naval strength, but in this he was wholly disappointed. The distribution of the British Fleet remained unchanged, and the great numbers of swift cruisers and armed liners, which had been apprehended as presenting a formidable menace to commerce, made but a feeble appearance. The commerce-raiding campaign gave rise, however, to a good deal of alarm at the time, though it surprised no one who understood the means made available by the scientific and mechanical developments

of modern naval warfare, and who had studied them in the light of history.

The interruption or destruction of the enemy's commerce has always been one of the objects in naval warfare. British floating commerce offered a very large target, and the swift German cruisers, directed by wireless telegraphy and supplied by friendly neutrals, were at work on the lines followed by shipping, making it inevitable that there should at first be considerable losses to the Allies. Admiral Mahan thought that the British total losses in the long wars of the French Revolution and Empire did not exceed 2½ per cent. of the commerce of the Empire. The Royal Commission on the Supply of Food in Time of War expressed the opinion that 4 per cent. would have been a more accurate estimate.

German cruisers, destructive as a few of them were, did not inflict losses amounting to anything like the figures of the old wars. In those contests of power, notwithstanding the depredations of commercedestroying frigates, British oversea trade grew. while that of the enemy withered away. If the enemy captured ten British ships out of a thousand the loss might be considered serious, but if the British frigates captured ten out of the enemy's hundred the injury inflicted was ten times more effective. Towards the end of the long war with France very few French traders were captured because scarcely any ventured to sea, while the French continued to capture English ships up to the very end of the war, ten years after their fleet had been destroyed at Trafalgar. The loss by capture

A DRIFTER AT SEA: LOOKING FOR SUBMARINES AND MINES



A DRIFTER LAYING ANTI-SUBMARINE NETS

and sinking was at the rate of 500 ships a year, and even in 1810, 619 English ships were lost.

In the present war the German commercedestroying campaign, by means of cruisers and armed liners, though very effective at the beginning, collapsed with great rapidity. Hostile action against trade has never before been so rapidly brought under control. Steam, the telegraph, and wireless have enormously increased, as compared with the sailing days, the thoroughness and efficiency of superior sea-power. Difficulty of providing for coal and oil supply, the want of naval repairing and docking bases, and, above all, the immense superiority brought quickly to bear by the combined naval forces of England, France, and Japan, aided by the Australian Navy (auxiliary to the British, to which it belonged), within a comparatively short time caused the whole of German commerce to disappear from the oceans. Soon not a single ship remainedtrader, cruiser, or armed liner-as a target, except that such isolated raiders as the Möwe might offer rare opportunities of attack. This failure of the Germans seemed the more remarkable because they had long recognised the floating commerce of England to be her Achilles' heel. Prince Bülow described it as such. They had expressly reserved, at The Hague Conference, the right to convert merchantmen into cruisers on the high seas to serve as commerce-destroyers. They used this right in some instances, as in that of the Cap Trafalgar, which was sunk in single-ship action by the British converted liner Carmania. Yet this procedure proved of no effect in the war.

It would be a great mistake to regard the German cruiser campaign against commerce apart from the general distribution of German warships and the means taken to supply them with their requirements. The writer is inclined to the belief that the impotence of the Germans in distant waters shows that their Navy was not ready nor effectively prepared for the war. The great expenditure on the High Sea Fleet proved unavailing. The submarine boats did not exist in any considerable number. Only about twenty-seven or twenty-eight of them were completed in August, 1914, of which about a dozen were of early experimental type, fit only for local use, and the programme provided only for the building of half a dozen in each year. The German Navy possessed not more than a couple of big airships, and a few effective aeroplanes. The cruisers on foreign service were scattered about the world without plan. The battle-cruiser Goeben and the light cruiser Breslau had been detached in the Mediterranean during the Balkan War, and, according to the Greek White Book, Turkey having entered into alliance with Germany on August 4th, the two cruisers fled to the Dardanelles in conformity with orders received from Berlin. The Germans were apprehensive as to their safety, and their naval authorities never intended to leave them in their dangerous situation of isolation in an Italian port. The business of controlling and directing the operations of the commerce-destroying cruisers and armed liners, and providing their supplies, was admittedly dexterously arranged by the agency of wireless, mainly through the means placed at disposal by

German sympathisers in the United States, the States of Southern America, and other neutral countries, though nothing they did could withstand the steady pressure of sea-power.

The most considerable German force in distant waters was the East Asian Squadron, under command of Admiral Count von Spee. It was located at Kiao-Chau, and its principal elements were the armoured cruisers Scharnhorst and Gneisenau. Sooner or later this squadron was bound to be defeated, as its commanding officer fully realised. The Japanese declared war on August 23rd, and the fleets of Admiral Baron Dewa and Admiral Kato were stretched out to blockade and intercept him; but he extricated himself very dexterously, crossed the Pacific, defeated Admiral Sir Christopher Craddock off Coronel on November 1st, rounded Cape Horn. and was himself defeated with the loss of his whole squadron in the battle of the Falkland Isles on December 8th. One of his cruisers, the Emden, which had escaped the Japanese, made a great noise in the world. Her captain was a very capable and also a very gallant officer, who bombarded oil tanks at Madras, sank the Russian cruiser Jemtchug and the French destroyer Mousquet at Penang, and sent to the bottom seventeen British vessels, representing a value of £2,211,000, besides three sent into port. The Emden was destroyed by H.M. Australian cruiser Sydney at the Cocos-Keeling Islands on November 8th. The Karlsruhe sank vessels representing a value of £1,662,000.

It is not the purpose here to describe the depreda-

tions and ocean wanderings of the other German cruisers or auxiliary cruisers. The object is to show how, by the all-compassing pressure of naval power, they were successively destroyed. It would be folly to deny that there was something defective in the disposition of the British naval forces at the beginning. Admiral von Spee was at large, with two powerful armoured cruisers, but Sir Christopher Craddock was left in inferior force off the coast of Chile. The obsolescent battleship *Canopus*, which had inferior speed, was to join him, but did not reach him in time. The Australian battle-cruiser *Australia*, which would have been an extremely valuable aid to Craddock's squadron, did not pursue the German squadron across the Pacific.

Admiral of the Fleet Lord Fisher returned to the Admiralty as First Sea Lord on October 29th, 1914, and at once set about to use the naval instrument he had been so largely instrumental in creating. In dead secrecy and with incredible speed a force was prepared and dispatched. Admiral Sturdee had with him the magnificent battle-cruisers Invincible and Inflexible, the armoured cruisers Kent, Cornwall, and Carnarvon, the light cruisers Bristol and Glasgow, and the armed liner Macedonia. The battleship Canopus was already at Port Stanley. Before anyone knew he had left England, he arrived at the Falkland Islands on December 7th, after having steamed a distance of 7,000 miles. The German Admiral was known to be approaching with the object of utilising the islands as a base. He arrived on the next day, but was taken by complete surprise, though he was conscious of impending fate, and his squadron ceased to exist.

This was one of the master-strokes of the war, made with lightning rapidity. Strategy was seen in action, and thenceforward the control of the ocean was secured. There remained the business of rounding up the enemy cruisers which were still preying upon shipping on the routes of commerce. Cruisers of sufficient force were dispatched, with instructions to remain at certain rendezvous, each forming a base upon which lighter cruisers could fall back, or to the support of which they could proceed. The lighter vessels cruised on specified curves or lines of search, and in this way a network was spread over the oceans comparable to a spider's web. Thus in due course every enemy cruiser and auxiliary was intercepted, or, conscious of the toils which were spread for her, abandoned her task and sought safety in the internment of a neutral port. The Grand Fleet in the North Sea was the master of the situation, and made possible the decisive blow which was struck at enemy power in the oceans.

Thenceforward the enemy was impotent in every sea. Not a man could he send afloat to bring aid to his colonies and protectorates. His distant possessions collapsed like a house built of cards. No means had he to interrupt the transport of troops which have brought about the darkening of every German "place in the sun." "Deutschland ist Weltreich geworden," it was said. But distant possessions are the ripe fruit which falls into the lap of the ultimate sea-power, and the Weltreich exists no more. By

means of sea-power it has been destroyed. The submarine is an effective weapon within its sphere, but no victory has ever been won by evasion, and no seapower can be exercised by stealthy craft which hide beneath the surface of the sea.

CHAPTER IV

THE GRASP OF THE MEDITERRANEAN

SEA- AND LAND-POWER

Others may use the ocean as their road, Only the English make it their abode; Our oaks secure, as if they there took root, We tread on billows with a steady foot.

Edmund Waller, 1656.

T is important next to consider the situation in the Mediterranean, where sea-power is of momentous importance to the Allies. In those historic waters the fate of many nations has been decided. They are a vital link and the highway of the British Empire. Between Gibraltar and Port Said two thousand miles of British welfare lie outrolled. To France, with her great possessions in Algeria, Morocco, and Tunis, the importance of this sea highway is supreme. She must, in this war and at all times, traverse its waters or she will be undone. Italy has won a great position in the Adriatic and the Mediterranean, and she would wither away and perish if either fell under enemy control. Trieste is her object, and she has proclaimed a protectorate over Albania the better to establish her power in the Adriatic, and she has her new possessions in the Libia Italiana of Northern Africa. From the operations in the Mediterranean we shall learn something more of the relation of seapower to land operations, and of the limitations of that power, and we shall see the allied navies of England, France, Russia, Italy, and Japan in co-operation. We shall know why the enemy made a great submarine stroke in the Mediterranean when everything else at sea had failed.

The French battleship squadrons were concentrated in the Mediterranean before the war. The cruiser squadron in the Channel, like David against Goliath, was willing to encounter even the whole German High Sea Fleet; but the French had been assured of British co-operation, and all danger was forestalled. In the Mediterranean the Goeben and Breslau had come west, and had bombarded Bona and Philippeville; but the French Admiral, going south from Toulon, was on their heels, and they fled to the east again, running the gauntlet of the British squadron on their way to join the Turks.

They had intended to raid the French transports at sea. At this time the French were bringing their troops from Algeria and Tunis, amounting in all to nearly 100,000 men, with guns, horses, mules, stores, ammunition, hospitals, tent equipment, and all the requirements for field service, to join the main army in France. It was a great responsibility for the French Navy, increased many-fold when troops began to come from their eastern possessions through the Suez Canal.

Failure would have meant disaster. But the

whole of the transport work was managed without the loss of a man or a horse, and was a wonderful success. It could hardly have taken place with so much security if the British squadron had not been in the Mediterranean, and not at all if the Grand Fleet had not held the German High Sea Fleet fast in its ports by the blockade in the North Sea. From that time forward for many months, until the Italians came into the war, on May 23rd, 1915, the French squadron was employed in neutralising the Austro-Hungarian Fleet in the Adriatic, which did not dare to move. The blockading squadron was extended across the Strait of Otranto, with occasional sweeps to the northward, to control hostile operations, if possible, at Cattaro and along the Dalmatian coast up to the approaches to Pola, where the submarine Curie was entangled, and lost to the Austrians. The French base for these operations was at Malta, but an advanced base was established in the island of Lissa. The blockade was completely successful in checking every effort of the Austrians to strike at the stream of transport in the Mediterranean, though it could not avail to save Montenegro or hold back the Austrians in their advance into Albania. No fleet can operate beyond the range of its guns, unless its flying officers carry their bombs into inland countries.

The blockade maintained through the winter at the Strait of Otranto was exceedingly arduous and filled with peril. Enemy destroyers and submarines were at work, issuing from the wonderful island fringe of the Dalmatian coast, and the French knew their peril. The armoured cruiser Léon Gambetta was sunk by submarine attack, with the loss of Rear-Admiral Sénès, who was in command, and every officer on board, as well as nearly 600 men. The armoured cruiser Waldeck-Rousseau suffered damage by torpedo, and the new Dreadnought Jean Bart, with Admiral Boué de Lapévrère, the French Admiralissimo of the combined fleets, on board, was touched, though only slightly injured. There were other submarine attacks and losses of small craft, and some losses were inflicted upon the enemy. British cruisers were attached to the French Flag during these operations, and they continued to co-operate with the French and Italians in Adriatic waters and in the Ægean, where the French and Allied naval forces were the guard of all the operations at Salonika and in the Piræus. Fleets and armies have co-operated in the Mediterranean from the very beginning of the war. In May, 1917, the British monitors, which, with the converted cruisers, had been operating with the military expedition against the Turks and Bulgarians, appeared in the Adriatic, and rendered valuable aid to the Italians in their advance towards Trieste. The naval coalition has been a marvel of effective organisation.

German professors have sometimes said that the land would sooner or later beat the sea—that "Moltke" would become the victor over "Mahan." That is the convinced opinion of the Pan-Germans, who say that the railway will yet prove the more rapid and the more secure means of transport than the steamship. The lines from Antwerp by Cologne to Vienna, and from Hamburg to Berlin, and thence through the very heart of Europe to Vienna, and on

by Belgrade and Sofia to Constantinople, and from the opposite shore of the Bosphorus to Baghdad and down to the Gulf, and by a branch through Persia to the confines of India, were to give commercial and, perchance, military command of two continents. Enterprise by the branch railway through Aleppo and Damascus against Egypt, with a view to further developments in Africa, was related to this conception of land-power. The measures adopted by the Allies for the reconstitution of Serbia, the expeditions to the Dardanelles and Salonika, the strong action taken in Greece, the naval movements on the coast of Syria, the operations in the Sinai peninsula and Palestine, and the expedition from the Persian Gulf to Baghdad were the answer to these gigantesque projects of the enemy.

Behind them all lay the working of the fleets. Every class of ship and almost every kind of vessel employed in naval warfare has been used in one or other of these operations—the battleship, cruiser, destroyer, torpedo-boat, submarine, mother ship, aeroplane, aircraft-carrier, mining vessel, river gunboat, motor launch, mine-trawler, armed auxiliary, special service vessel, transport, store ship, collier, oiler, tank, distilling ship, ordnance vessel, hospital ship, tug, lighter, and a crowd of other craft. All these are required for the work of the Navy in the Mediterranean, as elsewhere, and they have been employed with a quality of seamanlike skill, enterprise, resource, courage, and success such as the history of the sea has no previous record of. The appearance at the Golden Horn of a British submarine, which

had traversed a Turkish mine-field, was the sign of new powers in naval warfare. We are lost in admiration of the self-sacrifice of officers and men, both of the regular naval service and of the mercantile marine and the fisheries, the latter being the heroes of the perilous work of mine-sweeping. The British and French navies, and the vessel representing the Russian Navy, acted in the closest co-operation, and all the naval forces worked in intimate association with the armies.

Where there was failure, the failure was due to the inevitable limitations of sea-power, which has already been suggested with reference to the North German coast, Zeebrugge, and the Montenegrin and Albanian coasts. The history of the Dardanelles expedition will not be written here. Beginning with a bombardment of the entrance forts on November 3rd, 1914, which had little other effect than to stimulate the defence, continued after an interval of months by the great naval attacks in March, 1915, in which enormous damage was done to the forts at the entrance and, to some extent, at the Narrows, but with the loss of British and French battleships by the action of gunfire and drifting mines, the enterprise concluded with the landing of the Allied armies in the Gallipoli peninsula. The troops were compelled by outnumbering forces and concentrated gunfire to withdraw. The combined attack should have been made at the beginning. The unaided naval attack had merely stimulated the defence. Here was the greatest demonstration of which there is record of the limitation of sea-power. In the attack of such a military position naval forces are essential, but military operations are required if the desired success is to be attained.

This is true of all the operations in the Mediterranean and elsewhere. Sea-power gave the means by which the army drove back the Turks from Egypt, and it was the support of the advance in Sinai and Palestine. It gave protection to the transports which carried troops and Army requirements to Salonika and the Piræus, patrolling the routes or providing convoy for the ships. The enemy realised his opportunity, and his submarines began to develop great activity in the Mediterranean. Certain transports were sunk, and an attempt was made to cut the communications of the expeditionary forces with their base. Some considerable losses were suffered thereby, but gradually systems were developed which gave a reasonable sense of security. The British, French, and Italian flotillas were employed, and that of Japan came to their aid. Never had such naval co-operation been witnessed before. We cannot separate the advance in Mesopotamia from the Mediterranean operations because the same object inspired both-viz., that of arresting the threatened development of German commercial and military power, through Asiatic Turkey to the Persian Gulf, and through Persia to the borders of India. The first advance to Kut-el-Amara and Ctesiphon proved disastrous because undertaken with inadequate means; but the Navy rendered brilliant service, and, in the second advance, a sufficient river flotilla of gunboats and transports made possible the advance to Baghdad

and beyond. The naval flotilla co-operated with most excellent effect in this advance, played havoc with enemy's craft, and recaptured H.M.S. *Firefly*, which had been lost in the retreat from Ctesiphon.

Thus we see the Navy operating in the great central theatre of war and on its outlook to the East, exerting influence, transporting troops, forming the base of armies, and everywhere proving an essential factor in all that was done. It was confronted in the Mediterranean, as elsewhere, with the new weapon of the submarine in very active form. That menace, and the campaign against it, shall be the subject of the next chapter.

CHAPTER V

DEALING WITH THE SUBMARINES

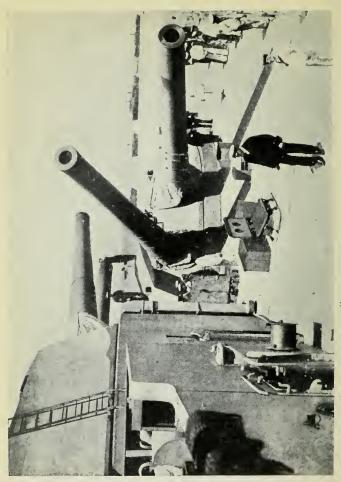
My name is Captain Kidd,
Captain Kidd.
My name is Captain Kidd,
Captain Kidd.
My name is Captain Kidd,
And wickedly I did;
God's laws I did forbid,
As I sailed.

Old Nautical Ballad.

AVING seen the British Fleet and the fleets allied with it operating in the North Sea, the Oceans, and the Mediterranean, we may suitably turn to some special features of the duties and work of the Navy in the war. The submarine came as a sign and a portent of new developments in the means and the practice of warfare at sea. Regarded once as the weapon of the weaker Power, it was adopted into the naval armoury of the strongest. When, in 1901, under Lord Fisher's administration as First Sea Lord, a beginning was made in submarine construction by the ordering of five Holland boats, many people were taken aback. Confessedly the part to be played by the submarine lay at that time in the realm of speculation, but the British Navy could not afford to ignore it. Every advance must be watched and studied as it developed. The development has been rapid, and there are British submarines of astonishing powers, which have no equals in the world. They have made their mark in many a theatre of war. The French had led the way. The Germans followed in 1906. There is, indeed, the best reason to believe that Grand Admiral von Tirpitz, chief of the Navy Department, looked with no kindly eye upon submarine boats. He was a believer in battleships and the creator of the High Sea Fleet, with its battle squadrons and cruiser divisions. Concessions were made to the Admiralty Staff, and a few submarines were put in hand; but it was not until the beginning of the war that Tirpitz became inspired with the fervour of the convert.

Even now the relative position of the submarine in the category of warships is obscure. Admiral Sir Percy Scott thought that the knell of the battleship had been rung by its growing power; yet ships of the battleship class, carrying incredible armaments, possessing speed beyond the dreams of ante-bellum naval constructors, and infinitely superior for a dozen reasons to anything the Germans had thought of, have recently been completed, and will probably play a decisive part in any future naval engagement.

But if the submarine has not dethroned the battleship, she has, in the hands of the enemy, done other remarkable things. She has struck a mortal blow at what many excellent people have hitherto regarded as the settled and accepted code of International Law; she has appeared as a pirate commerce-destroyer. Without warning and without pity she has sunk fishing vessels, tramp steamers, stately liners, and hospital



ON BOARD THE "QUEEN ELIZABETH" AT MUDROS

ships. The code of honour is not observed by her. The German submarine officer has orders to run no risks, although in the old wars naval officers-who had no means of submerging either to attack or to escape—gladly ran every risk incidental to the service in which they were engaged. When the Lusitania was sunk it was explained that if the commander of the submarine had permitted the passengers to take to the boats before firing his torpedo, "this would have meant the certain destruction of his own vessel." There was no evidence that such would have been the case, but the risk, which implied a danger merely incidental to naval service, was held to justify the sinking of the great liner with 1,200 souls on board. The wildest imagination could not have conceived that any human being could take such a distorted view of right and wrong, and of the plain duty of the seaman.

The submarine has accomplished other remarkable things in the war. She has converted benevolent neutrals into resolute enemies. She has brought the United States into the war in support of the Allies. She has transformed the mercantile marines opposed to her into actual fighting forces. A few merchant ships were armed before the war began, but now, because of ruthless submarine attack, the British mercantile marine is for practical purposes embodied with the Navy, in the sense that it is under naval control, is provided with means of defence, and acts directly under haval orders. Moreover, one-half or more of its shipping has been taken over by the naval service. The same is true of the merchant ships of the Allies. The German submarine has had a further effect. She

has created a whole array of means directed to her destruction. Countless inventors have been set at work, and extraordinarily ingenious methods have been employed with the purpose of putting an end to submarine activities by sinking every boat as she appeared.

In the early days of the submarine it was believed that she might be sunk by using spar torpedoes fixed in swift boats, which would bear down upon the submarine as she submerged and explode the charge against her hull. But it soon occurred to seamen that if a swift vessel, destroyer or other, could run down a submarine she might more easily sink her by the impact of her sharp stem or a special keel. This method has been practised in the war, and by this means a number of enemy submarines have been dispatched to Davy Jones's locker. There was an early case in which a certain destroyer, going at high speed, actually impaled a German submarine on her stem, and carried her onward, so injured that she sank. Another early case was that of the German submarine rammed and sent to the bottom off Beachy Head on March 28th, 1915, by the Thordis, commanded by that plucky skipper, Captain Bell, who set an example to many.

Another plan was to use suitable vessels in pairs, each pair dragging a cable connecting them, from which hung, on short lines, small mines to be electrically exploded when a submerged obstruction, probably a periscope or conning-tower, put a tension upon the connecting cable. The disadvantage of this system was that the entrapping vessels could not

travel swiftly without bringing the cable near to the surface, and the chance of a submarine fouling the cable was remote. Yet it may be conjectured that the features of this system may have furnished the germ of procedures now in use. Capture or sinking by the use of nets was also an early idea, probably suggested by the nets used by big ships at anchor for protection against torpedoes, and Admiral Sir Arthur Wilson devised a large steel net for the purpose. Possibly this method, too, has developed into the nets employed in dealing with enemy submarines at the present time. But submarines were continually increasing in strength of structure, speed, and handiness, so that new systems were necessary and have developed with the requirements.

What the actual methods employed by the Navy are cannot be explained. When Mr. Frederick Palmer, the American writer, visited the Grand Fleet he asked how the thing was done, and officers said: "Sometimes by ramming; sometimes by gunfire; sometimes by explosives; and in many other ways which we do not tell." M. Joseph Reinach also visited the Fleet, and said in the Figaro that the submarine was pursued "by net, gun, explosive bomb, and other means." Squadron-Commander Bigsworth on August 26th, 1915, destroyed a submarine off Ostend by dropping bombs upon her from his aeroplane, and there have been several other episodes of the same kind. When the first American transports were attacked in the Atlantic, bombs fitted with a short-time fuse were employed which burst at a determined depth below the surface of the sea.

The Royal Naval Air Service plays a large part in the anti-submarine campaign. Its seaplanes are always scouting over our waters and sight enemy submarines from afar. Flying high, they can and do discover submarines navigating below the surface, and by wireless or other signals bring destroyers or other craft to the scene, where by special means submarines are destroyed.

Probably gunfire is the chief means by which submarines are sent to the bottom. A German submarine may attain complete submergence from the cruising trim within about three minutes; but the time may be longer, if she has a gun mounted, wireless rigged, and other top hamper. From the awash position, in which her speed is reduced, she may submerge in about two minutes. A swift destroyer, knowing the position of such a submarine, may advance toward her, covering a nautical mile within two minutes, so that she has an excellent chance of coming within range and putting in shots with effect. Gunnery is carried to a high pitch of proficiency in the Navy, and one destroyer may be mentioned which knocked out the periscope of a German submarine at a range of over 2,000 yards with her first round. There is nothing an enemy submarine likes less than to see destroyers tearing down towards her at high speed as she is getting in her gun, withdrawing her periscope, lowering her masts-often a disguise-and filling her tanks. Moreover, complete submergence may not be a sure protection for her if she is watched, for she may be destroyed by an explosive bomb.

German submarines have also learned to fear

armed merchantmen, which have not seldom used their guns with effect, sometimes compelling their assailants to submerge, and so evading their attack, and sometimes by obtaining direct hits. The Dunrobin in September, 1916, carried on a lively action for some minutes, hitting her assailant in the vicinity of her conning-tower with a T.N.T. shellthereby causing an internal explosion, from which dense smoke arose-followed by three common shell, each of them making a direct hit, after which the enemy suddenly plunged at a sharp angle, evidently going to the bottom. In March, 1917, the Bellorado was attacked by gunfire from a submarine, whereby her master, chief officer, and a seaman were killed, while her gunners put such shot into the assailant that she was silenced and manifestly disabled.

Further it is not permissible to go on describing how submarines are accounted for. The catalogue of methods is a long one. There could certainly be no single and decisive weapon for the destruction of this new engine of warfare. There is no remedy for the effects of gunfire, and if submarines discover targets possible to be attacked they will certainly attack them. Some surprise was expressed that the British Admiralty did not at once suppress the submarine menace. When the submarine campaign began in February, 1915, it resulted in the sinking of a number of British merchantmen; but, having risen to its height, it declined, with fluctuations, until it was described as being "well in hand." The methods employed had been successful. Then, after several months, the submarines began their depredations again, carrying

them into the Atlantic and the Mediterranean with great violence. They also penetrated the Channel, though they never checked the great stream of transport for the armies between English and French ports, which the Navy was guarding with complete success.

The reason for this recrudescence of submarine piracy was the intense energy which the Germans devoted to the production of standardised powerful classes of submarines, whose parts were produced in many districts of the German Empire. The new boats were practically submarine cruisers, capable of high surface speed, which enabled them to overhaul slow merchantmen, and they were armed with powerful guns. The early enemy submarine carried a 1.4-inch gun, but a 2.9-inch 12-pounder was provided. There is now reason to believe that the calibre has risen to 4.1 inches and, in the case of some of the more powerful boats, to 5.1 inches, these larger guns being shorter and lighter than the same guns mounted in cruisers. But obviously submarines of these classes, carrying on their work over wider areas and in distant places, will not be so easy to destroy as the smaller boats of the early submarine campaign, and this may account for the difficulty in providing a complete protection from the attack. Submarine sections have been sent overland and assembled at Trieste for the Adriatic and Mediterranean, and at Varna for use in the Black Sea, and also doubtless at the Golden Horn or in the Gulf of Ismid.

There is much uncertainty about the future of the submarine. She exercises no command at sea, and she makes many fruitless attacks upon armed merchantmen; but she is dangerous, nevertheless. The British Navy has devoted exhaustless energy in applying every possible agency for dealing with hostile submarines, and its great success encourages the hope and belief that the scourge will yet be exterminated. Destroyers, motor launches, patrolling ships of many classes, seaplanes, observation balloons, and other craft are at work every day and many of them every night. But whatever element of uncertainty there may be as to the complete success of these agencies, there is none in the conclusion that the submarine will never bring England, still less her Allies, to the verge of famine or anywhere near it. Scarcity of food is not due so much to the submarine as to the great demand on the world's supplies, and the enormous volume of shipping absorbed by the naval and military requirements of England and her Allies. The Navy, which has done such wonderful work in the war, is not and will not be ineffective against the submarine.

CHAPTER VI

THE NAVY AND THE MINE

They sink, they slink, they seek the boat,
Grisly horns stuck through their skin,
Ready to sink all things that float,
These villain boxes shaped of tin.
The fisher sees the death therein,
But reaches down with his long fling,
And grasps the chain that holds them in,
And draws the fangs they hoped would sting.

Anon.

HE British Navy fights for the great ideals of the people, acting upon the lines of old and loval traditions; but, while doing so, it has encountered the desperate devices of the enemy, who has used the latest achievements of scientific and mechanical invention in such a manner as to overthrow many preconceived methods and accepted conventions of naval warfare. We have already spoken of the submarine. Now we shall see what the mine is, and how it is dealt with by the Navy and the services the Navy controls. It has been said, with much truth, that the essence of war is violence and that moderation in war is futility. is also true, as we see, in the cruel operations of Zeppelins and bomb-dropping aeroplanes, and not less in the attacks of submarines, as directed by the Germans and their allies, that the non-military populations suffer the horrors of war in much greater degree than was the case in the wars even of recent times.

But the Germans, at the very beginning of the war, outraged neutral sentiment by employing ostensible merchant and passenger vessels, flying neutral flags, and without giving warning to the neutrals, in the deadly work of scattering mines indiscriminately in the open sea on the main lines of trade. They acted in direct contravention of the rules of war as previously accepted. These disguised mining vessels had traversed the trade routes as if pursuing peaceful purposes, thus enjoying the immunities which had always been accorded to innocent neutral vessels, and yet they had wantonly endangered the lives of all who traversed the sea, whether neutral or enemy. The Admiralty were soon able to declare publicly that this mine-laying under a neutral flag, as well as reconnaissance conducted by trawlers and even by hospital ships and neutral vessels, had become the ordinary methods of German naval warfare. The later history of the war shows how far the Germans were prepared to go in casting off any restraint in their efforts to do injury to their enemies. They compelled the British Admiralty to adopt counter-measures.

For years past the Germans had devoted unremitting attention to the study and practice of mining and the production of very powerful types of mines. In that respect they were undoubtedly ready. The state of war between England and Germany began at 11 p.m. on August 4th, 1914, and on the morning of the next day German mines were being laid on the east coast of England. The Königin Luise, a

former Hamburg-Amerika liner of 2,163 tons, was caught in the act, off the Suffolk coast, and was sunk by the light cruiser Amphion and the Third Torpedo Flotilla. On the next day the Amphion herself, the first British warship destroyed in the war, fell a victim to the mines she had laid. This disguised mine-layer had initiated a practice, which has since been many times followed in the war, of throwing mines overboard in the track of pursuing vessels. It was resorted to by the retreating Germans in the battle of the Dogger Bank. Here it may be remarked that the Germans have always claimed the right to subject every consideration to their necessity to win, though at The Hague Conference of 1907, Baron Marschall von Bieberstein, the German delegate, said that conscience, good sense, and the duty imposed by the principles of humanity would constitute the most effective guarantee against abuse, and he proclaimed—"je le dis à haute voix"—that German naval officers would always fulfil "in the strictest fashion the duties which emanate from the unwritten law of humanity and civilisation."

Any technical description of German mines would be out of place here; but it may be said that generally they approximate to a spherical shape, and are provided with projecting "horns," almost in the shape of drumsticks, concussion with which is calculated to break a small phial within, whose contents cause the detonation of the enormous charge of T.N.T. explosive. Each mine is provided with a sinker, which drops to the bottom, and is attached to the mine by a cable or sounding-line paid out by special mech-

anism to any desired length, whereby the mine may be kept at the intended depth below the surface. There are other types of mines, and in particular one of cylindrical form, containing a prodigious quantity of explosive and capable of the widest destruction. This has probably been used only in special situations. The ordinary mines can be laid with great rapidity by a specially fitted mine-layer, provided with rotary gear, bringing mine after mine along a special track to the dropping position. The drifting mines which the Germans at the very beginning of the war set afloat in the main trade route from America to Liverpool, viâ the North of Ireland, can be laid with still greater rapidity.

When mine-laying in British waters by surface boats was made extremely risky, or almost impossible, the Germans resorted to the employment of submarine mine-layers, one of which was exhibited in the Thames. Vessels of this class, so far as they are known, probably carry a maximum of twelve big mines in six shoots or air-locks, the lower mine in each shoot being released by means of a lever, after which the other drops into its place, ready to be let go in the same way. The boat exhibited in London and elsewhere was of a rough, rudimentary character, indifferently built, and her speed was probably not more than six or eight knots. Undoubtedly many of the submarine mine-layers are of better type. They are constantly at work especially on the east coast of England, and some losses have resulted; but the effect of their operations is nearly always overcome by the means adopted by the Navy.

The first measure set on foot by the Admiralty was to organise a system of search for suspicious craft, and to declare the North Sea a war area, within which it was dangerous for any vessel to navigate except through channels indicated by the naval authorities. The Germans replied with their now famous and futile blockade order of February, 1015. New regulations were issued from time to time regulating navigation through the British minefields, and the result has been, in association with the patrols, to exercise a very close supervision over the navigation in home waters. As to distant mining operations of the enemy, the First Lord of the Admiralty stated, on March 8th, 1917, that they had been carried very far, and the P. & O. liner Mongolia, sunk off Bombay on June 23rd, 1917, was not the only vessel mined in the Arabian Sea. From time to time it has been announced that mails for and from the East and Australia have been lost at sea.

It is an inspiring thing to turn from this picture of mines and the scattering of them by the enemy to another picture—that of the gallant and successful manner in which the Navy, and the mine-trawlers and other vessels embodied in its service and employed in the ceaseless patrols, have grappled with the deadly menace of the mine. Ever patrolling the British coasts, ever facing death, often speeding to the help of vessels mined, torpedoed, or otherwise in distress, the glorious men who man these craft have inscribed their names in letters of gold on the roll of British honour and fame at sea. It was a marvellous thing, this embodiment of the vast mine-sweeping and

patrolling service in the work of the Navy in the war. From all the coasts fishermen have come, with their trawlers converted from the craft of winning fish at sea, to the sterner work of bringing up and destroying the strange harvest of deadly mines which endanger all life at sea. Many a trawler has been sunk by contact with her fatal captures; others have been sunk by hostile fire and bombing by enemy aeroplanes, but never have the brave seamen quailed in the service of the country and the Allies, and in every port men are to be met whose craft have been sunk under them, and who have hastened to sea again.

Hundreds of ships, drawn from the mercantile marine and the fisheries, steam yachts, motor boats, armed launches, and vessels of other classes, are employed in such dangerous work. They share the trials of war, wind, and weather with the regular naval patrols. Sir Edward Carson, when First Lord of the Admiralty, directed attention to the magnificent work of the mine-trawlers of these patrols. The force employed at the beginning of the war numbered about 150 small vessels, but increased to 3,000 or more. The whole nation should understand what mine-sweepers were doing. "The thousands of men engaged in this operation are the men who are feeding the whole population of this country, from morning till night, battling with the elements as well as the enemy, facing dangers under the sea. A mine-sweeper carries his life in his hands at every moment, and he does it willingly." Later again he expressed his thanks and the thanks of the nation for the splendid work they had accomplished. Of

all the seamen who had so deservedly earned the gratitude of the country none had had more arduous and dangerous duties to perform than the gallant fellows in the patrols.

They have worked in reliefs day and night at sea, though sometimes driven to port by the fury of the elements, and they brave every kind of weather. As Admiral Bacon, commanding the Dover Patrol, has said, with reference to the security with which thousands of merchantmen had passed through the waters in his control, "no figures could emphasise more thoroughly the sacrifice made by the personnel of the patrols and the relative immunity ensured to the commerce of their country." They have trawled for mines not only in British but in distant waters. Their magnificent work under fire, and attacked by bombdropping aeroplanes, at the Dardanelles will never be forgotten.

An American correspondent, Mr. Gordon Bruce, who sailed in a mine-trawler to learn its work, concluded an article in the *New York Tribune* in these words:—

I looked at those men who go out day after day; who wear their lifebelts continuously; who take their tea on the decks while they peer over the rims of their cups for the death that lurks in those sombre waters. I thought how fine was their devotion to their duty; how great a part they are playing in the war—out there alone, where their deeds are attended with no sounding of trumpets, where they give to their work the same quality of bravery as is required of the man in the trenches. And as I glanced at the inscription over the cabin, which read

"England expects every man to do his duty," I knew that England would not be disappointed.

The practical methods by which the Navy and its brave mine-trawlers conduct their operations are of great interest, but description cannot go too far. The enemy is certainly well acquainted with all British methods previous to the war; but mine-sweeping systems do not stand still, but develop with the progress of armaments generally. Mine-trawling is developed from the system of trawling for fish, which before the war had reached a high degree of technical efficiency, and in the application of that system to their work in the war the men have attained great proficiency and become extraordinarily successful. The trawl-net varies in size with the dimensions of the vessel using it. An average size would be about 100 feet in length, with a spread of from 80 to 90 feet. The principal features in fishing trawlers are fore and after frameworks, with fairleaders, a towingblock, a powerful steam-winch, and towing-warps. A trawler would pay out hundreds of fathoms of heavy wire warp, the handling of which called for great skill and dexterity. It was not a very difficult thing to adapt this method of trawling to the sweeping for mines. The fishing trawler goes unaided, but in minesweeping the trawlers work in pairs, and the towingwarp is replaced by the sweeping-wire. Two trawlers, steaming abreast at a certain interval, drag a weighted steel hawser which, upon striking the mooring of a mine, brings the deadly catch to the surface, where it is exploded by gunfire from a destroyer or by rifle fire from an armed trawler or motor boat. The mine-

sweepers have encountered perils and hardships which have never been recorded, and fishing trawlers pursuing their peaceful occupations have often incurred the same risks.

Next after the destruction of the enemy's fighting vessels comes the destruction of his death-dealing mines, and the mine-trawlers, confronted with an unparalleled task, attended with extreme peril, have rendered magnificent service to England and her Allies.

CHAPTER VII

THE NAVY AND ARMY TRANSPORT

What of the mark?
Ah! seek it not in England;
A bold mark, an old mark
Is waiting over-sea;
Where the string harps in chorus,
And the lion flag is o'er us,
It is there our work shall be.

Sir A. Conan Doyle.

HE stupendous and scarcely calculable operation of transporting by sea the enormous armies which are employed in many theatres of the hostilities is the index and measure of the greatest of all the triumphs of naval power in the war, namely, that of establishing and maintaining essential command of the sea. Against this bulwark the enemy's naval forces have battled in vain. The submarine may, in some degree and in some circumstances, affect command of the sea, but it cannot exercise it.

It is difficult to realise all that the transport of millions of men, organised as armies and provided with all that armies require, has meant to the Allies, or to bring home to ourselves a full sense of what the responsibilities of the Navy have been in safeguarding them. The armies of Frederick and Napoleon were pygmies compared with the vast hosts which are set in the field to-day. When Frederick invaded Silesia he had with him not more than 30,000 men. The motley army with which Napoleon invaded Russia-the greatest that had ever been brought under a single command-did not greatly exceed 600,000 on a liberal computation. Wellington in the Peninsula never commanded 50,000 men. But in March, 1916, Mr. Balfour, then First Lord of the Admiralty, said that 4,000,000 combatants had already been transported under the guardianship of the British Fleet, with 1,000,000 horses and other animals, 2,500,000 tons of stores, and 22,000,000 gallons of oil, for British use and the use of the Allies. In January, 1917, Admiral Sir John Jellicoe, First Sea Lord, said that over 7,000,000 men had been transported, together with all the guns, munitions, and stores they required. Six months later, when the United States troops began to arrive, the figure may be estimated to have reached 10,000,000.

The victory of Germany would have been swift and decisive if the great armies represented by these figures had not come to the support of France. French troops from Northern Africa and the East also joined her brave army, because transport in the Mediterranean was secure. The great army of Russia could have made no offensive movement if she had not received the immense supplies of guns, munitions, motors, and other material which came to her from abroad. Because of British supremacy at sea and the shipping that consequently came there, Archangel, from being a sleepy harbour, developed into one of the busiest ports on the continent of Europe. Italy

could have made no headway if many of the things she required had not come to her by sea. Greece would have remained permanently on the side of the enemy if sea-power and the troops transported there had not rallied her to the Allies. The German colonies would not have been occupied if fleets had not carried to them the troops for their subjection. England, by virtue of sea command guaranteed by her Fleet, has gathered her armies from India, Canada, Australia, New Zealand, and from every colony and possession, and has sent them to serve in France, Belgium, Greece, Gallipoli, Egypt, Palestine, Macedonia, Mesopotamia, and Africa. Not a soldier has gone afloat but a seaman has carried him on his back.

Before we can appreciate this aspect of the work of the Navy in the war, we must gain some idea of what is implied by the military service of these armies in the field. It is not enough to dispatch armies. They must be maintained and supplied. The communications of an army are vital to its operations, and the communications of all the armies that England is employing are by sea, and are guarded by the Navy. It would not be an easy thing to estimate the vast requirements of fighting forces; but that is unnecessary. They are on an infinitely greater scale, in proportion to the strength of the troops employed, than in any previous war. Guns are far more numerous and much heavier than they were. The expenditure of ammunition has gone beyond all anticipation, and a real fleet is required for its transport. Horses, mules, many descriptions of heavy and light ordnance and ammunition for them, warlike and general stores of

innumerable kinds, aeroplanes, balloons, the gigantic "tanks," hospitals and hospital requisites, clothing, food, forage, camp equipment, transport vehicles, traction engines, pontooning, railway, telegraph, building, and mining material, locomotives of many kinds, petrol, and a hundred other stores and things are necessary, and they must day and night be in transit, without rest or pause. It will illustrate the gigantic nature of the operation if we record that between November, 1916, and June, 1917, 2,000 miles of complete railway track were shipped, with nearly 1,000 locomotives, and other supplies by railway companies. Labour and work for a hundred different services have to be provided also. The United States and other countries have contributed enormous supplies, and, with the coming of the American Army, the volume of the ceaseless torrent—the veritable Niagara—will increase still more. History has no parallel for such operations.

This vast business being the charge of the British Navy and of the navies allied with it, we see how great an object it must be of the enemy to strike at the lines of supply. That they have completely failed would appear almost miraculous, if we did not know that the reasons for the failure are altogether of a practical character. It was inevitable that there should be some losses when submarines and minelayers were at work, but the destruction effected has been a mere fraction of the whole, and the influence upon the campaigns is entirely negligible. The Ministry of Munitions imports 1,500,000 tons of material every month. The most considerable loss due

to attack has been in the matter of shell components, but it did not amount to more than 5.9 per cent. of the whole supply from the beginning of the submarine campaign up to June, 1917. The most serious disasters were in the Mediterranean, where submarines sank the French transports *Provence II*. and *Gallia*, engaged in the Salonika expedition, with the loss of about 1,600 lives. The enemy will certainly continue his efforts.

Never was a more seriously planned attempt made than that of June 22nd, 1917, when General Pershing's American Expeditionary Force was crossing the Atlantic. German submarines, in considerable force, made two attacks upon the transports, and on both occasions were beaten off with every appearance of loss. One submarine was certainly sunk, and there was reason to believe that the accurate fire of the American gunners sent others to the bottom. For purposes of convenience the expedition had been divided into contingents, each composed of troop-ships and a naval escort designed to keep off such raiders as might be met with. An ocean rendezvous was arranged with the American destroyers then operating in European waters, in order that the passage through the danger zone might be attended by every possible protection. There was reason to believe that the Germans had secret intelligence of the course taken by the transports to the rendezvous and of the time appointed for their arrival there.

The first attack occurred at 10.30 p.m. at a point well on the American side of the rendezvous, in a part of the Atlantic which might have been presumed

free from submarines. The heavy gunfire of the American destroyers scattered the enemy boats, and five torpedoes were seen. The second attack was launched a few days later, against the other contingent, on the European side of the rendezvous. Not only did destroyers hold the boats at a safe distance, but their speed resulted in sinking at least one submarine. Bombs were dropped firing a charge of explosive timed to go off at a certain distance under water. In one instance the wreckage covered the surface of the sea after a shot at a periscope. "Protected by our high seas convoy destroyers and by French war vessels," said the Secretary of the United States Navy, "the contingent proceeded, and joined the others at a French port. The whole nation will rejoice that so great a peril has passed for the vanguard of the men who will fight our battles in France."

This incident illustrates the method of protection chiefly employed by the British Navy. When the original Expeditionary Force was sent to France, the Grand Fleet was in readiness if the High Sea Fleet should venture to issue to sea. Cruisers, destroyers, naval aircraft, and submarines were on watch and guard in the North Sea and the Channel, and the patrol was maintained, day and night, without intermission until the army had been effectively transported. The patrol was then organised upon a greater scale as the transport grew in volume. The Dover Patrol undertook a work of the highest importance, and was instrumental in holding off all destroyer attacks from the eastward. Cruisers, destroyers, armed motor launches, mine trawlers and drifters, and other

vessels have been constantly at work, and observation balloons and seaplanes have never ceased their vigil. The triumph has been complete, the enemy submarines have never penetrated the guard, and the Channel communications of all the armies in France have been made secure. There are certain features of this organisation which cannot be dealt with here. The same system has been carried into the Mediterranean and elsewhere, and the French, Italian, and Japanese navies have shared in the work.

In this matter of transport protection the British Navy has rendered magnificent service to all the Allies. General Sir Charles Munro, after the evacuation of Gallipoli, said it was a stroke of good fortune for the Army to be associated with a service "whose work remained throughout this anxious period beyond the power of criticism or cavil," and General Sir Ian Hamilton reported that "one tiny flaw in the mutual trust and confidence animating the two services would have wrecked the whole enterprise." This is true not only of Gallipoli but of every place in which the Navy has been serving as the guard of the communications, and the base and support of the military forces.

It will be understood that the Transport Department of the British Admiralty undertook a colossal work at the beginning of the war. It possessed the unrivalled experience gained during the South African War, 1899-1901, when about 275,000 men were dispatched and supplied with all army requirements over a distance of 7,000 miles of sea and land. Then there was no enemy afloat, but the operation was greater than any previously undertaken, and evoked the ad-

miration of the world as a revelation of resource, energy, organisation, national spirit, good management, and business-like capacity. What will be said when the now incalculable work of the Transport Department in this war can be estimated and described? The inspection and selection of ships and the conversion of them for the accommodation of troops and horses was a great business. In 1899 it was estimated that a satisfactory transport should be capable of carrying a number of men equal to 25 per cent. of her tonnage. What is the rule now one cannot say. There are important considerations of ballasting, speed, coal consumption, and other matters in such business, and the removal or adaptation of existing fittings and the allotting of space for various purposes have occupied the Admiralty officers and officials.

It was a business both of embarkation and disembarkation, on both sides of the Channel, and special provision was required for the wounded and sick. The Naval Transport and Embarkation Officers have had a very exhausting and anxious time in taking up, fitting, coaling, and otherwise preparing vessels for sea, and in giving orders for the movements of ships at the ports on arrival and departure, as well as in providing for the safety and expedition of all embarkations of men, horses, and stores, and arranging for docking and like matters. They merit the gratitude of the country and the Allies. It may be said that in all the naval and commercial ports of the United Kingdom, and in the French ports as well, work of this or like kind has been in progresss uninterruptedly since the beginning of the war. It is strictly naval work,

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and was set on an excellent and satisfactory footing by the Admiralty; but, as the war progressed, and the pressure grew greater, imposing additional duties on the Transport Department, some matters dealt with by certain of its branches, and concerned with ship construction, modification, and repair, were placed in charge of competent civilians.

CHAPTER VIII

THE NAVY THAT FLIES

Heard the heavens fill with shouting, and there rain'd a ghastly dew
From the nations' airy navies grappling in the central blue.

Tennyson.

NOM an account of the work of the British Navy in the war there must not be omitted some exposition of the gallant doings of the men of the Royal Naval Air Service. They have made their mark in the war, in every theatre of it, and no one can tell what part they will play before the struggle is at an end. Of some of their work very little is known. They render "silent" service. like that of the Navy to which they belong. do not always carry on their duty alone. On occasions they participate in that of the Royal Flying Corps of the Army. They have been associated with the gallant French airmen, and the Americans come with a new burst of energy. The Germans know British naval airmen at Zeebrugge and Ostend, and in all the country behind those places; at sea also, when the German raiders return from their exploits; and on the West front of the Army, too, where they go at times far behind the line, spying out the land, taking number and note of the enemy, dropping bombs on his store and ammunition dumps, disturbing all



his rearward services, and stirring up his aerodromes and the nursing places, where his fledglings, whom they call "quirks," are taking to themselves wings and learning to fly.

The Royal Naval Air Service has lent its aid to the Italians, has provided unpleasant experiences for the Bulgarians, has dropped bombs on the Turks at Gaza and thereabout, has rendered good service in the Mesopotamian business, and was invaluable in "spotting" for the guns which destroyed the fugitive German cruiser Königsberg in the jungle-clad reaches of the Rufiji River. From dawn to dusk these knights of the air have been flying in many parts of the world, and night-flying is their particular pleasure when there is great work to be done. Their "game book" is very full of astounding episodes of fighting which, in exciting experiences, put into the shade the thrilling narratives which for generations have delighted the hearts of boys. Few people know the sleepless vigil which the naval airmen keep all round the British coasts, constantly flying to keep watch upon the enemy, to spot his submarines, to discover his mine-fields, and to defeat any efforts he may make when transports are moving at sea. Such is an outline of the occupations and duties of the Royal Naval Air Service.

There was an "Air Department" at the Admiralty before the war, and a Naval Wing of the Royal Flying Corps with its "Central Air Office," its Flying School at Eastchurch, and seaplane and aeroplane stations at six places on the coasts, as well as airships at Farnborough and Kingsnorth. At the Royal inspec-

tion at Spithead of the great mobilised Fleet, just before the war, naval aeroplanes, seaplanes, and airships gave a fine display. Development was rapid, the Royal Naval Air Service came into independent existence, and there is now the Fifth Sea Lord at the Admiralty charged with the supervision of the Royal Naval Air Service, and representing it on the Air Board.

Some of the most useful work of the Royal Naval Air Service is in "spotting" for the guns of the warships. Its officers made a methodical photographic survey of the coast from Nieuport to the Dutch frontier early in the war to assist the monitors which were then bombarding the coast, and to observe and correct their fire. They worked from a height of about 12,000 feet, constantly observing the development of the enemy's gun emplacements, all in despite of hostile aeroplanes and shells. That survey has been continued, and the result is the finest thing in aerial cartography which has ever been achieved.

It will illustrate this part of the special work of the seaplanes if we describe how they began, which we are enabled to do by a lively-witted official scribe, who examined the records of their operations, and has given his impressions:—

"I can't see where they're pitching," said the Navy-that-Floats, referring to the shells of the monitors bursting twelve miles away. "What about spotting for us, old son?" "That will I do," replied the Navy-that-Flies. "And more also. But I shall have to wear khaki, because it's done out here; by everybody, apparently."

"Wear anything you like," replied the Navy-that-

Floats, "as long as you help us to hit those shore-batteries. Only—because you wear khaki (the Royal Naval Air Service does not usually wear khaki) and see life, don't forget you're still the same old Navy, as it was in the beginning, is now, and ever shall be."

The Navy-that-Flies added "Amen," and said that it wouldn't forget. Wherever its squadrons were based they rigged a flagstaff and flew the White Ensign at the peak. They erected wooden huts and painted them Service grey, labelling them "Mess-deck," "Ward-room," "Gun-room," etc., as the case might be. They divided the flights into port and starboard watches, and solemnly asked leave to "go ashore" for recreation. They filled in shell-holes and levelled the ground for aerodromes; they ran up hangars and excavated dug-outs—whither they retired in a strong silent rush (the expression is theirs) when the apprehensive Boche attempted to curtail their activity with bombs.

Not all the good work of the Royal Naval Air Service in its co-operation with the Fleet comes into public notice. It rendered excellent service at the Dardanelles, the seaplane carrier Arc Royal being present. There were many fine achievements, including the bombing of a transport in the Straits by Flight-Commander C. H. K. Edmonds, R.N. Seaplanes may take the place of scouting cruisers, as the eyes of the Fleet, and relieve destroyers of some of their scouting duties. What would Nelson not have given for the help of seaplanes when he was crying out for frigates, and was groping for the French in the Mediterranean in 1798, and came unknowingly within a short distance of them; or, again, when, in 1805, they eluded him off Toulon? Intelligence of

the movements of our enemy is of the utmost importance to officers commanding at sea, and this is the service which the naval airmen have been rendering.

At the beginning of the war the Germans enjoyed an advantage in the possession of some dirigible airships, which sailed in calm airs, unimpeded, over the North Sea, surveyed its full extent, and reported what they saw to the German naval authorities. Their number rapidly increased. Thus the British Fleet was to a certain extent hampered in its operations. Now the situation is changed. The enemy's airships know the peril of coming within range of anti-aircraft guns, and they dread the "hornets" which carry special means of setting them on fire. There are British airships, too, and observation captive balloons, fixed and towed, as well as seaplanes, maintained in adequate numbers. The seaplane played a useful part in the battle of the Jutland Bank, and craft of the class will astonish the enemy in any subsequent naval engagement.

The dropping of bombs by the seaplanes or aeroplanes of the Royal Naval Air Service has become the most prominent of its activities. The machines are of great power, and, acting in numbers, they have been able to drop an enormous weight of bombs on the enemy positions, particularly in the districts behind the coast of West Flanders. Within the space of four or five months 70 tons of explosives were dropped on the German aerodromes in Northern Belgium. Brave naval airmen in July, 1917, from a height of 800 feet, dropped bombs on the *Goeben* and other enemy warships at the Golden Horn, and hit the Turk-

ish War Office also. In this work the young officers—for the service demands youth—have given proof of exceeding keenness. It would be difficult to catalogue the expeditions of the naval airmen on the Belgian coast. They have assisted in most important operations.

How far such work may be continued, to what range carried, or what will be the full effect, we do not know. The Navy-that-Flies will leave nothing undone that is capable of accomplishment. It has operated in association with the work of French flying men on many occasions, at the bombardment of Zeebrugge and elsewhere. It will find a powerful coworker in the new and gallant allies who are bringing all their force to bear from beyond the Atlantic. The United States air service will develop with extraordinary rapidity, and its co-operation will be warmly welcomed by British naval airmen. So abundant is the confidence of Americans, so strong and virile their faith in themselves, that some of them look to the aeroplane to end the war. Rear-Admiral Bradley A. Fiske has demanded an immediate naval attack on the German fleet and submarine bases in the Baltic by a monster fleet of aeroplanes and seaplanes. He believes that the importance of naval aerial operations is not sufficiently realised by the Allies and that Essen may be destroyed by bombardment from the air.

The field of speculation does not fall within the scope of this little book, the object of which is to illustrate the work of the Fleet and its associated services in all the theatres of war. The Royal Naval Air Service is still young, and has undoubtedly a

great future. Already it has proved a valuable auxiliary. It has assisted in the important business of providing complete strategical observations. It has aided the work of the commercial blockade, in making more easy on many occasions the operations of the muchtried examination service. Undoubtedly the transport of the armies and their stores across the Channel and in many seas, which was the subject of the last chapter, would have been conducted with less certainty, and perhaps with less confidence, if it had not been for the active co-operation, as the eyes of the Fleet, of the naval flying men. The long-range gunnery of warships against permanent fortifications, both at the Dardanelles and on the Belgian coast, has gained in accuracy from the observation by the aircraft of the Navy.

This subject might have been pursued further, but enough has been said to show that, among the agencies employed by the British Fleet in the accomplishment of the supreme duties which it exercises for the safety of the country and the support of the Allies, the Royal Naval Air Service holds an important place. It has evoked enthusiasm among its officers, who have maintained in a high degree, in many a battle in the air, the fearlessness, resource, and daring of the Naval Service to which they belong.

CHAPTER IX

OFFICERS AND MEN OF THE NAVY

Sailor, what of the debt we owe you?

Day or night is the peril more?

Who so dull that he fails to know you,
Sleepless guard of our island shore?

Safe the corn to the farmyard taken;
Grain ships safe upon all the seas;
Homes in peace and a faith unshaken—
Sailor, what do we owe for these?

The late Viscount Stuart.

O picture of the war work of the British Navy could be complete without some account of its officers and men. From what has already been said, the nature of the qualities demanded of them will have been realised. In the general direction of the Navy by the Admiralty there have been required calm reflection, profound insight, strategic imagination, sound and swift judgment as to the full use and the yet ill-understood limitations of sea-power, an abundant spring of action, and the unflinching resolution to give effect to the utmost to the striking and controlling force of the naval arm. In the Commander-in-Chief of the Grand Fleet there was needed the high ability to administer and exercise the command, to inspire officers and men of every rank and rating in the Fleet with zeal, efficiency, and devotion, as well as sleepless vigilance in the long waiting

for the enemy, and instant readiness for action at all times. The Commander-in-Chief does not work alone. He has a staff who collaborate in these duties and give effect to his plans; and admirals secondary in command, who have no light task in directing the work and operations of the larger elements of the Fleet. Sir John Jellicoe, who was appointed to the Grand Fleet at the beginning of the war, was a master of the high attainments required for his office, and it was he who created the base of his operations, organised all the agencies of his command, and exercised that command with consummate ability. The instrument he had shaped and handled so capably fell to the charge of Sir David Beatty, a most gallant officer, eminently fitted to use it, whose temperament is the very spirit of action, and yet who forms his plans in the mould of cool reflection. Happily for the British Navy, the fire of action is mingled in its officers with the ice of thought. They know when to strike, and when they strike they strike hard.

Great responsibilities have rested on the captains of His Majesty's ships. They showed in the Jutland battle, in which they were tried by the searching test of decisive action, that they possessed the ability to inspire and discipline their men, and to put forth the maximum of the fighting power of the ships. Officers in detached command away from the Fleet have rendered very great services. The junior officers are beyond praise. By universal testimony, their devotion, courage, and ever-ready professional skill, in every test of emergency and endurance, have never been excelled. The officers of the destroyers are men above

price. The commanders of submarines, who have even carried their enterprise into the Baltic, and risked the perils of mine and gun in the narrow waters of the Dardanelles and the Bosphorus, are officers who have won new laurels for the Fleet.

The men of the lower deck, wherever they serve, give daily proof of the bravery, hardihood, cheerfulness, and long endurance which have always been the qualities of British seamen. Let Sir John Jellicoe speak of them as he knew them:—

Nothing can ever have been finer than the coolness and courage shown in every case where ships have been sunk by mines or torpedoes; discipline has been perfect, and men have gone to their deaths not only most gallantly, but most unselfishly. One heard on all sides of numerous instances of men giving up on these occasions the plank which had supported them to some more feeble comrade, and I feel prouder every day that passes that I command such men. During the period of waiting and watching they are cheerful and contented, in spite of the grey dullness of their lives.

It would not be difficult to single out instances from the records of the war of constructive power in thought, and sound and swift judgment in action, as well as of splendid courage, enterprise, dash, and resolution—call it what you will—in the crisis of battle and in moments of stress, exhibited in a manner rarely exampled in naval warfare. The British Fleet has been rich in the mental endowments of its officers, showing them to possess grasp and insight, and moral force, to dominate hesitation and sustain action in the tremendous emergencies of battle and when confronted

with the most formidable responsibilities. Excitement has never carried them away. Judgment has worked through all their endeavours as, in the long watches and waiting, it has sustained them.

Eulogy is not required. Nothing that has been said exceeds the merits of officers and men. It is right that these things should be understood. The man is more than the machine, and the finest fleet and most complete material equipment are dead and inert without the living power of the officers who command, and the men who man the ships and vessels of every class. It is they who have done and are doing the work of the Navy in the war. They, and not their ships, have given security to the British Isles, have kept the seas and oceans open for the Allies, have safeguarded every interest afloat, and have worked and are working, day and night, to defeat the purposes of the enemy.

We now turn to a consideration which is of paramount importance for a right understanding of the Navy's work in the war. England is the support of all her Continental Allies. If she should suffer or lose her power of supplying them with armies and arms, or should weaken in her offensive, the Allies would collapse. This is a fact of primary importance. The Germans realise it fully. They hesitate at nothing in their efforts to strike at England. They publicly declared that they would reduce her by famine. They struck at her mercantile marine, not merely at ships which were armed and engaged in the naval service in such large numbers, but at the ordinary cargo vessels, including neutral vessels carrying Brit-

ish supplies, and at fishermen pursuing their regular avocations, who, under The Hague Conventions, were, with their boats, tackle, rigging, gear, and cargoes, to be exempt from capture, and still more from destruction. Of the officers and men of these services we must speak also. It became necessary, in the conditions which had arisen, to bring the whole mercantile marine under naval direction and orders, and practically it is embodied with the Navy, and provided for the most part with armaments for defence, and closely in touch with a great protective organisation.

When Mr. Balfour was First Lord of the Admiralty, speaking in the House of Commons on March 7th, 1016, he directed special attention to this aspect of naval work, not merely to the service of ships flying the White Ensign, but to that of transports and of merchant and cargo vessels, and their officers and men, conveying imports and exports, and the supplies required by the Allied armies. "On them," he said, "we depend, not less than on our armed forces, for maintaining the necessary economic basis upon which all war must ultimately be waged." There were, as he said, thousands of officers and men whose ships had been sunk under them by mine and submarine, and yet who had cheerfully signed on again, and were not to be driven from their ancient heritage of the sea. England depends upon her mercantile marine for her national existence. To a great extent, her food and raw materials are in its charge; and it also brings without ceasing hundreds of thousands of tons of munitions of many kinds required by the Allies. When, therefore, we estimate the work of the Navy in the

war, we must give to the merchant branch of the Sea Service the position it deserves, as an absolute and primary necessity to England and her Allies.

The nobility of the work carried on by the officers and men of the merchant service and the fishermen, whether in armed ships, mine trawlers, or cargo vessels, is a dominant note of the war. Their heroism has been conspicuous, and, as was stated by Admiral Sir Henry Jackson, when he was First Sea Lord of the Admiralty, the facility with which they learned to carry out their duties as part of a trained fighting force was extraordinary. "The Allied nations," he said, "owe them a deep debt of gratitude for their response, as well as for their indomitable pluck and endurance." "There is no room in the Navy for anything but the most sincere admiration and respect for the officers and men of the mercantile marine," said Sir John Jellicoe. They had practically become a part of the fighting force, sharing in the work of the Navy in the war, and their courageous conduct and unflinching devotion to duty have gained the testimony of naval officers everywhere, not only in the British service, but in the Allied navies which have come into contact with them. Of the magnificent service of the mine-trawlers we have spoken in a previous chapter.

Let this chapter conclude with an appeal to England and her Allies to remember the great and enduring services of British seamen. They do not often speak of one another. Sometimes, as by a flash, as when Sir John Jellicoe wrote of his men, the truth is revealed. It was that tacitum old officer, Sir John

Jervis, who said of Troubridge that he had "honour and courage as bright as his sword." The torch is handed on from one officer to another. There are many qualities among them. The fire of Drake meets the resolute gravity of Blake; the long reflection of Kempenfelt is the foil to the fierce glow of Nelson. The tradition is continuous. Sir John Jellicoe could find no words to do justice to his officers and men in the day and night actions of the Jutland Battle. The glorious traditions of the past were worthily upheld. Sir David Beatty showed his fine qualities of gallant leadership, high determination, and correct strategic insight. Great qualities were manifested by every rank and rating. Down in the engine-rooms, seeing nothing of the battle, men were working like Titans, and some ships reached speeds which they had never before attained. This was great service for England and her Allies.

There is sometimes a tendency to forget—to lose proportion, also-in censuring seamen for not doing what the power of the sea alone can never achieve. Howe was burned in effigy in London almost at the very time when he was fighting his glorious battle of Quiberon Bay, braving the perils of rocks which were charted and known, and not, be it noted, of submarines and mines which are invisible and unknown. As the sarcastic songster wrote at the time:

> When Hawke did bang Monsieur Conflans, You sent us beef and beer; Now Monsieur's beat, We've naught to eat, Since you have naught to fear.

And so Nelson spoke. "I will only apply," he said, "some very old lines wrote at the end of some former war:

"Our God and sailor we adore
In times of danger—not before!
The danger past, both are alike requited:
God is forgotten, and the sailor slighted!"

Now, the object of this book is to show what are the services of the British Navy to England and to the Allies. Its influence has been visible throughout the world, working everywhere with unexampled success. It operates solely because of the qualities and sacrifices of its officers and men. To them a high tribute must be paid.

CHAPTER X

WHAT THE BRITISH NAVY IS AND WHAT IT FIGHTS FOR

Where shall the watchful sun,
England, my England,
Match the master-work you've done,
England, my own?
When shall he rejoice agen
Such a breed of mighty men
As come forward, one to ten,
To the song on your bugles blown,
England—
Down the years on your bugles blown?

W. E. Henley.

NTAGONISM between England and Germany became the central fact in the international situation many years before the war. There seemed to be a fundamental antithesis between the ideals of the two peoples. The freedom of the Englishman, guaranteed to him by sea-power, appeared effeminate and undisciplined weakness to the German; the freedom of the German, guaranteed to him only by the military strength of his autocratic State, was regarded as feudal dependence by the Englishman. Not to bring about a conflict, but to avert one—or, if the worst came to the worst, to engage in one with success—was the motive of British policy. There was no visible ground for German aggression, but deep-seated antagonism was the element of danger

which successive Premiers and Foreign Ministers had had to take account of in appraising their country's future, and, with the guidance of their colleague at the Admiralty, who based his judgment on that of his naval advisers, they had obtained the means to build up the Fleet, which was to be the country's and Empire's defence.

Armageddon was foreseen, though there was hope against hope that, in the great crisis, the dire struggle might be averted. It was known that Belgium and France would have need of England if the dogs of war were let slip. Many soldiers and writers had pointed out that Belgium would become the inevitable pathway of aggression. German writers had declared it an injury that the Congress of Vienna had not established Germany on the North Sea, and Arndt had expressed the ardent desire of the German heart to reconquer the great western rivers, implying the domination of the seas. There were dangers in these lesser countries. They were full of possibilities. Qui trop embrasse mal étreint. Belgium would cry aloud for English help. As to Italy, it was difficult to believe that she could hold to her compact with the Central Powers. Russia, it was known, would be against them. Thus in all her naval efforts, long before the war, England, while guarding her own interests, was working and building up her naval strength, in conscious knowledge of the duty she might one day have to her friends who have now become her Allies. This is a very important point, and it leads to a brief survey of great sacrifices and unstinted efforts which Englishmen have made in the past.



JOURNALISTS ON BOARD A MONITOR

The Fleet that went into the war was the most powerful, best organised, and best equipped in every essential particular in the world. Yet, for a very long anterior period, Englishmen had remained unconscious of what they owed to the Fleet. They had fought brilliant campaigns in China, Afghanistan, India, Burma, the Crimea, Abyssinia, and clsewhere, in which the Navy was a most essential factor, though it had scarcely appeared in the public eye. It was therefore from a low ebb that the British Navy rose to the high-water mark of the war. It was not until about the year 1882 that the tide began to turn, driven forward by the lively breeze of a very useful agitation, in which the late Mr. W. T. Stead took a prominent part, and which is believed to have been inspired by the present Lord Fisher and the late Mr. Arnold Forster. A great shipbuilding scheme was put in hand in 1889. Ever since that time, under far-seeing First Lords and First Sea Lords of the Admiralty, the task of asserting British naval supremacy has gone forward. Expenditure on the Navy mounted from £31,-000,000 in 1901 to £51,500,000 in 1914, which latter was thought a monstrous figure; but it was not a penny too much for the great interests which had to be safeguarded.

Battleships of increasing power, cruisers of many classes, destroyers, submarines, and auxiliaries were built. Lord Fisher came to the Admiralty as First Sea Lord in 1904, and during the subsequent six years an enormous work was carried on. The battleships culminated in the Dreadnoughts—that class of ships with a main armament of all big guns—the cruisers

in the battle-cruisers, destroyers grew more numerous and of much greater power, submarines were developed in range and sea-keeping qualities. None of these types have stood still. The Dreadnought developed into the Super-Dreadnought, and the latter has developed into the ships of powers before undreamed of, which no one has yet described. The submarine has been changed out of recognition, and no one suspects what these British vessels can and will do when "The Day" really comes.

All these mechanical developments of the Fleet, which are so essential at the present time, grew out of the impetus given in and after the year 1904. But that was not the only thing which placed the country in such a position of advantage at the beginning of the war. The battle-fleet and cruiser squadrons had been reorganised to coincide with the needs of the Empire, owing to the shifting of the stress of naval power from the Atlantic and the Channel to the North Sea. Some squadrons in distant waters were reduced in strength to correspond with the requirements, and non-fighting ships-vessels too weak to fight and too slow to run away-were brought home from distant seas, and their officers and men were made available for modern ships. A system of nucleus crews was adopted for the reserve ships to facilitate mobilisation and to make sure that the ships would be really fit for sea. Before that time the whole Fleet had been pivoted on the Mediterranean, and a British warship was rarely seen in the North Sea. By progressive steps the naval front was changed from the South to the East. On the east coast of the United Kingdom destroyer and submarine flotillas were based on ports prepared for them. A great dock-yard was erected at Rosyth, and all along the coast naval bases were developed, and every preparation was made for the possibility of war. These were developments of great significance, and the immense and growing strength of the British Fleet justified the French in concentrating their battle squadrons in the Mediterranean, and leaving at Brest and in the Channel only a division of cruisers, supported by flotillas.

Fleets of warships are meant to fight when the need for fighting comes; but there was no affront to Germany, no cause for resentment or agitation, in the concentration of the main strength of the British Fleet in such places, and with such bases, that they could carry their power into the North Sea. Force attracts force in strategy as in physics, and the growth of the German High Sea Fleet at Wilhelmshaven, with the great sea canal thence to Kiel on the Baltic, inevitably brought about the British concentration. How magnificently advantageous was the position secured has already been shown. In an earlier chapter it has also been explained that by the strategic position occupied by the Grand Fleet, and the grip held on the entrance to the Channel at Dover, the North Sea became strategically a closed sea—a mare clausum.

This fact, which is a fact of geography as well as of strategic concentration, has made the enemy restive and resentful. We are described as the "tyrants of the seas," and the "freedom of the seas" became a catchword of the Germans. Every ruler who has felt

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the hard pressure of British sea-power, whether his name was Louis, or Napoleon, or Wilhelm, has, perhaps inevitably, taken this line in denouncing us to neutrals and endeavouring to array neutrals against us. In an earlier stage of the present war this was the consistent plea of German statesmen. But when they instructed their sea officers to sink the *Lusitania* and many other ships, and when they threatened with disaster neutral ships which approached the British Isles, they became themselves the tyrants of the sea in a very real sense, and they thus arrayed the United States and other. States against themselves, and brought a new Armada to strengthen the already superior British Fleet.

The war is a fight for freedom. The British Navy is fighting, and glad to have the Allied navies fighting in co-ordination with it, for the liberation of oppressed nations and countries from military domination. Command of the sea implies no restriction of navigation. It exists only in war time. In time of peace the British Navy guaranteed the freedom of the seas, and will guarantee it again when the war is at an end. We cannot do better than quote on this question what that distinguished American writer Admiral Mahan said:—

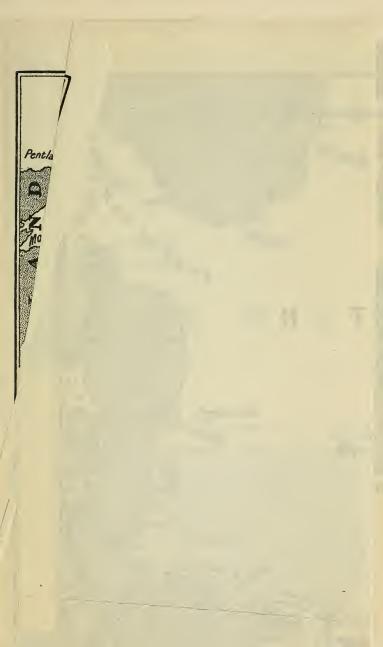
Why do English innate political conceptions of popular representative Government, of the balance of law and liberty, prevail in North America from the Arctic Circle to the Gulf of Mexico, from the Atlantic to the Pacific? Because the command of the sea at the decisive era belonged to Great Britain. In India and Egypt administrative efficiency has taken the place of a welter of tyranny, feudal strug-

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gle, and bloodshed, achieving thereby the comparative welfare of the once harried populations. What underlies this administrative efficiency? The British Navy, assuring in the first place British control and thereafter communication with the home country, whence comes the local power without which administration everywhere is futile. What, at the moment when the Monroe doctrine was proclaimed, insured beyond peradventure the immunity from foreign oppression of the Spanish-American colonies in their struggle for independence? The command of the sea by Great Britain, backed by the feeble Navy but imposing strategic position of the United States, with her swarm of potential commerce-destroyers, which, a decade before, had harassed the trade even of the Mistress of the Seas.

In concluding, therefore, we see how the British Navy, having served Great Britain and the British Empire so efficiently and so well in every interest and possession, fighting constantly against every stealthy device of the enemy, has served the Allies not less well and worthily. And we discover, too, that the Navy is ever friendly to neutral Powers, and that the command of the sea which it exercises in the war is the panoply of freedom and liberty throughout the world.







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