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# PEEPS AT THE ROYAL NAVY

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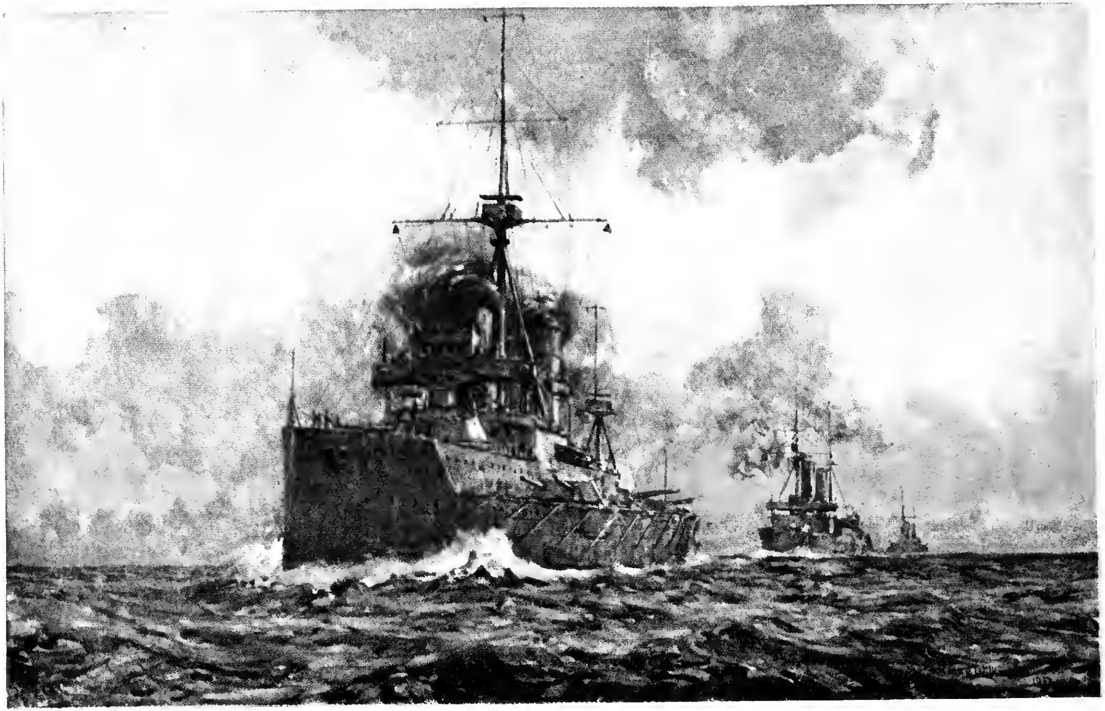

H.M.S. DREADNOUGHT.

# PEEPS AT THE ROYAL NAVY

BY

REV. JAMES BAIKIE, F.R.A.S.

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# CONTENTS

CHAPTER PAGE
I. EARLY DAYS—ALFRED AND THE DANES . . . . 1
II. THE PLANTAGENET NAVY . . . . . . . 5
III. THE TUDOR NAVY . . . . . . . . 12
IV. THE GENTLEMEN-ADVENTURERS AND THE ARMADA . 18
V. BLAKE AND THE DUTCH WARS . . . . . 30
VI. THE FIRST GREAT FRENCH WAR—QUIBERON, THE SAINTS . . . . . . . . . . 37
VII. THE GREAT FRENCH WAR—FIRST PERIOD . . . 46
VIII. THE GREAT FRENCH WAR—THE NILE, COPENHAGEN, TRAFALGAR . . . . . . . . . 54
IX. THE COMING OF STEAM AND STEEL . . . . 63
X. THE NAVY TO-DAY—MAMMOTHS AND MOSQUITOES . 74

# LIST OF ILLUSTRATIONS

## IN COLOUR

H.M.S. "DREADNOUGHT" . . . . . . *frontispiece*

FACING PAGE

SHIP OF THE TIME OF ALFRED THE GREAT . . . 9

THE "HENRI GRACE À DIEU" . . . . . . 16

THE LAST FIGHT OF THE "REVENGE" . . . . . 33

BATTLE OF QUIBERON BAY . . . . . . . 40

THE "VICTORY" GOING INTO ACTION AT TRAFALGAR . 49

OUR FIRST IRONCLAD, H.M.S. "WARRIOR" . . . 56

AN EARLY TURRET SHIP, H.M.S. "THUNDERER" . . 65

A DESTROYER AT SEA . . . . . . . . 72

SUBMARINE AND AEROPLANE . . . . . . . 81

A HYDRO-AEROPLANE . . . . . . . . 88

A SUPER-DREADNOUGHT: H.M.S. "KING GEORGE V." . *on the cover*

# THE ROYAL NAVY

## CHAPTER I

### EARLY DAYS—ALFRED AND THE DANES

"It is upon the Navy that, under the good providence of God, the wealth, prosperity, and the peace of these Islands and of the Empire do mainly depend." So runs a sentence in the "Articles of War" carried on board every warship of the British Fleet. And the purpose of this little book is to try to show you how true that sentence has been and is, and how, bit by bit, through many hundreds of years, the rulers and the people of these islands have been coming more and more to understand its truth, and to see that at all costs our Navy must be kept up to such strength as shall make it impossible for any enemy to attack us with any hope of success.

Our country has been invaded and conquered by foreign enemies several times during its long history. Never could these invasions have succeeded had we at the time possessed a fleet sufficiently strong to meet the invaders on the water. But to-day our safety more than ever depends upon a strong fleet. For if we were at war with another great nation, and our fleet was not powerful enough to meet and beat decisively that of our enemy, there would be no need of an invading army to force us into submission. By far the greater part of the food on which our people live comes from beyond the seas, and if our enemy's ships could only hinder our supplies from arriving for a few weeks, we should be forced to yield from sheer starvation, just as surely as though a great army had invaded our shores, beaten our soldiers, and occupied our capital. And so every boy and girl in this land ought to have an interest in the Navy, in the wonderful ships and the brave and skilful men who guard our shores and the ocean highways by which our food is borne to us, and in the long story of courage and skill which tells how we slowly learned that our land must rule the waves as the very condition of her life. Other nations *may* have strong fleets ; we *must* have one—our very life depends upon it.

Yet it was only after many hundreds of years, and only by painful lessons repeated again and again, that our forefathers learned that an island kingdom's only safety lay in being supreme upon the sea. When Julius Cæsar came with his legions to invade our shores, he found no British fleet to oppose his landing, though our neighbours, the Veneti, on the other side of the Channel, had a navy which gave him trouble enough. Our forefathers fought on land against him with desperate bravery, but they had no weapon with which to attack him in the only place where attack had any chance of success, and their undisciplined courage was of no avail against the steady discipline and skill in arms of the Roman legionaries. And so Britain had to endure her fate, and to become for many a long day part of a Roman province.

Later, when the Romans had gone, the same thing repeated itself again and again all round our coasts. The wild, fierce Northmen swept down in their long ships, and killed and burned and harried, until the very sight of a sail on the horizon was a terror to the poor folks of the sea-board counties ; and we were helpless to hinder them, because our rulers had not yet learned that the proper place to meet an invader from the sea is on the sea. But about 900 years after Julius Cæsar's invasion there was born a man who, first of all our rulers, began to understand what was the true way to defend an island kingdom.

You have all heard of King Alfred and his great battles and adventures against the Danes. But the greatest thing that King Alfred did was not any of those daring deeds that you like to read about ; it was to realize that the best way to keep the Danes from overrunning the country was not to fight them after they had landed, but to meet them at sea and fight them there. So he began to build a fleet, and one of the old historians who writes about him says that he made his ships "full twice as long" as the ships of his enemies. It is not quite certain if this was so, and if Alfred had really learned the secret of the power of the big battleship. Neither did the great King ever gain a great victory over the fleets of the Danes ; his sea battles with them were only small affairs, and not always quite successful. But he at least took the first steps in the right direction, and taught his fellow-countrymen that they must not wait for the enemy to come to them, but must meet him on the way ; and for that lesson, if for nothing else, King Alfred deserves to be remembered and to be called "the Great."

The ships in which our enemies of those days came swooping down upon our coasts, and in which King Alfred met them, were, of course, very different from the huge steel monsters which carry the White Ensign to-day. They were just long, open boats bearing a single mast with one great square sail, often gaily painted or embroidered, and they carried perhaps fifty or sixty men apiece to row and fight. When the wind was fair the great sail was hoisted, and the rowers had a rest; when it was calm, or when the wind was contrary, the great sail was lowered, the heavy oars were got out, and the straining oarsmen drove the "long serpent" by sheer strength of muscle through the water. Along either side of the boat the rowers' shields were fastened, while their spears and swords, battle-axes, bows and arrows, were stored away in lockers under the seats, ready to be snatched and used whenever an enemy's ship appeared.

You would not think much of these warships if you were to see them now; yet in these open boats the Norsemen crossed the stormy North Sea, voyaged to Iceland, and even journeyed right across the Atlantic to America. There must have been bold and skilful sailors in those days, men whose names have long been forgotten, but who were in very truth the sea-kings ot the old world. In some of the museums of Norway there may still be seen some of these ancient ships, wonderfully preserved, and looking on them, we can understand something of the bravery and skill of the men who manned and fought them.

Our forefathers were slow to learn the lesson which Alfred had tried to teach them. No fleet of sufficient power was kept up for any length of time, and the country had to pay the price of carelessness in raid after raid upon its defenceless shores. In 1013 Sweyn of Denmark made a great invasion, and four years later his son Canute became King of England, and the raids ceased for a while, because they had accomplished their object.

Then fifty years later came another great object-lesson on the helplessness of an island kingdom which has no fleet to defend it. William the Norman mustered a great army to invade England. His knights and men-at-arms were packed into 696 little ships, which must simply have been crowded with men. Never was there a finer chance for a defending navy. Had Harold possessed anything even approaching a decent fleet, there would have been no Battle of Hastings; the question of whether Norman or Saxon was to rule England would have been settled in the Channel, and William and his great army would have perished without ever setting foot upon our shores. But there was no fleet to attack the Norman's crowded transports, the invading army landed unopposed, and a single battle cost Harold his crown and life, and England its freedom.

Cæsar, the Northmen, Canute, Norman William—these are the first sentences of the story which tells our need of a supreme navy. So far, only one man had been wise enough to read the lesson.

## CHAPTER II

### THE PLANTAGENET NAVY

NOT for many generations after the Conquest did Britain come to understand that her future and her real strength were to lie on the sea. Everybody in those days believed that all real and serious fighting was to be done on the land, and that ships were only useful to get soldiers moved from one place to another. So, though the Cinque Ports, or Five Ports—five seaport towns on the south coast of England—were entrusted, twelve years after the Conquest, with the duty of acting as a kind of sea police for the English Channel, there was no such thing as a real national fleet.

Ships were gradually growing bigger and more powerful, and were no longer the open boats of the Norse times. The *White Ship*, in which the son of King Henry I. was drowned on his passage from France, had 300 people on board her when she was wrecked. But, bigger or smaller, they were all owned either by private merchants or by towns, not by the nation, and were only hired in time of need for warlike service.

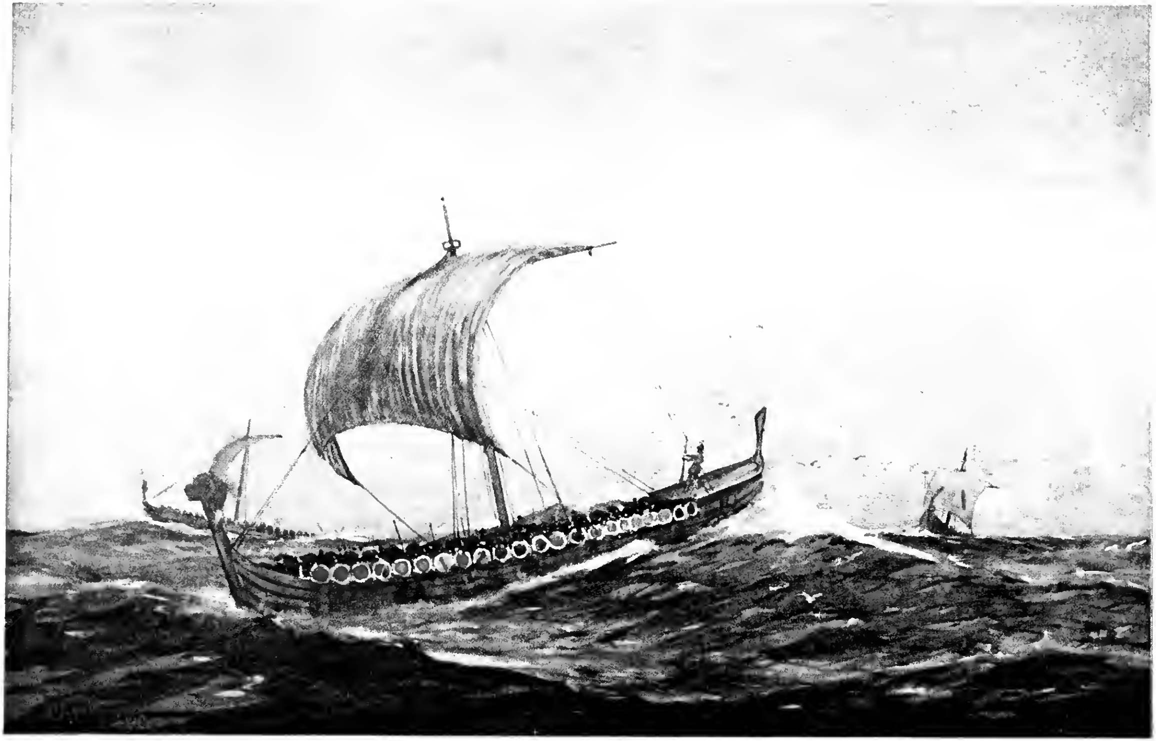
When Richard I. sailed with his army on his Crusade, he ordered the various towns in his dominions to supply him with ships, and so got together a big fleet of more than 200 vessels, of which, however, the greater part came from his possessions in France. With this fleet he set sail for Palestine on the first great overseas voyage ever attempted by an English fleet ; and on his way he fought a curious naval battle, which shows us how far behind our forefathers then were in shipbuilding compared with some other nations that we never think of as sea-going nations at all. Between Cyprus and Acre he encountered a great Saracen ship—a regular Dreadnought of those days—so big that she filled the English sailors with amazement. She had three masts, was said to have 1,500 men on board her, and was armed with Greek fire, a fiercely burning composition which could not be quenched by water. The whole English fleet gathered round her and attacked her ; but the boarders were beaten back again and again from her lofty sides, and scorched by her Greek fire. To encourage his men, King Richard promised them that, unless they succeeded in capturing the Saracen ship, they would be crucified or "put to extreme torture." Again and again the attack was made, only to be repulsed ; but at last the English seamen managed to foul the Saracen's rudder by fastening ropes to it, so that the great ship could no longer be steered. Even then the boarders could not carry her, and in the end King Richard had to form his galleys in line, and make them ram their stubborn opponent, which went down with all her crew, unconquered to the last. It was not a very glorious victory ; but at least it helped to show our men how much they had yet to learn.

King John, who succeeded his brother Richard, was a man who, whatever his other faults, seems to have had some idea of England's need of a strong navy, and to have attempted to secure some command of the Channel ; but his reign was too disturbed and unfortunate for his efforts to come to much. Shortly after his death, however, a great naval battle took place off Sandwich between the English and the French, in which the English Admiral, Hubert de Burgh, gained the victory by a new and clever device. He ordered all his ships to take on board a large quantity of quicklime. Then, sailing out to meet the enemy, he manœuvred till he gained a position from which he could come down on the French fleet before the wind. Sweeping down with the breeze behind them, the

English sailors threw the quicklime into the air, and it was blown into the faces of the Frenchmen, who, blinded and tortured, could not see what they were doing, and were unable to defend themselves properly, and were at last totally defeated with great slaughter.

In those days fighting at sea was constant. Nations might be at peace on land, but whenever their ships met at sea they fought all the same, and the fighting was most ferocious, no quarter being given to a conquered enemy. Every sailor had to carry weapons, and be prepared to defend his ship, or he ran a very small chance of ever getting to harbour ; and for year after year the sea-coast towns of England and France were continually being harried and burned. On the whole, perhaps, the Frenchmen had the best of it, and the towns on the south coast of England suffered miserably ; but when Edward III. began his great war with France—the war in which Creçy and Poictiers were fought, and in which the Black Prince, Chandos, and Audley won such fame as soldiers—he saw that he must gain command of the Channel, so as to be able to move his troops as need arose.

In the summer of 1340, he gathered a great fleet of 250 ships, and on June 23 he arrived off Blankenberghe on the Flemish coast. The French fleet was lying in the port of Sluys, about six or seven miles away. Edward landed three of his knights with their horses, and they rode over the sand-dunes until they could see the enemy's armada and bring back a report of its strength and position. Early next morning Edward got to sea again, and just about flood-tide came sweeping down with wind and tide upon the Frenchmen. The great French fleet awaited his coming



SHIP OF THE TIME OF ALFRED THE GREAT.

at anchor, just as Admiral Brueys awaited Nelson at the Battle of the Nile. They had some Genoese ships with them, and the wary Genoese Admiral advised them to put to sea, and meet the enemy in the open ; but they preferred to lie at anchor, and allow the English to attack. So Edward came rushing down upon them, and soon each ship had grappled an enemy, and the crews were fighting fiercely hand to hand.

The Frenchmen had carried great stores of heavy stones and iron bars up to their fighting-tops, and these they hurled down upon the English ships and boarders, sometimes sinking a ship or doing great havoc among her crew, but sometimes killing as many of their own men as of the enemy, since the fighters were so mingled together. On the high poops and forecastles of the English ships stood the archers, shooting their deadly arrows as fast as they could draw their bows ; while the King and his knights, in full armour, raged among the French crews, and fought their way across the decks. It was not till the fighting had lasted for twelve hours that the battle was decided, but at last victory went to the English. The whole French fleet was either destroyed or captured, and from 25,000 to 30,000 Frenchmen were killed, while the English lost 4,000.

Ten years later Edward won another great victory on the sea. The Spaniards were now rapidly becoming the great traders and seamen of Europe, and their big carracks or galleons were far finer ships than any that the northern nations had yet learned to build. Every year their fleet came up-Channel to the Flemish ports, and went back laden with cargoes of linen and other goods. But while they traded, they were quite ready to fight as well. They went full armed, with strong crews of fighting men, and it is supposed that some of them even carried guns. As they went up or down the Channel, they swept it clear of the unfortunate English ships which they met, mercilessly murdering their crews. In fact, they were growing to be an unbearable nuisance, and it was time that something should be done to put a stop to their insolence.

In 1350 the usual Spanish fleet came up the Channel, sinking, burning, and destroying, and put into the Flemish port of Sluys. This time Edward was resolved that they should not go back unfought. He gathered a fleet at Winchelsea, and as soon as he heard that the Spanish fleet had put to sea he sailed in search of it, accompanied by his son, the Black Prince, and 400 knights. His royal standard flew from the masthead of the cog *Thomas*, and as they sailed to meet the Spaniards he and his knights whiled away the time with music and dancing.

Suddenly the lookout in the fighting-top hailed the deck. "Ho! I spy a ship, and it appears to me to be a Spaniard." Everybody sprang at once to attention, and in a moment another cry came from the top: "Yes, I see two, three, four; so many that, God help me, I cannot count them!" So out of the fog on the afternoon of August 28 the forty great Spanish carracks came boldly on, glittering with scarlet and gold, their lofty sides towering above the English ships, their white under-bodies gleaming as they pitched and rolled across the long Channel swell.

The King's ship bore straight down upon the nearest Spaniard, and the two ships met with a tremendous crash, which started the seams of the *Thomas*, and made her leak seriously. For a time the fight went on fiercely, the Spaniards, owing to the height of their vessel, having a great advantage in casting stones and iron bars upon the deck of the English ship. At last the two vessels broke from their deadly grapple, and the *Thomas*, taking in water at every seam, drifted alongside another carrack. Here the battle began again with renewed fury, and at last the King's men succeeded in boarding and carrying the great Spaniard, just as the *Thomas* sank at her side.

All around similar scenes were happening. The Black Prince, with the help of the Duke of Gloucester, captured the ship to which he was opposed, his own vessel sinking almost under his feet as he leaped on board the enemy. Finally, after a most stubbornly contested fight, the Spaniards were thoroughly beaten. Fourteen of their ships were captured, the entire crews, according to the savage sea-custom of the time, being either slaughtered on deck or thrown overboard ; and the remainder of the fleet was glad to seek safety in flight. King Edward, hailed by his triumphant crews as "King of the Seas," returned with great glory to Rye, and sent the Black Prince to bear the good news to Queen Philippa, who had been anxiously waiting for the report of her husband's safety.

Such was the great sea-fight called in those days "Les Espagnols sur Mer," or "The Spaniards on the Seas." After this victory, however, Edward paid less and less attention to his fleet, and by the end of his reign things had got into so bad a condition that the sea-going trade of England was practically ruined. The ships that should have been trading to foreign ports were drawn up upon the shore, or left to rot at their anchors, and many of the Channel ports had their entrances closed with a great chain, as the only way to prevent the French raiders from making their way in. Nor were things much better in the reigns of the Kings who followed Edward, though in the time of Henry V. there was a spurt for a little while, and the great invasion of France, which resulted in the Battle of Agincourt, was the occasion for the assembling of a fleet of 1,400 vessels to transport Henry's army. It was not till the end of the fifteenth and beginning of the sixteenth centuries that, under the Tudors, the Navy began to recover and to take its proper place as the chief defence of the country in time of war.

## CHAPTER III

### THE TUDOR NAVY

The father and founder of the British Navy as we know it to-day was Henry VII., the first King of the great house of Tudor. It was not that the Navy was ever called upon in his day for any great warlike feats such as the Battle of Sluys or Les Espagnols sur Mer, for Henry was a cautious, prudent King, who thought more of making his throne secure at home than of making war upon his neighbours. But he was also the first English King to realize that, for the Navy to become what it ought to be to the country, it was necessary not merely to gather together a great number of ships on some particular occasion, and then allow them to be scattered again to trade or to decay as soon as the immediate need for them was over, but to have a regular royal fleet—a certain number, not perhaps a very great number, of good strong warships, which belonged to the King and his Government, which were specially designed and built for war, and could always be at command when they were needed. So Henry's plan was to build a few ships of good size and strength, and to keep them under his own control, just as the ships of the Navy are kept at the present time.

The two chief ships with which he began his fleet were called the *Regent* and the *Sovereign*, and when they were launched, at the end of the fifteenth century, they made just as great a sensation as the *Dreadnought* did in our own time. No such ships had ever been built in England, though nowadays they would seem very insignificant. The *Regent* was of about 600 tons burden, was rigged with four masts, and carried no fewer than 225 cannon—serpentines, as they were called—though these were very small pieces and meant more to cripple an enemy's spars and to sweep his deck than to pierce his hull. The *Sovereign* was somewhat smaller, and the fact that she carried 200 bows and 800 sheaves of arrows, and only a small quantity of powder and ball, shows that the old ways of fighting at sea were still supreme, and that seamen had scarcely yet learned the power of the big gun. The *Regent* came to a terrible end in 1512, at the beginning of the reign of Henry VIII. When the English were attacking the French fleet off Brest she grappled a great French warship, the *Cordelière*, and while the two were fiercely fighting both took fire, and were totally destroyed, with terrible loss of life. Aghast at this great disaster, both fleets ceased their struggle and drew off from one another.

Henry VII., by his wise policy, left to his son, Henry VIII., the small but important beginnings of a real Royal Navy, and Henry VIII., though he may not have been a very good King in other respects, showed a great and wise interest in the fleet, and did his very utmost to encourage it. The great vessel of his reign was the *Henri Grace à Dieu*, one of the most famous ships ever built. She was of no less than 1,500 tons—a very big ship indeed for her time—and she had two decks and four masts, and carried 184 guns. We should think her a very queer craft now, with her stumpy hull, her towering stern-castle and forecastle, and her long projecting beak ; but she seemed a very wonderful thing to the sailors of those days, and, indeed, must have been a very picturesque and interesting sight, with her many-coloured streamers, her gorgeous sails, and her gaily-painted sides with the brass guns looking out from the little round portholes.

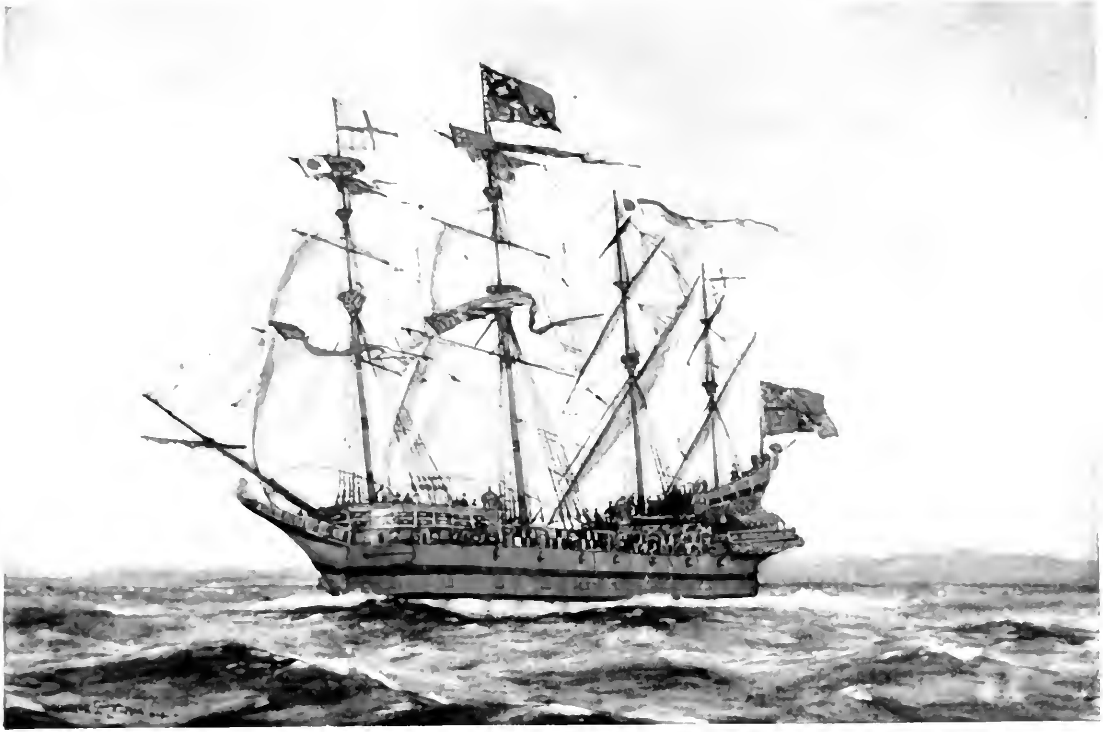
In those days they were strong on bright painting and flags. An old writer tells us how the ships of the time were to be painted and decorated. All the ornamentation, from the water-line to the top of the castles, was to be painted with the colours and devices of the Admiral in command, and the fore- and stern-castles were to be as splendidly decorated as possible. Round the upper part of the castles were shields emblazoned with the Admiral's arms and devices. Above the forecastle, and at its corners, were to be pennons with the Admiral's colours and arms. Amidships floated two square banners, and on the stern-castle a great square banner larger than any of the others, while from the maintop flew a broad swallow-tailed pennon long enough to reach the water. "You may also paint your sails with such devices and colours as you choose, or with the representation of a saint if you prefer it."

A fleet of such ships coming rolling across the waves with their gaudy sails and long pennons, their tall sides gleaming with all the colours of the rainbow, and the blue water breaking into foam under their bluff bows, while the sun flashed upon the bright armour of the knights and soldiers, must have been a very beautiful sight, far prettier to look at than a squadron of our modern battleships, heavy and grey and grim, however impressive they may be in their sombre strength. Plate III. gives you some idea of how the *Henri Grace à Dieu* may have looked in the days when she was the crack ship of the Royal Navy.

Another famous ship of the time was the *Mary Rose.* She was not nearly so big as the *Henri Grace à Dieu,* being only of 500 tons burden; but she was considered to be, in some respects, the finest ship of the fleet. Admiral Howard, who commanded her on her first voyage, writes with great pride to King Henry about the new vessel. "She is," he says, "the flower of all ships that ever sailed. Sir, she is the noblest ship of sayle at this hour, that I trow, be in Christendom." She was, in fact, by far the fastest ship in the fleet. But the glory of the *Mary Rose* was not to last for long. On July 20, 1545, she, with the rest of the English fleet, put to sea to fight the French fleet, which was lying off the Isle of Wight. Her portholes, which were only 16 inches above the water, were open, so that she might be ready to fire her broadside. As the breeze freshened she heeled over more and more, the water poured in at the open ports, the guns got adrift, and in a few minutes the gallant vessel went down like a stone, carrying with her her whole crew. Not more than a mile away from where she lies at the bottom of the sea at Spithead, a similar disaster happened more than 200 years later, when a far greater ship, the *Royal George*, sank at her anchors, carrying with her Admiral Kempenfelt and 900 men.

The great invention of the time was that of a Frenchman named Descharges, who was the first to make portholes for the big guns to fire through. Hitherto they had been placed on the upper deck, and were fired over the bulwarks; and of course no very heavy guns could be carried in such a position, or the ship would have capsized. But when Descharges' portholes came into use it became possible to have a regular battery of heavy guns on the lower deck, nearer to the water; and though in the case of the *Mary Rose* the portholes proved fatal, yet it was this invention which changed the whole character of sea warfare, and gave the supremacy to the big gun, instead of to the bow and pike and sword.

For a while the portholes were only round holes in the ship's side, just big enough to let the muzzles of the guns through. So you can understand that it was not possible to point the guns either ahead or astern, and they were only of use when an enemy's ship came right opposite them. But very soon the English, at all events, began to make the porthole square and wider, so that the gun could be pointed from it in a slanting direction, either ahead or astern, as well as straight out. It was this improvement that greatly helped the English fleet in its great fight with the Spanish Armada; for the big Spanish ships were mainly provided only with the small old-fashioned portholes, and so their guns had not the same wide sweep of fire as the English guns had.



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Perhaps you would like to hear how the sailors of King Henry's Navy were fed. I dare say we wouldn't think very much of their provisions nowadays ; but if they had not a great deal of variety, at least they had plenty to eat. On Sundays, Tuesdays, and Thursdays, each man got three-quarters of a pound of beef, and half a pound of bacon ; on Mondays, Wednesdays, and Saturdays, four herrings and two pounds of cheese ; and on Fridays every four men got half a cod, ten herrings, one pound of butter, and one pound of cheese. Besides this, each man had a daily allowance of one pound of bread or biscuit, and either beer, or wine and water. On the whole there was plenty, but the quality was not always good. Sometimes the beer was sour and made the whole crew ill, and there were frequent complaints on that score. Each sailor got, as pay, five shillings a month ; only, of course, you must remember that five shillings would stand for a good deal more than it does now, so that the pay was not nearly so bad as it looks.

After the death of Henry VIII. the Navy did not get so much attention for awhile, though in the reign of Edward VI. an improvement was made in the building of ships by the sheathing of the underwater timbers with thin sheets of lead to preserve the wood, and to prevent marine growths from gathering on the ship's hulls and checking their speed. During the unfortunate reign of Mary the fleet was greatly neglected. The ships were allowed to get into bad condition, and some of them were then sold for what they would fetch. One ship, for instance, *The Great Mistress of England*, of 450 tons, built only in 1545, was sold for £35. But in 1557 a decree was passed which marked the rise of a class of seamen who were to multiply exceedingly during the next half-century, and whose skill and daring largely helped to give to England the rule of the seas.

Pirates abounded in the Narrow Seas, and the Royal Navy was quite unequal to the task of putting down these pests. So in 1557 it was proclaimed that any Englishman might fit out a squadron of ships against the enemies of the Crown, might attack them wherever he found them, and keep possession of any ships and goods which he captured. So privateering became a lawful occupation, and many of the daring young men of the great English families took to it as naturally as a duck takes to water. It was these "gentlemen adventurers," as they were called, who largely formed the force which swept the Spaniards from the seas and made the English name dreaded in all the oceans of the world. But their story belongs more properly to the next chapter, when we come to tell how Spaniard and Englishman fought for the lordship of the new lands and oceans which had been discovered.

## CHAPTER IV

### THE GENTLEMEN ADVENTURERS AND THE ARMADA

It was in the end of the fifteenth century that the discovery of America opened the door of the rich lands of the New World to the nations of Europe, and set on foot, among other things, the rivalry between England and Spain which ended in the defeat of the Invincible Armada. About 1474, Christopher Columbus was seized with the great idea of reaching India by sailing westward. He applied for money to carry out his scheme to Genoa, his native state, to John II. of

Portugal, and to Henry VII. of England ; but in vain. At last he got the necessary funds from Ferdinand and Isabella of Spain, and so the glory of discovering America fell to a Spanish expedition. The success of Columbus aroused great interest in England, and Henry VII. commissioned the Venetian sailors, John and Sebastian Cabot, to search for unknown lands. The first fruit of their voyages was the discovery of Cape Breton Island and Nova Scotia.

Later Sir Hugh Willoughby and Richard Challoner endeavoured to find a north-east passage to China. Willoughby and his crew perished in the ice ; but Challoner made his way to the White Sea, and thence to Moscow, where he established our trade with Russia.

These discoveries, and the glowing reports of the wonderful wealth of the Western lands, created in nations like Spain and England a great craving for adventure and exploration. Spain was, of course, first in the field, and she had obtained from the Pope a decree giving her exclusive right in all lands and seas westward of a line drawn north and south, 110 leagues west of the Azores. But it was one thing to make such a decree, and another to enforce it, and the gentlemen adventurers of England laughed at the Pope's line. What Spain could grasp and hold by the strong hand she might have ; no more. And so the daring sailors of the South and West Coasts began to push their little ships westward to the Spanish Main, and did not hesitate to do all the fighting necessary to clear from their path the Spaniards who tried to hinder them.

Hawkins made voyage after voyage on a not very savoury job—the slave-trade—selling negroes from the West Coast of Africa to the settlers in Spanish America, until his little fleet was ruined, partly by treachery, at San Juan de Ulloa. Francis Drake, his kinsman, sailed round the world in the *Pelican* or the *Golden Hind*, as she was sometimes called; and many other less famous captains followed in their wake. These voyages were nominally trading ventures; but whenever there was fighting to be done, the gentlemen adventurers were not slow to do it. And there was plenty of fighting, for the Spaniards were thoroughly alarmed at the appearance of these heretic dogs of Englishmen in their jealously guarded treasure-house of the West, and when they were strong enough to assert their claims, they showed no mercy to the English.

So for the greater part of the reign of Queen Elizabeth a curious state of affairs prevailed between Spain and England. In name, and on land, the two nations were at peace; actually, on the sea at least, they fought one another furiously wherever and whenever they met. Sometimes you will hear it said that Drake and Hawkins and the other great sailors of England at this time were really nothing but pirates. Certainly they attacked and took towns and ships belonging to a nation with whom their country was nominally at peace; but everybody both in Spain and England knew that the peace was only in name, that Spain meant war whenever it was convenient for her, and meant to crush England as soon as she felt herself ready. So the English took their own way of showing Spain that England would not be so easily crushed, and that no nation could attempt to bar other nations out of one-half of the world by simply drawing a line on a map, and saying: "You must come no farther than that." If the Englishmen of that time had waited, according to the strict letter of the law, till Spain was ready to declare war, they would simply have been devoured, and would have deserved it, as a set of fools.

It was in 1562 that Hawkins made his first voyage to the West Indies with a cargo of slaves. That voyage, and the second one, though both contrary to the Spanish laws, were very successful, and brought in a handsome profit to the adventurers. But they seriously alarmed King Philip of Spain, and he gave instructions to his commanders to attack Hawkins on his next voyage. Hawkins was forced to put in to the harbour of San Juan de Ulloa, with his six ships for shelter. On the very day after he arrived, a Spanish fleet of thirteen ships appeared off the port. Hawkins, suspecting mischief, refused to allow them to enter the harbour unless upon an agreement that no harm should be done to him and his fleet. The Spaniards consented to the agreement, and were allowed to come in; but before long, in spite of their bargain, they made a treacherous attack upon the English, and only two ships of Hawkins' fleet, the *Minion* and the *Judith*, escaped. The others were captured, and their crews were either killed or miserably ill-treated in Spanish prisons and in the Inquisition.

The captain of the *Judith* was Francis Drake, and when he got home he resolved to revenge himself upon the Spaniards for their treachery, and for the loss which he had suffered. His first expedition was to Nombre de Dios and Panama. He was beaten off at Nombre de Dios, but he captured the gold-train at Panama, and the money so gained enabled him to fit out another small fleet of five vessels, with which he sailed from Plymouth in November, 1577, and returned in

November, 1580, having sailed right round the world. How big do you think the ships were in which this great voyage was made? The largest of them, the *Pelican* or *Golden Hind*, was of 120 tons; the next, the *Elizabeth*, was of 80. There were two ships, one of 50, and another, the *Marigold*, of 30 tons, and last of all a little pinnace of 12 tons. In such little cockle-shells as these the sailors of Queen Elizabeth's time ventured to face all the unknown dangers of a voyage of three years right round the world. Little wonder that with such training they became unmatched in skill and daring.

From his famous voyage Drake brought back a considerable amount of Spanish gold taken from the different ships he had captured. The Spaniards were very indignant at his attacks upon their preserve of one-half of the world, and they were steadily preparing for the great expedition which was to avenge the insults that the gentlemen adventurers had put upon Spain. Things were brought to a head by King Philip's treachery in 1585. The Spanish harvest had failed that year, and Philip invited the English corn-ships to the Spanish ports to make up for the want of corn in his own land. No sooner were the ships anchored in Spanish ports than they were all seized, with the exception of the *Primrose*, whose crew threw some of the Spanish officers overboard, and forced their way out to sea, carrying the rest of the Spaniards with them as prisoners.

Of course, there was great anger in England over this trick, and Drake was put in command of a small fleet, with instructions to go down the Spanish coast, and, if possible, secure the release of the crews of the corn-ships. He cleared from Plymouth in September, 1585, with a fleet of twenty ships, called at Bayonne and Vigo, and then sailed for the West Indies. In Spanish America he captured and held to ransom the towns of San Domingo and Cartagena, and returned home in triumph in July, 1586.

This insult to Spain naturally made Philip more determined than ever on the conquest of England, and his preparations became so threatening that in 1587 Drake was put in command of another fleet of thirty ships, including some vessels of the Royal Navy, and was ordered to go down the Spanish coast and look into these alarming preparations which Philip was making. Queen Elizabeth did not want war, and Drake's second-in-command was sent by her expressly to see that the great sailor did not push things too far. In fact, she was so unwilling to have strife with Spain that she sent a special messenger to Plymouth recalling her orders, and forbidding the fleet to sail. But Drake, who half expected such a thing, was too quick. He had everything ready, and immediately the first order came his fleet put to sea, and was almost out of sight of land before the second messenger galloped into Plymouth.

Drake arrived at Cadiz on April 19, and found the port humming with preparations for the great invasion of England. There he remained for two days, burning and sinking thirty-three Spanish vessels, and destroying or capturing great quantities of provisions. Having thus "singed the King of Spain's beard," he sailed for Lisbon, where a famous Spanish sailor, the Marquess of Santa Cruz, was in command of a great fleet that was gathering for the invasion. He hung about the mouth of the Tagus, challenging Santa Cruz to come out and fight; but the Marquess did not budge, not because he was afraid, for there was no braver man living, but because he had not enough men to man his ships. Finding that he could neither persuade nor insult the Spaniards into fighting, Drake left Lisbon, and swept the Spanish coast, sinking galleys, destroying and capturing stores of all sorts, and doing so much damage to the Spanish preparations as to make it sure that there would be no invasion that year.

Then he set sail for the Azores, having heard of the approach of a great galleon from the East Indies. Near the island of St. Michael his fleet spied the huge *San Felipe*, lumbering home from her long voyage. She was quickly captured, and Drake and his fleet returned with her in triumph to Plymouth. His arrival made a great sensation. "The taking of this Carak," says an old writer, "wrought two extraordinary effects in England: first, it taught others that Caraks were no such bugs but that they might be taken. . . . and, secondly, in acquainting the English nation more generally with the particularities of the exceeding riches and wealth of the East Indies." For the *San Felipe's* cargo proved to be worth more than £114,000, or, perhaps, rather more than £1,000,000 at present-day values; while she had on board papers which were even more valuable than her cargo, because they disclosed all the secrets of the East India trade, which the Spaniards and Portuguese had jealously guarded for themselves.

With great labour and trouble the Spaniards succeeded in repairing the damage which Drake had done them, and finally, on May 30, 1588, the Armada sailed from Lisbon, with 130 ships, great and small. The great carracks and galleons were bigger than any of the English ships, though not nearly so much bigger as they looked, for the Spaniards kept to the old-fashioned style of building. Their ships were round-bodied and high out of the water, with towering castles at bow and stern ; while the English ships were longer and lower, faster sailers, and much handier to work. Besides, the Spaniards did not yet understand, like the English, the power of the big gun. Even their biggest ships had comparatively few and light guns, while the English ships were much more heavily armed. In fact, the Spanish idea was to make a sea fight really like a land battle—to grapple their enemy's vessels, and to decide the fight by hand-to-hand combat ; and this the English, by their better sailing, never allowed them to do. Besides the great galleons, there were galleasses, almost as big, and using both sails and oars, and galleys which relied almost entirely on their oars, and proved very useless in the stormy Channel waters.

Against this great Armada the English had prepared a fleet which altogether may have mustered a few ships more in number, but was mainly made up of smaller vessels. But when the Armada was sighted, on July 20, 1588, this fleet was not all gathered together. Fifty-one ships were with Drake and Howard, eleven of them Queen's ships, forty of them private adventurers' or towns' ships ; and it was with these fifty-one that the first of the Channel battles began. Really, it was scarcely a battle. The English ships proved so much handier than their opponents that they were able to choose their position and their distance almost as they liked. They hung upon the rear of the Spanish fleet, smashing their heavy shot through the crowded vessels, cutting off stragglers, and doing a vast amount of damage, while the Spaniards could scarcely touch them in return.

The Invincible Armada went slowly up the Channel, with Drake and Howard shepherding it all the way, the English fleet steadily growing, as ship after ship came out from the Channel ports to join in the struggle. It was more like a great flock of sheep driven by fierce hard-biting dogs than a mighty war-fleet destined to conquer a kingdom. Some of the Spanish captains would fain have stopped at the Isle of Wight, captured it, and made it their base ; but the Admiral, Medina Sidonia, was anxious to hurry on and get Prince Alexander of Parma and his veteran troops on board from Flanders, so that he could invade England ; and besides, it was almost impossible to stop with the English ships worrying his rear. So the great Armada drove on to Calais, the Spaniards becoming more and more aware of how helpless they were in face of the better sailing and better gunnery of their enemies.

At last Medina Sidonia anchored in Calais Roads, and sent word to Parma to have his troops prepared to embark. But Parma was not ready to move, and could not get out if he had been ready ; for the Dutch fleet was blockading him and his army at the mouth of the Texel. Then, while the Armada was impatiently waiting, the English decided to give the Spaniards a hint to move on. Taking some worthless vessels, they filled them with barrels of pitch, tar, and powder, set fire to them, and sent them drifting down upon the Spanish fleet. In wild confusion the Spaniards cut their cables, and drove out to sea through the darkness.

No ships were burned by the fire-ships ; but some ran aground in the attempt to escape, and the whole fleet was scattered and terrified.

Before they could recover, the English fleet, now at its full strength, was down upon them again, and off Gravelines came the last battle of the Armada. The Spaniards have no reason to be ashamed of the way in which they fought. Overmatched alike in sailing and in gunnery, overcrowded with men, so that the butchery on board their ships was terrible, they fought desperately on, their scuppers streaming with blood, feeling all the time that their case was hopeless, and quite aware that they could do little harm to the enemy, who was doing so much to them. Utterly beaten as they were, no Spanish ship struck her colours ; all fought on till the battle ended through sheer exhaustion on both sides and want of powder to continue the firing.

By the end of the day the great Armada had been fairly driven past the eastern end of the Channel, and out into the North Sea, and there was no hope of its being able to force its way back again. The danger to England was over. Howard and Drake followed the retreating Spaniards northward until they had passed the Firth of Forth ; then they turned homewards, and left the storms and rocks of the Scottish coast to do the rest. Medina Sidonia and his fleet doubled the north of Scotland, and made their way down the west coast, suffering terrible privations and misfortunes. Their clumsy ships were driven in upon the land, and wrecked here and there upon the Scottish and Irish coasts, the crews almost entirely perishing. At last a poor fifty-two ships crawled back to Spain out of the great fleet which had set sail to conquer England. The best sailors of Spain, Recalde and Oquendo, died of broken hearts at the miserable end of their expedition. England was saved, and the dominion of the sea had passed away from Spain for ever.

The defeat of the Armada, however, did not put an end to the sea-fighting between Spain and England. The adventurers still made their cruises, and the Spaniards still fought them whenever they met. It was after the failure of the Armada that one of the most famous fights of our naval history took place. A small English squadron was lying at the Azores. It consisted of five ships under Lord Thomas Howard, and a sixth, the *Revenge*, commanded by Sir Richard Grenville, a Devonshire man, and a famous adventurer captain of the day. A pinnace came in with the report that a Spanish fleet of fifty-three great warships had been sighted, and was drawing near. It was plainly impossible to fight against such odds, and Howard, with his five ships, made sail at once and escaped.

Grenville could not get clear so quickly. Like most of the crowded and ill-ventilated ships of the time, the *Revenge* had had a great deal of sickness, and out of her crew of 190 men, 90 were lying sick ashore. Grenville could not abandon them, so they were brought on board the ship, and at last the *Revenge* sailed out right in the teeth of the Spanish fleet. Even so she might have escaped if her captain would have consented to run before the Spaniards. But he disdained any such course, and chose to sail straight through the Spanish fleet, and try to force his way. For a time he was successful, compelling ship after ship to luff up and let him pass ; but at last his sails were blanketed by a huge Spanish galleon, the *San Philip*, and the *Revenge* lost way, and was surrounded. For a whole day and night her gallant captain and crew held the entire Spanish fleet at bay. Two of the Spanish warships were sunk alongside the *Revenge*, many were shattered and forced to draw out of action ; but fresh ships took their places, and the desperate fight went on.

At last the powder of the *Revenge* was all spent ; the pikes of the sailors were all broken or bent in the constant struggle, and fifty of the hundred sound men were either killed or desperately wounded, Grenville himself being wounded in several places. The *Revenge* lay a dismasted hulk upon the water, surrounded by the Spanish fleet. When summoned to surrender, Grenville scornfully refused, and ordered the gunner to sink the ship. The gunner, a man after his captain's own heart, was perfectly ready for this deed of desperation ; but the rest of the crew held that enough had been done for honour, and at last, as Sir Richard lay dying, the flag of the *Revenge* came down, and she was surrendered.

Grenville was carried on board the Spanish flagship, where the officers gathered around the dying hero, praising his valour, and doing what they could to tend his hurts. But with a last flicker of his unconquerable spirit, he rose to his feet and cried : "Here die I, Richard Grenville, with a joyful and quiet mind, for that I have ended my life as a true soldier ought to do that has fought for his country !" and so died. The *Revenge* did not long remain in the hands of her captors. A great gale arose, from which the battered Spanish fleet had much difficulty in escaping, and in the midst of it the shattered hulk of the *Revenge*, pierced by 800 roundshot, went down, close to the scene of her last immortal fight. No more heroic action is recorded in the annals of our Navy.

## CHAPTER V

### BLAKE AND THE DUTCH WARS

During the earlier Stuart reigns, those of James I. and Charles I., the history of the Navy is one of gradual decay. James made peace with Spain, and was too timid a man to employ his ships on warlike expeditions; and Charles had too much trouble with his own kingdom to pay great attention to his fleet. Yet even in this time shipbuilding was making progress, and some wonderfully fine vessels were designed and built. The chief of these was the famous *Sovereign of the Seas*, or *Royal Sovereign*. Designed by Phineas Pett, a famous shipwright of the day, and one of a family of great shipbuilders, she was laid down in 1635, and launched in 1657. To us, who have seen 20,000 ton Dreadnoughts completed within two years, twenty-two years seems a long time for the building of a ship of 1,600 tons; but in those days work went on more leisurely, and a ship's timbers were all the better seasoned if she stood for a long time upon the stocks. The *Sovereign of the Seas* was considered an extraordinarily fine vessel, and a model of what a ship of the line should be. She was our first regular three-decker, though she was afterwards cut down to two decks. She fought in many famous battles, and was of such force that no enemy's ship would willingly lie alongside her. So well built was she, that she remained in active service for nearly fifty years, and might have lasted far longer had she not been accidentally burned in 1696 while undergoing refit.

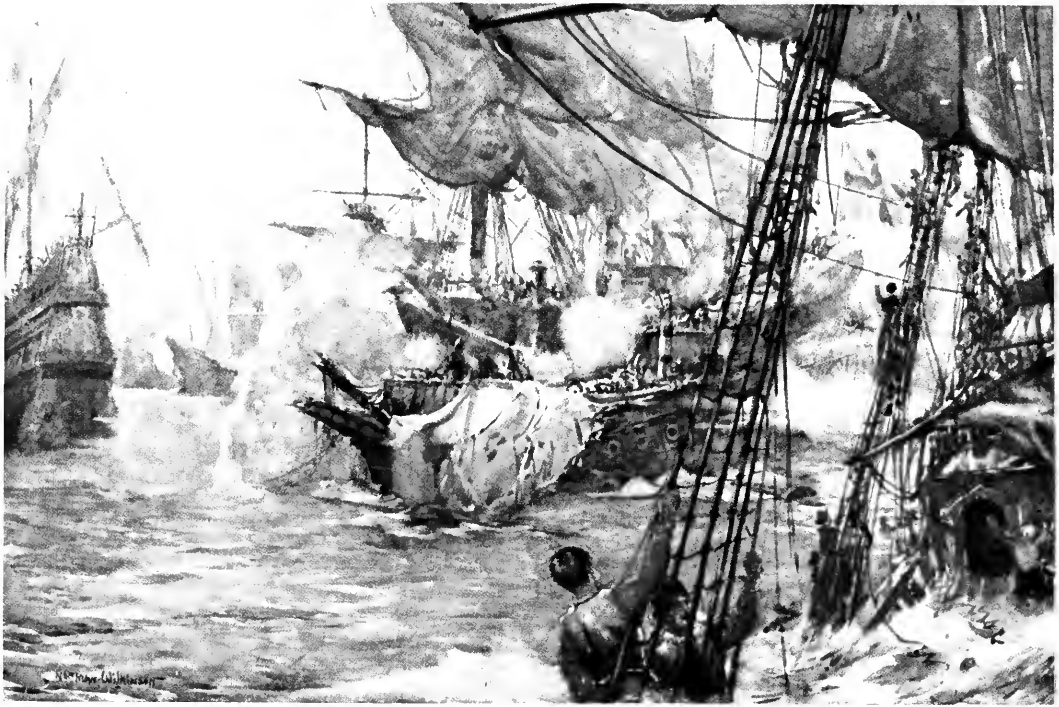
When the Civil War broke out the Navy finally sided with the Parliament, and under Cromwell's wise and energetic management it became once more a thoroughly efficient weapon. Cromwell, too, had found in Blake a great sea-fighter, one of the greatest Admirals that England ever had. Blake was not a seaman by training, having been a colonel in the Parliamentary army during the Civil War; but, when placed in command of the fleet, he quickly showed that a worthy successor to Drake and Hawkins had arisen.

It was in 1652 that the first war with Holland broke out. It was nominally caused by the fact that the English claimed to be supreme in the Narrow Seas, and insisted that the fleets of other nations should lower their flags and their topsails in presence of an English fleet. This claim the Dutch resented, and the result was war. But, though this was the nominal cause of the struggle, the fight was really to determine whether England or Holland should be mistress of the seas. The Dutch had been gradually building up a great trade to the Indies, and their Navy had become the only possible rival to ours; the question of who should rule had to be settled sooner or later, and the matter of the flag was only the pretext for a trial of strength.

In the Dutch we found rivals far more worthy than the Spaniards had proved to be. The battles of all the Dutch wars were most stubbornly fought, and victory went sometimes to one side, sometimes to the other. Everybody knows the story of how Van Tromp with a superior fleet defeated Blake in one engagement, and sailed the Channel in triumph with a broom at his masthead to signify that he had swept the English from the seas, and how Blake came back to the fight again, beat Tromp, and sailed in triumph with a whip at his masthead. On the whole the honours of the war were fairly divided, and Blake, Monk, and Deane found a fair match in Van Tromp, De Ruyter, and De Witt; but the final result was that, in 1654, the Dutch agreed to concede the right of the English fleet to a salute in the Narrow Seas.

Blake's work was not done yet, however. Tunis was a nest of pirates, as Algiers came to be later, and the Tunisian galleys were such a nuisance that it was necessary to teach them a lesson. Blake and his fleet attacked the Tunisian fleet lying in the harbour of Porto Farina, near Tunis. While the ships held the forts in action, the boats attacked the pirate galleys, burned them all, and made their way out again with a loss of only twenty-five men. This was the first warning to the Mohammedan pirates that they must respect the English flag, a warning which Lord Exmouth repeated finally at Algiers one hundred and fifty years later.

In 1657 Blake accomplished the crowning success of his gallant career. He came with his fleet to Santa Cruz, Teneriffe. There the Spanish Treasure Fleet was lying at anchor, under the protection of shore batteries, in a position that seemed unassailable. A Dutch captain whose ship was lying in the bay warned the Spanish commander that Blake would attack him, and asked permission to put to sea to avoid the coming battle. The Spaniard scornfully answered: "Get you gone if you will, and let Blake come if he dare." Blake soon showed them whether he dared or not. The position


Norman Wilkinson

THE LAST FIGHT OF THE REVENGE

was so difficult that the smallest mistake would have meant defeat and disaster, but the English Admiral's plans were so carefully thought out and so gallantly executed that the result was a brilliant success. With twenty-three ships he appeared off the mouth of Santa Cruz bay. The Spanish silver fleet was riding close under the castle and forts, and the wind was blowing straight into the bay. Blake ran in on the flood-tide, destroyed six galleons and sixteen other vessels under the very noses of the gunners in the forts, and went out again triumphantly on the ebb-tide in the very teeth of the wind. The English loss in this most daring battle was only fifty killed and a hundred and twenty wounded, while the Spaniards suffered an immense loss both in ships and treasure.

But Blake was already a dying man, worn out with hard service. He set sail for home, and his flagship, the *George*, was abreast of the Lizard Point when he felt that death was near. Calling his captains on board the *George*, "He willed them to bear up with all speed for Plymouth, hoping to have reached land before his death, but in the very entrance into the Sound of Plymouth he expired." The body of the great Admiral, perhaps our greatest save Nelson, was taken in state up the Thames, and buried in Henry VII.'s Chapel, Westminster. It was left to the miserable creatures of King Charles II. to drag from their honoured rest and cast into a foul pit the mouldering bones of one of the noblest heroes that England has ever had. The shame was not to Blake, but to themselves.

When Charles was brought back in triumph at the Restoration, the Navy was most devoutly loyal, and Samuel Pepys, who became Secretary to the Admiralty, and was one of the few reasonably honest men in the King's service, has left a very high-flown description of the scene in the fleet when the King was proclaimed. It was not long, however, before the worthy Mr. Pepys had to come to the conclusion that things were far better managed in the old Commonwealth days than under the new Heaven-sent ruler. Charles himself was fond of the sea and of naval affairs, and his brother the Duke of York, afterwards James II., was still more interested in them; but in that wretched Court everything was corruption and dishonesty, and the money that should have gone to keep up a strong fleet was wasted on the King's vile favourites. The poor sailors could not so much as get the wages which they earned so hardly, and the decent men, who, like Pepys, honestly wished to see the fleet maintained as it should be, were at their wits' end to find the money with which to do it.

In March, 1665, war with Holland broke out, and three desperate battles were fought at sea in that and the following year. In the first, the British fleet under the Duke of York was victorious over the Dutch under Opdam, who perished by the blowing up of his flagship during the engagement. In the second, one of the most stubborn and fatal of sea-fights, known to our sailors as "the four days' bloody blunder," Monk, with sixty-one ships was beaten by Cornelis van Tromp with ninety-six. The defeat, however, was avenged in the third battle, where Monk and Rupert defeated the Dutch decisively, and drove them into harbour.

Both sides now seemed weary of war, and attempts were made to secure peace. Charles and his advisers thought that peace was certain, and made no warlike preparations, being only too glad to have more money to spend on their own pleasures. The Dutch heard of our lack of preparation, and at once they planned a bold attack upon the Thames. On June 7, 1667, they were at the mouth of the river—on the 10th, 11th, and 12th they forced their way up past the forts till they had entered the Medway. Then came the attack upon the ships of the British fleet anchored there. The *Royal Charles*, the finest man-of-war afloat, was captured and carried off without a shot being fired in her defence. The *Loyall London*, the *Royal Oak*, the *Royal James*, and a number of other fine warships were burned at their anchors, and the Dutch withdrew at last, justly proud of what they had accomplished, and having inflicted upon us the greatest disgrace that ever befell our Navy. It was not lessened by the fact that a number of the sailors in the Dutch fleet were Englishmen, who, wearied of serving unpaid, had gone over to the side which honestly paid its servants, and who cried to their former comrades as they passed: "Once we served for tickets, now we serve for dollars!"

The one honourable incident on our side in the whole shameful business was the behaviour of Captain Douglas of the *Royal Oak*. He beat off two attacks, and when at last his ship was set on fire, and his men urged their captain to leave the blazing wreck, he quietly refused. "It was never known" he said, "that a Douglas quitted his post without orders." So he stayed, and so he died—a man worthy to be remembered with honour for his share in an incident which we would fain forget, and which yet may teach us a lesson as to the need of being always prepared.

The succeeding campaigns against Holland gave the opportunity to our sailors of showing, in the two great battles of Solebay and of the Texel, that the old spirit was not dead; and that is about all one can say for them. Gallantly as our men fought, against an equally gallant enemy, we were fighting in a bad cause, and were being simply used as the tool of France, who wished to see Britain and Holland exhausting themselves that she might become supreme at sea. Finally, when both parties had had enough of the strife, peace was signed in London in February, 1674, the treaty containing the following clause: "That the ships and vessels of the said United Provinces, as well men-of-war as others, be they in single ships or in fleets, meeting at sea with any of the ships of the State of England, or in their service and wearing the flag, shall strike their flag and lower their topsail until they be passed by."

So the long Dutch Wars ended, after a struggle in which great valour and determination had been shown on both sides. It cannot be said that we have any great cause to look with satisfaction upon the part we played against Holland, except during that time when the Commonwealth was really contending for the glory of England. The later stages of the strife were badly planned, badly managed, and carried on with bad motives. But though the result was not apparent for awhile, it proved in the end that these confused struggles had really setttled the question of supremacy on the seas. Britain, and not Holland, was destined to be Mistress of the Sea, in spite of the skill and valour of men like Van Tromp and De Ruyter, whom we may freely acknowledge to have been sailors of the very first rank, worthy of a place of honour in the annals of any navy.

## CHAPTER VI

### THE FIRST GREAT FRENCH WAR—QUIBERON, THE SAINTS

The Revolution of 1688, when James II. was driven from the throne and William of Orange became King, made war with France a certainty. The French King's aim in setting Britain and Holland at one another's throats had so far been served. Both countries had been greatly weakened, and France had become the greatest European power, and was actually stronger than Britain even at sea. But the accession of a Dutchman to the throne of Britain combined the two countries, and a struggle with France was inevitable.

It began unfavourably for our country ; Torrington, with fifty-six sail of the line, Dutch and British, being defeated off Beachy Head in a battle in which the brunt of the fighting fell upon the Dutch ships. But in 1692 the disgrace of this defeat was wiped out in the battle of La Hogue, in which Tourville, the victor of Beachy Head, was totally defeated by Russel. In one sense, La Hogue was no great victory, for Tourville was hopelessly outnumbered, having only forty-four ships against ninety-nine, and only fought because he had positive orders from his King ; but the result was that the French fleet was greatly crippled, and a decisive blow given to France's pretensions to supremacy at sea.

War went on at intervals for many years between this country and France and Spain, but it was marked by no very outstanding incidents, except the daring capture of Gibraltar by Sir George Rooke in 1704. In

1739 another war broke out with Spain, the earlier part of which was rendered memorable by Anson's famous voyage. He was sent out with six ships, the largest being the *Centurion*, of sixty guns, to sail round Cape Horn, and up the western coast of South America to Panama, there to join hands with Vernon, who was to attack Cartagena. The pitiable state into which our Navy had fallen at this time is very plainly to be seen in Anson's account of the fitting out of his expedition. Mismanagement was rampant on every hand, and Anson was sent to sea with a force totally unequal to the work it was meant to do, and largely composed of men who, instead of being sent on active service, should have been in hospital. His ships were crazy and badly found, his men died like flies of the scurvy, ship after ship was lost, or had to put back before the Cape Horn gales; but the unconquerable Anson forced his way round the Horn, captured the Spanish town of Paita, and when he had learned of the failure of Vernon's attack on Cartagena, brought his own cruise to a brilliant conclusion by capturing one of the great Spanish Manila galleons with £1,250,000 of treasure. Everyone who wishes to know the kind of man who made the British Navy should read the little book which tells the wonderful story of Anson's voyage, and shows plainly how courage and patience can triumph over almost any obstacle.

In 1759 France planned a great stroke which was to settle once and for all the question of supremacy. It was the first great example of those invasion schemes with which our forefathers grew so familiar during the Napoleonic Wars. The Toulon fleet of twelve sail of the line, under de la Clue, was to sail north, join hands with the Brest fleet of twenty-one sail under Conflans, and the combined fleet was to sweep the Channel clear, and land 50,000 troops in England and 12,000 in Scotland. The scheme was a daring one, but it never got beyond the first stage; for instead of the Toulon and Brest fleets sweeping the British away, it was the latter who took the broom in hand.

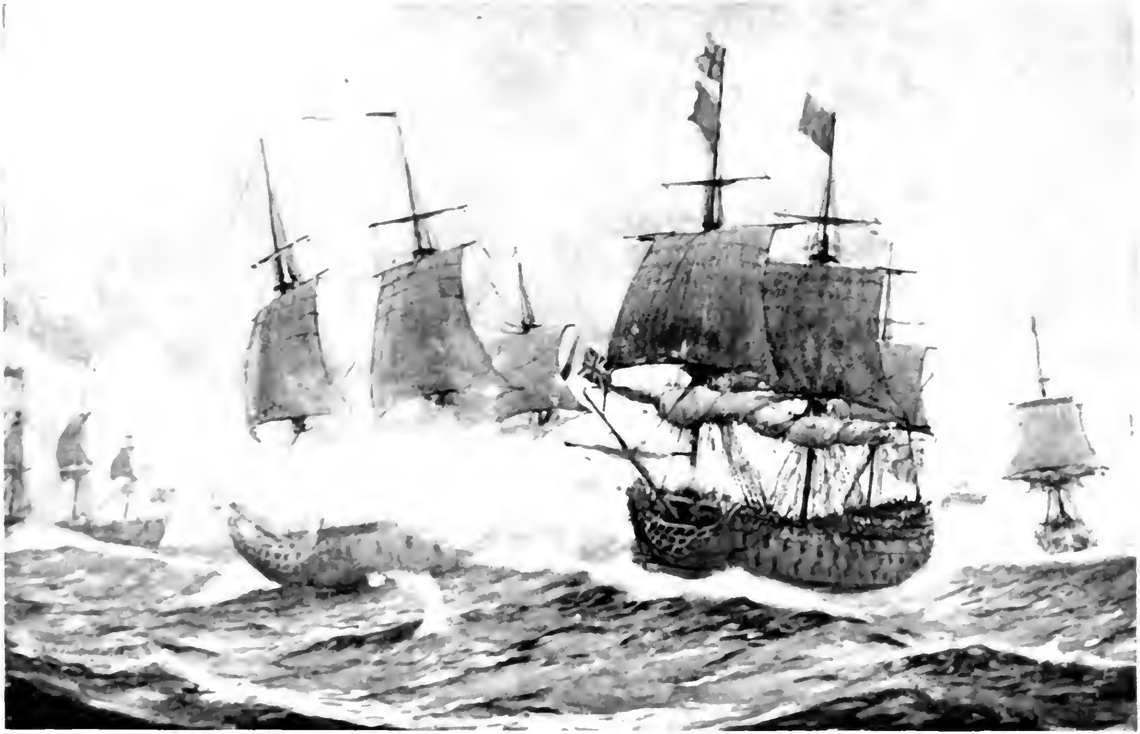
The Toulon fleet was closely watched by Boscawen, who had his headquarters at Gibraltar. De la Clue almost managed to slip past Gibraltar unobserved during a fog; but one of Boscawen's scouts caught sight of the French sails, and began at once to fire signal guns. Out came Boscawen's fourteen ships of the line, crowding all sail in chase of de la Clue's twelve. The French Admiral did all he could to avoid an engagement, but his fleet was soon scattered. Five ships ran into Cadiz, two stood out into the Atlantic and got clear off; the others were driven in upon the Portuguese coast between Lagos and St. Vincent, and of them Boscawen captured two and burned the others. So instead of de la Clue joining hands with Conflans, his fleet was scattered to all the winds of heaven.

From May to November, Conflans, with his twenty sail of the line, had been blockaded in Brest by Hawke; but a heavy gale drove the British fleet to take shelter in Torbay, and on November 14 Conflans was able to get to sea. The very same day Hawke left his anchorage in Torbay, and, on learning that Conflans had sailed, he at once made sure that the French fleet would make for Quiberon Bay. Thither, therefore, he hastened under all sail that his ships could bear in the wild November weather, and off Belle-Isle on the morning of the 20th the *Maidstone* signalled that the

French fleet was in sight. Conflans, in fact, was chasing some British frigates, and was much surprised to find Hawke so close upon his heels. He at once gave up the chase of the frigates, and made sail for Quiberon.

His plan was to take advantage of the local knowledge of his pilots, and shelter himself from attack among the shoals and rocks which make Quiberon Bay a regular death-trap for those who are not familiar with its dangers. But Hawke was a man of the coolest daring. Instead of sheering off from the dangers of the bay, he signalled to his twenty-three ships to carry on with all sail in pursuit of the French. A fierce November gale was blowing, and the labouring battleships, pursuers and pursued, wallowed onwards through mountainous seas towards the spouting reefs of Quiberon. At 2.30 p.m. the firing began, and from then till the gloomy winter night darkened down the battle raged.

Hawke's pilot remonstrated with the Admiral against the foolhardiness of carrying the huge *Royal George* into such danger. Hawke's answer deserves to be remembered—the answer of a man who had that supreme characteristic of a great leader—the nerve to accept a great responsibility for a great end : "You have done your duty," he said, "in pointing out the danger. Now lay me alongside the French Admiral." As the *Royal George* came plunging down upon the *Soleil Royal*, which bore the flag of Conflans, another French battleship, the *Superbe*, attacked the British flagship. Hawke replied with one furious broadside. The unfortunate French seventy-four, reeling to the concussion, dipped her lower-deck ports in the wild sea, the waves rushed in, and before the British crew could realize the



appalling success of their broadside, the great ship filled and sank like a stone.

By five o'clock four of the French battleships had either struck or sunk under the horrified eyes of the great army which lined the shore eagerly watching the fortune of the battle. Then the British fleet anchored, and all through the long dark night the battered vessels heaved and strained at their cables, the howling of the storm pierced every now and again by the boom of distress guns, as ship after ship dragged her anchors, and was driven towards the deadly rocks. Next morning it was seen that the French fleet was practically annihilated. The *Soleil Royal* had been run ashore to save her from capture, and only a few ships had escaped into the shelter of the bay or the mouth of the Loire. Two British vessels had run upon the shoals, and been lost; but this was a cheap price to pay for the destruction of the whole hostile fleet, and the setting at rest of all fears of invasion. The amazing dash and daring with which Hawke carried out his attack made the Battle of Quiberon Bay the most remarkable feat of our Navy between the Armada and Trafalgar, and mark out the great Admiral as the worthy forerunner of Nelson.

Rather more than twenty years later came the next great naval encounter with France. At this time, in 1782, Britain was hard pressed by a crowd of enemies. The revolt of the American Colonies was taxing all her energies. France and Spain had taken advantage of our hour of distress, and were endeavouring to wrest from us our possessions in the West Indies. All over the world Britain was fighting against desperate odds with her back to the wall.

In these circumstances a great French fleet under de Grasse was lying off Fort Royal, packed with troops destined for the conquest of Jamaica, while thirteen Spanish ships of the line were waiting off San Domingo, accompanied by transports with 24,000 troops on board. Once the two fleets had united they would make up a force sufficient to sweep away the British fleet, and to conquer Jamaica without any trouble. But they had first to reckon with the two great Admirals in command of the British fleet of thirty-six sail of the line, and Rodney and Hood meant that de Grasse should not join hands with the Spaniards without a battle. Accordingly they kept watch in Gros Ilot Bay, their frigates marking every movement of the French fleet in Fort Royal harbour, and reporting it to their Admirals.

On April 8 the signal was repeated from ship to ship across the thirty miles of sea that separated the fleets: "The enemy are coming out of port." It was a magnificent fleet that sailed out with de Grasse to his last battle: one ship of one hundred and four guns, five of eighty-four, three of eighty, nineteen of seventy-four, six of sixty-four, made up a total of thirty-four sail of the line, accompanied by sixteen frigates, and they must have made a brave spectacle as they glided slowly out of port, with their yellow topsides and black water-lines, dark blue bulwarks, and red ports, their gilded figure-heads and stern galleries, and their brass guns glittering in the tropical sunshine. On board were representatives of the very best blood and fame of France, and the ships were crowded with the pick of her soldiers.

Rodney's fleet was worthy to meet with such an enemy. It consisted of thirty-six of the line: four ninety-eights, one ninety, twenty seventy-fours, one seventy, and ten sixty-fours. While he had thus two ships more than de Grasse, Rodney's vessels were on the whole smaller and older, and the total weight of his broadsides was nearly two tons less than that of the French fleet.

In spite of the fact that he commanded so powerful a force, de Grasse did not mean to fight if he could avoid a battle ; but, after several days of skilful manœuvring, Rodney managed at last to get the whole French fleet comfortably under his lee, and after lying-to for a while to let his crews have breakfast, he swept down upon his enemy in order of battle. The leading ships on both sides drifted past one another, pouring in their heavy broadsides as the guns bore on an opponent, till half the line was enveloped in clouds of smoke pierced incessantly by fierce jets of flame.

At last Rodney's flagship, the *Formidable*, came broadside to broadside with de Grasse's *Ville de Paris*, and the furious fire from her guns so staggered the French crew that they made but a feeble reply. Then came the incident which changed the whole fortune of the fight. A sudden shift of wind headed the sternmost ships of the French fleet, threw them out of order, and left a wide gap in their line at a point two ships behind the *Ville de Paris*. Rodney, or his flag-captain, Sir Charles Douglas, saw the opportunity. The great *Formidable* swung round, and headed through the gap, pouring her torrents of fire on the French ships on either side of her as she passed. The five ships immediately astern of her followed her example, and the French fleet was broken into two sections. Nor was this all. The same shift of wind made another gap in the leading squadron of the enemy, and as the rear division of the British fleet came up, they, too, swung round, and passed through the opening, completing the disruption of de Grasse's fleet, which was now broken up into three isolated divisions.

The French Admiral's case was now hopeless. His magnificent fleet was a huddle of separate atoms, each fighting desperately against opponents who were confident of victory. The British, indeed, were also separated by the very success which had broken up their enemy's line, but their ships were all able to support one another, while the French were in hopeless confusion.

All that now remained was the process of hammering as many as possible of the scattered French ships into surrender or destruction. The slaughter was terrible, for the French vessels were packed with soldiers for the Jamaica expedition. No seventy-four had fewer than 900 men on board ; the larger ships had more, the *Ville de Paris* having 1,300, and the British broadsides, poured in at point-blank range, swept the decks, and tore ghastly lanes through the crowded ranks of brave men who stood helplessly at quarters. One dreadful feature of the day appalled everyone. The whole sea was alive with sharks, and as the bodies of the dead, and sometimes of the not quite dead, were thrown overboard, or as men fell into the water from the crashing spars, the creatures fairly ravened on their prey, darting over one another in their cruel eagerness, and snapping savagely at every poor fellow who fell.

Gallantly as the French fought, they could only prolong for a while a contest of which the end was certain. The *Glorieux*, her decks from bow to stern a perfect shambles, was the first to haul down her colours. Next the *César*, with six feet of water in her hold and only thirty-six rounds of cartridge left in her magazine, struck to the *Centaur*, and the *Hector* and the *Ardent* followed her example.

The huge *Ville de Paris*, the noblest ship then afloat, was the next to yield. Surrounded and battered on all sides by determined enemies, she still held out. Every spar had been shot away, her rudder was smashed, many of her guns were disabled, she was riddled with shot-holes, and between three and four hundred of her crew were dead or wounded. Her cartridges were exhausted, and the guns were being served by loose powder being ladled into them from open barrels. But de Grasse would not give in. His ship flew an Admiral's flag, and only to an Admiral should she strike. At last the *Barfleur*, bearing the flag of Sir Samuel Hood, Rodney's second-in-command, ranged alongside. As she came up the doomed *Ville de Paris* fired at her a single challenging gun. It was answered by a crashing broadside, which struck down sixty men. Enough had been done for honour, and de Grasse stepped to the halyards and with his own hand hauled down the ensign of the *Ville de Paris* just as the sun dipped below the sea-line. The great battle of the Saints was fought and won, and the West Indies were saved.

## CHAPTER VII

### THE GREAT FRENCH WAR—FIRST PERIOD

It was the outbreak of the French Revolution which brought about the next great war with France, a war which lasted, with brief intervals of doubtful peace, from 1793 to 1815. On February 1, 1793, the Revolutionary Government declared war against Britain. Both countries were apparently well prepared for the struggle so far as concerned their Navies. Britain had eighty-seven ships of the line, of which sixty were in first-class condition, while she had in addition a strong force of smaller vessels. Nominally the fleet of France was almost as strong; she had eighty-two of the line, and some of them were more powerful vessels than any which we possessed. The *Côte d'Or*, the *Commerce de Marseilles*, and the *Sans Culotte*, huge 120-gun ships, were bigger than anything in our fleet.

On the other hand, the fleets were by no means so well matched in reality as they appeared to be on paper. The British crews were well trained and disciplined, keen, and accustomed to victory; but the French were largely untrained, a great crowd of men, brave individually, and enthusiastic for their new Republic, but no match for the well-disciplined and hardy seamen of Britain.

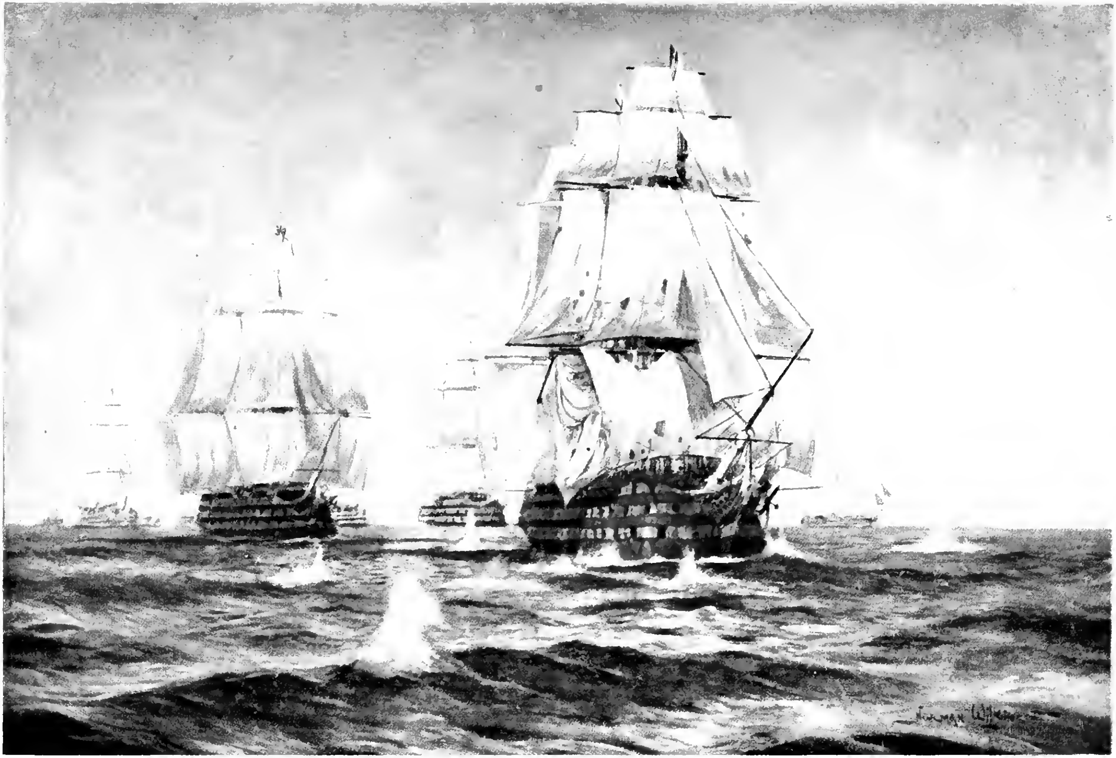
The earlier stages of the war were of no great significance, save for the appearance and swift rise into notice of a young captain named Horatio Nelson, who was already giving promise of the spirit and genius which made him the greatest of all seamen. It was while in command of the *Agamemnon* under Admiral Hotham that the great sailor showed that tireless and insatiable energy which, when he came to command a fleet, made his battles so decisive. Hotham, after a scrambling and confused fight, had captured two ships of the French Mediterranean fleet. Nelson urged upon him to leave the prizes under the charge of one or two ships, and to press home his attack upon the retreating enemy ; but the sluggish Admiral answered : "We must be contented ; we have done very well." "Now," said Nelson, "had we taken ten sail, and allowed the eleventh to escape, when it had been possible to have got at her, I could never have called it well done." Fortunately it was Nelson's spirit, rather than Hotham's, that was to inspire the Navy throughout the war.

The greatest battle of this period of the war was fought on June 1, 1794. A huge fleet of corn ships, three hundred and fifty in number, was on its way from America, bringing to France supplies for her people, who were in danger of starvation owing to the bad harvest of 1793, and the French Government sent out a powerful squadron to escort it into the home ports, while Villaret-Joyeuse, with the main battle fleet, cruised in the Channel. Howe, with the British fleet, had to provide convoy for the merchant fleet of Britain, to watch for the American provision fleet, and to find and fight Villaret-Joyeuse. He failed in the second part of his task ; but his failure was due to the very success with which he accomplished the third.

On May 28 Howe sighted his enemy off Ushant, and when the fleets met they were as nearly as possible of equal numbers—twenty-five British and twenty-six French sail of the line. For three days the opponents manœuvred about one another, Howe seeking a chance to attack, while Villaret-Joyeuse tried to avoid a battle; but on the morning of June 1, Howe found that he had at last got to windward of his enemy, and could force him to fight. At 8.15 a.m. the British fleet filled, and stood down to engage, by nine o'clock the signal for close action was made, and the two fleets engaged in a desperate action in which all order was quickly lost, each ship choosing out an individual opponent, and fighting a furious duel with her.

Howe, in the *Queen Charlotte*, chose the *Montagne*, the French flagship, a monster of one hundred and twenty guns, as his own special antagonist. Rounding her stern so close that the ensign of the French vessel brushed the *Queen Charlotte's* shrouds, he poured in a dreadful broadside, and then engaged her so fiercely side by side, that after an hour Villaret-Joyeuse had had enough of it, and made off, followed by every ship of his van division which could carry sail. Meanwhile all around a series of desperate single-ship duels had been going on.

One of them may be a picture of all the rest. Astern of the *Queen Charlotte* came the *Brunswick*, under Captain Harvey. To prevent her from breaking through the line the French *Vengeur* came up, hoping to force the *Brunswick* to bear up and engage her side to side; but Harvey steered straight into his enemy, entangling his starboard anchors with her port chains. His officers asked him if he would have his ship cut clear; but he answered, "No. Now that I have got her I will keep her." So the two great ships lay side by side, so close that the ports could not be opened, and the *Brunswick's* gunners had to blow away the



THE VICTORY GOING INTO ACTION AT TRAFALGAR.

port-lids with their first discharge. Up and down they heaved on the rolling swell, grinding against one another with sickening crashes, while all the time the guns on either vessel were tearing their opponent to pieces and scattering death along her decks. On the lower deck the *Brunswick* had the advantage, and her heavy guns were steadily pounding the hull of the *Vengeur* into fragments; but on the upper deck the conditions were reversed. There the Frenchmen, with their more numerous crew and more powerful musketry, held the upper hand. From her tops and quarter-deck the *Vengeur* swept the deck of the *Brunswick*, and mercilessly hailed death upon the gun-crews as they sweated at their guns. Before the ships broke away from their deadly grapple Captain Harvey was mortally wounded, and 158 of his crew were down.

The *Achille* came up to help the *Vengeur*; but on the British side the *Ramillies* joined in the fight and restored the balance. At last the sorely battered vessels drifted apart. The *Brunswick* was in no condition for further fighting; but the *Vengeur* was in still worse plight. Captain Renaudin had fought his ship most gallantly; but she was simply torn to pieces by the dreadful pounding which the *Brunswick* had given her. Lower and lower she sank in the water. At 2.30 her colours were hauled down, and a Union Jack was displayed over her quarter in sign of surrender. Boats were at once sent to rescue what remained of her crew; but she was settling down with dreadful rapidity, and at last, with one sickening lurch, she disappeared, carrying with her a number of the men who had fought her so bravely.

The end of this terrible struggle was witnessed by the whole fleet, for by this time the general action was practically over. Six other ships had been captured, and the remainder of the French fleet was doing its best to escape. Perhaps the victory might have been greater still had Howe ordered a general attack upon the scattered enemy. But he was a man of sixty-eight, worn out with incessant watching and responsibility; most of his ships had suffered heavily, and the crews were almost exhausted. On the whole, we may say that as much had been done as could be expected under the circumstances. Howe, at all events, had set the example of that fierce, headlong, determined fighting which gave us the victory again and again during the Great War. His victory, "the glorious First of June," as it was called, may seem a small thing in comparison with the Nile or Trafalgar; but it is scarcely fair to compare it with these. Nelson had Howe's example before him; Howe had to make his own example, and had he not taught the British sailors to have confidence in the result of a close-fought battle the Nile and Trafalgar might not have been such brilliant triumphs.

After the battle the battered British fleet had to return to port with its six prizes to refit, and the great provision fleet from America sailed over the very spot where the struggle had taken place, finding the sea still strewn with shattered and blackened spars, and made its way safely into port. The French had been defeated; but the sacrifice of the *Vengeur* and her sisters had saved their land from the horrors of starvation.

The following year, 1795, saw Holland, which had been conquered by the French, added to our enemies; and in 1796 Spain declared war. By the end of 1796 things looked so ominous that Sir John Jervis had to withdraw his fleet from the Mediterranean and concentrate at Gibraltar. A great scheme was formed for the invasion of Britain. The French, Spanish, and Dutch fleets were to unite off Brest, brush aside the British fleet, and cover the transport of an invading army; and in pursuance of this object a great Spanish fleet of twenty-seven sail of the line came out of Cartagena, and was making for Cadiz, when it was intercepted off Cape St. Vincent by Jervis and his fleet.

On paper the Spanish force was overwhelmingly superior. Its biggest ship, the *Santissima Trinidad*, of one hundred and thirty guns, was the most powerful vessel afloat. Then came 6 three-deckers of one hundred and twelve guns, 2 eighty-fours, and 18 seventy-fours, in addition to 10 frigates and a brig. Sir John Jervis had 2 one-hundred-gun ships, 2 ninety-eights, 2 ninetys, 8 seventy-fours, and 1 sixty-four, besides 4 frigates, a sloop, and a cutter. Thus in ships of the line the Spaniards had nearly two to one, while they had 1,054 guns more than our fleet; but the deficiency in ships and guns was more than made up by a far greater deficiency in the character of officers and crews on the Spanish side. The Spanish officers were a byword for inefficiency, and their crews were not much better.

When Jervis sighted his enemy the Spaniards were in two confused divisions, with a considerable distance between them; and before they could form a line of battle, Jervis and his fleet passed through the gap and then tacked, cutting off nine Spanish vessels from the main body. One of these managed to rejoin her companions; the other eight were so roughly handled in the attempt that they made sail and fled at once.

Jervis then turned upon the main fleet, and signalled to his own ships to tack in succession. Nelson, who was in command of the *Captain*, saw that if this order were obeyed the Spaniards would be able to scrape past the British and rejoin their scattered comrades, or else avoid action altogether. In order to prevent this he took upon him to disregard his Admiral's orders, and, instead of tacking, he wore ship, and threw himself right across the track of the oncoming Spaniards. You may get an idea of the risk he ran when you learn that he was thus brought into action at once with the *Santissima Trinidad*, one hundred and thirty guns, the *San Josef*, and the *Salvador del Mundo*, one hundred and twelve guns each, the *San Nicolas*, eighty, the *San Isidro*, seventy-four, and another seventy-four. It seemed as though his ship must be overwhelmed, but Troubridge in the *Culloden* came gallantly to his rescue, and though the two ships were in a perfect volcano of fire, the match was not so unequal as it seemed, for Nelson and Troubridge were men of a very different stamp from the Spanish officers to whom they were opposed.

Poor as the Spanish gunnery was, however, such a torrent of fire, poured upon the *Captain* at short range, could not fail to work havoc. The ship's fore topmast was shot away, her sails were in tatters, her rigging hanging in festoons, and her wheel splintered. In this crippled condition Nelson ran alongside the *San Nicolas*, which lay side by side with the great *San Josef*. As soon as the vessels grappled, he called away his boarders, and the gallant seamen, following their chief, were on board the big Spaniard in a moment, and mastered the ship after a very short struggle. Then, as the huge *San Josef*, towering above their heads, opened a sputtering musketry fire upon the conquerors, Nelson ordered the boarders to capture her too, and led the way by climbing into her main chains. At that moment a Spanish officer looked over the rail of the *San Josef* and hailed that they surrendered.

Thus in a few minutes the smallest seventy-four in the British fleet had captured two great vessels, one of eighty and one of one hundred and twelve guns, and "Nelson's patent bridge for boarding first-rates" became a standing jest in the Navy. Meanwhile the action over the whole fleet had gone against the Spaniards, who were totally defeated with heavy loss. As soon as the battle was over Nelson went on board his Admiral's flagship. Sir John was a great stickler for discipline, and Nelson had flatly disobeyed signals; but no man knew better than Jervis how to value a captain who knew when to face responsibility and take a great risk upon his shoulders for a worthy purpose. The grim old Admiral publicly embraced Nelson on his own quarter-deck, and said that he could not sufficiently thank him for what he had done. Someone hinted that Nelson's action was a breach of discipline. "I know it," said Jervis, "and if ever you commit such a breach of discipline, I will excuse you too."

The same year which saw the victory of St. Vincent, witnessed also Duncan's victory over the Dutch fleet at Camperdown, after a battle which showed that the Dutchmen were as stubborn fighters as ever. But even St. Vincent and Camperdown were to seem small events compared with the great triumphs that lay ahead of the Navy.

## CHAPTER VIII

### THE GREAT FRENCH WAR—THE NILE, COPENHAGEN, TRAFALGAR

THE victory of St. Vincent was followed by Nelson's one failure, when, in a boat attack on Santa Cruz, he was beaten off, and lost his right arm ; but, by the beginning of 1798, he had recovered from his wound, and was ready for work again. His presence in the Mediterranean was urgently needed, for Napoleon, whose star was now in the ascendant, had planned a great scheme for the conquest of our empire in the East by way of Egypt. Gathering a large army at Toulon, he had set sail from that port for Alexandria, escorted by Admiral Brueys, with a powerful fleet of ships of the line. Nelson started in chase of him ; but so eager was his pursuit that he overshot the mark, arrived at Alexandria before his opponent, and, on the return voyage, missed the French Armada altogether. Had he had the good fortune to meet Napoleon at sea, when the fleet of Admiral Brueys was encumbered by a crowd of transports, it needs no great stretch of imagination to realize that the whole history of Europe would have been changed, and Napoleon's baleful career cut short at its very beginning.

Finding that he had missed the French, Nelson at once sailed again for Alexandria, and this time found that there was no mistake. Napoleon and his army had landed, but the fleet of Brueys was drawn up at anchor in line of battle in the Bay of Aboukir. It lay in a great crescent right across the bay, leaving very little room for an enemy to approach between the anchored vessels and the shoals which abounded in the bay. The position was, in fact, a very strong one, and a less daring Admiral might have hesitated to attack; but Nelson, having found his enemy, had but the one idea, to go straight at him and destroy him.

The fleets were well matched. The French had thirteen sail of the line and four frigates, the British thirteen of the line and one fifty-gun ship. But while the British vessels were all seventy-fours, the French had three eighties, and one great three-decker of one hundred and twenty guns—*L'Orient*, the flagship of Admiral Brueys—and, in guns, they reckoned 1,196, against the British total of 1,012.

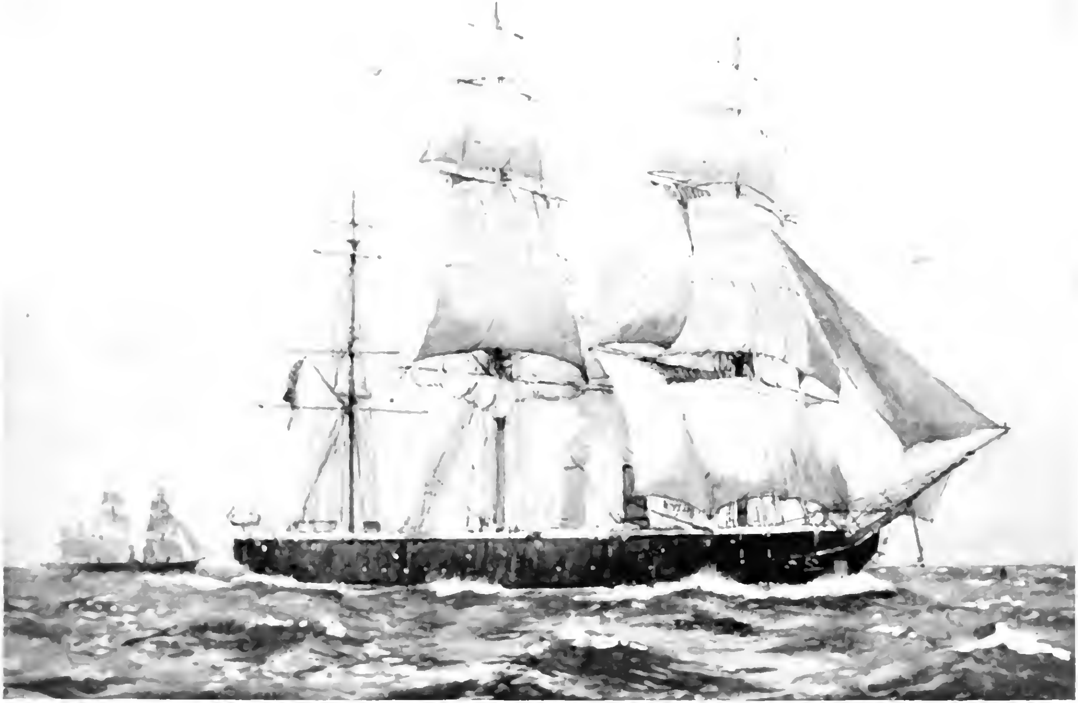
It was evening as the leading ships of Nelson's fleet, under full sail, came majestically into the bay; and the night had darkened down before the whole fleet had got into action. Brueys did not believe that Nelson would risk a night attack in such dangerous waters, and had made comparatively little preparation for a fight; in fact, only the guns on the seaward side of his ships were cleared for action. Nelson's plan was simple and daring. He reasoned that, where there was room for a French ship to swing, there was room for a British ship to anchor, and he meant to double on the French line, engaging only a part of it to start with, and stationing a British ship on the bow, and another on the quarter of every French vessel attacked. He calculated on thus destroying the leading vessels of the French fleet before the sternmost division could do anything to help them.

As the British fleet came silently onward, the French opened fire both from the ships and the shore batteries;

but the British crews, busily engaged in furling sails and getting ready to anchor, made no reply. One of the best vessels in the fleet, the *Culloden*, under the gallant Troubridge, had, unfortunately, been put out of action already by grounding on a shoal at the mouth of the bay, where she lay helpless while the battle raged inside.

Foley, in the *Goliath*, led the van, rounded the bows of the foremost French ship, the *Guerrier*, pouring in a tremendous broadside as he passed, and let go his anchor abreast and inside of the second ship in the line, the *Conquérant.* Hood, in the *Zealous*, followed him, blasted the unfortunate *Guerrier* with another broadside as he went by, and anchored also. The *Orion*, which came next, passed inshore of both her predecessors, and anchored abreast of the *Peuple Souverain*, while the *Theseus* and the *Audacious* followed the example, making five of the British fleet which had passed inside the French line, and engaged it on the landward side.

On the seaward side, the *Vanguard*, with Nelson on board, anchored abreast of the *Spartiate*, while the *Minotaur*, the *Defence*, the *Bellerophon*, the *Majestic*, the *Swiftsure*, and the *Alexander*, followed her into action. Thus the whole head of the French line was between two fires, and though the leading ships fought most gallantly, they were overwhelmed by the torrents of fire poured upon them from either side. The *Bellerophon* had chosen as her opponent the huge *Orient ;* but the seventy-four was no match for the hundred and twenty, and, after a desperate conflict, had to cut her cable and drift out of action totally disabled. Her place was taken by the *Swiftsure* and



[illegible] IRONCLAD, H.M.S. WARRIOR

the *Alexander*, which hailed a dreadful storm of shot upon the French flagship. *L'Orient* finally took fire, and the great ship blazed fiercely, lighting up the whole scene of furious strife. Early in the action Nelson had been severely wounded in the head ; but, on learning of the miserable plight of the French flagship, he ordered boats away at once to save her crew.

At last, with a tremendous explosion, *L'Orient* blew up, scattering blazing spars and fragments of timber far and wide over the bay. The dreadful concussion seemed to appal the crews on both sides, and for a full ten minutes the firing ceased. Then the cannonade broke out again with redoubled fury.

When morning dawned it was seen that the French fleet was totally ruined. Nine ships were prizes, three of them so shattered that they had to be destroyed ; one had blown up, and a second, the *Timoléon*, having gone ashore, was burned by her own crew. Only two ships of the line, the *Guillaume Tell* and the *Généreux*, escaped, and both were captured later in the Mediterranean. Napoleon and his army were shut up in Egypt, and cut off from their base of supplies. So complete a victory had never been known in the annals of naval warfare.

Napoleon escaped from Egypt, leaving his army there to surrender under General Menou, to a British force, and by the beginning of 1801 he had succeeded in inducing the Northern Powers—Denmark, Russia, Sweden, and Norway—which had their own grievances against Britain, to unite in a coalition against us. It was necessary to break up the naval power of these new enemies, and Admiral Sir Hyde Parker was put in command of a fleet for this purpose, with Nelson as second in command. Fortunately Parker entrusted the actual direction of the engagement to Nelson, and after a fierce fight, in which we actually lost more men than in the Battle of the Nile, and in which the Danish sailors displayed the utmost heroism, the Danish fleet was destroyed, the batteries of Copenhagen were silenced, and the Danes were forced to agree to terms of peace. This victory, and the assassination of the Russian Emperor, broke up the coalition of the Northern Powers, and the danger from the North passed away.

In 1802 France, wearied of war, or perhaps only wanting time to prepare for a fresh struggle, signed the Peace of Amiens; but this gave only a short respite, and in 1804 war was again declared against both France and Spain. Once more Napoleon planned a great invasion of England. His fleet, under Admiral Villeneuve, was to sail for the West Indies in order to entice Nelson thither. It was then to double back to Europe, join hands with the Spanish fleet, and clear the Channel for the transport of a huge army which Napoleon had gathered at Boulogne. Nelson did follow Villeneuve to the West Indies; but the Brest fleet, which should have joined the French Admiral there, was unable to break the British blockade. Villeneuve hastened back to Ferrol, encountering on his way Sir Robert Calder, and losing two ships in the scrambling action which followed.

From Ferrol he escaped with the French and Spanish fleets into Cadiz. It was quite clear that, instead of being able to clear the Channel, he was helpless to accomplish anything against the watchful British fleets; and Napoleon at once broke up his great camp at Boulogne, and marched his troops across Europe into

Austria. Villeneuve was blockaded in Cadiz by Collingwood, with twenty-four ships, and, had he risked a battle in these circumstances, he might have done something; but on September 28, 1805, Nelson arrived with reinforcements, to take over the command, and Villeneuve's opportunity was gone. When it was too late, on October 19, he began to get his fleet out of Cadiz, driven thereto, as we now know, by express orders from Napoleon. Why such orders were ever given is a mystery which will probably never be satisfactorily explained. No end could be gained by a battle, for the purpose for which it should have been fought was already abandoned; and poor Villeneuve led his ships out to a struggle which could accomplish nothing save his own destruction.

On October 20 his fleet, consisting of thirty-three sail of the line, was clear of Cadiz. Nelson, with twenty-seven battleships, waited till the enemy was so far from the land as to make escape impossible, and then on October 21 came down upon his foe to fight his last battle, and to gain the greatest triumph ever won by the British Navy.

The combined Franco-Spanish fleet was sailing under light airs, in a confused line, in which the ships were sometimes two or three deep. Nelson formed his fleet in two divisions, the lee division led by Collingwood in the *Royal Sovereign*, the weather by himself in the immortal *Victory*, and brought his attack down in these two lines at right angles to the long straggling line of battle of the enemy. By all the rules of naval warfare he took an indefensible risk, for he exposed his leading ships, as they came up in succession, to a fire from the whole Franco-Spanish line which ought to have destroyed them. But no small part of Nelson's genius lay in his power to gauge the enemy to whom he was opposed. He believed in the inefficiency of his opponents, and in the efficiency of his own fleet; he took his risks accordingly, and the result was the most triumphant of victories.

As the British divisions slowly drifted down before the light wind, a storm of fire burst upon them. Collingwood, at the head of the lee division, which was nearest to the enemy, was the first to encounter it. The *Royal Sovereign* suffered severely; but Collingwood held grimly and silently on, and broke the hostile line astern of the great *Santa Ana*, raking her, as he passed, with a thundering broadside which killed or wounded 400 of her crew. Then he ranged alongside his big opponent, muzzle to muzzle, and engaged her and four other vessels which came up to help her. It was at this moment, when the shot were flying so thick that they could be seen crashing together in the air, that Nelson, whose division had not yet come into action, exclaimed, "See how that noble fellow Collingwood carries his ship into action!" while Collingwood, in all the rapture of a great fight, remarked to his flag-captain, "Rotherham, what would Nelson give to be here?"

It was 11.30 a.m. when the enemy opened fire upon the *Royal Sovereign*. Twenty minutes later, as the *Victory* slowly crept down before the light breeze, the batteries of the Franco-Spanish fleet opened upon her, and the *Téméraire* which followed her. Between twelve and one the *Victory* passed under the stern of the French flagship, the *Bucentaure*, giving her a fierce broadside of double-shotted guns. Then, finding that he could not get alongside of the *Bucentaure*, Nelson ran on board the *Redoutable*, and engaged her with his starboard battery, while the port guns opened upon the *Santissima Trinidad* and other vessels of the enemy's fleet. The *Téméraire*, coming up, took the *Redoutable* on her other side, and, as ship after ship of the weather division arrived, the action became general all along the line.

Then, about 1.15 p.m., came the catastrophe. The *Redoutable* was hopelessly overmatched in gunnery, but her tops were filled with musketeers, who kept up a deadly fire on the decks of the British flagship. A bullet fired from her mizzen-top, not more than fifteen yards from the spot where the Admiral was standing, struck him in the shoulder, and he fell to the deck. His flag-captain, Hardy, ran to pick him up, and, as he raised his gallant chief, Nelson said : "They have done for me at last, Hardy." "I hope not," said Hardy. "Yes," he replied, "my backbone is shot through."

The stricken hero was carried down to the cockpit of the *Victory*, and there he lay for three hours, his life slowly ebbing away, while the battle raged overhead, and his ship quivered continually to the concussion of her own broadsides. "O *Victory*, *Victory*," he said in one such moment, "how you distract my poor brain !"

At 4.30 p.m., not before he had learned of the completeness of his triumph, the greatest sailor our country has ever bred passed away, with the words, "Thank God, I have done my duty !"

Meanwhile, in every quarter of the fight the British fleet was triumphant. Shortly after 2 p.m., the *Bucentaure* surrendered, and Villeneuve yielded himself as a prisoner. The *Santa Ana*, with Admiral Alava, followed suit, after a most gallant defence. About four o'clock the biggest ship in the combined fleet, the *Santissima Trinidad*, hauled down her colours, as the *Redoutable*, the *Victory's* particular antagonist, had done some time before, after fighting a battle worthy of her great opponent. No man on the French side came out of the fight with greater credit than Captain Lucas of the *Redoutable*.

By five o'clock all that was left undestroyed or uncaptured of the combined fleet was in full flight, part under Admiral Gravina, making for Cadiz, part under Dumanoir, steering out into the Atlantic, only to be brought to action and captured, a fortnight later, by Sir Richard Strachan. In all, eighteen ships of the thirty-three with which the enemy had gone into battle surrendered. Soon after the struggle ended a fierce storm came on. The battered ships, some of them almost torn to pieces, had great difficulty in riding it out. Some foundered, the *Redoutable* among them; others, including the huge *Santissima Trinidad*, had to be scuttled and abandoned. Only four of the prizes survived to be brought to Spithead; and even these were too much shattered to be of any service. But the victory of Trafalgar is not to be measured by the number of prizes which it added to the Navy. It meant the destruction of the whole sea-power of France and Spain, and the setting at rest for ever of the fear of a French invasion. Nelson had accomplished in his death what had been the great object of his life, and, like the stricken Douglas at Otterburn, "a dead man had won the field."

Yet even the brilliancy of the victory scarcely seemed to touch the nation in comparison with the sense of the loss sustained in the death of our great naval hero.

What was said of the people after Wolfe's victory at Quebec might have been said just as truly after Trafalgar. "They triumphed, and they wept; for Nelson had fallen in the hour of victory." Yet Nelson may be esteemed to have been fortunate in his death. He was only forty-seven when he fell; but his work was done, and it is scarcely possible to imagine an event that could have added glory to the laurels of the Nile, Copenhagen, and Trafalgar. "Other men," writes a great American sailor, Admiral Mahan, "have died in the hour of victory; but for no other man has victory so singular and so signal graced the fulfilment and ending of a great life's work."

> "Admirals all, for England's sake,
>   Honour be yours, and fame!
> And honour, as long as waves shall break,
>   To Nelson's peerless name!"

## CHAPTER IX

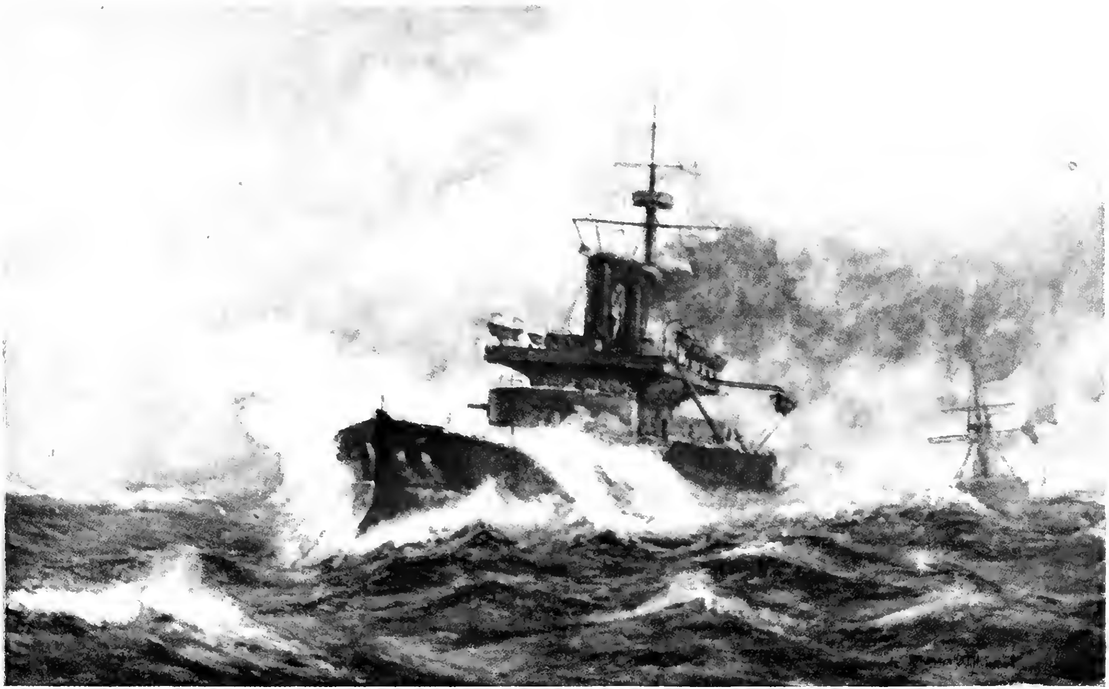
### THE COMING OF STEAM AND STEEL

After the Great French War had come to an end at Waterloo, the world for a while had a rest from naval warfare. In 1816 indeed, Lord Exmouth, with a British fleet and a Dutch frigate squadron, bombarded Algiers, the Pirate City, and secured the release of hundreds of Christian slaves, and in 1827 the combined British, French, and Russian fleets, under Sir Edward Codrington, destroyed the Turkish-Egyptian fleet in the Bay of Navarino. But, apart from these incidents, there is comparatively little to tell of the Navy in the years from 1815 to 1854.

In 1854, however, the Crimean War broke out, and

Britain and France combined against Russia. The Navy played no very prominent part in the war, for the ships of the Russian fleet in the Black Sea were sunk or burned at their anchors, to keep them from falling into the hands of the Allies, and the wooden vessels of the time could make little impression upon the great forts of Sevastopol. All the same, the Crimean War marked the first step of the great movement that was to change the Navy from sail and wood to steam and steel. Steam-vessels were used to a considerable extent in the various operations, and at the bombardment of the Russian fortress of Kinburn, armoured vessels made their first appearance in warfare, three French floating batteries, plated with 4-inch iron, being employed, which did great damage to the Russian defences, receiving next to none themselves. Similar floating batteries were built for the British fleet, but were not ready in time to take part in the war.

In 1857 the first sea-going ironclad made its appearance. The French Government handed over to the famous naval architect, M. Dupuy de Lôme, the wooden two-decker *Napoléon*. He cut her down a deck, lengthened her by 24 feet, plated her all along the water-line with iron 5 inches thick backed by 26 inches of wood, and in 1859 the transformed warship, now named *La Gloire*, was ready for service. Her completion was a challenge to the world, and France's late ally was not slow to lift the gauntlet. In 1859 the designs of Mr. Isaac Watts and Mr. Scott Russell for an ironclad to match *La Gloire* were accepted by the Admiralty; and two years later the *Warrior* was afloat. She was an iron steamship of 420 feet in length, and 6,050 tons burden, was



AN EARLY TURRET SHIP—H.M.S THUNDERER.

plated over the greater part of her length with 4½-inch armour, carried sixty-eight-pounder guns weighing 5 tons apiece, and, with her speed of fourteen knots was the most formidable fighting machine in existence (Plate VII.). Our first ironclad is still in being as a workshop at Portsmouth.

The next move, however, was to come from the other side of the Atlantic. In 1861 the Civil War between the Northern and Southern States of America broke out, and on March 8, 1862, the Northern fleet of old-fashioned wooden sailing-ships and steamers was lying in Hampton Roads, blockading the Norfolk Navy-yard. The Southerners had been preparing a surprise for their opponents. They had taken an old wooden frigate, the *Virginia*, cut her down nearly to the water-line, and reared upon her hull a sloping structure, much like the roof of a barn, plated with railway iron. From this ironclad fortress ten heavy guns looked out. On this spring morning the crews of the Northern vessels saw this strange-looking monster coming slowly and ominously down towards their fleet. As she drew near, the ships in range opened fire upon her, but the shot rebounded from her sides, or rolled harmlessly down her sloping iron roof. Grimly silent, the *Merrimac*, as she was now named, came on, and at close range her ports opened, and she poured a dreadful fire upon the two nearest Northern frigates, the *Congress* and the *Cumberland*. Then, swinging round, she headed straight for the doomed *Cumberland*. In vain the latter pelted her iron walls with shot and shell. The *Merrimac* came on uninjured, and in a few moments her iron ram crashed into the wooden side of the *Cumberland*, making a hideous rent. Then she backed out, leaving her ram behind her; the water poured in through the gaping timbers, and the *Cumberland* slowly settled down, her guns firing to the very last.

The *Congress* had moved to shallower water, and the *Merrimac* could not get near enough to ram her; but she came as near as possible, and poured in a deadly fire, to which the Northern ship could only make a feeble reply. At last, her captain killed, the greater part of her crew either dead or wounded, and the ship on fire, the *Congress* hauled down her flag. The grim victor turned to complete her work of destruction, and the other Northern ships seemed at her mercy; but the tide was ebbing, and she had to give up her task for the day. To-morrow she would return and complete the ruin of her enemies. But by the next day the whole circumstances of the fight had changed, and her opportunity was gone.

The Northern engineers, knowing something of what the Southerners were doing, had been feverishly working to produce a ship to match the *Merrimac.* A Swedish engineer, named Ericsson, had designed a new type of ironclad, and on this ship, the *Monitor*, the Northern Navy-yard had been busy for 120 days, and now she was ready for her work. She was the strangest of all warships. Her deck rose only 2 feet out of the water, and she had no bulwarks. Amidships there stood a single revolving iron turret, thickly plated with armour, out of which looked two heavy guns, firing shell of 250 pounds weight. A little pilot-house, plated with 9 inches of iron, was the only other structure above the deck.

Two days before the *Merrimac's* first battle, the

*Monitor* steamed out of New York Harbour, accompanied by two other steamships. As she drew near to Hampton Roads, her crew saw the glare of the burning *Congress*, and heard the boom of her magazine as she blew up. The *Monitor* had not arrived a moment too soon. Next morning, when the *Merrimac* steamed down the river to renew her attack on the Northern fleet, she saw, lying near to the steam-frigate *Minnesota*, a curious-looking vessel, "a cheese-box on a tin raft," as an onlooker described her. The *Merrimac* opened fire on the *Minnesota*; but this strange monster moved out between the attacker and her prey, and when the *Merrimac* fired at her, she found it almost impossible to hit the little cheese-box at all; or, if she did hit it, the shot simply flew off from the rounded sides. The *Monitor's* two heavy guns now opened fire upon the *Merrimac*, but proved just as powerless to pierce her armour. Greek had met Greek. Round and round one another the two ships steamed, doing their utmost to deliver a deadly blow. First the one, then the other, attempted to ram her antagonist, but failed, and after the fight had lasted for several hours, the combatants drew sullenly apart, realizing that they were helpless to harm one another. The *Monitor* anchored in a position where she could cover the rest of the Northern fleet; the *Merrimac* went back to her port. It was a drawn battle; but the results of it went all to the *Monitor* and the Northern States. The *Merrimac* had failed to break the blockade and destroy the Northern fleet, and she never ventured to attack again.

Indecisive as this first fight of ironclads had been, its echoes were heard all round the world. The nations saw that a great new naval force had come into being, before which their old-fashioned vessels would be powerless; and all who could set to work to build ships fit to meet such an enemy as the *Monitor*. The cry was all for ships with turrets; but our Admiralty wisely decided that our vessels, which had to go all over the world, could not be built so low in the water as the American turret-ship, but must be higher and bigger. At last, after several experiments, such as the *Royal Sovereign* and the *Monarch*, Captain Cowper Coles designed and built the famous ship called the *Captain*. She had two turrets, each carrying two 25-ton guns; but she was meant for both sail and steam, and was much more like a regular sea-going ship than the American vessel. She was intended to float 8 feet 6 inches above the water; but by a strange slip in the design this was reduced by nearly 2 feet, and the *Captain* went to sea with only 6 feet 8 inches of free board.

At first all promised well. The new ship was faster than the *Monarch*, and bore the firing of her guns, even in rough weather, very well. On the evening of September 6, 1871, she was with the Channel Squadron, under Admiral Milne, in the Bay of Biscay, not far from Cape Finisterre. The Admiral had noticed that all day the *Captain* was rolling heavily, her low deck being often under water. As night came on, he watched with some anxiety the labouring vessel, which was immediately astern of his flagship, the *Lord Warden*. By one o'clock in the morning a great gale was blowing, sails were furled, and everything made snug. Not long after, Admiral Milne saw the *Captain* heeling over fearfully to starboard; then a heavy squall of wind and rain blotted her out from sight, and when it had passed the *Captain* was gone. Next day eighteen survivors landed at Finisterre, and the story was gradually told of how the great ship heeled over more and more before the storm, until she lay on her beam-ends with her masts along the water. As she heeled, her turrets fell right out, and she slowly settled down and disappeared, taking with her her captain, Burgoyne, her designer, Cowper Coles, and 500 brave men.

This terrible disaster gave the death-blow to the masted turret-ship in the British Navy. Turret-ships were still built ; indeed, it was plain that the turret, or some form of it, was the only way in which the heavy guns of modern times could be carried with safety and with proper protection for the gun crews. But now mast and sails had to go, as wooden hulls had already gone, and the warship of the future was to be a strange contrast to the stately white-winged ships of the line that flew the White Ensign at Trafalgar. In 1872 the *Devastation*, the first ship of the new type, was commissioned. She was an ugly monster of 9,500 tons, lying very low in the water at bow and stern, but rising higher amidships. In each of her two heavily armoured turrets she carried a couple of 35-ton guns, while she was plated at the water-line with 14-inch armour. Amidships rose one stumpy iron mast, not to carry sails, but simply for purposes of signalling and hoisting out boats. The *Devastation* was certainly no beauty, as you can see from Plate VIII., which shows the *Thunderer*, a ship of the same type ; but she proved a very successful and efficient vessel, though a very uncomfortable one in heavy weather.

Bit by bit the size and power of the big battleship increased. As guns were made more powerful, so bigger ships had to be built to carry them and the thick armour needed to resist heavy shell, until in 1882 the most powerful ship afloat was the *Inflexible*, which took part in the bombardment of Alexandria. She was of more than 2,000 tons greater burden than the *Devastation*, and the peculiarity of her construction was that her armour only covered about one-third of her length. At bow and stern for 100 feet she had no plating; but the central part of the vessel was plated with compound armour of the enormous thickness of 24 inches. At two opposite corners of this iron citadel rose turrets plated with 17-inch iron, from each of which looked out two huge 81-ton guns, firing a shell of about 1,700 pounds weight. The *Inflexible* was then the last word in battleships, and great ideas were formed of her power.

With her was a fleet of battleships of various types and ages. A strange collection they would seem to us now, and one and all have long since passed out of service. Along with them were a few light gunboats of between seven and eight hundred tons, one of them, the *Condor*, destined to make a name for herself. The reason for this fleet's presence off Alexandria was that a military rebellion had taken place in Egypt; British interests were threatened, and the fleet which was sent to protect them found itself in presence of a number of forts which were being made more formidable every day. Accordingly a message was sent in, warning the Egyptian commander that, unless the forts were surrendered and disarmed, they would be bombarded by the fleet. No answer was received, and, at seven o'clock on the morning of July 11, 1882, the *Alexandra* fired the first gun, and the whole British fleet poured a tremendous fire upon the forts. The Egyptian gunners replied bravely; but their guns were no match for the heavy artillery of the fleet. One by one they were silenced, and by 5.30 in the afternoon the ships ceased firing.

The British losses had been slight, only five men being killed and twenty-seven wounded. The Egyptians had suffered far more severely; but when the beaten forts came to be inspected, it was found that the heavy slow-firing guns of the *Inflexible* and her sisters had done far less harm than was expected, and that almost as much damage had been done by the light 4½-ton guns of the gunboats, as by the huge 81-ton monsters of the *Inflexible.* One of the gunboats in particular, the *Condor*, commanded by Lord Charles Beresford, had steamed close in and engaged Fort Marabout at short range; and, though a single shell from the Egyptian batteries might have sunk her, if it had struck her, she was so skilfully handled, and kept up so fierce a fire, that she succeeded in silencing the fort, and drew from Admiral Seymour the signal, "Well done, *Condor.*" On the whole, the results of the bombardment of Alexandria were disappointing to the admirers of the big battleship of the day.

The *Inflexible* was succeeded by a class of battleships known as the Admirals, because they were named after famous British admirals—*Rodney*, *Collingwood*, *Benbow*, *Anson*, *Howe*, and *Camperdown.* They were ships of 10,300 tons, and were driven by twin-screw engines of 11,500 horse-power, and carried four 67-ton guns, not in turrets, but in barbettes, or armoured forts open at the top. Instead of four 67-ton guns, the *Benbow* carried two monstrous weapons of 111 tons each. One ship of this class, the *Camperdown*, was destined to a terrible celebrity from the fearful collision in which she sank the flagship of the Mediterranean fleet, the ill-fated *Victoria*.

The *Victoria* was of a later type than the Admirals. Completed in 1889, she, and her sister the *Sanspareil*, were then counted the finest vessels in the Navy. She was of much the same size as the Admirals, but of 14,000 horse-power, while she carried two 110-ton guns in one turret forward, and a single 9·2-inch gun aft. On June 22, 1893, she was flagship of the Mediterranean fleet under Sir George Tryon. The fleet had left Beirut, and was steaming in two lines, about 1,200 yards apart, the one line led by the flagship, the other by the *Camperdown*. Admiral Tryon then signalled for the two lines to turn inwards towards each other sixteen points. It was pointed out to him that this order would almost certainly cause the leading ships to collide; but for some reason never satisfactorily explained, he persisted, and the signal was duly made.

Admiral Markham, on the *Camperdown*, exclaimed when the signal was hoisted, "It is impossible," and the *Camperdown* signalled that the order was not understood; but no change was made, and at last the two great ships began to turn towards one another. Closer and closer they drew, and soon it was plain that a collision was bound to follow. Vainly the *Camperdown* tried to avoid it by reversing her engines. She had gathered too much way, and with a fearful crash her steel ram struck the *Victoria* on her starboard bow, just in front of the great turret. Such was the force of the blow that the stricken vessel was carried bodily sideways for over 70 feet, while the ram of the

*Camperdown* penetrated her side to a depth of 9 feet; and as the striker drew back, the water poured in like a mill-race through the enormous rent. The *Victoria's* engines were started again in the hope of forcing her on shore before she sank; but all was in vain. Lower and lower her bow dipped in the water, and her stern rose high in the air, the whirling screws killing several of her crew as they attempted to leap from the sinking ship. And then, with a great plunge, the mighty vessel went down to the depths, carrying with her 321 brave men and the gallant and skilful Admiral, whose one unfortunate mistake had cost him and his country so dear.

The sinking of the *Victoria* led to much discussion as to whether it was advisable to build such huge ships, whose loss involved so much destruction of human life and of money; but the arguments in favour of the big ship carried the day, and instead of vessels growing smaller, they steadily increased in size and power. The *Royal Sovereign* and her sisters, which succeeded the *Victoria*, were nearly 4,000 tons larger and considerably faster; but even they were made to look old-fashioned by the nine fine ships of the Majestic class which were commenced in 1893. These were not very much bigger than the Royal Sovereigns, 14,900 tons compared with 14,150; but they were finer ships in every way. Their armour was of the new Harveyed steel, in which the hardened face of the plate gives a much greater resisting power, and their barbettes held four of the new 46-ton wire-guns, so-called because the gun is built up of many miles of flat steel wire or ribbon, wound, under great tension, round an inner core of steel tube, and covered by an outer skin of steel.

These wire-guns are of enormous strength, and the method of building them is one that has been followed ever since. Besides their heavy guns, the Majestics carried twelve 6-inch guns, and sixteen 12-pounders. Up to the end of last century, they and their improved successors, the Formidables and Bulwarks, remained the finest ships in the fleet and probably in the world ; but the twentieth century had scarcely begun before a great change began to take place, and the battleship advanced in size and power by leaps and bounds.

# CHAPTER X

## THE NAVY TO-DAY—MAMMOTHS AND MOSQUITOES

THE earliest ships of the new century, the eight ships of the King Edward VII. class, and the *Lord Nelson* and *Agamemnon*, were an advance indeed upon the Majestics and Formidables, but not so great an advance as to suggest the tremendous change that lay ahead.

In the year 1901, however, Colonel Cuniberti, Constructor to the Italian Navy, began to develop the idea of a new type of battleship of tremendous power and speed, and in 1903 he published, in "Fighting Ships," an article on the subject. His plan was to have a vessel of at least 17,000 tons, so heavily armoured that no shells, save the very largest, could do anything against her, armed, not with four 12-inch guns as had been the custom hitherto, but with twelve of these huge weapons, carrying no medium-sized guns at all, but only a few light pieces to repel torpedo craft, and capable of a speed which would enable her to bring to action any other battleship afloat whenever she chose.

Colonel Cuniberti's ideas were laughed at in some quarters; but other minds had been working in the same direction, and in 1905 the *Dreadnought* was laid down, and, being hurried forward with all possible speed, was ready for launching ten months later. In this great ship, which at once made all other battleships look small and feeble, the ideas of Colonel Cuniberti were completely realized. Her tonnage was 17,900, her armour-plating was 11 inches of Krupp cemented steel, the most impenetrable defence yet devised, and instead of the old-fashioned engines driving twin screws, she was equipped with four shafts driven by Parsons' turbines of 23,000 horse-power, which forced her huge hull through the water at a speed of twenty-one knots. But the greatest change was in her armament. In five heavily armoured gun-houses, one ahead, two astern, one on either side, she carried ten 12-inch guns of the latest type, giving her a weight of fire two and a half times as great as that of the heavy guns of any battleship afloat. Besides these she had no guns save twenty-seven 12-pounders to repel torpedo craft.

Let me try to give you some idea of the size and power of this great ship whose appearance put all the war engines of the time out of date. In length she would take up the whole of one side of Trafalgar Square, or fill up the whole nave and chancel of St. Paul's Cathedral. Inside her hull she could stow two first-class ships of the line, such as the *Victory* of Nelson's time, with a frigate thrown into the bargain. But it is her tremendous striking power that is the point of greatest interest. Her ten huge 12-inch guns, 50 feet long, are so grouped that when she is fighting broadside to broadside with an enemy, eight of them can always be fired at once, while, when she is chasing, six guns could always be brought to bear on the ship ahead. Each of her guns weighs more than 58 tons, and its steel core is wound round with 130 miles of steel ribbon, the winding process taking three or four weeks to accomplish. The charge of cordite used to fire these formidable weapons weighs nearly 3 cwt. while the shell itself weighs 850 pounds. Fired at extreme elevation, the shell could travel 25 miles—right across the Straits of Dover with something to spare—and at the highest point of the great curve which it would describe, the missile would be flying at a height twice as great as that of Mont Blanc. If the whole ten guns were fired at once, the force exerted by the discharge would be sufficient to lift the great ship 21 feet into the air. Such vessels are, of course, costly luxuries for the nations which own them. The *Dreadnought*, fully equipped for battle, cost the British taxpayer £1,797,497.

Taken aback as they were for the moment by the completion of this great fighting machine, it was not long before the other nations of the world took up the challenge. Within three years every nation that had a claim to be considered a sea-power was building Dreadnoughts, while some whose claim to such a position is more than doubtful were following their example. By 1908, Germany, whose Navy had been advancing at a rate which has made it the one great rival to our own, had launched four Dreadnoughts, the *Nassau*, the *Posen*, the *Rhineland*, and the *Westfalen*, all with a tonnage of 18,307, or more than 400 tons larger than our *Dreadnought*, while the United States had put into the water the *North Dakota*, of 20,000 tons, and had another ship of the same size, the *Delaware*, ready to launch in the following year.

Meanwhile, Britain had not been content with her type ship. The *Dreadnought* was succeeded in 1907 by the *Bellerophon*, the *Temeraire*, and the *Superb*, each of 18,600 tons, while in 1908 the *Collingwood* and the *St. Vincent*, of 19,250 tons, were launched, and in 1909 the *Vanguard*, of the same tonnage, and the *Neptune* of 20,250 tons. By 1910 we had crept up to the Orion class of 22,500 tons; while now, in 1913 we are completing ships like the *King George V.* of 23,600 tons.

The four great ships of this class, the *King George V.*, the *Centurion*, the *Ajax*, and the *Audacious*, measure the advance which has been made since the *Dreadnought* was launched. Nearly 6,000 tons larger than the latter, their horse-power is 8,000 more, their armour is an inch thicker, and they carry a much heavier battery. Instead of the ten 12-inch guns of the *Dreadnought*, they, like their predecessors of the Orion class, are armed with ten of the new 13·5-inch guns firing a 1,400-pound shell, while in addition they have sixteen 4-inch quick-firers. The weight of their broadside is more than double that of the *Dreadnought*—14,000 pounds, against the 6,800 of the earlier ship.

But even these monsters, huge though they may seem, are not the biggest ships of war. Germany is meeting them with her Kaisers, whose tonnage is 24,310, though their armament is not so heavy, consisting of ten 12-inch guns and smaller weapons, and their broadside fire is only 9,810 pounds against 14,000. Austria, which has already, in the ships of the Viribus Unitis class, vessels of 20,000 tons, mounting twelve 12-inch guns, is contemplating a class of battleship of

26,000 tons, with a gun-power of twelve 13·5's. The *Nevada* and *Oklahoma* of the United States Navy are of 27,500 tons, carrying ten 14-inch guns, and it is said that Congress is thinking of a 31,000-ton vessel, to carry twelve of these great weapons; while States like Brazil, Chili, and the Argentine Republic are all building Dreadnoughts of 27,000 tons and upwards. In answer to all these, our new Iron Dukes are of 26,400 tons, while the latest class of British battleship is to be bigger still, reaching 29,000 tons, with a speed of 22½ knots.

Already these mammoths are costing practically £2,000,000 apiece, or double the price of a first-class battleship of twenty years ago; and there is no sign of the costly competition coming to an end. What a naval battle will be like, when two fleets of these enormous vessels, with their terrible armament, meet in anger, is almost too dreadful to think of. Meanwhile, costly as such ships may be, and senseless as is the rivalry between nations which makes them a necessity, we cannot afford to be slack in our efforts to maintain our lead. A great fleet costs a vast amount of money, but it costs infinitely less than national ruin; and that is what our fate would be were we to allow any foreign nation to become superior to us at sea, or even to approach within measurable distance of equality with our Navy.

But the big battleship, though perhaps the most important weapon of the fleet, is far from being the only one. For centuries the ship of the line, with her great size and her powerful battery of guns, has had for her companion and handmaid the frigate—smaller, lighter, and faster—carrying fewer and lighter guns, and designed, not to lie in the line of battle alongside the bigger ships, but to be the eyes and ears of the battle fleet, cruising ahead to bring news of the enemy to the big vessels behind, fighting, when need arose, with the corresponding ships of the hostile fleet, and damaging the enemy's commerce, but never, except in extreme cases, presuming to meddle with the affairs of the ship of the line. In fact, in the great battles of the fleet it was scarcely considered etiquette for a battleship to fire upon a frigate, unless the frigate invited disaster by rudely attacking the bigger vessel, in which case one broadside from the capital ship was generally sufficient to settle the business of her unfortunate opponent.

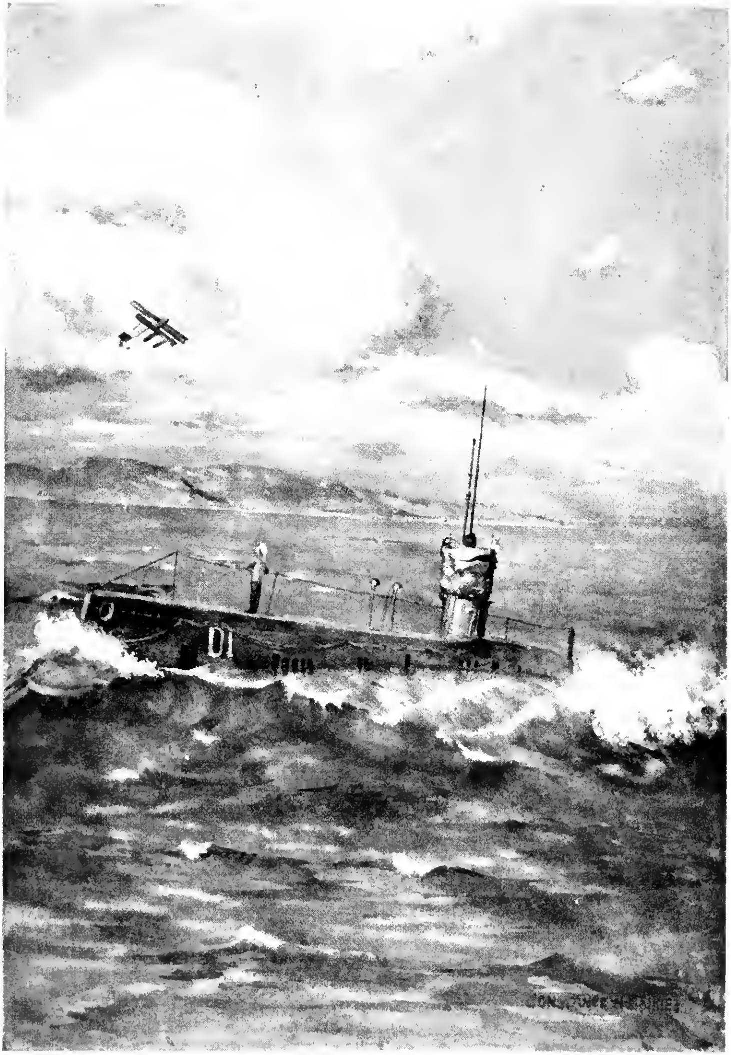
When steam and steel superseded sails and wood, the place of the frigate was taken by the steam-cruiser, which discharged exactly the same duties as the frigate used to do. The cruiser was generally, though not always, smaller than the battleship, had finer lines, and more powerful engines, and was therefore faster, carried less heavy armour, or sometimes none at all, save a curved steel deck to protect her vitals, and was armed with lighter guns. Battleship and cruiser had simply taken the place of ship of the line and frigate, their respective relations and duties remaining what they had always been.

This remained true up to the year 1905. Our cruisers, with two notable exceptions, were much smaller than our battleships, and much less heavily armed, and no cruiser could have stood up for half an hour to a battleship's fire. The two exceptions were the famous cruisers *Powerful* and *Terrible*, which were almost as big as the Majestics of the same day. Even so, they were not armoured, but only protected by a steel deck, and their armament only consisted of two 9·2-inch and twelve 6-inch guns. Their chief feature was their speed—

22 knots—which was very great for such big ships at that time. But the cruisers of the Cressy and the Drake classes, which succeeded them, were smaller, though they were provided with armour, and were altogether more formidable vessels.

In 1905, however, there appeared, along with the *Dreadnought*, three ships of a new type, which we now call the battle-cruiser type, and in which the cruiser, still keeping her great speed, becomes almost as powerful a fighting-machine as the battleship. These ships—the *Invincible*, the *Inflexible*, and the *Indomitable*—were of 17,250 tons. They were armoured with 7-inch armour against the 11-inch plates of the *Dreadnought*, and they carried eight 12-inch guns against her ten. They were thus weaker ships than the *Dreadnought*, but not so very much weaker, and they were far more powerful than any other battleship then afloat. Along with their great hitting power they had extraordinary speed. Their engines were of 41,000 horse-power, and while they were designed for 25 knots they have all, in actual practice, sometimes done about 28½. Of course, to get such speeds they consume an enormous amount of coal. The *Indomitable*, in her famous record-breaking trip at full speed across the Atlantic, burned 500 tons of coal and about 120 tons of oil a day.

The Inflexibles were followed by the *Indefatigable* of 18,750 tons and a speed of 29·13 knots, and by 1910 the cruiser had passed her rival, not only in speed, but in size, the *Lion* and the *Princess Royal* being of 26,350 tons, or nearly 4,000 tons larger than the battleship *Orion* of the same year. They carried eight 13·5 guns, and their horse-power had gone up to the enormous figure of 70,000, which gave in the case



SUBMARINE AND AEROPLANE.

of the *Lion* a speed of nearly 32 knots, and in that of the *Princess Royal*, of nearly 35. The *Queen Mary*, newly completed, is still larger, 27,000 tons and 75,000 horse-power, while the *Tiger*, now getting ready on the Clyde, is expected to be of 30,000 tons and 110,000 horse-power. The latter vessel is designed for 31 knots, but it is certain that she will do considerably more.

One type of cruiser, therefore, has become simply a faster battleship, not quite so powerful as the grim monster of the line, but only a little behind it even in striking power, and so very much more speedy that the battle cruiser could always refuse battle to the more heavily armoured vessel, unless at her own time and under her own conditions. The battle cruiser is an even more costly luxury than the battleship ; the *Queen Mary* and her companions average something over £2,000,000 apiece. Of course, these huge vessels are not the only cruisers we are building. Our fleet needs cruisers of all sizes, and we have smaller armoured vessels like the County cruisers, able to stand up to anything less than a battleship, small armoured cruisers like the ships of the Town class, Yarmouths, Birminghams, and so on, which range about 5,000 tons in size, have a speed of about 25 knots, and are designed to be the eyes and ears of the battle fleet ; and smaller cruisers still, like the *Forward* and her sisters, of 2,700 tons or thereby, fast little ships which only carried 12-pounder guns at first, but are now being armed with 4-inch quick-firers.

Behind the battleships, battle cruisers, and cruisers of the Navy comes what is sometimes called the mosquito fleet. It consists of the various classes of torpedo-boat destroyer, and the submarines, while a new weapon of as yet unknown power is being added to it in the shape of the hydro-aeroplane. The destroyer and the submarine both owe their existence and their power as weapons of warfare to the torpedo. The torpedo is simply a little submarine vessel which needs no crew, carries within itself the engines for driving it through the water and the provision for steering it, and is provided with a heavy charge of an explosive material called gun-cotton which is fired by contact with the object aimed at. Its shape is that of a long cigar of steel. Beginning at its head, we have first the striker which explodes the charge, and then the charge itself. Behind this comes the air chamber, where is stored the compressed air which drives the engine of the torpedo, and behind the air chamber lies the balance chamber where the self-acting steering apparatus is placed. Then comes the engine-room with its tiny engines working a shaft on which are two screw propellers revolving in opposite directions. Last of all, just before the tail, is the buoyancy chamber holding air sufficient to keep the torpedo at its proper level in the water, and the gyroscope which hinders it from being deflected to right or left of its proper course. The tail itself carries the four rudders, two vertical and two horizontal, the propellers, and the mechanism for regulating the length of run.

The ordinary torpedo used till lately as the standard in our Navy is about 16 feet in length and 18 inches in diameter, costs about £500, and is effective up to a range of about 4,000 yards, or considerably over two miles. The more modern type, however, is larger and more powerful, being 21 inches in diameter, with a range of 7,000 yards at 45 knots speed, and 11,000 yards at 30 knots. It is started on its errand of destruction by being fired, either by compressed air or by a small charge of cordite, out of a special tube carried for the purpose. As it leaves the tube and plunges into the water its engines begin to work, and it cleaves its own way beneath the waves towards the object at which it is aimed. All our battleships and cruisers carry under-water tubes for the purpose of discharging these deadly little machines; but there are also vessels specially designed for torpedo service.

At first these vessels were called torpedo-boats, and were of small size, though of considerable speed. They ranged up to about 300 tons, with speeds of from 24 to 27 knots. But soon the Navy began to develop a class of boat which was called the torpedo-boat-destroyer, because it was supposed that its chief duty would be to chase and destroy the enemy's torpedo-boats. The vessels of this type were bigger and faster, carried torpedo-tubes themselves, and were armed with quick-firing guns. Gradually the type grew more and more important until it superseded the torpedo-boat altogether, and now the torpedo-boat-destroyer—or destroyer, as she is usually called—has become simply a large and speedy torpedo-boat.

In some respects these destroyers are the most wonderful ships afloat. A destroyer of the most modern type, such as the boats of the 1912-13 programme, may be of 1,200 tons displacement, and, though more than double the size of some of her predecessors, is still quite a small vessel. But she has engines of from 25,000 to 27,000 horse-power, as powerful, that is to say, as those of a 20,000-ton

Dreadnought, and they drive her slender hull through the water at a speed of perhaps 33 knots. Some of our destroyers have done considerably more than this, reaching nearly 37 knots, or well over forty miles an hour. These latest boats carry four 21-inch torpedo tubes and three 4-inch quick-firing guns, and are manned by a crew of 110 men.

Our destroyer fleet at the present time numbers about 230 vessels of different sizes and speeds, the latest and biggest being of the type described above. In war-time their duty would be partly to protect the big battleships and cruisers against the attack of the enemy's destroyers, but also, and chiefly, to make attacks themselves upon the hostile battle fleet. Taking advantage of a dark night, and using their high speed, they would dash for the spot where the enemy's squadron lay, trying to get within effective torpedo range before being discovered. Should they succeed in doing this, their torpedoes would be fired at the great ships, and the little vessels would retreat through the darkness, while the torpedoes did their deadly work, bursting against the bottoms of the battleships, and sinking or disabling them.

Of course, such an attempt means a terrible risk to those who make it. The moment the destroyer is discovered the beams of the enemy's searchlights will light her up, and a hail of shell from the quick-firing guns will be poured upon her, against which her thin steel sides and deck will give little protection. But then risks have to be taken in warfare, and even the loss of two or three destroyers would be a cheap price to pay for the sinking or even the crippling of a hostile Dreadnought.

Besides the boats described, we have one destroyer of a special type, which may claim to be the fastest ship in the world. This vessel, the *Swift*, is of 2,170 tons, has engines of 30,000 horse-power, and, while designed for 36 knots, has done over 38.

Within the last few years naval warfare has taken two new developments, and it is becoming evident that in future our sea battles will be fought not only on the water, but under the water, and perhaps in the air over the water as well. For more than 200 years men have been trying to invent a boat which could move safely under the surface of the sea, and, during the American Civil War, one warship, the *Housatonic*, was sunk by the Confederate submarine torpedo-boat *David*, the submarine being herself lost, with her crew, in the attempt. But it was not till the beginning of this century that the successful trials of submarines belonging to the French fleet led our Admiralty to take up the matter seriously. They then adopted the Holland type of submarine boat, and several were built and successfully used ; and since then our Navy has gone on building these little vessels, until at the present time we have eighty-seven of them either complete or almost complete. The submarine is a boat shaped like a fat cigar or a fish. Within her steel hull she carries two or, in the later types, three or four torpedo tubes, and two sets of engines—a gasoline engine for driving her on the surface, and an electric engine for use when she is submerged, while she has storage chambers to hold compressed air for her crew to breathe while she is under water. Above the cigar-shaped hull rises a narrow deck, which, as she slips along the surface, shows very much like a plank set on edge, and from this deck rises a small conning-tower with a water-tight door, by means of which the crew can enter or leave the hull. When travelling from place to place, the submarine runs with her deck and her conning-tower above the water, so that her crew can have fresh air, and can see around them, though one would scarcely imagine the boat to be a comfortable ship in heavy weather.

When she is about to descend all openings are closed, and, as the boat dives under the water, guided downwards by her horizontal rudders, the only means by which her crew can see what is around them on the surface is afforded by the periscope. This is an arrangement like a small mast standing up above the conning-tower. It contains a prism and mirrors, by means of which what is happening on the surface is reflected down to a table in the hull where the navigating officer can see, as in a camera obscura, how to guide his own vessel among the other ships which surround him, or which he may wish to attack. Of course, the periscope can only be used to a limited depth below the water, and, when the submarine has to go deeper than the height of her periscope tube, she is blind for the time being.

The navigation of these boats is attended by great dangers, and there have been several terrible disasters, in which submarines running on the surface or immediately beneath it have been run down and sunk by other vessels. But the submarine is constantly becoming more and more reliable, and will, no doubt, play a great part in the naval warfare of the future. Our first submarine was launched in 1901; she had a displacement of 120 tons, and a speed on the surface of 8 knots, while under water she could only do 5. The boats of the D class (Plate X.) are of between 500 and 600 tons displacement, and have a speed of 16 knots on the surface and 10 under water, while the E boats are from 700 to 800 tons; and the F class of 1912-13 displace from 940 to 1,200 tons, are of 5,000 horse-power, and have a surface speed of 20 knots, and an underwater speed of 12. These latest boats carry six torpedo tubes and two guns. What the value of these dangerous weapons may be in actual war only the test of war can prove. At all events, they are a threat to the huge battleship which cannot be disregarded, and it is plain that at the very least they will make an attack on estuaries and ports defended by them a very risky business for the ships employed, while their range of action and their speed have now so greatly increased that they are capable of attacking a hostile fleet even at a very considerable distance from their own base.

The last year or two has witnessed the addition of one more weapon to the many with which our Navy now works, or which it may have to face. When the aeroplane was made a working possibility, it was plain that before long it would be adapted to purposes of naval warfare. That has now been done, and the aeroplane has developed into the form of the hydro-aeroplane, which, instead of taking off from the ground after a run on wheels, takes off from the water, skimming along on fish-shaped floats, or is launched from a platform on the deck of a big warship. That the possibilities of danger from the attacks of aeroplanes have been recognized is seen in the fact that our latest ships have decks sufficiently stout to be proof against bombs dropped from above, and have also funnel protection.

It is scarcely likely that bomb-dropping on a moving ship will ever be successful, except by a lucky chance ; but the aeroplane has certainly a future before it in another branch of naval work. Its speed, and the height to which it can range, will enable it to do the scouting work of the fleet far more efficiently than the destroyer or the small cruiser ; and, though Britain has been very slow to take up this idea, there is no doubt that in the future we shall see a great development of the hydro-aeroplane for scouting purposes at all events, if not for those of actual battle.

Thus, then, we have traced the growth of the Royal Navy from its first small beginnings in the long-ships of King Alfred till it has become the wonderful force of the present day, with its mammoth battleships, its fast cruisers, its venomous destroyers and submarines, and its first attempts at aerial warfare. Each age has brought its own changes. Only one thing has remained the same through all the centuries—the cool, steady courage of the men who manned the ships and fought the battles for the sake of the land they loved. That, we are sure, remains as unquestionable to-day as it was when Nelson led his ships into action at Trafalgar, or when Grenville in the little *Revenge* defied the whole fleet of Spain. We may hope that it may never be put to the dreadful proof of actual war ; but, should that ever happen, we are confident that, in the grim hour of battle, it will not be the men behind the guns or in the conning towers who will be found wanting.

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