

## A BATTLESHIP IN ACTION

BY J. OLIVIER CURWOOD

WITH bombardments and sea fights of almost daily occurrence, and with half Europe preparing for a possible war, there are few things of more interest these days than the lives of the brave men who are waiting behind the armor belts of scores of battleships, ready to respond to the command which may at any moment precipitate them into the midst of one of those ocean tragedies whose terrors are only guessed at by the millions of people for whom they are fighting.

What it means to stand behind these sheets of steel, fired on from guns which can pierce them even from a distance of miles, only a comparatively few know, for the great steel monsters which now protect the flags of nations are of almost recent date. A modern battleship is a box of delicate machinery. The end of the whole mechanism may come at any time, and be over in an instant, perhaps. A well-directed shot from an enemy's gun reaches a vital spot in the great battleship. It flounders for thirty seconds, pitches forward, and in another 30 seconds only a whirlpool of water marks its grave.

### Preparing for Battle.

One may look on one of these leviathans of the deep as a many-storied building of steel. At the very bottom of it, deep down under the water, and safe from all attacks but those of torpedoes, is what might be called the "basement" of the battleships.

Here are the engines, the boilers, the ammunition magazines, and the great bunkers of coal. Men are polishing, oiling and cleaning. Petty officers may be inspecting the magazines, and still other men may be lolling about with nothing particu-

lar on their hands to do, or they may be working the tackle in the ammunition hoists to see that it is in proper shape.

Above this "basement" is the second story of the great warship—the ammunition passage, where, during battle, scores of men seize the powder and shells handed up to them from the magazines, and distribute them by means of hoists to the different guns on the ship.

Above this is the third story, the quarters of the men, the surgeons' room, and where the wounded are brought. And still above this is the great last "story" of the ship, bristling with great guns and turrets, and with the "fighting tops" and the big black funnels rising above.

There may be 500 or 600 souls on great war machines. Some of them are writing home, so as to have their messages ready when the opportunity comes for mailing them. Others are sleeping or reading or doing any one of a hundred things while off duty.

Then perhaps there comes to every ear the thrilling, thundering reverberations of the warships' great battle gong.

In a dozen different parts of the ship bugles begin calling the men to action. Wherever they are, they drop their occupations. Each one of them is a part of the machinery of battle, and understands exactly what to do.

In less than a minute the whole aspect of the ship is changed. Swarms of gunners and aides climb into the gun turrets. Up through the big, hollow steel masts rumble the "hoists," like small elevators, carrying men up into the fighting tops. Down in the basement of the ship a hundred ammunition tenders

march swiftly and silently to the powder and shell magazines. The surgeons gather in their compartment with stern, set faces. The men who are to bring the wounded to them stand quietly by, listening for the first boom above.

Above this silence is the clanging and bolting of heavy steel doors, as the water compartments are shut and every passage closed. The engineer and his staff are hermetically sealed within the engine room. The doors close and shut them in airtight, and down through pipes and into the fires come torrents of air under pressure. Under it the fires burst out with terrific heat. Lurid streams of flame spout out of the black funnels, and soon the warship has her fighting speed.

#### The "Brain of the Ship."

In the armored conning tower is the brain of the great battleship—the captain. This conning tower is a 15-foot steel room, and is the center of all the nerves of the ship. From it to every quarter—to the gun turrets, to the "fighting tops," to the stoke-hole, the magazines, the engine room, and to a dozen other places run these nerves in the form of telephones. Of this system of nerves the captain is the central, and near him stand his aides ready to transfer and receive messages.

Presently from one of the big 12-inch gun turrets comes a voice:

"We are ready!"

From one of the fighting tops comes the same message:

"We are ready!" shouts up the engineer above the roars of his engines.

"We are ready!" comes from the ammunition hoists.

"We are ready—we are ready—we are ready!" comes from 50 parts of the ship.

At the last moment the executive officer comes up beside his captain. This man is the "general overseer" of all the mechanism below the water line, and is the third in com-

mand. He is responsible for the proper working of all that great ship and through the battle stands at his captain's side, a living encyclopedia, ready to answer every question regarding the ship that is put to him.

At the feet of these men and their aides a "communication shaft," with a winding stairway, goes down into the bowels of the ship, and near the bottom of that shaft stands the second officer in command. Though his blood may boil with eagerness to fight, this officer must listen patiently to the roar of guns and the bursting of shell until the conning tower above and all the life in it is swept into eternity, when he will take charge of the ship.

There he stands through the fierce fight, held safe and in reserve, so that if the captain falls the ship will not be without a leader.

#### Beginning of the Battle.

Now the captain's work begins. He is the pilot of that great ship, as well as the brains of all its mechanism. Near him stand the battleship's expert range-finders. With their apparatus they distance the ships of the enemy. One of these men raises his eyes and speaks to the captain.

"The enemy is 7,000 yards away," he says. (About four miles.)

The captain turns to his aides, and the distance is telephoned to every gun on the ship. Those guns are now trained to shoot at a distance of 7,000 yards, and soon another message comes to them: "The enemy is 6,000 yards away."

Meanwhile the captain eyes his admiral's ship. It may be that now a message is signaled to him to begin the battle.

Down in the big 12-inch gun barbettes every man is at work, and awaiting that signal which the captain has just received.

In less than a minute after the call to quarters the tackle in the ammunition hoist begins creaking. Up

from the bowels of the ship to the chamber under the gun turret comes a shell weighing nearly half a ton. Another tackle seizes it here, and it runs up to the great open breech of the 40-foot gun. Hardly is it in before a sack containing 500 pounds of powder in chunks as large as walnuts follows, and is shoved in against the shell. Then the breech is closed and locked, and the gunners leap back.

It is a crack shot at the gun this time and he runs his eye eagerly along the telescope sight. A petty officer stands near with his ear glued to the telephone which leads to the conning tower. Those seconds seem like minutes, the minutes like hours. The gunners crouch like panthers. They watch the officer's face as if life and death lay hidden in it. The man with his eye along the gun seems hardly to breathe. Then down through the telephone there comes a small, faint voice.

"Fire when you are ready!" it says.

The officer turns about. "If you can bear on the enemy you may fire!" he says.

The gunner leaps back with a cry. An electric button is touched, and a great rumbling roar goes through the ship. To every soul on board it means the beginning of battle. In that instant nearly half a ton of metal goes out with a force that would lift two battleships like the Iowa a foot out of the water at 100 yards.

#### In the "Fighting Tops."

Inside the turret the roar of the gun is not deafening, but outside the crash is terrific. A jar runs through the whole ship, and following this is another and slighter one which tells that the big guns in turret at the other end of the ship are at work.

As the enemy draws closer, the whole ship bursts into an inferno of noise that sounds like rolling thun-

der. In the fighting tops the three-pounders rattle away incessantly, and the roar of the six and eight-inch guns is added to that of the larger ones.

Now the captain has no time to direct the gunners. His eyes are glued upon the enemy and the signals from his admiral's ship. Each gun-turret is a machine fighting independently of the rest.

In the turrets the men are protected more or less from the nerve-racking sound. But to the men in the fighting-tops it is deafening. Their ears are stuffed with cotton. But even then at each fire of the great guns it is as if some one had struck them a sudden blow on the head. But to the hell that is displayed below them they must pay no attention. They can look down and see the black muzzles of a score of great guns belching out fire and smoke, but they take only fleeting glances at the spectacle. Their three-pounders rattle without cessation. They know that they are the most exposed of all the men on the great ship, for only a thin steel shield protects them. A shot from a six-inch gun would blow them into eternity, where it would not harm the men in the big turrets. So they watch each tuft of smoke that rises from the enemy in terrible suspense.

Presently a great shell strikes the battleship's side. Looking down, these men see the steel as it gives way, they see the upper works bend and twist before it, and then hurrah as it falls without doing vital injury. They are eye-witnesses of every shot that strikes the ship.

Suddenly a small shell strikes one of the shields. Like pasteboard it crumbles before it, and half a dozen men fall wounded and dying. There may be a man with his head taken off and he is tossed over and out of the way. If possible during battle all dead men are thrown into the sea.

Now down the mast-shaft rattles a chair with a wounded man in it.

Another and another follows. The enemy draws nearer and nearer, and small shot and shell begin whistling across the fighting tops. Then the telephone rings and a small, distant voice comes up through it.

"Leave the fighting-tops," it says. Then these men go down with their companions behind the thick steel sides of the ship.

#### With the Captain in the Conning Tower.

In his conning tower the captain watches the progress of the battle, watches his admiral's signals and guides the course of the great battleship. No other man on board is under so terrific a strain as he. He is pilot and steersman as well as commander. Just on a level with his eyes is a narrow slit running around the conning tower, and through this he looks out upon the scene.

At his hand is a little table with a dummy steering apparatus on it. Now he wants the ship to turn sharply to starboard to bring a big gun into play, and he swiftly turns his dummy wheel to the proper degree.

Down through the ship to the wheelman's room go electric wires from this dummy apparatus, and before this wheelman is a similar table and a similar dummy wheel, which like lightning responds to every touch upon the other in the conning tower. So, with his eyes glued on this apparatus, the wheelman is able to respond so quickly that it is just as though the captain himself had hold of the real wheel of the ship in his conning tower.

Now the big machine is made to steer in a circle with her sister ships, engaging various ships of the enemy as she passes them. Then from the admiral's ship comes orders to get into closer action, or perhaps to engage at longer range. At each signal the captain turns his little wheel and upon his own skill and quickness often depends the result of the battle.

Although where, if he had the time, he could easily see the effects of the enemy's shells upon his own ship, the captain's eyes cannot once waver in their duty, and all information is brought to him by his aides.

#### Bringing Down the Wounded.

In the big gun turrets the men now work until the water runs from their faces. The ammunition hoists creak with the weight of great shells and tons of powder. Suddenly in one of the 12-inch gun turrets there comes a terrific jar. A huge shell from the enemy has struck the turret. For a moment it feels as if the great ship had struck a rock. Then the white, drawn faces relax, as they realize that the steel has saved them. But it may be that one man is standing with his shoulder touching the side of the turret when the shell strikes. Without a groan he falls back stone dead. So terrific is the impact of a great shell that it kills like an electric shock if a man is where he can feel the blow.

In the turrets of the smaller guns the men are working harder, if anything, for where the giant guns each send one shell about every minute and a half, they send several.

Down on the deck below the surgeons are at work. One man has had an arm shot off. Another has lost a leg. Still others have been struck by steel splinters and flying pieces of shells. Men are passing back and forth on this deck with stretchers.

A call comes down from one of the 6-inch gun turrets. A shell has wiped it out of existence almost, and a dozen bleeding men are waiting to be brought below. Down the winding stairs that run through the communication shafts and the ventilators they are carried and laid on the stretchers. These stretchers become red. The hands and garments of the men who carry them become stained with blood, and the floor becomes slippery. In this way these

men know something of how the battle is going, and when such and such a turret is out of action.

#### Down in a Living Hell.

But down below them on the next floor is a living hell, where scores of men, black and grimy, work on and on with no word from above. With the great shells and loads of powder they hurry back and forth to the ammunition shafts, feeding the guns above. To them the battle is concentrated in a steady rumble. The battleship quivers and thrills, and when a big shell strikes her these men down below can feel the shock, but cannot tell the result. Down to them comes air under pressure, which grows hot and foul. But there is not an instant's rest. Petty officers quicken their steps, and they know that they are fighting a great part of the battle. No guns must be idle. It may be that just now is the critical moment when every shot counts for victory or defeat.

Then all at once around one of the ammunition hoists gather a number of men bearing shells. Others join them. But the hoist does not come down. What can be the meaning of it? Those below know only too well. A petty officer runs up, and the men turn back with white, strained faces. Perhaps some of them have brothers or dear friends in the turret to which that shaft leads. And they know that the reason the hoist does not come down is because the turret has been destroyed. Then the petty officer goes to a phone.

"Captain," he says, "there is something wrong with turret No. 6."

But if this is a living hell, it is a worse one down where the engineers and their assistants are playing their great part in the fight. Here the air is even more hot and stifling. These men are shut off from all the rest of the ship. Great steel walls imprison them. And all this is to make the fires glow hotter. The engines strain like race horses.

The boilers are at their utmost tension. For the great ship must be able to move swiftly in a fight, to answer every touch of the wheel without an instant's hesitation. To this place comes no sounds of the battle. The rumble and crash of the big guns, and the shocks of the enemy's shells are drowned in the roar of the boilers and fires and the thunder of the engines.

"I wonder if they're fighting yet," shrieks an engineer to an assistant.

And at that instant it is possible the battleship may be almost a wreck.

#### Destruction of a Battleship.

Both aft and forward there is a torpedo tube running out into the sea from a room on a level with the ammunition magazines, but only in close action are these used. From a tower on top of the ship a man aims the torpedoes with an apparatus something like the wheel of a ship. He watches his opportunity, and when the right moment comes he presses an electric button which releases the air apparatus in the torpedo room, and the missile shoots out into the sea. When it leaves the tube there is a whistling sound, like the wind playing in tree tops, and by that sound alone does the crew know that the tube is empty.

In close actions where torpedoes are used the thickest armor is of little protection. Nothing that human hands can build will withstand the attack of a torpedo, and for that reason the armor belt of ships ends a little below the water line.

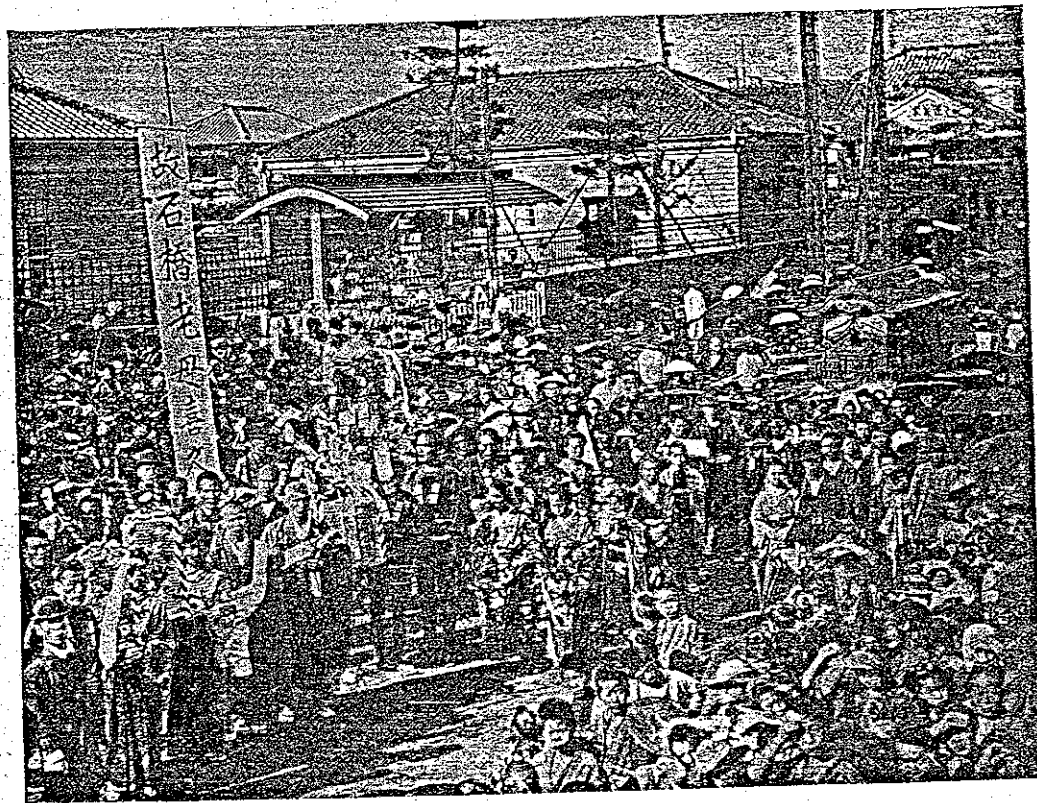
If it is night, or a fog comes on during the battle, scores of eyes eagerly scan the sea for torpedo boats. Suddenly there may appear a slim, black object a little distance off. If it is at all rough it is half buried in the sea as it shoots forward at a speed of 30 miles an hour. The quick-fire Maxims are brought to bear on it. A hail of small shells and shot rattle against its steel plates, but these little demons seldom retreat.

Even as it falls helplessly in the trough of the sea a torpedo leaves its bow. There are a few moments of suspense on the great battleship. Then perhaps the missile strikes near the engine room. Before it the steel sides of the ship give way like pasteboard. With a terrific explosion, the torpedo wrecks the boilers and engines, and the escaping steam brings death to the engineers and their assistants almost as quickly as if they had been shot.

Now the battleship, even if she does not quickly sink, is hopelessly

disabled and at the mercy of the enemy. She lists, and falls in the trough of the sea. It may be that she goes down. If so, there is little hope of escape for her crew, for she may go so suddenly that men will be still at work in their turrets when the water closes over them.

If by chance an enemy's shell enters one of the magazines the fate of the ship is even more terrible—a fate that now and then occurs in great sea fights, and which is written in American history in the destruction of the Maine.



THE WORLD AT LARGE. A Festal Day in the Orient.