

Navy's Pace Emphasized by Scrapping of Fleet's Erstwhile Giants



The BATTLE-TRIED TEXAS RETURNING TO NEW YORK AFTER HER SPLENDID WORK IN CUBAN WATERS IN 1898.

Interesting Bits of History Cling to Oregon and Others of Twelve Obsolete Battleships Slated for Retirement—Useful Purposes Which They Still May Serve

By ROBERT G. SKERRETT.

SCRAPPING twelve of our early battleships is evidence of the way in which our fighting fleet has developed in the course of twenty-nine years. The elimination of these erstwhile giants of the first line of our seagoing defence revives interesting bits of the inner history of the upbuilding of our modern armada. When we tackled the problem of planning the so-called coast-line battleships Indiana, Massachusetts and Oregon in 1890, we undertook to call into being craft peculiarly fitted to meet the physical conditions imposed by the shallow entrances to many of our harbors and the long stretches of the Atlantic and Pacific littorals which would have to be guarded. At that time we were building the original Maine and the first Texas, the designs for which we purchased in England. Therefore, the Navy Department had to blaze its own way in this particular division of naval architecture. True, our experts had turned out gunboats, cruisers, &c., but the problems they presented were trifling by comparison.

New Pace in Broadside.

When the Bureau of Construction and Repair revealed to the world the plans for those three battleships the authorities on the other side of the Atlantic sat up and took a good deal of notice, for the vessels bristled with batteries that far exceeded in their potential broadsides the concentrated fire that could be developed by any naval unit then built or building abroad. Some day the modest salaried draughtsman who bore the brunt of designing those ships will get his just recognition, and the vessel that he built for his indirect part in the destruction of Cervera's fleet at Santiago on that fateful 3d of July, 1898. The Indiana, Massachusetts and Oregon set a fresh pace in battleship armaments and revived the practice of crowding our ships with a superior array of guns, such as had characterized our memorable frigates of the War of 1812.

The nine remaining battleships which the Navy Department intends to retire are the Iowa, Kearsarge, Kentucky, Illinois, Alabama, Wisconsin, Maine, Missouri and Ohio. The low freeboard of the three coast line battleships had made them only a little better than monitors, so far as working their heavy guns in a moderately heavy sea was concerned, and the question was to provide in the Iowa, which followed next, a vessel that would be able to fire a destructive broadside and yet hold her own in rough weather. To this end, 13-inch guns supplanted the 12-inch rifles of her predecessors—the smaller calibre promising higher velocity and longer range without any sacrifice in destructive might. To save some of the added weight imposed by higher sides of the ship, the hull was modelled with a "tumble home," borrowed directly from the practice among French naval architects and, singularly, repeating a feature of the old frigate Constitution.

A Bit of Inside History.

The Kearsarge and Kentucky, authorized in 1895—three years later than the Iowa—were designed after the battle of Yalu, where the Japanese beat the heavier Chinese fleet mainly by reason of its superiority in rapid fire guns. Therefore, the Kearsarge and Kentucky were given an unusual secondary armament of 5-inch quick firing rifles, and the main battery brought into prominence once more the 13-inch gun. Here is where we have a bit of inside history that brings to light the fact that these two vessels were made monuments to inter-bureau jealousies. They were saddled with defensive monstrosities in the shape of double deck turrets—12-inch guns being mounted upon each 13-inch turret and fixed rigidly so that all four of the guns had to be swung in unison.

Up to that time the Bureau of Construction and Repair had designed the turrets, but the Bureau of Ordnance claimed that the Bureau of Property it province. As a result it planned the

superimposed or double deck turret as an improvement, and offered the design for adoption. That action started the long stretches of the Atlantic and Pacific littorals which would have to be guarded. At that time we were building the original Maine and the first Texas, the designs for which we purchased in England. Therefore, the Navy Department had to blaze its own way in this particular division of naval architecture. True, our experts had turned out gunboats, cruisers, &c., but the problems they presented were trifling by comparison.

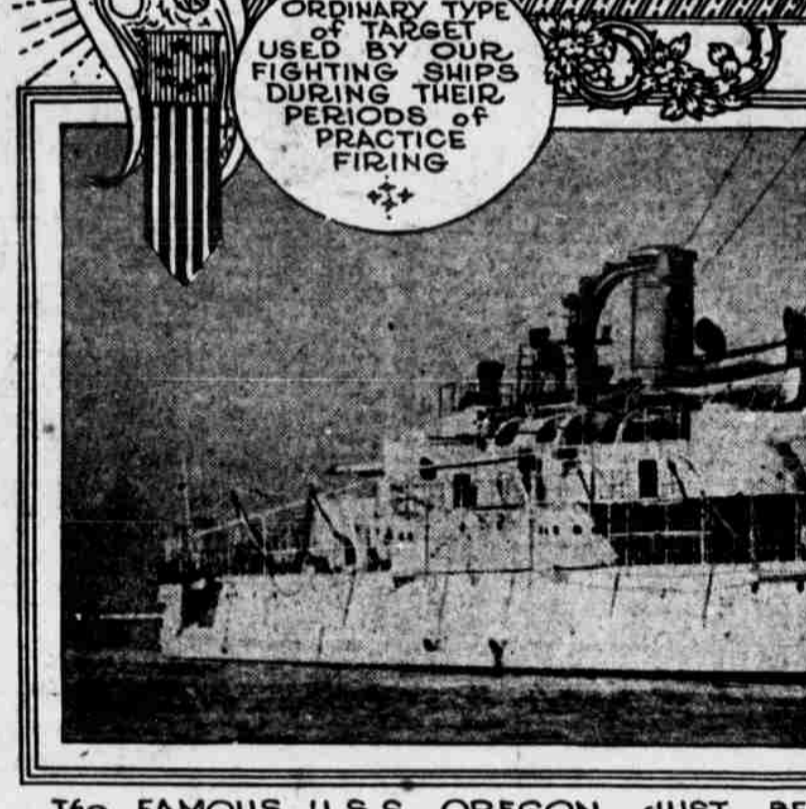
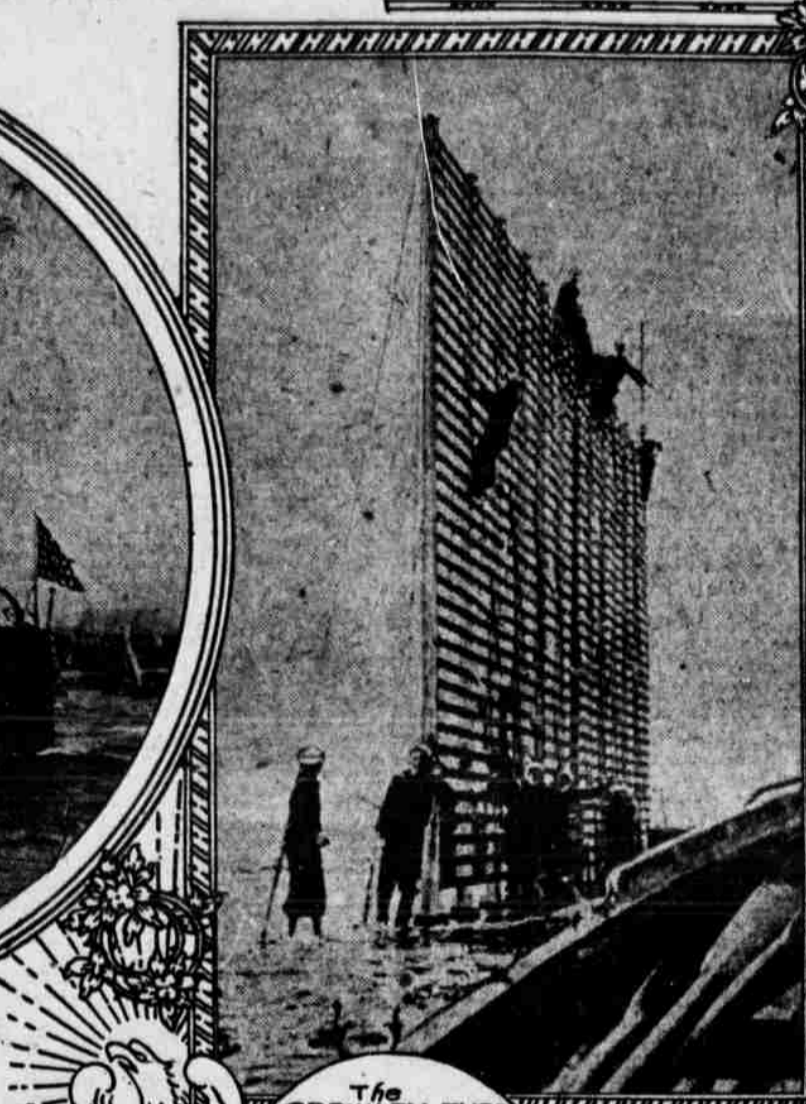
Eventually one angle of the fight—which became four sided, involving the bureau of engineering and of equipment—led to the abolition of the latter. The double deck turrets of the Kearsarge and Kentucky were vigorously condemned, and, while a modified form was imposed upon a few later battleships in an effort to improve and to justify the scheme, it was pretty generally recognized throughout the service that the design suffered from serious inherent defects that would gravely impair the fighting efficiency of any craft carrying it.

The Alabama, Illinois and Wisconsin were authorized in 1896, and to obtain slightly increased speed, better sea keeping qualities and a higher freeboard upon a displacement, substantially identical with that of the Kearsarge and Kentucky certain seeming sacrifices were made. Among these was the abandonment of the reliance for long range work upon four 13-inch rifles.

The 8-inch gun had by that time lost favor because it stood between the principal guns of the main battery and the force of the large rapid fire pieces, having neither the pounding power of the first at long range nor the capacity to maintain the withering attack of the latter at the shorter distances. Further, the 6-inch gun had been made a more formidable weapon, and fourteen of these were logically considered more desirable than an equal number of 5-inch guns, and the practice of crowding our ships with a superior array of guns, such as had characterized our memorable frigates of the War of 1812.

Finally we come to the Maine, Missouri and Ohio, authorized in 1898. These ships were considered an advance upon the Alabama, Illinois and Wisconsin because by increasing their length twenty feet it was possible to increase the speed, motive power and to raise the speed of the main gun. Further, twelve inch guns of a newer pattern supplanted the thirteen inch guns ordered for the three earlier craft. These twelve inch guns developed 20,000 foot tons more muzzle energy, and permitted the stowage of a greater number of rounds between the gun. It was in 1898 that Krupp's armor came into being and for a given thickness offered more protection than the hitherto accepted Harveyized steel. For that reason the sheltering walls of steel were made somewhat thicker than in the cases of the Alabama, Illinois and Wisconsin.

To-day, measured by the existing standards of speed, armor defence and powers of attack, none of this group of twelve battleships would be of any value in meeting a modern force of dreadnoughts or battle cruisers—they would be outclassed, outmaneuvered, outgunned. Therefore there is both technical and economic warrant for their retirement from the active fleet. Their complements call for 858 officers, 672 marines and 7,394 blue-jackets, a total personnel of 8,724. It is safe to say that the use of these officers and trained men aboard the typically up to date vessels of our several battle squadrons.



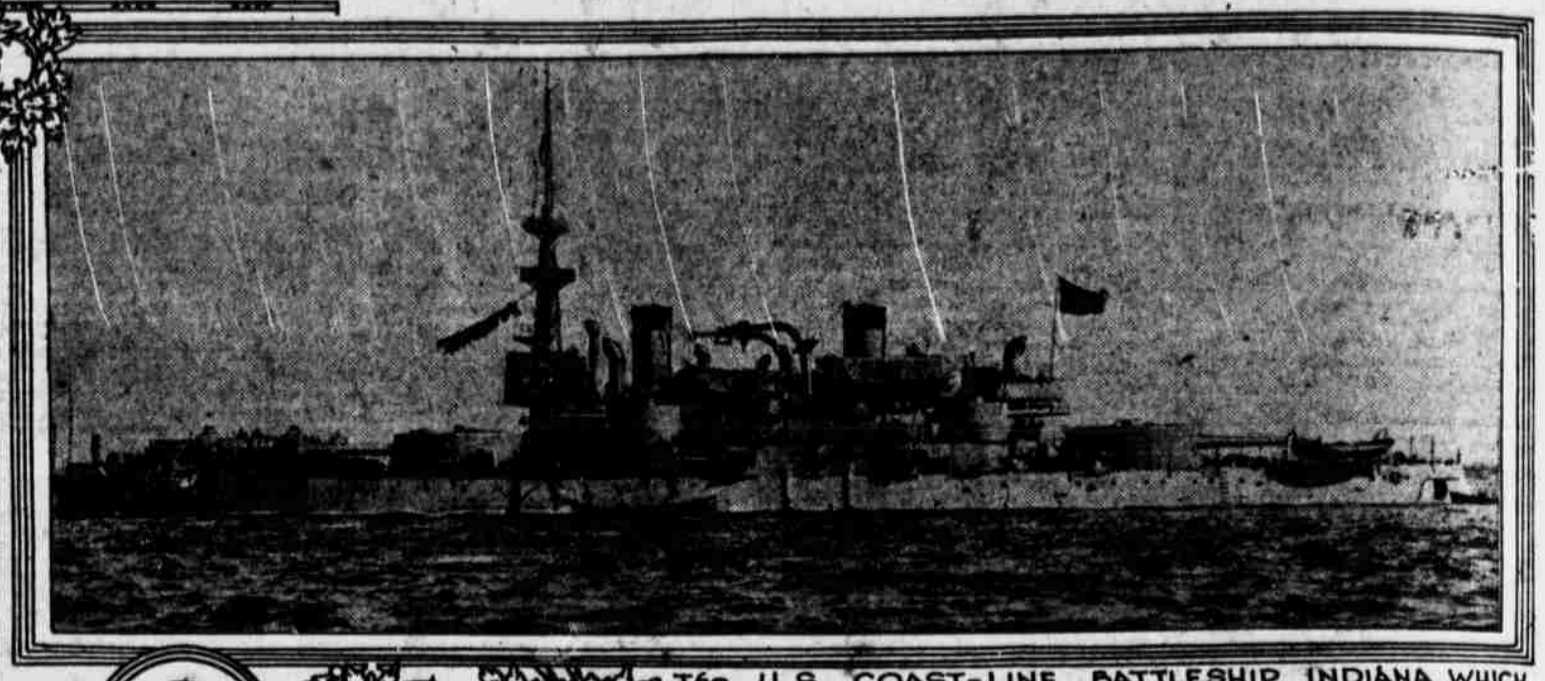
The FAMOUS U S S OREGON JUST BEFORE SHE LEFT THE WEST COAST FOR HER MEMORABLE RUN AROUND CAPE HORN TO SANTIAGO, CUBA

The Oregon as we know has been offered to the State after which she is named, and it is more than likely that the authorities will accept her—turning her either into an inspiring nautical museum or employing her as a recruiting base for men for the naval reserve. Her armament, although out of date in some particulars, could still be used to good purpose in training the men of the fighting fleet's reserve force. She will stand with her glory undimmed for decades to come and make a gripping appeal to the men whose duties hold them below the protective deck. It was the grit, resourcefulness and self-forgetfulness of the engineering department of the Oregon that sped her from San Francisco down around the tip of South America and thence northward at full tilt to Santiago, where she arrived in time to share generously in the annihilation of the Spanish fleet.

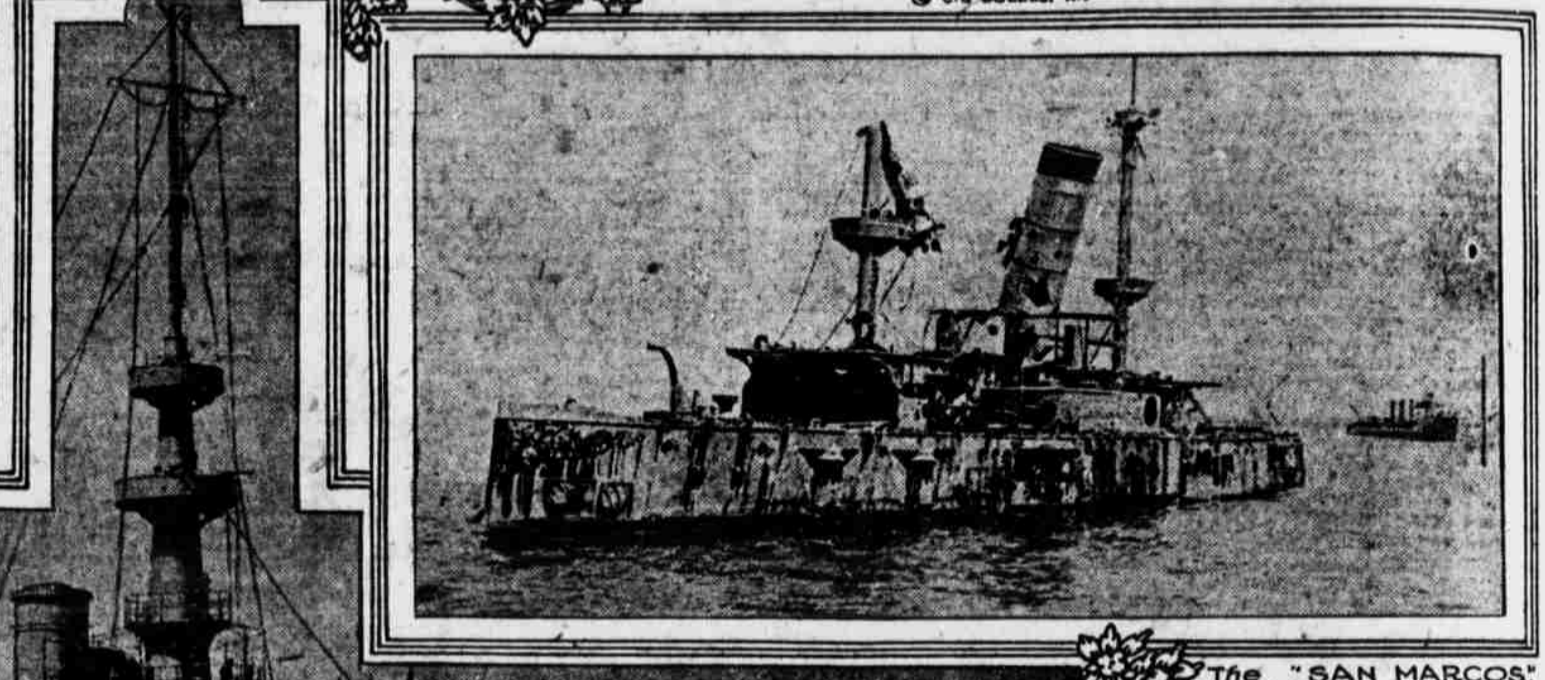
The Indiana and the Massachusetts, under their gallant commanders, also played their vital parts upon that momentous occasion, and the State of Massachusetts is so situated upon our seaboard that she could do with her namesake what Oregon is probably going to do with hers.

The Indiana, stripped of her guns, motive power and other valuable equipment, can be left a defensive bulwark which may play a potentially helpful part in promoting the battle efficiency of our dreadnoughts and super-dreadnoughts. In other words, take over the task which for some years has been the function of the battle target San Marcos, the erstwhile or original Texas.

The Oregon was designed by Lewis Nixon, one of the most famous of American naval designers, who recently was appointed by Gov. Smith as Public Service Commissioner. She was of the Indiana class, and her keel was laid in 1891, the ship being put in commission some two years later. At the time she was built the Oregon was not only one of the finest ships in the new American Navy, but she was one of the most formidable vessels afloat. Because of her race around the Horn and the tremendous amount of publicity and favorable comparison with other ships that she had, she has always been regarded by Americans generally as a very fast vessel, although as a matter of fact she was much slower than many war vessels of her time, and a great deal slower than any ship constructed within the last ten years. Her official rating was only fifteen knots, and on her best trials she never did more than sixteen. During the entire trip from San Francisco to Key West, according to the best available records, she never exceeded fourteen and a half knots, and most of the time she averaged between ten and eleven. Compared with the Tennessee, the giant warship which was launched re-



The U. S. COAST-LINE BATTLESHIP INDIANA, WHICH WITH HER SISTERSHIPS, LED THE WORLD IN 1895.



The "SAN MARCOS" FORMERLY THE U S S TEXAS, THE NAVY'S BATTLE TARGET ON THE CHESAPEAKE FIRING RANGE

and, next, it was possible to check up later just what were the physical effects of the attack. The ordinary target is essentially nothing more than a canvas screen quite fails to tell what the projectile would do if it encountered the different parts of an enemy battleship. As the naval expert knows no gun ship can be effectively halted by gunfire unless her protecting armor be pierced and projectiles, charged with high explosives, break their way through and into the vessel's very vitals. Therefore our gunners must have a chance to blast away at a real ship target under a one sided condition that pretty closely simulates the circumstances of actual conflict. Not only that, but our ordnance engineers must learn in this way just how efficient are the projectiles which they devise for smashing through a potential foe's steel walled defences.

Some of these the public were permitted to know about, but there were others which have been pretty well guarded from common knowledge, although it is doubtful if any foreign naval attaches were kept long in ignorance. Even so, the old San Marcos has served us well, and step by step we have realized our defects and have made the needful alterations or improvements. Also that battered hulk has inspired invention and led to a number of valuable advances in the naval art of attack and defence. Clearly, then, we cannot afford to rest upon what the San Marcos has done for us. Military science is a restless one, and it is essential that we keep abreast if not ahead of the general march of progress. Therefore, the San Marcos should be replaced by a newer and larger target.

Proud Record of the Old Battleship Oregon

THE recent announcement of Franklin D. Roosevelt, Assistant Secretary of the Navy, that the Navy Department had offered the old battleship Oregon to the State of Oregon to be maintained for historical purposes without expense to the navy has renewed interest in the famous old sea fighter that broke all naval tradition and records by her race from San Francisco to Key West in 1898, arriving in time to take her place in the American battle fleet and do valiant service in the sea fight at Santiago with Admiral Cervera's Spanish fleet.

This plan for the disposal of the old ship, which long ago outlived her usefulness as a fighting unit, has been suggested several times to the Navy Department by members of Oregon's Congressional delegation, and there is no doubt Mr. Roosevelt's offer will be accepted and that the vessel will be kept in one of Oregon's harbors as a monument to the fighting qualities of the American fleet and the resourcefulness and intrepidity of American sailors. This is the second attempt that the navy has made to get rid of the Oregon. Some five or six years ago the target for the big guns of the newer battleships. "But the Oregon was known and loved throughout the United States because her famous race around Cape Horn and up the South American coast had made her familiar to every schoolboy, and the plan of the Navy Department was quickly and effectually squelched. The Navy Department thereupon offered her to the State of California as a training ship for that State's Naval Militia, and she was used in that capacity throughout the war with Germany. Her slowness and her age barred her from active service either overseas or as a harbor patrol boat on the Atlantic coast. She would have been easy prey to a German submarine. The Oregon was designed by Lewis Nixon, one of the most famous of American naval designers, who recently was appointed by Gov. Smith as Public Service Commissioner. She was of the Indiana class, and her keel was laid in 1891, the ship being put in commission some two years later. At the time she was built the Oregon was not only one of the finest ships in the new American Navy, but she was one of the most formidable vessels afloat. Because of her race around the Horn and the tremendous amount of publicity and favorable comparison with other ships that she had, she has always been regarded by Americans generally as a very fast vessel, although as a matter of fact she was much slower than many war vessels of her time, and a great deal slower than any ship constructed within the last ten years. Her official rating was only fifteen knots, and on her best trials she never did more than sixteen. During the entire trip from San Francisco to Key West, according to the best available records, she never exceeded fourteen and a half knots, and most of the time she averaged between ten and eleven. Compared with the Tennessee, the giant warship which was launched re-

cently at the New York Navy Yard, the Oregon is hardly more than a toy vessel. She is only 348 feet long, while the Tennessee measures 624 from bow to stern. The Oregon gained undying fame by her race around South America and up the coast to join the fleet, but as a matter of fact her success in that feat was due not so much to the fact that she was a good boat, well designed and solidly built, although she had been in commission but two years and was practically new, as it was to the fact that she had a typical American naval crew and typical American officers aboard. They got out of the boat the best that she had and because of their care of the boilers and their care in seeing that the vessel was kept in tiptop condition throughout the long voyage she was able to steam immediately into the battle line and make her fourteen knots in battle formation as easily as the other ships of the fleet which had not undergone such a severe test. The Oregon was at Bremerton when she received word to hasten around the continent and join the American fleet in Atlantic waters. War had not been declared then, but in naval circles it was shown that armed conflict with Spain was but a few days away at the most. The old vessel called for San Francisco, and after coaling and putting aboard supplies, sailed from the California port on the morning of March 19, 1898. On the following May 26, more than two months later, she steamed into Key West, having covered 14,704.7 knots. The naval experts of the day were divided in opinion as to the value the Oregon would be to the fleet after making such a strenuous voyage. Many of them expressed the belief that the vessel would be practically worthless as a

fighting unit, since she must necessarily arrive with her boilers in bad condition and with her crew in any condition but fighting shape. But on the contrary the Oregon's boilers when she arrived off Key West were in just about as good condition as they were when she left San Francisco, due to the care which her engineers took of them, and the condition and fighting ability of her crew can best be judged by the fact that when the Spanish fleet had been scattered and were being pursued by the American vessels the Oregon steamed ahead of some of the other and supposedly better ships, and finally ran down and sank the Colon, a Spanish cruiser of larger tonnage and heavier armament than the Oregon. In an interview which was published in The Sun several years ago Rear Admiral Charles E. Clark, who as a naval captain commanded the Oregon on her famous trip, had this to say about the conduct of his men during the fight with the Colon: "I remember when we were still chasing the Colon down the coast, all the other Spanish ships having been run in, we stopped firing until we could get nearer. While I was talking with the ordnance officers as to whether we should strain our guns by opening up at long range the chief engineer officer came up and said: "Captain, can't you fire another gun? We're doing all we can just now, but I think we could do a little more if the boys below could bear some shooting. There is nothing they can't do so long as they know the guns are booming." "And so we opened up again with our thirteen inch guns at five miles—which was a long range in those days—and kept it up until we had the Colon done for."

When it strikes the water. With this method of firing there is no limit to the range at which you can fight a battle except that of visibility and the range of the gun. Of course the greater the distance the smaller the probability of chance of making a hit. According to Admiral Fletcher it is quite practicable to spot the fall of shots by their splashes if the atmosphere be clear at distances of fifteen miles away, and by way of explaining the ineffectiveness of shooting a ship's guns simply this eminent expert said: "We cannot fire single guns effectively because the blast of a gun fills the atmosphere for quite an appreciable time afterwards; so, therefore, it is necessary to fire all the guns we can and then let the atmosphere clear away so that we can fire again. If we fire one at a time, you see, we will lose a great deal of time. If we can drop some of our shots each time within 200 yards, one side or the other of the target, we are bound to make a certain percentage of hits if we fire a large number of shots." Similarly, the ship target as distinguished from the canvas target, approximates actual battle conditions and it is practicable to determine exactly just what measure of damage each telling shot makes. Not only does the target give us insight into the ordnance engineer, but it constitutes a compelling stimulating object lesson to the men behind the guns and their fellows at the telescopic sights. And there remains yet another service which some of these obsolete battleships may be able to discharge for the nation's advantage. That is to say, it is quite practicable to turn them into sea forts and to locate them at fixed positions of shore where they would effectually block a foe's surprise approach from the open ocean. For years the ordnance department of the army has proposed at intervals to create an artificial island midway between Cape Charles and Cape Henry at the entrance to Chesapeake Bay. This has been urged because the water gap at that point is a matter of quite thirteen miles, and when the weather is hazy or foggy it is impossible for observers on shore to detect the movements of shipping in midchannel. Therefore, batteries at either of the capes could not prevent a hostile force from passing in or out, as the case might be.

Battleship Might Serves. Accordingly, by rearing an artificial island at the point of entrance, and mounting thereon a powerful battery, the field of operations for a foe would be very measurably reduced and the chances of his slipping by undetected would be correspondingly diminished. It is practicable to substitute a permanently secured battleship for a man made island, and the draft of water immediately north of the main channel is such that a large vessel could be grounded there without reducing her freeboard or height above the tide level. The entrance to the Chesapeake is not the only water approach along our shores that might be guarded in this manner. To bring the subject directly home to us here we should recall how feverishly the ordnance authorities of the army—after the situation had been disclosed repeatedly for a number of years—stripped Forts Hancock and Mifflin of their main armaments and transferred them to empty casemates created for them at Rockaway Beach, where they could command a water area of considerable depth which was beyond the reach of the Spanish fleet's batteries and well beyond the range of the two forts just mentioned. The Government might around of other one of the best of the twelve retired battleships and place it at a point where it could guard the water area in question and likewise stand over the sea entrance to Ambrose Channel.