

Sacrificing a Battleship to the Science of War

The old "Iowa" is first to be made the subject of wireless-control experiments and then shot to pieces

THE most famous veteran in the United States Navy, the pre-dreadnought type battleship *Iowa*, now coast battleship Number 4, is slated for some experiments in wireless control, and then to be shot to pieces by the guns of the fleet.

At Santiago, under the command of "Fighting Bob" Evans, the *Iowa* played a conspicuous part, giving the mortal blows to the *Cristobal Colon* with her forward pair of twelve-inch guns. In the great war she served as a training-ship.

The *Iowa's* guns and other valuable equipment are being removed and the coal-burning boilers are being replaced by two oil-burning ones, which facilitate control. The weight thus saved will probably be used in modern deck armor.

The wireless equipment will consist of about the same apparatus as that used by John Hays Hammond in his wirelessly controlled boat a few years ago. This system was used by the Germans in their attack on the British monitors that bombarded their positions on the Belgian coast. Mr. Hammond is superintending the instalment of the wireless equipment.

When all changes have been made, the *Iowa* will steam down the Chesapeake for some very thorough trials with her wireless control. It is desired that the ship shall be controlled alter-

nately from another ship, a shore station, and an airplane or seaplane.

After the wireless tests have been completed, the *Iowa* will proceed to the battleship range and proving-grounds farther down the bay, where her crew

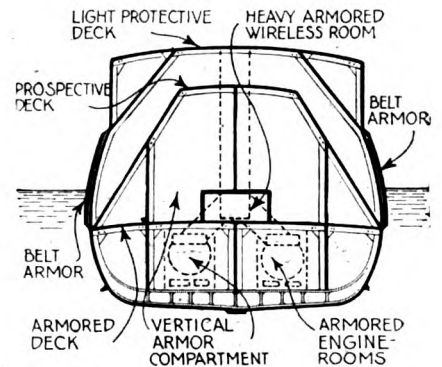
screen. The battleship force will arrive on the scene and will begin firing. With a blurred vision at great ranges, it will be almost impossible for the shells to hit their target except for the airplanes, which will spot the fire of the big guns. As each shell falls, its exact location in relation to the target will be radioed back to the pointers from one of the seaplanes.

While wireless control of ships dates from 1896, it is still in its infancy and must be developed for safety's sake. It is therefore reported that the battleship *Ohio* will be fitted out for this purpose later.

Still another ship, the former German dreadnought *Ostfriesland*, may be used as a target for the big guns. This German ship has a most complete system of internal protection and will therefore supply the needed example of deck protection.



"Fighting Bob" Evans' famous old *Iowa*, which the Navy Department is preparing for very thorough experiments in wireless control

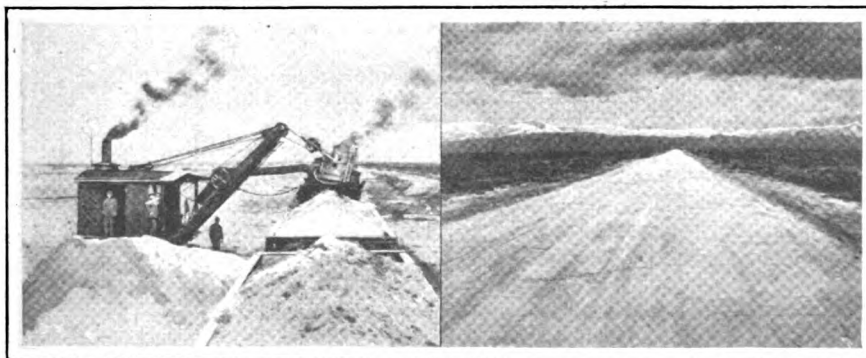


How the *Iowa* is being refitted. The wireless equipment is about the same as that used by the Germans in their attack on the British monitors off Belgium

will leave her. Control will then be taken over by a seaplane. The firing tests will be made as near to war conditions as possible. The *Iowa* will proceed under her own power, when a squadron of destroyers will dash past her, enveloping her in a dense smoke-

How a Road Was Built from Salt

MOST road-building materials are expensive. The people of Utah had millions of tons of good road material in their state, and did not know it. The Great Salt Lake washes upon its shores tremendous quantities of decayed salt. This substance was formerly considered a nuisance until a progressive contractor



The steam-shovel is loading on railroad-cars decayed salt from the Great Salt Lake; the picture opposite shows how it was used

Waste salt was discovered by chemical tests to possess excellent qualities for road-making purposes

discovered its value as a road-building material. When properly treated it was found to have better wearing qualities than most.

After the tests, it was at once decided to build a link of the Lincoln Highway with it. A small railroad was run into the heavy deposits and a steam shovel loaded the cars that carried the material