THE VALUE OF THE CAPITAL SHIP IN MODERN WARFARE.

The introduction of a large number of scientific devices and the rapid advances in efficiency made by so many weapons during the recent war renders it particularly desirable to investigate carefully the present value of the Capital Ship, and to consider what the probabilities are of its value being maintained in the future.

The evolution in the past fifty years of the Capital or Line-of-Battle Ship of the present day is the result of the struggle which has been in progress between—

(a.) The gun and the ship;

(b.) The torpedo and the ship;

(c.) The mine and the ship; and, more recently,

(d.) Aircraft and the ship.

The advent of explosive shell and the increasing power of guns led to the introduction of steel ships with armour and armoured decks.

The advent of the torpedo led to the successive introduction of—

(1.) Torpedo-nets.

(2.) Greater internal watertight subdivision.

(3.) Internal torpedo bulkheads.

(4.) External bulges.

The advent of the mine led to the introduction of paravanes.

The advent of aircraft has recently formed an additional reason for the thickening of armoured decks, the carrying of protecting aircraft by ships, and the

fitting of high-angle guns in ships.

In each case enthusiastic supporters of the new devices have pronounced the speedy disappearance of the Line-of-Battle Ship; but instead, the Line-of-Battle Ship has in each case been altered, and means found to counter the latest danger to its existence.

It is natural to ask—"Why has such trouble been taken to preserve the existence of the costly Line-of-Battle Ship?" The answer is not far to seek.

Millions of tons of cargo, and, in time of war, of men and stores also, are carried in ships, and until some other means of carrying these millions of tons over or under the ocean have actually materialized it is imperative for the British Empire to retain the command of the surface of the sea.

The Capital Ship is the strongest form of engine of war which exists for operating on the seas.

Its external bulges, which were invented during the late war, render it immune to torpedo-attack until hit (in the case of the newest type now building) by a large number of torpedoes, thus minimizing the effect of the hits obtained by torpedoes fired by surface craft, submarines, or torpedo-carrying aircraft.

The Capital Ship is also usually protected against torpedo attack by escorting destroyers, and in future will be assisted by various scientific devices, recently invented, which will enable it to carry out defensive or offensive tactical manœuvres

against submarines.

Paravanes, which were invented during the late war, form an efficient protection

against moored mines of the present type.

Thick armoured decks protect the vitals of the Capital Ship from bombs dropped by aircraft, which, when dropped from the low heights necessary to give much probability of hitting, have but low striking velocities and therefore only small penetrative effect.

High-angle guns help to keep attacking aircraft at heights from which hitting

by dropped bombs is improbable.

The aircraft carried on board, or in an attendant vessel, serve to protect the

Capital Ship against enemy airships and aeroplanes.

The secondary anti-torpedo-craft guns can establish "barrages" of bursting high-explosive shell to protect the ship against attack by small fast surface craft loaded with explosives and controlled from an independent position.