

LORD CLARENCE PAGET has boldly stood forward in vindication of the British Naval Service. He has undoubtedly placed the blame of its failures and disasters where they ought to lie. The Board of Admiralty, or rather what used to be the first Lord, usurping the functions of all his colleagues, had, in the person of Mr. CHILDEAS, exercised autocratic sway. Not only did that universal genius, on his sole responsibility, order the construction of the famous Monitors, but he is also responsible for those orders of the Admiralty of which Lord C. PAGET complains.

A manufacturer himself in no way connected with Naval affairs he assumed all the functions of the Commander-in-chief of the fleet, with what results Lord C. PAGET's letter to the *London Times* will show:

"In requesting you to insert the following remarks, I am incurring grave responsibility. It is no light thing for an admiral who has lately commanded one of her Majesty's fleets to appeal to the public, but times are out of joint with the navy when the minister for that department finds himself obliged, in replying to the usual toast at a public dinner to speak of the service in apologetic words. The late disasters need indeed apology, but is it only for the service that excuses are required? During the last three years we have lost one iron clad with all hands; four having been on the rocks, and though rescued by great skill, rendered well nigh useless, since it is impossible that a ship weighing 5,000 or 6,000 tons can lump upon the ground without seriously shaking her frame and loosening her armor-plates. But, worse than all, many officers of the highest merit and promise are wrecked in prospects and reputation, and the country is losing (but let us hope only for the moment) its confidence in us. Why is all this. I declare my experience of the officers of the navy during three years and on many trying occasions, was to the effect that they were full of zeal, prudence and knowledge of their duties. I know that other commanders in chief will bear the same testimony. The Admiralty actuated by a praiseworthy desire to economize one of the most costly items in the navy (viz. coal), and with a view to the maintenance of seamanship, issued a series of orders restricting the use of the engine. I cannot but think that it is these well-intentioned orders that have contributed mainly to the disasters. The officers of the navy are a highly sensitive body of men, and once impressed with the feeling that consumption of coal is displeasing to the Admiralty, they will run all sorts of risks rather than incur the censure, which has I understand, been freely bestowed on some who have disregarded their injunctions. Every one of these mishaps, may, in my opinion, be traced to the fatal impressions conveyed in the Admiralty orders. If the *Captain* had had her engines in use she would have been luffed to the wind and saved. The *Agincourt* drifted crab-like on to the Pearl Rock, because she had not headway enough to stem the current. The *Lord Clyde* drifted upon the rocks because her engines were not ready in time to save her. The *Defence* drove from her anchors because she had not full power of steam on. And now we hear that the *Royal Alfred* got aground in Bahama channel because she had no steam ready. These large ironclads are not safe when near the land or one another, or in bad weather without steam power. I have reason to believe that the Admiralty

contemplate a revision of the orders to which I have adverted. I am certain that no measure will be more beneficial to the navy or advantageous to the country. Meantime it is but justice to the many brave and distinguished officers who have been sacrificed at the shrine of false economy, that the public should have an opportunity of forming their judgment as to the amount of blame which is fairly attributed to them."

We were always of opinion that those *Ironclads* would turn out to be something like a *white Elephant*—very good for show useless for aught else—and yet the people of England are infatuated enough to believe that a crude *Tankee* invention pirated from the speculative theories of a seaman (the late Capt. COWREN COLES), are practically as valuable as vessels possessing many times their mobility and thoroughly manageable.

Built on a false principle against all known laws affecting the floatation of moveable and manageable bodies it is evident they are neither fit to act in concert—as cruisers—nor on a lee shore; nor has the practical experience hitherto acquired in the slightest degree defined the use to which they can be converted.

Their armament too is monstrous—35 tons guns warranted to be useless after 100 rounds is fired from those huge masses of iron, nor is there any certainty from the nature of the material that they would ever stand that test; in any case an action that would involve the firing of that number of rounds would leave the huge monster helpless; and as the hits at 1000 yards in action at sea are about 1 per cent, the effective value of an ironclad with two 35 ton guns would be equal to the chance of hitting an opponent twice, a result by no means commensurate with the pretentious size or outlay.

Sea fights will be carried on much in the old way of rapid firing and hard hitting, not with bolts that will drill holes through eleven inches of solid iron, but with shot sufficient to knock *two posts* into one.

England had better set about remodelling her fleet, but she should entrust the task to the officers who are to command it—not to Birmingham knife grinders or Manchester cotton spinners.

If the scientific knowledge necessary to construct ocean going monitors and the skill to command them are in an unsatisfactory state owing to ignorance of the laws of momentum communicated from combined motion, the knowledge which should govern the adaptation of the armament is in an equally unsatisfactory condition, the following extract from *Broad Arrow* exhibits a state of affairs by no means cheering.

"We understand that the Admiralty have it under consideration to test the endurance of a 25-ton gun, as mounted in the *Monarch*, *Glutton*, and *Hotspur*, by rapid and continuous firing such as usually occurs in a naval engagement or bombardment. The 25-ton gun is officially limited to 100 discharges with a reduced charge of 85lb. of powder, mis-called a "battering" charge. These being fired

with intervals of days, weeks, or months between every few rounds suffice to endanger the life of the gun. But if the same number of rounds were fired in one day's continuous practice, the effect would be still more injurious. As this continuous fire is what naval guns are wanted for, and the disabling of one gun would disarm the *Hotspur*, or that of two guns the *Glutton*, it is of some importance that a 25-ton gun should be so tested in times of peace, when a failure would be of comparative small consequence."

The use of Artillery on ship board is necessarily subject to different conditions to the same weapon on land; in action on the battle-field guns are fired and manœuvred on solid ground, aim can be deliberately taken, and the objects sufficiently large to allow of a high per centage of effect, in siege operations the same rule holds good in a greater degree, and no difficulty can be experienced in producing any effort the means at hand may be equal to.

In an action at sea all these conditions are altered, the guns must be fought on a platform constantly shifting not only in the line of the ship's course but with the hoave and roll of the sea through which she passes, the target or ship at which she fires or to which she is opposed does not necessarily possess the same amount of motion or in the same way, a good deal depends on her build, size, and the force of the power she may use so that the marine artilleryman has to deal with a shifting platform with compound motion and a shifting mark whose size, appearance and position is changing every moment, under all these circumstances it is very evident that fine shooting, such as that which can be practised on shore, is utterly impossible at sea.

Indeed it will require no extraordinary power of foresight to assert that naval battles will be fought as in the days when old England had a navy, at two cables length and decided by the quickest firing and hardest hitting.

It appears as a matter of necessity that smooth bore guns of large calibre throwing a heavy shot capable of doing good service after firing 500 rounds will be the Naval Artillery of the future, the expensive *rice hole punchers* will be left to the sole use of the land service where they can be thoroughly utilized.

War vessels of the period carrying four guns cannot afford to have any portion of their armament disabled; in former days the loss of one, two, or three guns out of say 40 to 100 by no means crippled the defence of the vessel, with modern artillery it would be fatal, and it is far more liable to such *contretemps* than the old armament could be.

#### NEWS OF THE WEEK.

The principal political event during the past week appears to have been the debate in the House of Lords on Earl Russell's mo-