

BEFORE THE BATTLE OF DORKING.

(From the London Free Press.)

And where doth the seer or prophetess dwell,
Whose glance through futurity stalking—
With far-seeing eye and trumpet tone
Fortelling the Battle of Dorking?
And, after the battle, those scenes so dire—
An empire lying discredited—
Oh, over what alchemist's mystic fire
These fearful sights have they found?
When the Prussian Eagle and the Northern Bear
Shall rush to the dreadful fray,
To pierce the hearts and maim the hands
They in friendship meet to-day?
When the "Hearts of Oak" shall shrink and warp
And the mother's prayers shall fall,
And the roses of England's merrie maids
Shall through falsehood and treachery pale,
But, before that great and terrible day,
Full many a field may rattle
With deadly hail of shot and shell
Of unpredicted battle,
And many a nation rise and fall,
And the now increasing Power
May have sunk away like the meteor light
To the silent starry hour.
Yet, England, watch, I counsel thee well,
O, follow thy guiding star—
Whose beams have lighted thy glorious course
O'er troublesome times thus far,
And not what the future may bring I tell,
For that is dim and unknown,
But I point to the halo on hist'ry's page
Where thy mighty deeds are shown.
And tho' coming events cast shadows long,
Like ghosts in the moonlight walking,
I'll fear not for thee if thou still pray on,
Though there should be a Battle of Dorking.
London, August, 1871. CLYDE.

OUR COAST DEFENCE.

In the House of Commons, on Friday evening, Mr. Macfie, had a notice that he would call attention to the defenceless state of the Firth of Forth. Mr. Cardwell appealed to the Hon. gentleman to postpone the motion, in order that it might not stand in the way of the adjourned debate on the Army Reform Bill. Mr. Macfie—I am quite in the hands of the house, and will postpone this motion, although the subject is one of great importance. If the right hon. gentleman will give me an assurance privately that he will do what I wish, I will not bring the subject on again; but if he does not, I shall reserve to myself the right of bringing it before the House.

The following excellent article on this subject is from the Scotsman:—

The seaboard of Great Britain and Ireland is so vast in extent—it has been computed by Dr. Keith Johnstone at 8700 miles—that any attempt to defend with coast-defences the entire line is seen at a glance to be hopeless. On the navy we place our dependence for the safety of our coast, but to a certain extent only is our confidence not misplaced. It is true that our floating batteries, as the iron-clads may be named, are moveable, but they are not ubiquitous. Towards the end of the last war, Great Britain had nearly six hundred vessels of war in commission. A few months ago she had but thirty-two iron-clads—the ships of war to-day. The introduction of iron plating has led to a great reduction in the number of vessels; just as the greater calibre of modern ordnance has led to the reduction in the number of guns on board ship. This is one change of conditions which tells against this country, with its vast scattered dominions to be protected almost entirely by its navy. Another change in the conditions which it may be well to note, in looking to the future, is this, that, for iron-clad floating batteries, few sailors are required. The manning of a navy is now with gunners and stokers. It is not necessary now that a great naval power should have a greatly extended seaboard and a vast commerce in order to man the ships of war. A great military Power, with a restricted sea-

board, but with a heavy bag of millions sterling in its coffers, may aim in these days at being great as a naval power. The entire ironclad navy of Great Britain has cost £8,000,000, sterling—a mere bagatelle compared with the amount of *loot* which the Germans are now withdrawing to Berlin to deposit in the Imperial Treasury. How that money will be applied the *Economist*, in speculating on the future of the money market, professes itself unable to answer.

The dependence we have placed in our navy in the past has led us to neglect the special defence of many vital and strategic points which should not be left to the care of the navy, unless indeed, we are prepared to keep up an enormous naval force at a far greater expense than the cost of the necessary works on shore. The cost of a ship like the *Glatton*, carrying only two 12-ton guns, and with armour-plate 10 to 12 inches thick, is £168,000. For this sum, earthen batteries mounting ninety-five guns could be erected on shore. It will be seen from this that, if there are any points on our coasts which ought to be specially defended it will be much cheaper to have coast batteries than to have those points watched by ironclads. Looking to the enormous expense of floating batteries as compared with batteries on shore or on an island where a suitable position can be found, our aim should be to render those points most likely to be attacked invulnerable to vessels, and thus set free the navy as much as possible for general offensive and defensive purposes, and to keep open our communications with India and our colonial possessions. It does not seem to have ever been pointed out that, with strong land defences on the Firth of Forth it would soon become a most valuable naval station for a squadron in time of war, and a harbour of refuge in the event of the enemy having a temporary superiority at sea.

Confining the enquiry to the defence of Scotland against invasion, it will be found that it lies primarily, in the defence of the Firths of Forth and Clyde, of which the keys of the positions are the Islands of Inchkeith and the smaller Cumbrae. Where would an enemy land? is the first question which presents itself in considering coast defences. With our charts and sailing directions in his hands when projecting the invasion, he would have no difficulty in selecting the most eligible localities always provided there are not those special defences which we are advocating to stand in his way. In Scotland, the objective point of an enemy would be in possession of Edinburgh and Glasgow. Would it suit him to disembark on the Tay, the Moray Firth or any part of the coast between the Firth of Forth on the east and the Firth of Clyde. The answer is No. The Tay is a narrow and shallow estuary, barred by nature against ironclads. The Moray Firth, and indeed the whole coast to which we have referred, is open to this objection, as regards a suitable point for disembarkation, that an army marching to the south must pass through a very thinly populated country, yielding no supplies, but with defiles of the strongest kind for defence. In fact the physical geography of Scotland north of the Firths of Forth and Clyde is an insuperable obstacle to the landing of a hostile force operating to the south. Here, then, we have narrowed the question of defence, disposing of the greater part of the seaboard as unsuited for an enemy's landing. Let us now direct our attention to the Firth of Forth. Since the time of Carl Ritter, the study of physical geography has been assiduously cultivated by the Prussians, while in England it had been ignored altogether. It

may therefore be useful to our friends in the south to describe shortly what the Firth of Forth is as, from answers which bear an official stamp, it would almost appear as if the official mind was under the impression that it was a tidal harbor like Great Grimsby or Harwich—on which latter harbour, by the by, £80,000 is about to be expended on defences, and is provided for in the Estimates. Be it known, then, to all whom it may concern, that the Firth of Forth is second only to the Firth of Clyde—the noblest estuary in Great Britain. Its average width towards the entrance is ten miles. It narrows to about five miles, opposite Leith, the island of Inchkeith standing about mid way. At Queensferry, thirty-two miles from the entrance, it narrows to a gorge, with a breadth of one mile, but with a depth of water sufficient for the heaviest ironclad afloat, or ever likely to be afloat. In the outer ten miles, the depths vary from 30 to 20 fathoms. Thence to Leith they range between 20 and 10; in the gorge at Queensferry the depths increase to 35 and 40 fathoms. It contains forty pier and tidal harbours, besides the roadsteads of Leith, Aberlady, and Largo Bays, and the sheltered anchorage of St. Margaret's Hope. Lastly, it is further important as affording the only real refuge on this part of the coast, in an easterly gale, to vessels of the largest size. Perhaps after this description which is principally taken from sailing directions accompanying the charts, our military friends in the south will allow that the Firth of Forth is of some strategic importance, and is not to be considered in the same light as the defence of other commercial harbours. The fact is that the more, our coast defences are considered as a whole the clearer will it appear that, in neglecting the defence of the Firth of Forth the country is neglecting one of the most vital and strategic points. From the depth of water admitting ironclads to come within easy range of Leith and Granton, and to cover the landing of troops from transports from its forty piers and tidal harbours, from the long sandy beaches adapted for disembarking troops, the Firth of Forth is marked out by nature as the most suitable base of operations for an enemy landing in Great Britain. Of what value would all the elaborate defences that for thirteen years, at an expense of £6,000,000, have been formed on our south eastern coasts be, if they could all be turned by a landing in the Firth of Forth? This is what we are laying ourselves open to by fortyfying such places as Harwich, and neglecting far more vital points in the north. It is not very commonly known, although it ought to be, that one of the points selected by Napoleon I. as suitable for a descent on our shores, in his projected invasion of Great Britain, was the sandy beach east of Musselberg, known as Gullane Sands. It may be said that although Napoleon was no inconsiderable authority in his day, war is changed since then: but the physical geography of the country is not changed, and this is a question of physical geography so long as we have no defences. Now-a-days Napoleon would no doubt have preferred landing at the piers of Leith and Granton, simply because these artificial aids of landing have been prepared since its projected invasion; but it was the capabilities of the Firth of Forth as a base of operations which attracted the attention of that great authority in everything connected with war. To the more northern powers of Europe, the advantages are even greater.

The best engineering talent at the command of the Government would not be misapplied or thrown away in defending Inch-