

## The Naval Position in Europe.

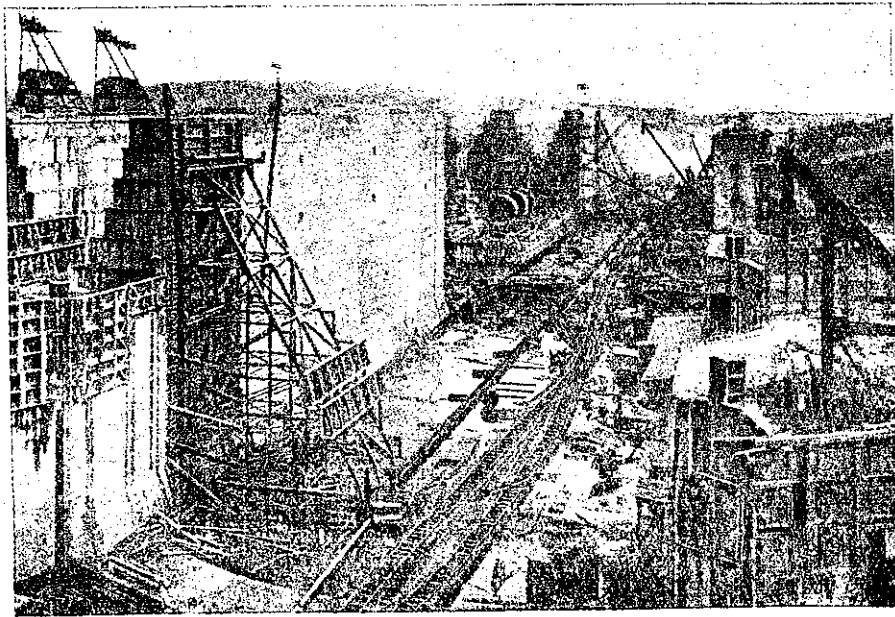
Sensational Statement.

British Supremacy Assured.

Suddenly the other day an obscure English provincial paper published a report which turned off at the meter the German scare. It was the "Evening News" at Portsmouth which announced: "The Admiralty has resolved to build an experimental battleship, which, if successful, will render obsolete all Dreadnoughts of all Powers. The new vessel will probably be laid down at Portsmouth, will be motor-driven, with internal combustion engines."

Mr. Archibald Hurd, the naval expert, is sceptical. He points out that the marine-oil-engine has not yet reached the stage of Parsons' turbine, when the *Turbinia* frisked about the water at Spithead thirteen years ago, and it was not until 1904 that the Admiralty—pioneers in this respect—had the courage to introduce the turbine into a large man-of-war—the Dreadnought. In the interval, turbines had been tested in destroyers, then in cruisers, and only at long last was it determined to instal them in the Dreadnought.

Not at once, therefore, can we look for the motor-driven battleship or the motor-driven liner. When the revolution occurs, then, indeed, the strangest ships



GATUN DAM. Along the line of Concrete Locks.

on which the eye of man has ever been cast will be afloat. We shall then have battleships which will be without boilers and without funnels, leaving the whole deck space free for the guns and for an increased number of guns, and practically without stokers, as the engines will be fed almost automatically with the heavy petroleum refuse. Increased space will be available for the crew and for ammunition and stores generally. The ship will lie low in the water, with one mast, and no top hamper or smoke pennant—to reveal her presence directly she comes on the horizon. She will be cheap to run, silent in movement, inconspicuous on the skyline, and, uglier than anything which has yet been sent afloat.

## Napier Harbour Works.

No. III.



THE NATURAL PORT OF NAPIER.

View of the Inner Harbour taken on the same day as those showing the Breakwater being buffeted by the Pacific billows. Notice the calm security in which the shipping lies at rest.

The Harbour Board having received the proposal of Mr. George Nelson for the construction of an Inner Harbour, referred it to a Commission of three engineers—Messrs Maxwell, Williams and Mason. They informed Mr. Nelson to that effect in April, 1909, and furnished

This bar always existed to a certain extent, but has become more pronounced since the construction of the breakwater. the ebb tide, owing to the stoppage of the shingle drift, being now able to prevent its being spread out towards the beach while the accumulations in the neighbourhood of the entrance have entirely disappeared owing to the stoppage of the supply of shingle.

They examined the bottom by dredging with the Board's grab dredge "J.D.O." from this bank inwards, and found that the bottom was composed of sand to about 2000 feet from the end of the eastern mole, thence inwards it was composed of shingle increasing in size as they approached the entrance. In the entrance they found limestone boulders as described in the reports of Mr. Weber, one of the Board's former engineers.

This sand bar and the sand drift are, in their opinion, the critical features in connection with the proposal to establish an inner harbour suitable for the largest vessels.

"Even if it were practicable at a reasonable cost to cut an unprotected deep channel through this bar inwards, of which we have some doubt in the face of the fact that it is exposed to the heaviest seas, there is no doubt that in heavy weather it would be liable to be obliterated, wholly or in part, in which event the port would be closed until the channel was re-opened, which would be an intolerable inconvenience."

In addition, they dwelt on the difficulty of the navigation, concluding reference to this point with "in the face of this uncertainty we could not advise the expenditure of large sums of money on the inner harbour until it were proved that the outer channel could be maintained at a cost that would not be prohibitive." Then they went on to recommend the erection of a mole alongside this outer channel at a cost of £120,000 for its protection. Even with the mole there would, they declared, be much need for continuous dredging "though the cost might not be prohibitive."

him with a copy of the order of reference. Mr. Nelson replied, throwing light on various points of the order and a copy of his remarks was forwarded to the Commission. The Commission reported in July of the same year.

Regarding the inner harbour, they said that the travelling drift would be a great difficulty.

This drift of sand passes round the breakwater, and but for the opposition of the ebb currents from the inner harbour, would spread out towards the Petane beach. It now no doubt, assists in forming the bar which is found at about 3000 feet outside the moles at the entrance to the inner harbour, and on which the sea breaks during heavy weather.