Naval Matters.

Imperial Defence.

The First Line.

We describe in this issue the principal types of warships that will be represented in New Zealand waters when, in two years' time, the re-arrangements with regard to the Pacific fleets have been completed.

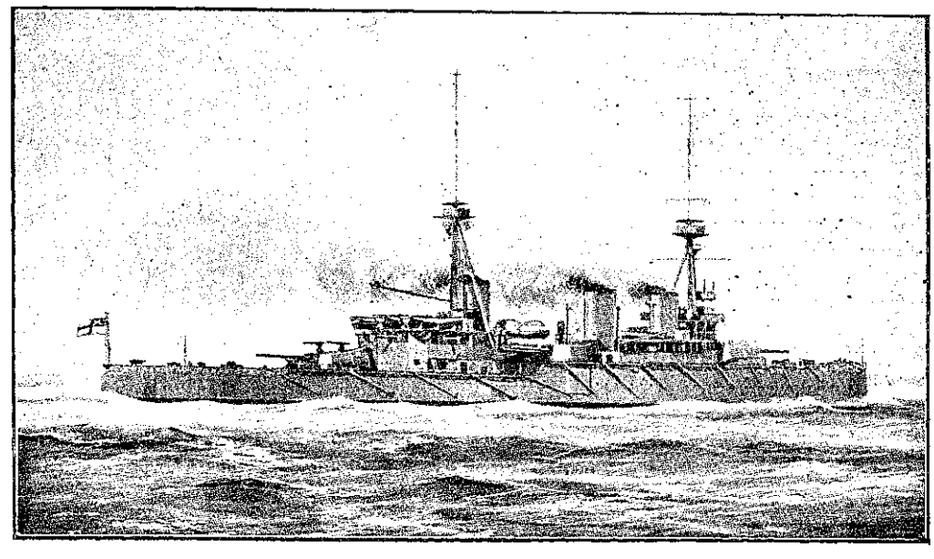
The first is the "Indomitable," of the "Invincible" Class. Our "Dreadnought" will, as a matter of fact, be an improved "Indefatigable," which itself is an improved "Indomitable," but the general appearance of the vessels will be much the same, and, as the later vessels are not completed, no later photograph is available. The "Indomitable" is 17,250 tons, and carries eight 12-inch guns, two of which are paired on the forecastle and two on the quarterdeck. The remaining four are paired between the second and third funnels, in what is known as the *echelon* manner, which permits one pair to fire across the deck and past the other pair. This gives the vessel a broadside of the whole of her big guns when the target is directly abeam or nearly so; but in our "Dreadnought," (the "New Zealand") it is probable that one pair of guns will be mounted between the first and second funnels, which will be wider apart than in the "Indomitable," and this will give them a much greater arc of training than they have in the earlier ship. The "Indomitable" is what is known as a "Dreadnought" cruiser, and has a designed speed of 25 knots. In service she has proved herself capable of 28 knots, and is actually credited with having touched 29.2. She steamed across the Atlantic at an average speed of 25.13 knots for some days. The "New Zealand" may be expected to exceed this.

The second type is the "Newcastle," a second-class protected cruiser with a designed speed of 26 knots. On trials, the class has done 27 knots. The "Newcastle" is armed with two 6-inch guns and ten 4.7 inch. Her displacement is 4,800 tons, or about 1000 tons less than that of the "Challenger" and the "Encounter," but she is nearly as long, and her much greater speed gives her an immense advantage over these vessels. Altogether the class is likely to prove very much more serviceable than the slower vessels they replace.

The destroyers are the remaining class of vessel which will be stationed in these waters, and it will be the first time that boats of this type have ever been to New Zealand. The description given is that of the "Derwent," one of the well-known river class, to which our boats are to belong. As destroyers go, they are not fast, and would be altogether eclipsed in speed in smooth water by many other torpedo craft in the Navy. They were built shortly after the wreck of the "Cobra" and "Viper," at a time when naval constructors were beginning to realise that speed is not everything in a destroyer but must be accompanied by structural strength. The river class are very strongly built and are good sea boats, and the result is that, though only 25 knot boats, they are good for a steady 25 knots in a seaway, while many a supposed 30 knotter's speed will fall to about 21 knots. In addition to this, they are extremely economical at low speeds, and have a radius of action of about 2000 miles.

The "Bedford" (of which we subjoin a description) has lately been wrecked off the South of Korea. She belonged to the well-known "County" class of armoured cruisers, of 9,800 tons, poorly armed with fourteen 6-inch guns, but very fast. She was running full-speed trials when she went on the rocks, and, this being so, one scarcely wonders that she was a total wreck, as her full speed was 24.3 knots. With 9,800 tons at anything like that speed, something would have to go.

The following are details of the "Lion," the giant "Dreadnought" cruiser now under construction:—Length, between perpendiculars, 660 feet; over all, 700 feet; beam, 86½ feet; mean draught 27½ feet; displacement, 26,360 tons; designed indicated horsepower, 70,000, giving a speed of 28 knots. The armour belt has a maximum thickness of 9¾ inches, and has been manufactured by the Simpson process. This belt is not continuous to the bows; here the lines of entry are so fine, and the buoyancy is so moderate that a heavy weight carried right up to the stem must seriously have affected her sea-keeping qualities. Instead of armour, therefore, there is a minute sub-division. The main armament is the most striking feature of this vessel and her sister, the "Princess Royal." It consists of eight 13.5 inch guns mounted all on the centre line. Four of these are paired in turrets forward, the after two of these four so mounted as to fire over the first pair. A third turret is placed between the second and third of the three funnels, and a fourth on the deck aft firing right astern. There will be twenty-four 4-inch quick-firers, and five 21-inch torpedo tubes. The ship will have a single tripod mast forward and a thin pole mast for signalling purposes astern. There will be three huge, squat funnels. The model test foreshadows an actual speed of over thirty knots.



H.M.S. "Indomitable."

The "Von der Tann."

Germany's Reply to the "Invincible."

(From "The Navy.")

We should be captious indeed if we grudged to Germany any part of the enthusiasm which has been aroused by the *debut* of the "Von der Tann" as one of the fastest warships in the world. This magnificent vessel, it need hardly be said, is a triumph for German naval shipbuilding in general, and for Messrs. Blohm and Voss in particular. Incidentally, the "Von der Tann" is a sweeping vindication of the turbine policy initiated and sturdily prosecuted by our own Admiralty, which led the way in this as in so many other branches of naval progress. Lacking full details, some of an essential character, of this giant cruiser, it is impossible to compare her exactly with the "Invincibles," of which she is a counter-type. The "Invincible" system of *echelon* mounting has been adopted and improved upon, with the result that the "Von der Tann" possesses an actual broadside of eight 11in. guns to the "Invincible's" very hypothetical broadside of eight 12-in. In speed the British and German vessels seems almost identical. The "Von der Tann" is a splendid tactical unit, according to published reports of her trials, and answers the slightest touch of her helm. Her steadiness as a gun-platform—a feature of all the later German capital ships—further entitles her to admiration. I understand that the maximum thickness of the belt is 8in.—K.C., of course. All the secondary 6in. guns have unusually wide arcs of fire and are the first new model 6in. weapons to be mounted. They are more powerful than the secondary guns of the "Nassau" and her three sisters. Such wide publicity has been given to the vessel's other features in the English press that a further description here is unnecessary. The fundamental fact is connection with the "Von der Tann" is this: for the first time in its history the German Navy possesses a unit equal, and probably superior to any foreign contemporary.

The consequence will be increased naval activity all round, for every nation will begin building something bigger, stronger and faster.