

# Canada's Navy—An Empire's Navy

BY T. W. SHEFFIELD, ENGINEER, LATE WITH CAMELL, LAIRD & COMPANY, LIMITED, ENGLAND,  
BUILDERS OF BATTLE-SHIPS, TORPEDO BOATS AND CRUISERS

## The Navy and Canada

When Great Britain's Supremacy of the Seas is challenged by the domineering ambition of any naval power the National Existence of Canada becomes imperilled

THIS expression is not given in any party or jingo spirit, but from careful observations of the situation in Germany, France, South Africa and Canada. A great deal has been written upon the subject, mostly by those who have had very little opportunity of becoming intimately acquainted with naval matters, either from a practical or an administrative point of view. It is therefore not unreasonable to expect that a few observations on the recent crisis, by one who has been trained in what may be termed the cradle of the British Navy, will be of interest at the present time. Many important side issues will of necessity have to be omitted to bring out the more serious views on the unquestionable and urgent needs of "An Empire's Navy."

Hitherto the navy has always been referred to as the British Navy, but recent events call for a broader interpretation of its true and real significance, and what more fitting title could fill the role than "The Empire's Navy"? The continued and prolonged apathy of Canada on this question is appalling. How is it? The reasons are not difficult of solution.

Firstly, the overestimated security of the present and past Governments in the British Navy.

Secondly, the inborn sense of security of the people living so far from the actual centres of naval powers.

Thirdly, the assumed immunity from war.

Fourthly, lack of opportunity in seeing the grey sentinels guarding the Empire's highways of commerce.

"THE SAND IN THE HOUR-GLASS IS RUNNING LOW."

It is not unreasonable that Canada fails to appreciate Great Britain's attitude in suddenly finding out that her navy must at all costs, be strengthened to the full two-power standard. No exception has ever been taken to a foreign power providing a navy strong enough for her own protection. When that power, however, undertakes a secret policy of battleship construction there can be only one object in view, and that is aggression, which is the true and only solution of Germany's rapid progress dur-

ing the last seven years, even against the outcry of her already overburdened taxpayers. Seven years ago the writer was in Germany, during the campaign for the German Navy League (which is similar in purpose to the British Navy League, having a duly organized branch in Toronto). When a certain section of the Reichstag condemned the policy of naval expenditure, the patriotic fever for a larger navy, with the Emperor of Germany as chief patron to the society, overruled all economical considerations, and surpassed anything ever witnessed in Great Brit-

ain. To-day the German Navy League, emulating Britain's example, has far surpassed the home society in political importance. The true significance of Germany acquiring the Island of Heligoland, in the German Ocean, has yet to be learned. It was ceded to Germany in 1890, after being in Great Britain's possession for over a century. It has been fortified with the most modern guns, by Krupps, to protect the entrance to the Elbe and other strategic reasons. When Heligoland belonged to Great Britain it was a calling place for fresh water only.

### A REVIEW OF GERMANY'S RAPID PROGRESS.

In 1895 the German fleet consisted of five inferior battleships, with a small fleet of very inferior torpedo boats. To-day the German Navy consists of twenty-one first-class line-of-battleships of the semi-Dreadnought type, and they are building Dreadnoughts at practically the same rate and standard as Great Britain. Germany's programme, if carried out, will, by

1917, give her forty battleships and an overwhelming proportion of armoured cruisers and other vessels. At the time of writing Great Britain has thirty first-class battleships of the semi-Dreadnought type. In this connection it is important to note that Germany's interest in what was thought to be Great Britain's own secret, was revealed in the fact that the figures taken on the trials of the first Dreadnought were published in Germany before they became known to the taxpayers of Great Britain, a situation calling for strong comment at the time by the

a half years before going into commission, and cost over \$4,000,000. The type following on these was the Majestic, costing over \$5,000,000. They are 400 feet long, with a beam of 75 feet, have a speed of over 18 knots, and carry four 12-inch guns in turrets.

### THE DREADNOUGHT TYPE.

This type is called after the first bearing that name having some 17,000 tons displacement. The latest type is over 20,000 tons displacement, and is armed with ten 12-inch guns, mounted in five turrets, so arranged that eight guns can be brought to bear on either side broadside. They are also equipped with a number of torpedo tubes and quick-firing machine guns for resisting the attack of torpedo-boat destroyers. They are faster than the semi-Dreadnought or Glory class, having a speed of about 22 knots an hour. At this speed they could keep at long range, manoeuvring at a distance of four to five miles from an enemy of, say, the Glory class, at which range the Dreadnoughts could inflict terrible damage, having eight big guns to the Glory class' four. The total cost is considerably over \$10,000,000 before being ready for commission. The Dreadnoughts have a crew of over 800 on board, which will give some idea of the enormous amount required for their maintenance. It would take quite a volume in itself to describe the building and equipment of one of these units of Empire.

### A COMPARISON.

The latest type of German Dreadnought is similar in all respects to the English Dreadnought. Nine years ago it was a stupendous undertaking for Germany to build even one ship of the Dreadnought class. To-day the combined efforts of capitalists and employers of labor are devoting all their time, resources and money to the great task they have in hand. The outcome of which, as the present programme now stands, will be that the German Navy will have an established fleet of forty battleships (Dreadnoughts), twenty-five cruiser battleships of the Glory class, forty protected cruisers, 150 destroyers, fifty submarines and a small fleet of aerial warships and captive balloons attached to the fleet, which will be the best equipped in the world. This extensive programme has only been possible through the combined efforts of the great firm of Krupps at Essen, employing over 30,000 hands, associated with their numerous establishments located in three



H. M. S. VALOR

Old type British war ship, equipped with steam and sail in the early period of Victoria's reign. Many other classes of Battleship followed this before the evolution of the "Mars" and "Glory" type, which preceded the "Majestic" type.

Press and leading engineering papers of the country.

### TECHNICAL EXPLANATION.

The term Dreadnought is too widely applied to-day, and a little explanation is necessary to convey what this title implies to gauge the relative strengths of each navy. The standard type of battleship before the Dreadnought class was the Royal Oak, Mars and Glory type, ranging from 12,000 to 14,300 tons displacement, armed with four 12-inch guns and twelve to sixteen quick-firing guns of 6-inch calibre. The 12-inch guns are counted in turrets fore and aft, each containing two guns, firing a shell weighing 850 pounds, three shots a minute at an effective range of four miles. The 6-inch guns fire a shell weighing 100 pounds, discharging eight to ten a minute at an effective range of two and a half to three miles. The speed of these ships ranges from 16 to 19 knots an hour. The three ships of this class with which the writer was connected were built in from two to two and