

thrift, intelligence and the prosperity of her people, illustrates to mankind the advantages of training her citizens, in their youth and manhood, to the use of arms. The habits of discipline and the order and cleanliness of person. It is recognized today as a national characteristic, that the womanhood of that nation look with reproach upon men ignorant of military training. Germany is well to the fore in all that belongs to the twentieth century civilization. The greatest lesson of all we learn from China. There is a nation of 3,000,000,000 to 4,000,000,000 of people. Honest traders, inoffensive, and unaggressive. A nation which, from its physical character, the industrious habits of its people, and its natural resources, should have been the last to arouse hostility. It neglected its defence on water, and we now see the result. The nations in possession of navies are trying to tear it to pieces and divide the spoil. Do we hear of any of these nations being worried by honest scruples? No. The whole dispute is over the division of the spoils.

Reference was made by the Minister of Railways to the splendid internal canal system of Germany, and all that has been done within the last ten years. But, now that England is aroused we need not fear any danger. We know very well that with England's resources she is now building at the rate of eight ships per year, and that she will never again allow Germany to approach near the danger point. The statement of some hon. gentlemen that there will be a war in a year or two seems to be absurd. It has never been stated by any naval authority in England that Germany could hope to enter into successful war with England even in the year 1912. Up to that date Germany would certainly be far outclassed. We must further remember that although Germany may be building these new ships she has to take men from the farms to man them. Germany has no large coast line to support a maritime people, and the men for these ships are taken by a system of what we would call force. They are forced to serve in the German navy, as they are forced to serve in the German army for a number of years, and while there is no doubt that after a time they do make good seamen, yet it is fair to say that even after these new ships are built it will take some years before the men are trained and before she is able to go to war with England. Now, let me point out to the House that in the year 1912, which it is prophesied by some may be the year of danger, Britain will have 22 Dreadnoughts, super-Dreadnoughts and Dreadnought cruisers; her naval programme for 1909 provides for the building of eight of the super-Dreadnought

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type. The Navy League annual shows that in 1912 England will have 22 Dreadnoughts, super-Dreadnoughts and cruisers, as I have already mentioned. But look at the improvement in these ships. The first Dreadnought was 17,900 tons and the last four ships of the super-Dreadnought class are to be of 25,000 tons. The first Dreadnought had 23,000 horse power, but the super-Dreadnoughts are to have 45,000 horse power and a speed of 23 knots instead of the Dreadnought speed of 22.4. They are to be armed with ten 13.5 inch guns and fourteen 6 inch guns. I might give a short description of these guns as follows:

#### The 16.25-inch gun.

The principal details of the 110-ton gun are as follows: It has a bore of 16½ inches in diameter, and is 43½ feet long. Its projectile is 1,800 pounds in weight, and is propelled by a charge of slow-burning cocoa powder weighing 900 pounds. This gun can only be fired at the rate of one round every seven minutes, and the life of it is not estimated to exceed 100 rounds. Now obsolete.

#### The 13.5-inch gun.

The 13.5-inch gun throws a projectile weighing 1,250 pounds, with a muzzle velocity of 2,016 feet per second, and with a firing charge of 630 pounds of powder has an energy of penetrating 25 inches of wrought iron at 3,000 yards.

#### The 12-inch gun.

Next in order we come to the 12-inch gun, which, with various modifications of design, remains the standard heavy British naval gun of the present time. The total length of this magnificent gun is 617.7 inches. The initial velocity of its projectile is 3,010 foot-seconds, which gives a muzzle energy of 53,400 foot-tons; the effective range against an average modern armoured warship is computed roughly at about four miles, and the extreme range is 25,000 yards, at which limit the remaining velocity of the shell would be so relatively small as to render it comparatively harmless save by virtue of its own weight.

When we remember that the latest British Dreadnought type of battleship are armed with ten of these mighty pieces of ordnance apiece, the tremendous concentration of their powers of aggression makes contemplation of the future naval battle simply appalling.

#### The 10-inch gun.

The 10-inch gun is a weapon that has been fitted to a few of our battleships, although it has never found particular favour amongst the gunnery experts of the British navy. The Vickers' pattern of this weapon, which is largely used in the Russian, Italian, Japanese, and United States navies, is 34.5 tons in weight, has a length of 45 calibres (464.9 inches, including breech-chamber), and throws a projectile of 500 pounds, with a muzzle velocity of 3,000 foot-seconds, and a muzzle energy of 30,990 foot-tons.

#### The 9.2-inch gun.

Continuing to follow the category of primary weapons in the order of their size, we come now to the 9.2-inch gun, which is the most popular and in its way the most useful piece of artillery in the British fleet. It is