side, which may in some measure account for the scrupulous cleanliness of the the vessel. In the fore part of the main deck is a spacious bathroom, where the men are compelled to go through a complete ablution every Saturday; but the 700 men pass through the water in six hours, so ample is the accommodation. Here, too, we see the condensers. On no account will the commanding officer allow water to be shipped from the shore. He tried it experimentally on the Neva, and the officers and men sampled it as they would champagne or vodka, only to declare that it did not suit the palate, and so all the fresh water is condensed on board. Rising to the battery deck we pass from subjects that are of human to others that are of inhuman interest. When we look at the guns my guide remarks that on this deck there are no less than sixteen 6-in quick-firers in clear view, but he passes to one, which is a sample of three others on this deck, and to which attaches some curiosity. The gun lies parallel with the ship, and not at right angles like the others. Above it is lifting tackle. Fire that gun as it now lies, and it would blow to smithreens a line of officer's cabins. Now in measuring the strength of a ship it is customary to count the muzzles of the guns that are visible; but in the Rurik four 6-inch quick-firers are kept out of sight. In going into action these weapons would be slewed back with the surmounting tackle, remounted, and the gun port would fly open, while four hitherto invisible guns would come into play. The wisdom of the arrangement is not quite obvious, as the number of guns can be ascertained from any standard naval work. Next my guide hands me a magazine rifle that holds four projectiles. The weapon, like the ship, the engines, and the big guns, is of Russian manufacture. It is no heavier to handle than the Lee-Metford, and as I open it and examined it carefully I am bound to pay a tribute to the armourer, or whoever is his counterfeit in in the Rurik, for keeping his rifles in a cleaner state than any foreign rifle I have yet seen

We next handle one of the 6-inch guns, train it, elevate and depress it, open the breech and close it' and everything works with the utmost smoothness. My guide tells me that one man can easily work a gun; but they always put four men in the gun's crew. He also explains the method of bringing up the ammunition, which is on the principal of the "railway" system in use in drapers' shops; but electricity is in general use in preference to hydraulics. The machinery is equal to supplying eight projectiles per gun per minute, which is quite fast enough for the ship that has to stand up against such a rain of 100lb. projectiles. On the upper deck are four 8in. breech-loaders, also made in Russia, and the action of the breech greatly facilitates rapid firing, while these, which constitute the heaviest artillery on board, are assisted by six 120-millemetre guns and other light weapons. In examining the guns in the battery one is greatly struck by the absence of that impedimenta which is calculated to make destructive *débris*, and as the weapons are themselves protected by sporsons they are secure against light ordnance. With ten inches of steel armour, therefore, the Rurik can deal a smashing broadside and can resist practically everything but the heaviest ordnance.

Below the main deck the ship is ventilated by means of twenty-two electric motors, so that the atmosphere is constantly undergoing change. All the decks are so lofty that there is no necessity to stoop in any part of the ship, and, from a sanitary point of view, this is one of the highest advantage, but it has its drawbacks, as the ship, with her enormous length, stands high out of water, presenting a wide target for the enemy. Waiving this objection the Rurik is one of the most formidable fighting engines afloat.—*Naval and Military Record.*

From Service Exchanges.

A R. M. C. Man Decorated.

Captain John Irvine Lang, Royal Engineers, whose name appears in the New Year's Honour Roll as a Companion of the Most Distinguished Order of St. Michael and St. George for services in connection with the Railway Survey and delimination of the Western Boundary of the Gold Coast Colony, is one of the several graduates of the Royal Military College of Canada who has come well to the front in the Imperial Service. The descendant of an old Yorkshire family settled in Canada after the war of 1812, Captain Lang entered the Royal Military College at Kingston, Ontario, in 1879, and graduating with honours in 1883, was gazetted as a lieutenant in the Royal Engineers in June of that year. After passing through the usual two year's course in Chatham he was sent to the War Office, and was subsequently made A. D. C. to Sir Andrew Clarke, Inspector of Fortifications, and on the expiration of this appointment, was appointed to British Columbia to carry out the surveys in connection with the defences of that portion of the Empire. His work was so well done that on his return to England he was selected for special duty on the Gold Coast, and has now been rewarded for his important services in connection with the Boundary Commission and his extensive surveys in the surrounding district. Capt. Lang, like his countrymen generally, is a man of splendid physique, and like all those who at the Royal Militia College of Canada have gained the coveted prize of a commission in the Royal Engineers, has justified the confidence of the Imperial authorities in their appreciation of the splendid training of four years duration which cadets receive at that important institution. Captain Lang is now on the Staff of the School of Military Engineering, Chatham, as Assistant-Instructor in Estimating and Construction. — The Broad Arrow.

Canada Take Notice.

The State of New York at the last election voted to spend $9,000,000 in improving the canals of the State, and within two years their depth will be increased to 8 feet 3 inches and the locks will take boats 17 feet 10 inches wide and 226 feet long. It is proposed to ask Congress to appropriate $2,000,000, to be expended in still further widening the locks so as to take vessels of 23 feet beam, thus making the width the same as on the Delaware and Raritan Canal locks, through which the torpedo boat Cushing has just passed. This will allow small torpedo boats to be sent into Lake Ontario via Oswego, and into Lake Erie via Buffalo.—Army and Navy Journal, N. Y.

Individual Training.

H. R. H. the Duke of Connaught, in announcing the arrangements for training the troops at Aldershot during the present year, directs "that during company training more attention than heretofore shall be paid to the individual instruction of the soldier, and to improving his capacity of thinking and acting for himself." The company training is to be completed in the spring, and there will be no autumn course as hitherto. Physical, spring, and company drills will be conducted currently with it, and training will not be suspended on Saturdays. Night operations by battalions and brigades are to be carried out between 20th March and 15th April. Minor operations and field days for the whole of the troops will begin about 1st July, and be continued till the manœuvres which, it is anticipated will this year be in the neighborhood of Aldershot. The force at present at the camp under His Royal Highness's command consists of three regiments of cavalry, three horse and six field batteries, two field parks, and depôt, a mounted detachment, two bridging troops, a telegraph division, four field companies, and baloon depôt of Royal Engineers; 15 battalions of infantry, 13 companies of the Army Service Corps, three companies and two depôts of the Medical Staff Corps, and three companies of the Ordance Store Corps—in all about 20,000.—The Broad Arrow.

Infantry Equipment.

At this time, when the reports as to the mode of carrying the infantry soldier's equipment have been so adverse in the reports of the Duke of Connaught, Lord Methuen, and Lord Ralph Kerr, it is interesting to know that a trial equipment is being experimented on at Maryhill by the 2nd Battalion Gordon Highlanders. The experimental pack is fixed on the shoulders by metal hooks, and the weight is entirely a downward pressure on the shoulders, without any straps constraining the respiratory or other organs. The back plate is designed to prevent "wobbling," which is a source of fatigue, and the whole equipment can be taken off in a second when halted and as easily replaced. This new pack is the invention of an officer in Glasgow.—Army and Navy Gazette.

Reorganization of British Cavalry.

An elaborate scheme for the reorganization of the British cavalry serving at home has been drawn up by the Inspector-General of the Cavalry for submission to the Commander-in-Chief and the Secretary of State for War. For the present it is not desirable to do more than indicate the broad lines of the scheme. In order to overcome the difficulties which commanding officers of regiments on home service have to encounter, which difficulties we have pressed on the notice of those in authority for some time past, it is proposed under the new scheme to concentrate brigades of three regiments each at Aldershot, Canterbury, and Colchester. Each regiment will be brought up to a greater strength than that which is now usual on the home establishment, and organized in three squadrons with an additional depôt squadron attached for training of remounts and recruits. As a general depôt for cavalry Canterbury will be abolished. It is not proposed that the brigades shall always remain at the centres named, but for administrative purposes they will at all times be nominated the Aldershot, Canterbury, and Colchester Brigades. By degrees many of the isolated stations would be abolished, whilst the Irish garrisons would be provided for among the regiments in the lower establishment - those lately returned from abroad with a large proportion of young soldiers in their ranks who require to be "licked into shape" before they are brought into brigade with other corps, or expected to operate with the other arms.—Army and Navy Gazette.

The New Dynamite Gun.

Experiments on an extensive scale were carried out in New York harbour with the new dynamite gun. The gun was loaded with a shell weighing 350 lbs, containing a charge of 100 lbs. of nitrogelatine. This discharge of the gun carried the projectile to a point three miles distant, where it struck a rock cliff and exploded, tearing a hole in the face of the solid rock 6 ft. deep and 3ft. in diameter. A projectile containing a charge