

ed is a mystery; three others were more or less injured. The poor fellow who was killed was blown out into the air, his left leg being torn off and carried by part of the torpedo into the Royal Artillery Department timber field, a distance of about fifty yards. The torpedo had on Friday last been discharged three times in the canal with a pressure in the air chamber of 1000lb. on the square inch, the same as it was charged with at the time of the accident. The whole which are supplied by contract, are constructed of the best material, and no means are neglected to test them fully before being used, the contractor being bound to submit each one to a test of 1100lb. to the square inch, which on being received at the Royal Laboratory Department of the Royal Arsenal is further increased to 1200lb. to the inch. The tests are applied by water instead of air, so that in case the machine should give way the explosion would pass harmless. The accident is believed to have been caused by some flaw in the construction of the case, which had up to the present trial been able to withstand the great pressure brought to bear upon it, but after each discharge he came weaker, until it at length gave way. Another supposition is that after being discharged in its course along the canal it might have come in contact with a bulk of timber or some other obstacle, and so received some injury which caused the accident. Soon after the accident Colonel Milward C.B., Royal Artillery, the superintendent of the Royal Laboratory Department, and other officials, were on the spot, and the injured men were conveyed without loss of time to the Royal Arsenal Infirmary, where on their arrival ample arrangements had been made by Surgeon-Major W. P. Ward and Surgeon Maunsell, of the Royal Arsenal, and Mr. Graydon, the dispenser, to mitigate as far as possible the sufferings of the men. The arrangements made for prompt attention to the sufferers were perfect, but such accidents as these, which occasionally occur in an establishment of such magnitude as the Royal Arsenal, prove the necessity for better accommodation being provided for their comfort, the building used as the ward being far too small for the reception of such a sudden influx of patients at one time. In order to find sufficient beds for them, Mr. Inspector Dodsworth, of the Royal Arsenal Police, who a short time since met with a severe accident at the Royal Arsenal railway station, had to be removed to his own residence. Information has been forwarded to the corner in order that an inquiry may be made into the affair. The building in which the accident occurred was much damaged, the roof being partly destroyed and part of the sides blown out; the track on which the torpedo rested, which was constructed in the most substantial manner, was broken, the stout blocks on each side being wrenched off the frame of the truck. The fish torpedo is about 15in. in diameter at the centre, and tapers off to a point at each end; at the tail end there is a three bladed screw propeller, worked by an engine inside the body, and a four bladed rudder to steer it in the direction it is intended to go. It is, so far as it is known, constructed in three parts; the head contains the rocket, which, being charged with gun-cotton when required for actual service, is fired by concussion with the enemy's ship, and intended to blow up the vessel. The tail end is a chamber which holds the compressed air to work the engine, and in the middle portion is placed the engine, with a pair of cylinders. They are intended to be discharged from a tube in the bows of a ship, but at the canal in the

Royal Arsenal the tube is fixed in a frame, by which it is lowered about five feet under water, with the torpedo inside. The torpedo is then expelled by means of a piston, and as it passes out of the tube a tripper catching against a stud puts in action the propelling power. When discharged the torpedoes, generally speaking, go straight to the mark intended to be struck at a speed of about ten miles an hour.

DOMINION OF CANADA.



MILITIA GENERAL ORDERS.

HEAD QUARTERS.

Ottawa, 6th March, 1874.

GENERAL ORDERS (5).

No. 1.

ACTIVE MILITIA.

SCHOOLS OF GUNNERY.

Adverting to Nos. 8 and 9 of General Orders (24) 20th October, 1871, officers and non-commissioned officers who have been selected for an additional nine months or "Long Course" of instruction, after having completed their three months or "Short Course" of instruction, and obtained First or Second Class "Short Course" Gunnery Certificates, will be entitled to Certificates having a higher qualification designated First and Second Class "Long Course" Gunnery Certificates, on the completion of their "Long Course," and provided they are found qualified in the additional subjects of instruction.

The words "Long Course" or "Short Course," as the case may be, will, in future, be written or printed conspicuously on the face and endorsement of all certificates issued.

PROVINCE OF ONTARIO.

47th "Frontenac" Battalion of Infantry.

No. 7 Company, Harrowsmith.

To be Captain:

Ensign Allen Carscadden, M. S., vice Joyner.

PROVINCE OF QUEBEC.

7th Battalion of Artillery and School of Gunnery, Quebec.

Master Gunner J. B. Donaldson, R. A.,

doing duty as Master Gunner, at the School of Gunnery, Quebec, is entitled to seniority in position and takes rank before all the non-commissioned officers on the establishment of, or attached to, the school.

PROVINCE OF NOVA SCOTIA.

78th "Colchester and Hants" or "Highlanders" Battalion of Infantry.

No. 1 Company Truro.

A Company of Infantry is hereby authorized at Truro, in the County of Colchester, to be No. 1 Company, 78th Battalion, to replace the former No. 1 Company, Truro:

To be Captain, provisionally:

Henry Taylor Lawrence, Esquire.

To be Lieutenant, provisionally:

Edmund Alexander Cock, gentlemen.

To be Ensign, provisionally:

William Barton Wilson, gentlemen.

CONFIRMATION OF RANK.

Major William Bingham, commanding the Victoria Provisional Battalion of Infantry, having served as a non-commissioned officer in Her Majesty's Regular Army, is hereby confirmed in his rank from date of promotion: 15 October 1871.

By Command of His Excellency the Governor General:

WALKER POWELL, Lieut Col.

Acting Adj. General of Militia, Canada.

The German park of siege artillery will according to the new regulations, consist of 400 pieces of ordnance, namely, 40 bronze 9 centimetre guns, 120 bronze 12 centimetre guns, 20 short cast steel 15 centimetre guns, 40 long 15 centimetre guns of cast steel with forged iron hoops, 40 bronze rifled 21 centimetre mortars, and 40 bronze smoothbore 15 centimetre mortars. It is expected to be complete as early as next March. A number of short 21 centimetre guns and 25 centimetre hooped mortars will be added shortly. The species of cannon upon which most reliance is placed is the 15 centimetre gun, a new type of ordnance which is supposed to be unequalled in truthness of aim and for firing breaches. For this reason the number of such pieces in the siege park will doubtless be still further augmented. The fact that this has not yet been done is accounted for by the requirements of the same arm for defensive purposes at fortified places.

Lieut. Governor Archibald on the 5th promoted Capt. John Cook, of the brigantine *Annie Brown*, of Wolfville, N. S. with a chronometer, awarded by the President of the United States for his humane services in saving the shipwrecked crew of schooner *Racenscairy* at sea: