

2.5 in. The diameter of the grooved tube is 12.75 in.; length of forged breech, with rings, 14.75; diameter of breech, 10.10 in.; over rings, 13 in.; number of rifled grooves, diameter 7. The pitch of the grooves commences with one turn in 130 in., and finishes with the turn in 93 in. In describing the gun, the inventor states that it has been built to burn the largest amount possible of powder in the shortest time, the charge being ignited in the centre. The method upon which the gun is constructed also provides against its bursting under any pressure. In further describing the gun, it is only justice to Mr. McComber to use his own words. He says:—

"The gun is built up of dies of the different kinds of wrought iron, increasing in density from the centre to the circumference. These dies are 'set' with a powerful steam hammer until the strain reaches the outside, and this strain is then for greater than can be given to the powder chamber on the explosion of the greatest charge it can be made to hold. After the gun has been built up in this manner, heavy steel rings are forced on over the chamber at the breech by a powerful hydraulic press (with the gun now for trial at Portsmouth the pressure used was 144,000 lb.), the inner surface of the rings and the outer surface of the gun being accurately engine-turned. Thus, the metal, commencing on the inside with the softest of tough wrought iron, finishes on the outer surface with the best of wrought steel. Whatever the size of the gun, the weight of the power charge will be equal to half the weight of the projectile. The gun is a breech-loader, closing after being loaded by two and a half turns of a three thread screw, forcing the fire tube into the centre of the charge, and closely surrounding the base of the powder chamber with the steel blades of the gas check, which entirely prevents any escape of gas."

Such is the inventor's description of a gun which is certainly somewhat of a curiosity, and which will prove to be a great success if the inventor's anticipations are realized. If the breech-loading arrangement would only work effectively when applied to a 50 ton gun, it would be invaluable on board our turret-ships. Yesterday, unfortunately, after one shot had been fired from the McComber it was discovered that a flaw existed in one of the steel gas check plates, and any further firing under the circumstances was, therefore, deferred until a new plate has been obtained from London.

DOMINION OF CANADA.



MILITIA GENERAL ORDERS.

HEAD QUARTERS,

Ottawa, 27th March, 1874.

GENERAL ORDERS (7).

No. 1.

MILITIA STAFF.

To be Paymaster for Military District No. 5, from 21st March 1874:

Captain and Brevet Major Théophile Amy

Maund, Sheffield Field Battery vice Honorable Matthew Aylmer appointed Brigade Major.

ACTIVE MILITIA.

PROVINCE OF ONTARIO.

St Catherine's Battery of Garrison Artillery.

To be 2nd Lieutenant:

Sergeant William Wiley, G. S., vice Charles E. Holmes whose resignation is hereby accepted.

Iroquois Battery of Garrison Artillery.

The Iroquois Battery of Garrison Artillery having been non-effective is hereby removed from the list of corps of the Active Militia. Captain Alexander McDonell, in consideration of his length of service, is placed on the retired list retaining rank, but 1st Lieutenant William Miller and 2nd Lieutenant John McDonell are removed from the list of officers of the Active Militia.

1st Battalion, Governor General's Foot Guards

To be Lieutenant:

Ensign Alfred Hamlyn Todd, M. S., vice Philip T. Vankougnet left limits.

To be Ensign, provisionally:

George Major, Gentleman, vice Todd promoted.

To be Adjutant:

Captain John Walsh, V.B. vice Rhodes resigned.

2nd Battalion "The Queen's Own Rifles," Toronto.

To be Captain, from 27th February, 1874:

Lieutenant Thomas Dawson Delamere, M.S., vice Samuel Bruce Horman transferred to the Provisional Battalion on service in Manitoba.

7th Battalion, "The London Light Infantry."

No 1 Company, London.

To be Captain, from 27th February, 1874.

Lieutenant Thomas O'Brien, M. S., from No 7 Company, vice Gorman appointed Adjutant.

To be Lieutenant, from 27th February, 1874.

Ensign John Kyle O'Connor, V. B., vice William Hill Nash transferred to the Provisional Battalion on service in Manitoba.

To be Ensign, provisionally:

Charles B. Hunt, Gentleman, vice O'Connor promoted.

No 7 Company, London.

To be Lieutenant, from 27th February, 1874:

Ensign Thomas Peel, V. B., from No. 2 Company, vice O'Brien transferred to No. 1 Company.

13th Battalion of Infantry, Hamilton.

Erratum.—In General Orders (6) 13 March, 1874, read "John Stoneman," instead of "John Honeman."

32nd "Bruce" Battalion of Infantry.

No 1 Company Southampton.

Adverting to General Orders (6) 13th March 1874, read, "vice Alexander Sinclair who, as a special case in consideration of his length of service, is permitted to retire with the honorary rank of Captain," instead of, "vice Alexander Sinclair whose resignation is hereby accepted."

34th "Ontario" Battalion of Infantry

To be Surgeon:

Francis Rae, Esquire, M.D., vice H. Warren deceased.

CONFIRMATION OF RANK.

Ensign John R. Cunningham, M.S., No. 8 Company 16th Battalion, from date of appointment: 28th May 1869, he being at that time the holder of a Military School Certificate.

PROVINCE OF QUEBEC.

Montreal Brigade of Garrison Artillery.

To be 2nd Lieutenant, provisionally:

John William Mulson, Gentleman, vice Taylor promoted.

1st Battalion of Rifles, or "Prince of Wales" Regiment.

The resignations of Captain John Robinson and Lieutenant William de Courcy Harnett are hereby accepted.

51st "Richmond" Battalion of Infantry.

No. 4 Company, Brompton and Windsor.

To be Captain:

2nd Lieutenant William Bernard Boyd, V. B., from Engineer Company G.T.R.B., vice W. Gordon Mack who is hereby permitted to retire retaining rank.

65th "Battalion" or "Mount Royal Rifles"

The resignation of Quarter Master Jean Baptiste Edmond is hereby accepted.

NON-EFFECTIVE CORPS.

The following corps having become non-effective are hereby removed from the list of corps of the Active Militia, and the officers thereof, below named, are also removed from the list of officers of the Active Militia:

Maria Infantry Company—Captain F. Solomon Cyr, Lieutenant John Green, and Ensign William Clapperton;
Matapedia Infantry Company—Captain