

7. Describe a Grummet wad and a Junk wad, and what is the use of each?

8. Can the 68 por. projectiles be used with the 8 inch gun?

9. What are the different kinds of fuze borer in the service, and with what fuze would you use the brace and bit?

10. If you had no portfires or tubes, how would you make them?

11. What precaution do you take in extracting a drill shot jammed in the bore?

T. B. STRANGE, Lieut. Col.  
Comdt. G. S., Quebec.

#### NON-COMMISSIONED OFFICER'S AND GUNNER'S SHORT COURSE.

GUNNERY SCHOOL, QUEBEC,  
November, 1874.

##### Shifting and Working Ordnance.

1. Give general duties of different numbers at 7 inch B. L. R. gun drill.

2. Detail stores brought up at the command "Prepare for action," with S. B. Garrison guns.

3. Give a rule to calculate the power gained by any tackle, and with the rule find the power gained by using a gun tackle.

4. Detail general duties at 10 and 13 inch mortar drill.

5. Detail general duties at shifting ordnance and explain in general terms the mode of shifting, on an emergency, a gun from one garrison carriage to another with such stores as are to be found with the guns in a battery.

6. What operations must be performed in laying a gun?

7. How is a mortar laid when the object is not in sight from a mortar?

8. Detail general duties of numbers of 16 and 18 feet light gun drill.

T. B. STRANGE, Lieut. Col.  
Comdt. S. G. Quebec.

#### NON-COMMISSIONED OFFICER'S AND GUNNER'S SHORT COURSE.

GUNNERY SCHOOL, QUEBEC,  
December, 1874.

##### Gunnery.

1. Define the following terms:

Trajectory.  
Line of Sight.  
Angle of Elevation.  
Angle of Clearance.  
Point blank Range.

2. What sights are used with S. B. guns? How are the length of degrees regulated on the various tangent scales?

3. Describe a rough method of testing the correctness of Sights on a S. B. garrison gun.

4. Give a rule to find the bursting charge of Shrapnel shell for S. B. gun.

5. How is the range of mortars increased or diminished? and give rule to find length of fuze.

6. Describe the process of laying them when the object cannot be seen from the mortar platform: the results of an uneven platform, and the means of obviating it.

7. If by raising the rear of a Garrison carriage a 24 por. gun is fired at a greater angle of depression than 15 degs, what should be the weight of the charge of powder used and why?

8. What is the object of firing hot shot, and what precautions must be taken?

9. Give a rough rule to find the length of fuze for Shrapnel and Common Shells for S. B. guns for a given range.

10. Give the different modes of rendering S. B. ordnance useless, entirely, and temporarily.

T. B. STRANGE, Lieut. Col.  
Comdt. S. G. Quebec.

#### The Annual Muster.

NIAGARA, June 1st.—The camp of exercise here was formed to day under the command of Colonel Durie, Deputy Adjutant General. Colonel R. L. Denison acts as superintendent of drill. The 2nd Regiment of cavalry are in camp with troops from the following points:—Grimsby, Queenston, Grantham, Welland and Burford. The following battalions arrived to day: the 77th, 44th, 37th, 19th, 15th, 13th and Queen's Own. The Welland and Hamilton field batteries, each with eight guns and wagons, are marching by road. They will unite at St. Catharines and arrive in camp to-morrow. The camp is very quiet, and the men have been so far occupied with the task of getting into quarters.

NIAGARA, June 2.—The camp has now its full complement of troops. The Hamilton and Welland Field Batteries arrived to-day. The food supplied to the men is very good in quality and no complaints have yet been heard. Several volunteers who had mis-conducted themselves were sent home to-day, and the same course will be pursued with regard to any men who have come to camp unfit for duty, as shown by the result of the medical inspection of all the corps, which took place this afternoon. The following are the hours for parade, as fixed by the Brigade Orders, viz:—6.30 a.m., 10.30 a.m. and 2.30 p.m. Though the weather has been temperate, a great many of the Volunteers who wear forage caps have suffered from the sun, and there are plenty of sore foreheads. The infantry commenced this morning exercise in squad drill under their company officers, and the cavalry were also being instructed in the details of their duty. Guards are mounted with scrupulous regularity, and habits of discipline rigidly enforced. Practice at the butts has not yet commenced. The sky clouded over during the morning, and a little rain fell. The weather is now fine.

The following is the Brigade Staff: Col. Durie, D. A. G., Commanding; Lieut. Col. Villiers, Brigade Major; Lieut. Colonel R. B. Denison, General Superintendent of Drill, Camp Quartermaster, Major Moore, 13th Batt.; Supply Officer, Captain Mason, 13th Batt.; Musketry Instructor, Capt. Johnson, late 20th Batt.; Orderly Officer, Lieut. Lloyd Jones; in charge of Camp Police, Ensign Kerr, 13th Batt.; Staff Sergeants Sergeant Baddock; Brigade Office Clerk, Sergt. Major J. Cantin; Quartermaster Sergeant Wyld; in charge of Musketry, Sergt. Dunford; Paymaster's Clerk, Sergt. Henderson; Clerk Supply Officer, Sergt. Willis; Police Sergt. D. Steele, 13th Batt.

The following is the list of officers and strength of battalions:—

37th Battalion, Haldimand Rifles. Staff officers:—Colonel, R. H. Davis; Major, R. A. McKinnon; Paymaster, Rogers; Quartermaster, J. A. Sill, Adjutant, Tuck; Dr. Baxter, Surgeon, Dr. Aiken, Assistant Surgeon.

No. 1 Co.—Capt. Williamson.  
No. 3 Co.—Capt. Nelles, Lieut. Walker.  
No. 4 Co.—Capt. Glen, Lieut. Almas.  
No. 5 Co.—Capt. Ryan, Lieut. Pyno.  
No. 6 Co.—Capt. Goodwin, Lieut. Armstrong.  
No. 7 Co.—Capt. Whiddon, Lieut. Nelles.

No. 8 Co.—Capt. Musson, Lieut. Threlburn.

Band and 270 non commissioned officers and men.

77th Wentworth Battalion—Staff Officers; Lieut. Col. Brown; Major, Gwyn; Paymaster, Hoey; Quartermaster Ryan; Surgeon, Burkholder; Adjutant, Aikens.

No. 1 Co.—Capt. Ogg, Lieut. Greening.  
No. 2 Co.—Capt. McMonies.

No. 3 Co.—Lieut. Fletcher.

No. 4 Co.—Capt. Bertram, Lieut. Hatt.

No. 5 Co.—Capt. Carpenter, Ensign Carpenter.

No. 6 Co.—Lieut. Walker, Ensign Wells.  
Band 23, and 270 non commissioned officers and men,—G. R. Sachem.

#### DOMINION OF CANADA.



#### MILITIA GENERAL ORDERS.

##### HEAD QUARTERS.

OTTAWA, 11th June, 1875.

##### GENERAL ORDERS (15).

##### No. 1.

##### ACTIVE MILITIA.

##### PROVINCE OF ONTARIO

##### 3rd Provisional Regiment of Cavalry.

To be Veterinary Surgeon:

J. S. Caesar, Gentleman, V. S.

To be Riding Master:

George Benson Smith, Gentleman, C. C.

##### Kingston Field Battery of Artillery.

To be 1st Lieutenant:

2nd Lieutenant and Captain Henry Wilmot, V. B., vice Kirkpatrick, promoted.

To be 2nd Lieutenant:

Sergeant Major John Wilmot, G. S., vice H. Wilmot, promoted.

##### Ottawa Brigade of Garrison Artillery.

##### No. 5 Company, Nepean.

The resignation of Captain Edward B. Hopper is hereby accepted.

##### 15th Battalion or "The Argyle Light Infantry"

##### No. 2 Company, Belleville.

To be Lieutenant:

Sergeant John Cockburn, M. S., vice Davy, deceased.

##### No. 6 Company, Belleville.

To be Lieutenant: