

raft, and calculate the floatation power of a cask raft of thirty fifty gallon casks, without taking weight of superstructure into calculation?

11. An advance on Montreal is threatened. You are desired to render the railway impassable in a few hours. Describe how you would effectually do the work, so as to get the smallest amount of blame for damage; supposing the rumoured advance turned out to be a canard, or supposing a subsequent retreat of the enemy rendered it advisable to re-open communication quickly?

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

GUNNERY SCHOOL, QUEBEC,
November, 1874.

Military Law, &c.

1. How many classes of Courts Martial are recognized in the service, and what are they?

2. Detail the form of proceeding of a Court Martial.

3. What remedy has a soldier who thinks himself wronged in any matter affecting his pay or clothing by the officer commanding his troop, battery or regiment?

4. How long can a soldier be kept in confinement before being brought in front of his commanding officer?

5. If a soldier has been confined and is subsequently made to do duty under arms, can he be punished for his offence?

6. What number of days confinement to barracks, and how many hours cells, can a commanding officer award?

7. Gunner Thomas Aitkens has been absent for 3 days from the 20th inst., and returned at 2 p.m., drunk, having lost his forage cap. Frame the charge that would be submitted to the commanding officer for investigation?

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OFFICER'S LONG COURSE.

GUNNERY SCHOOL, QUEBEC,
November, 1874.

Military Surveying.

1. Plot the following bearings and distances to scale 100 yards to an inch:

From.	To.	Bearing.	Distance in yards.
A	B	260°	190
C	B	35°	160
D	C	170°	60
D	E	265°	40
F	E	180°	50
F	G	190°	50
H	G	100°	30
H	I	240°	70

2. State briefly the General principles of making a military sketch, and the principal points to be noted in a reconnaissance report?

3. Submit your copy of the sketch made by the officers at Beauport Camp last Summer?

4. Describe Lieut. Col. Drayson's method of range finding?

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OFFICER'S LONG COURSE.

GUNNERY SCHOOL, QUEBEC,
November, 1874.

Tactics.

1. Define the following terms for Infantry, Cavalry and Artillery formations: A rank

a file, fours, section, sub division, division of artillery and what relation it bears to the battery, compared with that of the squadron and company to the larger unit of the other arms.

2. For parade purposes what is the extent of front of a squadron, a battery in line at full intervals, a company of 40 files; what intervals should be left between battalions in line of contiguous columns, squadrons, artillery, and other troops, and how is the dressing of artillery regulated with reference to infantry?

3. State the most important points for consideration by a battery Commander in the choice of a position, and the principles which govern the action of divisional, as well as of reserve or corps artillery in masses, on the march and in action, giving instances of the latter from the Franco-Prussian war.

4. Show by a diagram your disposition for an advance of the above corps d'armes in fighting order of march towards the frontier, by two parallel roads, sufficiently close together.

5. Suppose the advanced cavalry feeling the enemy falls gradually back on the advanced guard, which seizing a good position, with open ground in front, holds its own until the main body comes up, and the enemy draws off for the night. Shew with the aid of a sketch your arrangement of the corps d'armes, and the covering pickets, (supports and reserves not thrown out). State the strength of the pickets for a front of 1600 yards for each division: double sentries with an average beat of 50 yards are required?

6. At daybreak the force must be drawn up for battle, with the aid of a sketch shew the general outline you would adopt, the sort of ground you would prefer. You are facing south perpendicular to your communications, those of the enemy running south west; in what direction would you expect the real attack; how, when and where would you prepare to use your corps artillery and endeavour to develop a counter attack; with what special object? With a second sketch detail the formation for attack of one of your divisions on a front of 2,000 yards, skirmishers, supports, flank, battalion, brigade, and division reserves, according to the plan proposed by Captain Hume. Supposing in this case no strong features of ground break the general idea.

Give your reasons for everything.

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OFFICER'S LONG COURSE.

GUNNERY SCHOOL, QUEBEC,
November 1874.

Military Law, &c.

1. What is the difference between Martial Law and Military Law? State in general terms the persons subject to the latter.

2. Can Militia men be tried by officers of the regular forces and *vice versa*, and if so under what circumstances?

3. What punishment can a commanding officer award, and in what case has a soldier the right of demanding a court martial?

4. What is the limit of fine for drunkenness without court martial and with court martial?

5. Can a soldier be tried by a Regimental or Detachment court martial for drunkenness not on duty?

6. What are the powers of a Regimental court martial, of how many officers is it composed, and is there any exception to the usual number?

7. How often may the revision of a court martial be ordered, and is it allowable to take fresh evidence in respect of any charge on which the prisoner then stands arraigned?

8. May "hearsay" be taken in evidence?

9. Should soldiers committing minor offences, such as absence from tattoo, overstaying a pass, be lodged in the guard room. If returning sober after tattoo, how are they to be dealt with?

10. What are the rules relative to placing officers under arrest; can a junior place a senior under arrest, and what is it that prevents an officer leaving his room when ordered under arrest?

T. B. STRANGE, Lieut. Col.
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NON-COMMISSIONED OFFICER'S AND GUNNER'S SHORT COURSE.

GUNNERY SCHOOL, QUEBEC,
November, 1874.

Gunnery.

1. What is the meaning of the words:—

- Dispart.
- Preponderance.
- Calibre.
- Windage.
- Axis of the piece.
- Line of Sight.
- Line of Fire.
- Line of Metal.
- Point Blank.

2. How many kinds of fire are implied under the head of "horizontal fire," and name them?

3. What piece of ordnance is specially used to obtain vertical fire, and for what purposes is vertical fire chiefly used?

4. Give the rough rule to find the elevation required for a given range with S. B. guns.

5. Give a rule to find the service charge of a S. B. cast iron gun.

6. Give a rule to find the bursting charge of Shrapnell shells for S. B. Garrison guns.

7. Give a rule to find the length of fuze required for a given range for S. B. Common and Shrapnell shell.

8. Give a rule to find the charge of mortars for given ranges, and find the charges required to project an 8 inch mortar shell to 1,200 yards.

9. Up to what range can you effectively use Case and Shrapnell shell?

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

GUNNERY SCHOOL, QUEBEC,
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Artillery Material.

1. Name the different Projectiles fired from a S. B. Gun.

2. For guns of what calibre is Common Shell made?

3. What fuzes are used with S. B. ordnance shells, and describe the time fuzes?

4. In what respects does the exterior of the Pettman's Land service fuze differ from the General service?

5. What are the different substances of which service Gunpowder is composed, and in what proportion do they enter into its composition?

6. Describe the different natures of sabots or wood bottoms. How, with what Projectiles, and why are they used?