

Field Artillery Practice.

The following extracts from the "Instructions for Horse and Field Artillery Practice," issued to the Royal Artillery, may be profitably perused by those Canadian artillerymen who would labour to the best advantage next season :

PREPARATORY INSTRUCTION.

1. The results obtained at practice depend very largely, if not mainly, upon the thoroughness of the preliminary training of a battery before proceeding to carry it out.

2. The most important points to be attended to at practice are : (a) Accuracy of fire ; (b) Rapidity of fire. The attainment of both of these depends to a great extent upon the sufficiency of the preparatory instruction of the battery.

3. Accuracy of fire is dependent upon (a) Good laying ; (b) Correct observation of fire. Of these the latter can be acquired only while practice is going on, but the former must be insisted on before the battery joins the practice camp.

4. In order that the officer commanding a battery may be able to range his battery at once accurately and quickly, he must make sure that his non-commissioned officers (layers or Nos. 1) can lay time after time on the same spot with the same sight, and that the laying of them all is exactly uniform. He must moreover make certain that they can be trusted to lay steadily according to order, without attempting to make any corrections of their own ; such corrections must be based on very insufficient observations of fire, and must never under any circumstances be permitted, as they practically render it impossible for the officer commanding to range his battery.

When the Nos. 1 (or layers) of a battery have been fully trained in uniform laying, they should be encouraged to strive after rapidity of laying, both on standing and on moving targets. The targets selected should be such as would be met with on service, and not conspicuous objects such as church towers, high trees, etc. ; the range of such objects should not be, if possible, under 2,500 yards.

It should be remembered that when firing at infantry or cavalry, especially when in motion, it is more important that the laying shall be correct for elevation than that it should be so for line, since the formations of the enemy will in most cases have considerable breadth but very little depth ; but when engaged with artillery the guns must be carefully laid on individual guns of the enemy.

5. The observation of fire cannot form any part of the preparatory training, as skill in it can be acquired at actual practice only. It will therefore be considered later on.

6. Laying by an auxiliary mark should form part of the programme of the preliminary instruction.

7. Rapidity of fire depends upon the excellence of the general service of the guns, the rapid handling of the ammunition, on skill in boring or setting fuzes, and in action, upon the readiness with which the renewal of ammunition is carried out. All these matters should be assiduously practised before a battery appears on the practice ground.

ELEMENTARY PRACTICE.

(*Vide* Vol. II, Field Artillery Drill)

13. The principal objects of elementary practice are—

- i. To teach observation of fire, and to enable the officer commanding the battery to judge as to the capabilities of the various observers.
- ii. To instruct the officers of the battery in picking up and verifying ranges, and in deciding upon the length of fuse.
- iii. To accustom the battery to fire discipline.
- iv. To show the effect upon a target of all the service projectiles.
- v. To instruct in laying by an auxiliary mark.
- vi. To test the uniformity of the telescopic sights and brackets by shooting, according to the method prescribed in the handbook for the telescopic sight.
- vii. To practise supply of ammunition, as laid down in Volume II, "Field Artillery Drill."
- viii. One day at least should be devoted to drill at ranging on a moving target, with blank ammunition.

14. It is of the very first importance that the officer commanding, and some men of the battery, shall be skilled observers of fire. It is the duty of the officers commanding batteries to discover practically those among their men who may be trusted to observe, and to work those men up to the highest pitch of perfection.

As observing parties would rarely be possible on service (except in case of a battery acting alone), the officer commanding a battery should train his observers to use the battery telescope from a point close beside him (unless he is prepared to undertake the observation himself), and to give an immediate decision as to whether any shell is "plus" or "minus."

No estimate of actual amount is trustworthy, unless either the range be very short, or the observer be at such a distance from the battery as would be impossible on service. Observation with the naked eye is valueless.

When training, or judging the observers at elementary practice, the correct report of each round should be signalled in by the range party after each group of six shell ; the judgment of each observer and the true range should be noted and recorded.

15. It is further necessary that the observers shall be trained to judge of the height of burst of shrapnel shell. They should report this height to the commanding officer in feet ; he will then be able, knowing the maximum height, which must not be exceeded, to judge the efficiency of the fire against any particular nature of target. Trial fuzes should invariably be observed by means of the sights, according to the rule laid down.

16. The officers of the battery should be instructed in the conduct of fire, in order that they may, if necessary, be capable of replacing the officer commanding.

But neither (ii) nor (iii) can be satisfactorily carried out, unless the battery practises with at least four guns.

17. The Elementary practice should be throughout in the hands of the officer commanding the battery, but the details should be submitted to the camp commandant or the commanding officer, for his approval. The results need not be permanently recorded by batteries using the A scale of ammunition, but the commandant of a camp or the officer commanding may call for any reports which he may consider necessary.

SERVICE PRACTICE.

(*Vide* Vol. II, Field Artillery Drill.)

18. Service practice of the Battery is to be carried out under service conditions ; the officer commanding the battery is not to concern himself with petty details regarding the duties of his officers, non-commissioned officers and men ; all this should have been seen to during the preparatory instruction and the elementary practice. If it be observed that such interference is necessary, the camp commandant shall be empowered to order the battery to return to elementary practice, until it is in a condition to work without the constant attention of the commanding officer to details which are not within his province.

An exception may perhaps be made during the first few days of service practice, but it should be the endeavour of every officer commanding a battery to get his battery into working service condition as quickly as possible.

19. The duties of all the officers and of the Nos. 1 are laid down in the Field Artillery Drill, and each will, at service practice, adhere strictly to those duties.

20. The method of bringing up a battery into position will also be found laid down in the Field Artillery Drill. Great care must be taken that the instructions there given for the precedence of the battery by the range-takers and ground-scouts be strictly obeyed.

The officer commanding a battery will, before coming into action, give the following information to his officers and Nos. 1, halting it for this purpose under cover, viz. : the exact part of the target on which the battery is to be ranged, and subsequent distribution of fire, the range, and the flank from which the fire will commence.

Every gun will be laid at once, with the given elevation, as soon as it is in action.

21. The range-takers, having preceded the battery, should be careful to take up such a position as will not interfere with its coming into action ; they should also, as far as possible, keep themselves out of the sight of the enemy.

Officers commanding batteries are at liberty to accept the range as found, and proceed at once to find the short bracket, or to find the long bracket first, as may seem to them preferable. A certain number of ranges should be found on each principle by every battery.

Instructions on ranging a battery may be found in Volume II of the Field Artillery Drill.

The use of observing parties is not recommended, except with a single battery, as under other circumstances they would seldom be possible on service. If they are used, they should not be more than 5 per cent. of the range from the battery.

The selected observer, if other than commanding officer, will place himself, with the battery telescope, by the side of the officer commanding, on whichever flank of the battery the latter may select.

22. The system for battery service practice will be founded upon two principles :—A, ranging ; and B, effect. In carrying out A—

- i. A battery which opens fire on a target should not change to another target until it has correctly ranged itself both with common and shrapnel shell.
- ii. When once this has been done, that target has lost all instructive value to the battery, which should at once range itself on another.