FIELD ARTILLERY VOLUNTEERS.

Officers and men during the winter drill regularly in the drill-sheds, and learn the actual service of the gun, and a certain amount of fire discipline, but opportunities for going into the country, and working under more nearly service conditions are non-existent, and real efficiency cannot be obtained. It should be made possible to take these batteries completely away from the towns for at least one week, working all day. Manœuvres with a tactical idea could then be practised. Officers could be taught to quickly pick up natural targets, to observe, to move their batteries across country in the face of an enemy, to take up positions, and, in fact, to acquire the eye for ground without which a Field Artillery officer is enormously handicapped. Range-finders could be taught. Layers could also apply the knowledge they had acquired in the drill-sheds, and learn to lay quickly and accurately on natural targets.

Directors and gun arcs have now been supplied to the New Zealand batteries, but the problem remains: How, under present conditions, the batteries can be taught their use in drill-sheds?

As far as direct laying is concerned, these batteries have enormously improved during the This I think is due to the drill appliances which have been fitted up in the various drillvear. sheds.

Should it be considered sufficient for these batteries to be able to take up a position, not under cover, time not being a great object, and to pour an accurate fire on a fairly distinct target in slow time, in my opinion, most of these batteries fulfil these requirements; on the other hand, should they be required to fire from behind cover, either at ordinary or concealed targets, they would be practically useless. They would in fact be useful against guns landed by ships and manned by sailors or marines, but would be of no use against a modern field battery.

Two batteries qualified for first, two for second, and one for third class; one battery was not classified. In addition to causes mentioned above, this improvement is largely due to the increased allowance of ammunition which permitted of instructional practice being carried out previous to service class-firing. Hitherto batteries have carried out the whole of their annual practice on one day, and it was impossible to get good results, as it often occurred that a large percentage of the gunners were recruits and had not previously taken part in service practice. In order to obviate this, arrangements were made to carry out the practice on two separate days, the first day for "instructional practice," and the second day for "service class-firing." This enabled a thorough criticism to be made of the "instructional practice," and all ranks were able to benefit thereby, previous to commencing their service class-firing.

The difficulties of the battery commanders are still very great, in having to start every camp with so many untrained men, which makes it almost impossible for a battery to classify as first, under any scheme carried out strictly in accordance with the present regulations. The standard now laid down by the local regulations for the Field Artillery is all that can be expected from

Volunteers under existing conditions.

Nearly the whole of the practice was carried out with surprise targets, direct laying being

A supply of "directors" demanded from England last year arrived just before the camping season, and were consequently not used for the practice, although most of the batteries received instruction in their use.

Firing from behind cover was carried out by some of the batteries at the Easter manœuvres, and experiments were carried out by D Battery with a field telephone, for flank observation purposes, with satisfactory results, and it is now proposed to gradually equip all field batteries with field telephones.

In some batteries there was difficulty in getting the required number of qualified layers, too little attention having been paid to laying instruction, and the quarterly tests had not been

carried out.

All the practice was conducted in accordance with a tactical scheme, but as it had to be carried out chiefly over closely settled country battery commanders were not allowed to select their own position in all cases, and consequently were restricted in the tactical handling of their commands. The chief errors were: (1) Careless reconnaissance of position; (2) battery leader not going far ahead enough of his battery when leading it into action; (3) little attempt at concealment; (4) signals by battery leaders badly made; (5) communication between gun and wagon line not good; (6) detachments working the guns standing when they should have adopted the kneeling position.

The fire discipline was good as regards drill, the chief causes of failures in shooting being due to (1) bad range-finding; (2) defective observation; (3) inaccurate laying; (4) careless fuse-setting. It will be necessary for batteries to work very hard before the next camping season, in order to

be thoroughly conversant with the various systems of ranging laid down in F.A.T., 1906, and a great deal of time should be devoted to training in fire discipline and instruction in laying from behind cover. The system of drill-shed instruction should be carried out in as practical a manner as possible, with a view to instructing all ranks in firing from behind cover and communicating results from a flank observing station, as well as direct laying.

When daylight parades are held they should be devoted almost solely to taking up positions

and laying out lines of fire.

Laying instruction should be more thoroughly carried out, and quarterly tests held in all batteries.

Officers should practise observation of fire as far as is possible with disc and drill-shed

The following tables show the average results of battery practice and of laying and fuze setting; the results of battery classification are also shown:-