

fired, three qualified for first class, two qualified for second class, three qualified for third class, and one did not classify.

All companies have had the services of the officers, non-commissioned officers, and men of the Royal New Zealand Artillery, who spared no efforts in the conscientious discharge of their duties in connection with the instruction, as assistant umpires, recorders, &c.

Tactics and Drill.

The new features of the practice as compared with previous years were: (1) The introduction of "instructional practice" previous to class-firing; (2) special allowance in calculating figure of merit for companies firing from low-site batteries; (3) changing from electric to percussion firing during the firing of a series; (4) all practice conducted in accordance with some practical scheme; and (5) a time-allowance for ranging.

The instructional practice enabled all ranks to get experience previous to the class-firing, and resulted in better figures of merit being obtained in nearly all cases.

The allowance for low-site batteries was found in some cases too liberal, detachments in several instances scoring more marks than their shooting justified.

The changing from electric to percussion firing during the practice has resulted in more attention being paid to the drill for percussion firing.

Orders were issued for each practice in accordance with a tactical scheme, and officers had to study, and, previous to each series, lecture on the vessels reported as liable to attack. This system has caused all officers to take a keener interest in studying war-vessels of all nations.

A syllabus of instruction for a company training-camp was published in the "Instructions for Practice" in order to insure uniformity of training throughout the colony, the syllabus including lectures to officers on coast-defence subjects generally.

A local drill-book has been rewritten and issued during the year to all concerned. It is specially written for local requirements, and is of great value to a Volunteer, containing as it does all the gunnery drills required locally.

A book of questions and answers on gunnery, &c., has also been issued to all concerned, and has greatly added to the efficiency and general knowledge of the rank and file.

Material and Equipment.

The installation of the order dials, the invention of Master Gunner Richardson, has resulted in better fire discipline being obtained. It is hoped that before the next season all forts will be supplied with them.

Range-indicators on the same principle as the order dials have been experimented with, and appear very satisfactory, as they obviate the necessity for installing the more expensive electric dials.

Drill-guns are being gradually supplied to companies, and are proving of great value for training purposes.

It is proposed to make 6 in. B.L. Mark VII drill-guns on the same principle as the 12-pounder Q.F. drill-gun; this will prevent unnecessary wear of breech mechanism of service guns through constant drill.

The value of drill-guns as a means of preliminary training was clearly shown, the standard of efficiency of those companies using them being much higher at the commencement of the training-camp than in companies where such facilities did not exist.

Excellent instruction has been given by the R.N.Z.A. to the G.A.V. throughout the colony, but there is a tendency on the part of some officers to rely absolutely on the R.N.Z.A. Instructors to carry out the instruction of their units, the company officers taking no active part.

Lieutenant-colonels of divisions should personally superintend the instruction of their officers, and the training of the men should be almost wholly carried out by the officers and non-commissioned officers of the company, special parades during the year being set apart for the instruction of units by the R.N.Z.A.

The laying generally has been very good, but there are insufficient layers in some companies, and officers commanding must be held responsible for the carrying-out of the quarterly tests. A similar arrangement to that suggested for the layers of Field Artillery is recommended for the garrison companies.

ENGINEER CORPS.

The field engineering companies at the various centres are very fairly efficient. There has been a most marked improvement in one company.

A new equipment has been sanctioned, but the stores are not yet in the colony; this should increase the efficiency of the companies very materially.

A challenge shield has been inaugurated for the best engineering company in the colony, but too late for competition last year.

The camps were well attended, and the examinations were on the whole satisfactory.

One company has taken advantage of the new establishment, and has elected an officer with special knowledge of electrical work. This has materially improved the field-telegraph section.

The submarine mining engineers have much to learn, and some arrangement must be come to by which they can receive more daylight instruction. The officers and non-commissioned officers, too, should attend courses of from one to two months at the submarine-mining stations. The corps both at Auckland and Wellington are much below their establishments, and efforts must be made to bring the numbers up to requirements. The summer months, when more interesting work can be done than in the winter, should bring about a change as regards this.