

(a) ARTILLERY MECHANIZATION.

During the year trials have been carried out with a view to solving the problems attendant on the mechanization of field and medium artillery. Three aspects have to be considered :—

- (1) Gun-wheels intended for traction by horse teams will not stand up to the hammering effect of travelling along a road at high speed behind a lorry.
- (2) A lorry towing a gun has only a limited cross-country capacity.
- (3) A commercial tractor which has good cross-country capacity is slow, and wears rapidly on a road.

Abroad the first problem is being solved by fitting pneumatic-tired wheels to the gun. This solution has the great advantage of allowing men and ammunition to be carried on the lorry, but the cost of conversion is high owing to necessity for a new gun-axle.

In peace-time a more economical solution is to place a gun on a lorry for road movement which will give it the requisite speed and, in addition, to carry a tractor on the same lorry for hauling the gun into battery positions which are inaccessible to the lorry. Suitable commercial vehicles can be hired when required for camp training, and sufficient are available in the country for mobilization requirements.

Trials at the artillery ranges at Waiouru and Sutton have shown that commercial six-wheeled lorries and tractors in general use throughout New Zealand are quite capable of dealing with light and field artillery in this manner.

Experiments have also been made with the carriage of ammunition in standard artillery wagons fitted with commercial lorry wheels. Although this has the disadvantage of depending on grease-lubricated direct bearings, road tests have proved satisfactory.

In carrying out these trials the motor firms concerned have placed their experience and technical knowledge at the disposal of my staff and spared no effort to make the tests as thorough as possible. I take this opportunity of expressing my appreciation of their ready co-operation.

(b) INFANTRY TRIALS.

The 1st Battalions of the Canterbury and the Taranaki Regiments carried out their annual camps this year on a fully motorized basis. Vehicles were hired locally and utilized to carry the troops to and from camp, thereby saving a substantial sum in transportation costs.

For training, all men and weapons were moved in motor transport to the most suitable ground for training within a radius of twenty-five miles of the camp. Field firing with ball ammunition was practised, and the tactical training had an atmosphere of realism, which greatly stimulated the interest of all ranks.

Speedy movement of riflemen and machine-gunners in motor transport is an important factor in our local defence, and every opportunity will be taken to exercise units in this work.

The use of motor transport instead of horse-drawn vehicles for all unit transport has been tried out successfully, and will be universally adopted in future.

It is hoped to provide in each Command a pool of lorries which will be available not only for all units but also for the normal transport work of the Army.

These vehicles will be augmented when necessary by hiring extra lorries and tractors.

(c) MOTOR-CYCLIST PLATOONS.

These sub-units were formed during the year on a scale of one to each infantry battalion.

The personnel provide their own motor-cycles for training in peace, and receive petrol and oil when engaged on military duty.

Local motor-cycle clubs have been most helpful and assisted with recruiting. So far the results have been very encouraging.

For local defence, the combination of mobility and fire-power assist greatly to meet the danger of landings on our long coast-line. For this purpose motor-cycle platoons have proved particularly useful in combination with troops moving in motor transport.

6. COAST DEFENCES.

The works for the new batteries at Wellington and at Auckland, which were sanctioned under the 1933 programme of expansion, will be ready by the end of July. The installation of the armament will then proceed, and is not a lengthy task.

7. CORONATION CONTINGENT.

The New Zealand Contingent consisted of nine officers and forty-one other ranks, selected from the Regular and Territorial Forces and from the Returned Soldiers' Association.

It left New Zealand on the 16th March by the R.M.M.V. " Rangitiki " and arrived in England on the 19th April, after an excellent voyage. Lavish entertainment was provided in the Panama Canal Zone by the American Army, and by the British Minister for Panama and Costa Rica. This hospitality was much appreciated by all ranks.

The Contingent was met at St. Pancras Station by the High Commissioner for New Zealand, and, headed by the Band of His Majesty's Grenadier Guards, marched through London to Wellington Barracks. It received a very warm welcome from the people of London. Headquarters were established at the Brigade of Guards Camp at Pirbright, where training was carried on prior to the Coronation.