

were being taken in Australia in connection with the manufacture of the various kinds of munitions, such as shells, explosives, grenades, respirators, &c. Much valuable information and important plans and drawings were received from this source, including all the plans, specifications, circulars, &c., issued in connection with the manufacture of the 18-pr. shell in that country.

CENSUS OF MACHINERY AVAILABLE IN NEW ZEALAND.

During the time the preparatory work was being carried out at Addington Workshops endeavours were being made to obtain some idea of the machinery resources of the Dominion, and with this end in view a circular letter was despatched on the 9th September, 1915, to all firms throughout the country which it was thought would have in their workshops machinery suitable for the manufacture of munitions. This letter invited the addressees to fill in forms which were attached giving particulars of lathes and other machines in their possession, and also asked for an indication to what extent they would be willing to assist the Government by stating (1) the number of lathes and machines (if any) they would be prepared to allow it to have the use of in a central depot should such be established, and (2) the number of lathes and machines (if any) that they would be prepared to place at its disposal for use in their own workshops, and for how long daily.

Some eighty firms throughout New Zealand, as well as the various Harbour Boards, were approached, and they responded in a most generous and patriotic manner, many offering to place their whole plant and staff at the disposal of the Government. By this means a fairly complete census of the machines available for the manufacture throughout New Zealand was compiled for use in the event of the work being undertaken.

PROFFERED ASSISTANCE FROM UNIVERSITIES.

The Universities throughout New Zealand were also approached as to whether assistance could be expected from them in the way of special instruments and services of their staff, and in each case an earnest desire to assist in every possible manner was expressed.

BAYONETS.

In addition to shells, experiments were made in the manufacture of bayonets, and in this connection Professor Scott and Mr. J. Keir, a member of the Munitions Committee, very generously offered their services, with the result that a bayonet which passed all tests was produced. The practicability of manufacturing such weapons thus having been demonstrated, it was decided to invite tenders for the manufacture of 5,000 bayonets and scabbards, but a tender for scabbards only was received. In view of this, and various other reasons, it was then decided not to proceed with this manufacture.

RIFLES.

Some months ago an offer was received from a large manufacturing company in the United States for the supply and setting-up of a complete plant to manufacture 100 rifles per day. The delivery of this plant could not be completed for two years, and the output would therefore most likely not be helpful in the present war. In addition, the capital expenditure was exceedingly large, and Cabinet decided in this instance also that no action should be taken.

GRENADES.

Specimens of grenades manufactured by the Sabulite Company, of Waikunete, Auckland, were submitted to the Department, and these were tested at Wellington with good results. An offer to supply a certain number of these grenades was thereupon made to the Imperial Government, but a reply was received to the effect that they were not required, and it was consequently proposed to proceed no further with their manufacture in the Dominion.

EXPLOSIVES, RESPIRATORS, ETC.

Close touch has also been kept with all matters appertaining generally to the manufacture of different kinds of munitions—namely, explosives, respirators, &c.—but in each case on the circumstances disclosed it has not been thought advisable to take any action regarding manufacture in New Zealand. In connection with explosives, valuable assistance was rendered by both Professor T. H. Easterfield, of Victoria College, a member of the Munitions Committee, and Mr. E. Parry, Chief Electrical Engineer to the Public Works Department.

INVENTIONS RELATING TO ARMS AND MUNITIONS OF WAR, ETC.

Many communications have reached this office from people throughout the Dominion forwarding ideas and plans of inventions relating to arms and munitions of war. These communications have been sent on as received to the Defence authorities, with a view to their being considered by the military experts, or, if necessary, submitted to the Army Council.

MUNITION-WORKERS.

Numerous letters have been received from skilled mechanics and unskilled workers throughout the Dominion offering their services on munition-work either here or in England. These offers