

Guns and Small Arms.—Before 1939, except for the Ross rifle, the manufacture of guns in Canada was virtually unknown. To-day, Canada is not only a leading producer of guns but is producing them at costs comparing favourably with those of any country. Some of the guns and equipment now being produced in Canada are:—

25-pounder field guns, with equipment, trailers and tractors
 Bofors 40-millimeter guns
 Bofors anti-aircraft gun barrels
 Bofors anti-aircraft guns, mountings, equipment and predictors
 3.7-inch anti-aircraft gun barrels
 3.7-inch anti-aircraft guns complete with equipment
 Anti-aircraft barrels of a third type
 Tank guns and mountings
 Anti-tank guns
 Anti-tank gun carriages
 2-inch trench mortars
 3-inch trench mortars
 Bren guns

100-round Bren-gun magazines
 Browning aircraft machine guns
 Browning tank type machine guns
 No. 4 rifles
 Safety fuse pistols
 12-pounder naval guns
 4-inch naval guns, 2 types
 Naval gun mountings, 12 types
 Depth charge throwers
 4-inch smoke dischargers
 Sten machine carbines
 'Boys' anti-tank rifles
 Naval pom-poms
 Secret equipment and weapons of various types
 Gun carriages, mountings and other types

Canada has machine-gun plants that compare in size with any similar units in the world. Deliveries of small arms are now numbered by hundreds of thousands. Great quantities of the Canadian Lee-Enfield rifles (No. 4) have been shipped from a Government-owned factory; as early as the summer of 1942 production was stepped up to 4,000 rifles a month. The plant manufacturing Bofors anti-aircraft guns came into full production in 1943. This plant, prior to making gun units, was producing barrels for the same gun. The output of tank and anti-tank guns has greatly exceeded expectations.

Particularly good results have also been obtained in the output of mountings and fittings; these have proved to be more of a mechanical problem than the guns themselves.

Machine Tools.—Machine tools are the basic tools of industry. They are used in 80 p.c. of the work involved in the manufacture of guns, ammunition, cartridge cases, bombs, diesel engines, instruments and countless other items required in the prosecution of the War.

Prior to 1939, Canada's machine tools industry was comparatively small and the demands of war were, from the first, a heavy strain on the source of supply. The extent to which demands were met is shown by the following figures of machine-tool production during the past four years: 1939, \$4,000,000; 1940, \$15,000,000; 1941, \$23,000,000; 1942, \$22,000,000; 1943, \$20,000,000 (approximately).

In the development of the Canadian munitions program, precision gauges that control the dimensional factors of every type of munition have been of prime importance. The highest mechanical and engineering skill is necessary in the manufacture of these gauges and Canadian workers have proved equal to the task.

Machine Tools Control.—To increase Canadian production and to buy available tools from the United States, Citadel Merchandising Company Limited, was incorporated in May, 1940. In August of the same year, a Machine Tools Controller of the Department of Munitions and Supply was appointed to co-ordinate deliveries and allocate urgently needed machines.

The Machine Tools Controller was given the power to anticipate Canada's requirements regarding the purchasing of machine tools which might be required for future contracts.