

Tires of all army vehicles are inspected monthly by officers in charge of allotted districts, whose recommendations regarding tire maintenance are promptly carried out. Tire inspectors strive to obtain maximum mileage from each tire casing, on the alert for evidences of improper use, such as: "Over and under inflation, external injury, evidence of internal injury distortion, improper mating of duals, misalignment, heel and toe wear, bleeding, missing valve caps, improper fitting of chains, cold patching of tubes, use of tire boots or shoes, and failure to rotate tires at prescribed mileages."

Twenty-eight maintenance shops have been established, with facilities for repair and vulcanization of tubes and tires. These co-operate with all units in various areas regarding tire repair, including road service,

Experimental work on repairing rubber bogie wheels and tank track pads proved successful in Canada, resulting in establishment of a plant in England where rubber track pads are retreaded. At present no rubber tracks, other than retreaded ones, are used in Canada. A number of all-steel tracks are in use, including the Canadian dry pin track, an all-Canadian development.

Curtailement of natural rubber in universal carriers has proved difficult, due to heating and deterioration of synthetic tires when overloaded. Synthetic tires are used whenever possible on idle wheels, where the load carried is light.

Responsibility of the individual driver is stressed in tire conservation, as preservation of tires during period of wear on the original tread is a basic essential. Pamphlets outlining general tire operating conditions within the driver's control were distributed in 1942, to all officers, non-commissioned officers, mechanics and drivers.

Speeding, or negligent operation of military vehicles is severely handled, the driver being subject to reprimand or arrest.

A revised tire inflation table, based on maximum load capacity, and correct pressure for general operations, is posted inside each vehicle. Tire gauges are regularly tested for accuracy.

All tires used by the Canadian Army on vehicles in this country are recapped several times. Plants for this purpose are operated at London, Ontario; Camp Debart, Nova Scotia; and at Vancouver, British Columbia.

#### DOMESTIC RUBBER PLANTS

Canadian experiments on domestic plants as possible sources of rubber have centred largely on the Russian dandelion and milkweed.

Under a program organized in 1942, the Botany Division of Science Service, Department of Agriculture, was made responsible for a survey of native plants for rubber content, and for the production of rubber-bearing plants. Extraction and testing of the rubber produced was done by the National Research Council.

Approximately 1,500 analyses were made of Canadian plants but remote possibilities of securing large tonnages and the low rubber content in the majority of cases made the results of this survey largely negative.