## Sawmilling Section.

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The comprehensive Forestry Report prepared by Captain L. MacIntosh Ellis, Director of Forestry, has been laid upon the table of the House and contains maps, graphs, and diagrams, together with typed matter covering about 130 foolscap pages. It starts out by showing the World's Forestry resources, comparing other countries with our own Dominon, and proceeds to elaborate the case for a forest policy, with recommendations as a basis for legislation which include,—

Timber sale policy and procedure.

Technical Forest training.

Forest investigation and research.

Inventory and classification of the forest resources, forest lands, and soils of New Zealand.

Classification of agricultural and non-agricultural lands on state forests etc.

Forest lands of the Natives.

State forest extension.

Extension of forests by effort other than the State.

Forest protection problems. Grazing within State forests.

It then goes on to discuss "Forest Acts" and Forest Finance, also a suggested programme for the first five years period.

There are four proposed conservation regions in the South Island and three in the North Island, each having Conservation Headquarters and District Headquarters, with responsible administrative officers attached.

It is pointed out that no reliable data with regard to our forest resources, has ever been prepared, but that the Royal Commission on Forestry, 1913, had before it an estimate of 33,060,883,000 as being available on our indigenous forests in 1909, and that in 30 years' time (1943) very little timber would be left at the then rate of consumption, unless steps were taken to conserve our resources. Captain Ellis is, however, of opinion the available supply will greatly exceed 35,000,000,000 superficial feet and that where to-day only 25 per cent of the ligneous material per acre is used in industry, in a few years' time this utilisation will probably be nearer 65 per cent. Within a generation it is estimated the population will probably exceed five millions and on the basis of a consumption of 200 feet per head, one thousand million feet would be required annually for our own needs.

World statistics, it is pointed out, clearly go to show a steady increase of wood consumption, and there are only three countries at present which can increase their exports without lessening their forest capital, viz: Russia, Sweden, and Finland. Re-

viewing the principal timber-growing countries throughout the world, and the future outlook, Captain Ellis concludes that, "We must either go without essential timber supplies to the great hazard of our national safety and perhaps with sacrifice of our industrial prosperity, or we must take immediate steps to assure ourselves an adequate supply "Home-grown timber" which is perfectly practicable to-day."

With regard to the sale of standing timber, the present methods of disposal are condemned, and lead to waste and public loss. What is termed the severance tax on royalty does not keep pace with the increasing value of the raw material, and no provision is made for the State to increase the value of the standing timber, as the selling value of the manufactured article appreciates. This he would remedy and provide for a sliding scale on the lines adopted by British Columbia where 25 per cent of the increased selling price is added to the royalty payable in the first 5 years, rising by increments of 5 per cent. to 40 per cent. for the last 5 year period.

The cubic foot is advocated as the standard system of measuring timber in the log, as has been adopted by France, Germany, Norway, Sweden, India, South Africa, United States etc., etc.

The report unreservedly advises that a Forest training centre should be established in New Zealand without delay, and that a chair of forest engineering and a State Ranger School should be attached to one of our colleges, which would provide amongst other things, a four years' course to train men as logging and milling engineers. Special courses could also be given in such subjects as:—

Pulp and paper making.

Dry Kiln engineering and ply wood manufacture.

Timber grading.

Management of farmers' wood lots.

Timber appraisal.

Ferest utilisation.

Forestry for civil engineers.

Distribution and marketing forest products.

Wood distillation and extraction.

Forest nursery practice and tree planting.

Among the problems referred to as of great economic value for investigation are stated:—

The wood borer—means of combat and control. The fixation of sand dunes, and the utilisation of the 500 square miles of sand dunes in New Zealand.

Development of farm forestry.

Incidence of taxation on timber lands.

Effects of forest climatically on various parts of New Zealand.