

Leaving London again on the 28th August by the R.M.S. "Osterley," insufficient time was available at stopping-places to make any excursions into forests until reaching Melbourne, where the Botanical Gardens, &c., were visited. It was also possible to acquire much valuable information from Mr. H. Mackay, Conservator of Forests, and also Mr. McIndoe, Superintendent of Nurseries at Creswick, where, in addition to the ordinary tree-raising station and plantations, the Government have made the centre for forestry education under the control of Professor Hart. A very interesting day was spent at the school and forest at Creswick.

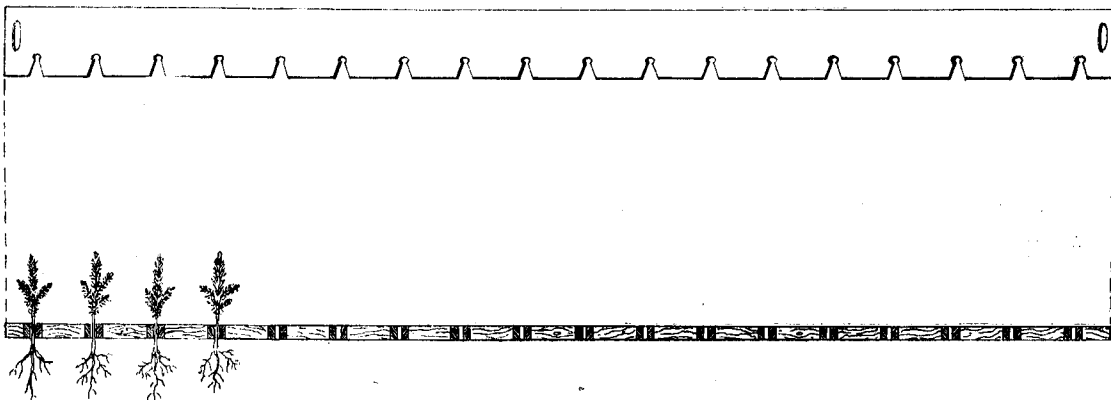
I went overland from Melbourne to Sydney, and whilst there interviewed Mr. J. H. Maiden, Government Botanist and Director of Botanical Gardens. It was also possible to discuss forestry problems with Mr. R. D. Hay, Director of Forests, and Mr. Watson, First Assistant, and before leaving Sydney a profitable day's visit was made to Gosford, where the chief New South Wales nurseries and plantations are situated. Forestry Superintendent Gollan kindly gave me all information solicited. I returned to Wellington on the 20th October, after being absent for slightly over five months and a half.

NURSERIES.

Direct personal inspection of about twenty-five typical State and private-owned nurseries has convinced me that the tree-raising methods conducted in New Zealand are equal, if not superior, to the very best in operation in any of the countries visited. Undoubtedly many working specialities having an important economic bearing were noticeable here and there, and it is likely that our propagation-work could be still further perfected by the introduction of such supplementary ideas that may be adaptable. German and French nurseries are considered by experts to show greater evidence in skill in management than those in other parts of the world; still, it must be remembered that even the most advanced methods are now practised in Great Britain, although perhaps on a much smaller scale, and has thus afforded me an opportunity of making the desired comparisons. It is not necessary perhaps to particularize herewith opinions formed of each nursery or forest visited; but, as previously mentioned, should such information be required, a special article on the subject could be immediately forwarded. A light review of typical tree-raising stations will perhaps meet the position.

Indian Head Nursery, Canada.—The work is carried on here under almost precisely the same conditions as in General Otago (rainfall, 16 in. annually; maximum temperature, 100° in shade; minimum temperature, 60° below zero). Much activity is being shown by the Government in raising about two millions of trees annually, principally for free distribution to settlers willing to adhere to a planting scheme outlined by the Government in a printed pamphlet. Of course, on the prairie country shelter-belts are chiefly aimed at, and every assistance is afforded the pioneers by the forestry officials, who continue to make inspection for at least two years after the trees are planted. Certain suitable deciduous trees are raised, particularly *Acer negundo*, the seed of which is sown in drills by a machine, and subsequently kept cultivated by horse-labour. No nursery transplantation is afterwards effected, as the yearling maples take root easily in prepared ground. Such trees as *Pinus sylvestris*, *Pinus Murrayana*, *Pinus Banksiana*, *Populus Petrovski*, *Populus deltoides*, *Larix americana*, *Larix laricina*, *Picea* (vars.), and *Salix* (vars.), &c., are grown with more or less success. Some 500 to 700 acres of light ground are available for tree-raising and experimental work, and the advantage of possessing a somewhat extensive area for propagation and trial plantation work is apparent. Lining out seedlings is evidently an unusually costly undertaking, as a distance of some 20 in. is allowed between each line of conifers. Most of the maples are sufficiently advanced for permanent planting at one year old, and are transported direct from the seed-drills. Specially interesting were the hardy hedges of the Siberian pea-tree—*Caragana*—a plant that is admirably adapted for providing quick low shelter in dry intensely cold regions. A small cone-seed extractor, complete, costing about £120, is also attached to the nursery. Amongst other novel ideas seen were:—

- (1.) Poplar-cutting machine (which enables a workman to make treble the number of cuttings with less exertion than by hand):
- (2.) Planting-board (for lining out):
- (3.) Low axle cart for removal of trees (which facilitates the removal of trees in nursery):
- (4.) Special tree-digger (a specially constructed plough that should be introduced into our nurseries).



PLANTING-BOARD.

Can be made any length.

Honolulu State Nursery.—Perhaps the most interesting and instructive feature of nursery-work here was the soil sterilizer, which subjects the soil used for sowing to a temperature sufficiently high to destroy weed-growth, insects, and foreign seeds. Needless to emphasize the amount