



The Evils of Deforestation.

VI.

By J. P. GRÖSSMANN, M.A., Director of School of Commerce, A.U.C.

The Profits of Forestry.

I HAVE dwelt on the German forestry system in some detail, partly because of the general interest of the subject, but chiefly because I wish to emphasise the amount of care and trouble and expense that the most business-like and economical State in the world thinks it necessary to take about the conservation of its forests and the replenishing of its timber supply. And what I have to say next bears directly upon this aspect of the question. Knowing that the Germans pride themselves on making a commercial success of their undertakings, we might justifiably assume that an enterprise carried out on such a scale as to employ about a million workers directly, and three times that number indirectly, must be a highly profitable investment. And, as a matter of fact, it is so. Various estimates represent the total net return to the German Treasury from the State forests throughout the Empire at from £18,000,000 to £20,000,000 a year. These are impressive figures, but the facts have been on record for many years, for even New Zealanders to reflect upon. So far back as 1879, M. Lecoy, in a paper on "The Forest Question in New Zealand," contributed

to the N.Z. Institute Transactions, pointed out that Prussia, expending 1,100,000 a year on her six million acres of State forests, drew from them between 1860 and 1870 an annual revenue of £21,000,000. During the same period, Bavaria, on an outlay of less than 1,500,000, drew a forest revenue of £1,261,000; and France, on an annual expenditure of £70,000, drew an income of £1,400,000, or twenty times her outlay, from her State forests. And these high average returns have been maintained, and have even gone on increasing down to the present day. Thus the little State of Wurtemberg, from one forest of 20,000 acres, averages an annual yield of £2 per acre. Considering that the forests of Germany managed on scientific lines yield on the average 46 cubic feet of wood per acre, as against about twelve cubic feet obtainable from the average American forest there must be a wide margin for profit in a forestry system when properly conducted. As a matter of fact, the net surplus from the State forests of Germany range from about 6/- per acre in Prussia to over 22/- per acre in Saxony. The forestry record of this last-named State is in many respects so interesting that I am tempted to quote in some detail the remarks made by that eminent authority, Professor Schlich, in an article dealing with the British forestry problem. There are reliable statistical data for the State forests of Saxony since 1817. Between 1817 and 1893 their area increased by about 17 per cent. In 1817 the yield in wood per

acre was 61 cubic feet; in 1893 it had risen to 92 cubic feet, an increase of about 50 per cent. Within the half-century, from 1844 to 1893, the average stock of wood standing on each acre had increased from 2,173 cubic feet to 2,658 cubic feet, that is to say by about 25 per cent. This means that the forests, in spite of the greatly increased annual yield, are now much more valuable than they were fifty years ago. As to the pecuniary return, the records are even more instructive. From 1817 to 1820 the average net revenue from the Saxony State Forests was 4/- per acre; from 1854 to 1863 it was 10/- per acre; from 1884 to 1893 it was 18 6 per acre; and by 1900 it had risen to 22 6 per acre. Taking these facts in conjunction, we see that between 1817 and 1900 the average receipts per cubic foot of wood have risen by about 114 per cent, while the net receipts per acre have risen during the same period by over 460 per cent. "Surely," as Professor Schlich remarks on concluding this analysis, "there is an incontrovertible proof of what scientific and systematic management of woodlands can achieve."

I have probably said enough to convince most people that forestry properly conducted affords an extremely lucrative form of investment either to the State or the individual, and that the successful experience of other countries fully justifies us in making experiments on similar lines here. The reason for such an undertaking is, of course, the ever-growing certainty that our timber supply is being rapidly reduced, and that we already find it unequal to the demand. And if, after we have considered the risks and



A RAILWAY PLANTATION LESS THAN TWENTY YEARS OLD.

American railroads now endeavour to supply their own timber, and all over the United States the companies are planting largely for sleepers and bridges.



BIRD'S-EYE VIEW OF ROTURUA NURSERY.