

I have been cutting out my "cull" trees, and splitting them into posts and rails, specimens of which were exhibited at the Auckland Agricultural and Pastoral Association's show this year. The messmate gum is worth all the rest in the foregoing list put together; the stringy-bark comes second; in fact, I think they are the only two sorts out of my list worth planting. Whether any one ordering messmate-gum seed would get the sort of tree I have I cannot say.

I have another gum in a second plantation nearly as fast-growing and hardy, bark smooth and almost white, seed and seed-pods similar to the messmate. This sort after being in the ground for six years is quite sound (except the sap). I may say the sap of both is similar in thickness, about $1\frac{1}{2}$ in. I have not tested this sort as long as the other. Colour of wood, light salmon, almost white. An Australian that I had splitting says the rough-bark one is known as the "red-box," and the smooth-bark one as "white-box."

The trees in this specimen plantation run from 4 ft. 6 in. to 4 ft. 9 in. in diameter, according to variety. The messmate is very much the largest all through, and in the second plantation this smooth-bark gum is the largest.

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(E.) AFFORESTATION IN ENGLAND.

The report of the Royal Commission on Coast-erosion and Afforestation in 1908 stated that 9,000,000 acres in the United Kingdom were suitable for afforestation, but were not now under timber; that land suitable for afforestation is mostly devoted to the production of mutton; that calculations on the basis of the present consumption showed that at most 60,000 tons, or 4·8 per cent., of the total Home production of meat, or 2·6 per cent. of the national consumption, would be ultimately displaced; whilst, as to labour, the employment furnished by the present uses, mostly sheep-farming, to which the land in question is devoted, may be taken to average one man to 1,000 acres, which does not represent one-tenth of the permanent employment afforded by the maintenance of a similar area of land under forest.

It was anticipated that a forest of 9,000,000 acres would yield 9,000,000 loads annually in perpetuity. The importation of foreign timber from temperate climates into the United Kingdom in the year 1907 exceeded 8,500,000 loads, or approximately the annual supply which could be expected from the afforestation of this area.

Actuarial statements showed that, for the scheme, after allowing 3 per cent. compound interest on all the capital invested, the approximate equalised revenue would at the end of eighty years amount to £17,411,000 per annum, whilst the value of the property might be expected to be £562,075,000, or £106,993,000 in excess of the sum involved in its creation.

If 150,000 acres were annually taken in hand, the labour of 18,000 men would be required, and permanent employment would in due course be afforded to 1,500 men, rising by an additional 1,500 every year until the end of the rotation. The number then permanently employed would approach 100,000. But the number of men employed may roughly be taken to be represented by about double that figure, owing to the incidental occupations, such as building, the making of implements, the provision of materials, &c., all involving the employment of additional labour.

Although no State scheme of afforestation has yet been put into practice, yet municipal enterprise has already dealt with the subject with very satisfactory results. Appended are a few instances.*

Mr. Joseph Parry, of Liverpool, gave an account of the work done by the Liverpool Corporation at Vyrnwy and Riverton. The Corporation commenced systematic planting operations in the Vyrnwy area in 1896, but it was not until 1903 that much progress was made. Between 1897 and 1907 they had planted 1,034,056 trees, and the work is now being continued at the rate of 300,000 trees per annum. The total area selected for planting on the watershed is 1,202 acres, and when planting is completed the total number of trees put out will be about 4,000,000. The trees here planted are chiefly larch, spruce, Douglas fir, silver-fir, Corsican pine, alder, oak, and ash. The expenditure on planting has been at the rate of £6 15s. 3d. per acre; but this includes cost of clearance, also a large outlay for plants which will in future be supplied from the Corporation nurseries at a much lower rate. As regards the Rivington area, operations were undertaken in 1904, when an area of 571 acres was selected, afterwards increased to 1,243 acres. In the period of three years which has elapsed since, 349 acres have been planted with 1,291,295 trees, chiefly beech, ash, oak, sycamore, spruce, alder, and some willows. A recent plantation has been made at an average cost for planting (including purchase of plants) of £2 8s. 9d. per acre, and it is estimated that in future the cost of planting in the Rivington watershed will not exceed £3 per acre.

Alderman Sir Bosden Leech gave a short account of what is being done by the Corporation of Manchester in the catchment-area of its waterworks. They have planted about 500 acres of land, and during the past six years have been planting at the rate of about 50 acres per annum. During the last two years 75 acres have been planted out each year, and last year 100,000 plants were put out.

Mr. Leech gave some account of the planting operations carried on by the Corporation of Birmingham in its catchment-area. Work was commenced in 1902, and 410 acres have been planted at a total average cost per acre of £7 6s. 6d., of which sum the actual planting-cost was £4 2s. 8d. per acre, the remainder being accounted for by the expenses of clearing, fencing, &c.

* Taken from the Transactions of the Royal Scottish Arboricultural Society, January, 1908, page 62.

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