1874. NEW ZEALAND.

FIFTH ANNUAL REPORT OF THE BOTANIC GARDEN BOARD.

Presented to both Houses of the General Assembly by command of His Excellency.

THE expenditure during the past year has been confined (1) to raising and distributing young forest trees, (2) to widening and extending the paths and the general improvement of the grounds,

and (3) for planting.

1. The nursery ground has been thoroughly cleaned and trenched, and is now ready to receive the seedlings of this year's crop. A share of a large consignment of seeds, obtained by Government from California, has been received, and others are shortly expected from Europe, Eastern America, and India.

The late severe weather has prevented the raising of the seeds at so early a date as in previous

years, so that a year will elapse before there will be a fresh supply of young plants for distribution.

The following is a statement of the total number of coniferous trees that have been successfully reared, and the mode of distribution, excluding from consideration all other trees and shrubs:-

Planted out	$\mathbf{in} \ \mathbf{the} \ \mathbf{G}$	ardens		• • •		,		4,408
Distributed :	to Public	Reserves		•••			•••	3,980
Sold	•••	•••	•••	•••	•••		•••	1,780
In Stock	•••	•••	•••			•••	•••	3,586
								13,754

The loss of seedlings before planting out, and destruction from drought, insects, and other causes, has been about 30 per cent.

2. Improvement of Grounds.—The wide road from the entrance has been extended for 30 chains, and has been thoroughly trenched and planted on both sides as a shrubbery. The creeks have been cleaned out and several new bridges erected. The narrow paths have been cleaned, repaired, and gravelled where necessary. The gorse in the upper part of the grounds, which has always been a source of danger from fire, has been grubbed and burnt, and all the heavy bush has been underbrushed. All the work has been done by contract, when practicable.

3. Trees to the number of 1,880 have been planted during the year, and except that part of the ground covered with scrub or bush, the whole of the Domain within the fence has been planted. The

total area now planted with forest trees and shrubs is about 20 acres, the total number of plants put out being over 6,000. Of this area 11 acres has been closely planted with conifers varying in age from three to five years from the seed. Nearly all the most valuable species have been planted, the total number being 4,500, or about 400 trees to the acre. This will allow of the thinning out, from time to time, of the less flourishing trees; but for many species, such as the more rapid growing pines, adapted for shelter, it is probably not a heavier crop than the ground can fairly carry.

About 10 per cent. of the trees originally planted out have required to be replaced, which indicates

the amount of loss sustained.

The following is an abstract of the expenditure upon the Domain since its establishment in 1869 :-

						£	8.	d.
Fencing	•••	•••	•••		•••	155	13	8
Paths and Bridges	•••	•••				168	1	4
Buildings, Seats, &c.	• • •		•••			136	7	0
Nursery Ground-Wa	ter Supply,	, Frames,	, &c.			155	13	8
Purchase of Trees	•••			•••	•••	151	17	11
Wages and Labour for	Trenching	and Pla	nting	• • •	•••	876	19	4
_								
						£1,644	12	11
						•		

Selecting the items that may be fairly charged against the planting of the above area of 11 acres with forest trees, including the raising of the plants from seed and their maintenance since planting out, the amount is £650, or at the rate of £60 per acre, or about 3s. for each tree. In applying this experience to other plantations, however, the expense of fencing requires to be added.

The arrangement with the Provincial Government, under the Wellington Reserve Act, has been concluded, and the portion of the reserve shown on the attached plan has been conveyed to the Board,

1—H. 32.

and it will be necessary to fence this, and to make provision for this addition to the Domain being

planted.

It is proposed that the boundary of the Domain on the side next the town will be in future a carriage drive, having an easy gradient from the top of the Terrace at the Roman Catholic Cemetery along the seaward slope of the ridge, and winding down into Sydney Street on the Tinakori Road. JAMES HECTOR,

7th August, 1874.

Secretary.

STATEMENT of PLANTS in the Botanic Gardens; also Donations, and Plants Distributed and Purchased, for 1873-7.

Conifer	rous Trees	in Stoc	k on $12t$	h August,	1874 .		
Cupressus lawsoniana	•••	•••	•••				778
,, macrocarpa		•••	•••	•••			160
Wellingtonia gigantea		•••		•••			160
Pinus maritima	•••		•••	•••			200
,, sabiniana				•••			40
" excelsa	•••		•••				30
" torreyana				,		• • • •	60
" insignis	•••	•••		•••	•••	•••	1,950
" halepensis	•••	•••	•••		•••		40
" douglasii		•••		•••	•••	•••	45
Thuja gigantea	•••		•••	•••			60
•	${f T}$	otal	•••	•••	•••	• • • •	3,523
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Donations to the Gardens have been made by Mr. Ludlam, Mr. Duncan, Mr. Mason, Hon. Mr. Mantell, Dr. Hector, and Mr. Drake.

Plants Distributed.

To Somes' Island, 125 Pinus insignis, 225 Pinus maritima, 24 Cupressus macrocarpa.

To the Gaol Grounds, Wellington, 50 Cupressus macrocarpa, 30 Pinus maritima, 30 Pinus insignis, 3 Wellingtonia gigantea, 12 Native shrubs.

For Wellington College Grounds, 600 selected Conifera.
To Reserve, Custom House, Invercargill, 6 Pinus maritima, 12 Pinus insignis, 6 Cupressus macrocarpa, 6 Cupressus lawsoniana.

To the Asylum, Wellington, 200 oak trees.
To Government Reserve, Hutt River, 160 selected Conifera.

Total, 1,489.

	Plants Purchased from Sydney.	
6 Araucaria bidwillii.	2 Viburnum rugosum.	
6 ,, excelsa.	6 Photinia serrulata.	
6 "cookii	12 Corypha australis.	
2 Abies cærulea.	6 Seaforthea elegans.	
9 alba	4 Catalpa syringæfolia.	
9 mahna	6 Barckleya syringæfolia.	
6 Pinus caricii.		
2 gamanianaia	1 Aster argophylla.	
2 longifolia	6 Camphor laurels. 3 Olea ilicifolia.	
9 honthamiana		
10 " nines	2 Bignonia lindleyana.	
	2 ,, jasminioides.	
4 Cupressus knightii.	1 Arbutus unedo.	
6 , goveniana.	1 " andrachne.	
2 ,, torulosa.	l , canariensis.	
3 , lawsonii.	12 Ficus syringæfolia.	
3 Callitris sp. W. Australia.	6 " macrophylla.	
3 Cephalotaxus fortunii.	1 ,, sycamorus.	
6 Cryptomeria elegans.	3 , macrophylla.	
4 Thuja plicata.	6 Grevillea robusta.	
6 Juniperus rufescens.	2 Osmanthus ilicifolius.	
1 ,, attica.	3 Lophostemon australis.	
3 " lycio.	1 Cantua æpendens.	
1 ,, hibernica.	6 Magnolia grandiflora.	
2 ,, sinensis.	1 ", purpurea.	
1 Thujopsis borealis.	1 ,, conspicua.	
1 Retinospora obtusa.	4 ,, anonifolia.	
1 " pisifera.	3 Gynerium argenteum.	
12 Sterculia acerifolia.	3 Doryanthus excelsa.	
6 Viburnum sinensis.		
Total	*** *** *** ***	221
From Mr. Duncan: 100 I	Pinus halepensis, 200 Frenella cupressiformis	300
	* ,	
		521
		041

ACCOUNTS of BOTANIC GARDENS, from August, 1873, to August, 1874.

			RECEIPTS	•				Expenditure.			
Balance in har Vote for 1873- Share of Rents Sale of Plants Sale of Hay	-74	•	Reserves		 £ 162 300 93 41 7	0 9 2 0	7 0 0 0	Garden Work (including Keeper's wages and extra labour)	£ 325 23 29 18 207 £604	5 14 13	d. 6 7 0 0 6

Wellington, 10th August, 1874.

A. LUDLAM, Treasurer.

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