dissection of the branches, but as the destruction of the specimen, which is probably unique, would have been involved the idea was not entertained.

The whole process is strictly analogous to that which takes place under similar circumstances in phenogamic plants, although the formation of lateral crowns in plants which do not produce buds cannot be satisfactorily explained at present.

A similar case is recorded as having occurred in a Javanese Alsophila, but I am not aware of any other instance having attracted notice.

Branched tree-ferns are so extremely rare that they usually attract the attention of settlers in the districts in which they occur, but on the range of hills of which Ngongotaha forms the extremity, I found three specimens of Dicksonia squarrosa, Swartz, each with a single branch, in symmetrical and healthy condition. At Great Omaha I discovered a single branched specimen of Cyathea dealbata, Swartz, the branch about six feet in length; another specimen occurs in the Hunua, and a third is said to grow on the Great Barrier Island. Colenso describes a remarkable specimen of this species, three-branched at five feet from the ground, each branch being four feet in length, growing at Owae.

I am not aware that any branched specimens of *C. medullaris* have been observed, but in the parish of Opaheki a remarkable specimen of *C. cunning-hamii* is still growing; the main trunk is inclined to about eighteen inches from its base, when three erect branches are given off; the outer being respectively nine and ten feet long; the central one about six. All the branches are crowned with vigorous fronds.

ART. XLV.—Notice of a New Species of Senecio, (S. hectori). By John Buchanan, of the Geological Survey of New Zealand.

[Read before the Wellington Philosophical Society, 28th August, 1872.]

A BRANCHED woody shrub-tree, 6 to 12 feet high; stem 4 to 6 inches diameter; branches robust, erect.

Leaves sessile, 12 to 18 inches long, ovate-acuminate or ovate-lanceolate, tapering to both ends, $\frac{1}{10}$ of leaf at base pinnatisect, dentate with bristle points, membranous, upper surface scabrous, under surface thinly tomentose, white; veins distinct on both sides.

Corymbs lax, large, terminal; lower bracts foliaceous, upper numerous, linear, very narrow; peduncles and pedicels very narrow, slender, glandular-pubescent.

Involucre broad, campanulate, scales of one series, broadly linear, acute, tips brown, thick, with membranous border, glandular-pubescent.

Receptacle flat; alveola with scarious margins.

Heads $1\frac{1}{2}$ to 2 inches across; florets of the ray white, very narrow, $\frac{1}{2}$ inch long; anthers tailed; pappus of one equal series of rigid, scabrous, white hairs, slightly thickened at the tips.

Achene glabrous, narrow, linear, flattened and grooved.

This remarkable addition to the flora of New Zealand was collected by Dr. Hector on the Buller River, Nelson province, in January, 1872.

The magnificent floral display of this species, and others such as Senecio glastifolius with similar white rayed flowers, can only be seen to advantage in their natural humid habitats, and it is doubtful if any cultivation short of shelter under glass will be successful in rearing them in gardens.

Grows along the banks of the Buller River, and in rich bottom shrubberies between the River Mangles and the Inangahua; not observed in the lower gorge, nor near the sea. Also collected by Dr. Hector inland from Collingwood, and reported by Mr. W. T. L. Travers as occurring at Wangapeka and a few other localities in the Nelson province, where he collected specimens many years ago.

ART. XLVI.—List of Plants found on Miramar Peninsula, Wellington Harbour.* By John Buchanan.

[Read before the Wellington Philosophical Society, 25th September, 1872.]

THE flora of the Miramar Peninsula may be arranged under plants of the bush, plants of the open country, and plants of the swamp, the latter including those of the sea-side and those of the sand-hills.

The bush, which has no doubt at a very recent period covered the greater part of the hills, is now confined to a few gullies in the northern portion of the peninsula. Several of the following species are few in numbers, and none are large timber trees. No pines are present, they having been cut down for building purposes, as the stumps of totara piles may still be seen in what have been the defence works of Maupui Pa, and it is unlikely the timber was brought from a distance.

The following is a list of the trees and shrubs still existing:—

Clematis indivisa, Willd. Melicytus ramiflorus, Forst. Elæocarpus dentatus, Vahl. Melicope ternata, Forst. Melicope mantelli, Buch. Dysoxylum spectabile, Hook. f. Pennantia corymbosa, Forst. Corynocarpus lævigata, Forst. Carpodetus serratus, Forst. Metrosideros florida, Sm. Myrtus bullata, Banks & Sol. Myrtus ralphii, Hook. f. Fuchsia excorticata, Linn. f. Passiflora tetrandra, Banks & Sol. Panax

^{*} Written to accompany paper by J. C. Crawford, F.G.S., on the Miramar Peninsula, see Art. LVII.