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VI. Notice of a Plant called by Travellers in Canada the Polar Plant

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The smaller-sized specimens cut down last year commenced to give out buds immediately. The lower they are cut the fewer and stronger will be the shoots produced. These must be finally thinned out to single stems. It is curious to observe four plants in the garden having their top-whorls perfectly fresh but denuded of all the lower branches, probably arising from the depth of snow which rested on the upper whorl; while those having a terminal shoot above the upper whorl all died. The few plants saved appeared more delicate than the two noble plants which stood at each end of the long terrace lawn, and where the subsoil is deep dry sand, but both are now dead. During the last fifteen years, the two large plants were regularly supplied every May each with thirty barrels of water, besides a triennial renewal of the soil round the extremities of the roots, composed of very old rotted manure and loam. This may account for the very large size of the annual layers produced during the last fifteen years, compared with those sections where no extra water was given. For many years past a good deal of speculation has been going on with reference to the tiers of branches, as compared with the probable age of the trees. The cutting down of different sized trees in the Garden has given us an opportunity of setting this matter, so far, at rest. The largest plant cut down was 24 feet 6 inches high, and 4 feet in circumference at the base. This plant has 30 perfect annual rings, and 20 perfect whorls of branches, proving that eighteen months are necessary to complete one internode and whorl. Two others cut down, both about 16 feet in height and 15 perfect tiers of branches, besides an unbranched terminal shoot, and 23 annual rings. Many others averaging 8 feet in height have 8 perfect whorls, with unbranched terminal shoots, and about 13 annual rings. To tell the age of a growing plant of *Araucaria*, count the tiers of branches, and add one-half the number, making allowance for the unbranched terminal shoot, if any; this will give nearly the age of each tree. Some of the older plants, particularly those which had been confined in pots during their early growth, show a slight discrepancy in the lower whorls; in general the above test will be found very near the truth. It is not to be expected that plants ill-treated, or growing in very exposed situations, or bad undrained soil, will at all answer the above test. *Araucaria* and *Altingia* are perhaps the only plants whose external appearances indicate their exact age. Mr M^cNab exhibited a section of the stem of the largest *Araucaria*.

VI. Notice of a Plant called by Travellers in Canada the Polar Plant.
By WILLIAM GORRIE, Esq.

Mr Gorrie called attention to the various notices of this plant in different works, and stated that he was unable to determine the correctness of the observations, or to ascertain the botanical name of the plant to which allusion was made. The following are some of the references to this plant:—1. "The Scalp-hunters," by Captain Mayne Reid, 1852, p. 206—"But we had a guide to our direction unerring as the magnetic needle. We were traversing the region of the 'Polar plant,' the planes of whose leaves at almost every step pointed out our meridian. It grew upon our track, and was crushed under the hoofs of our horses as we rode onwards." 2. "The City of the Saints," by R. F. Burton, 1861, p. 60—"Whilst in the damper ground appeared the Polar plant—that prairie compass, the plane of whose leaf ever turns towards the magnetic meridian." 3. "The Prince of Wales in Canada and the United States," by the *Times*' Special Correspondent, 1861, p. 300—"Fortunately none go to the prairie for the first time without being shown, in case of such

mishaps, the groups of compass weed which abound all over the plains, and the broad flat leaves of which point due north and south with an accuracy as unvarying as that of the magnetic needle itself." 4. "Notes by Lieutenant-Colonel W. H. Emory, made in 1846-47, with the advance guard of the 'Army of the West,'" 1848, p. 11—"On the uplands the grass is luxuriant, and occasionally is found the wild tea (*Amorpha canescens*) and *Pilot weed* (*Silphium laciniatum*). The low grounds abound in prickly rush, narrow-leaved asclepias, while flowering indigo, flowering rush, spotted tulip, bed straw, wild bergamot, spiderwort, pink spiderwort, pomme blanche (*Psoralea esculenta*), scarlet malva, *pilot weed*, hazels," &c. Again, at p. 143 of same work, "*Silphium laciniatum* (pilot-weed) was found on the Arkansas and its tributaries. Another *Silphium*, with large ovate undivided leaves, was found in Cario Creek, in lat. 32°, long. 116°, Old California." In same work, Appendix, No. 6, Lieutenant J. W. Albert's Notes, p. 388—"The prairie was yet what is called rolling; the flat bottoms were covered with the rosin weed or *Polar plant* (*Silphium laciniatum*), whose pinnate parted leaves have their lobes extending like fingers on each side of the midrib. It is said that the planes of the leaves of this plant are coincident with the plane of the meridian; but those I have noticed must have been influenced by some local attraction that deranged their polarity." Mr Gorrie stated that there was no notice taken of the "*Polar plant*" either in Strausburg's "Expedition to the Great Salt Lake," 1852, or in Fremont's 1st and 2d editions.

Professor Balfour exhibited a photograph of a cedar of Lebanon (*Cedrus Libani*), which had been presented to the Museum at the Botanic Garden by the Right Hon. R. C. Nisbet Hamilton. The photograph was executed by Mr D. Campbell of Ayr. The following are the particulars relative to the tree:—It grew at Beil, where it was planted in 1707. It was measured on December 23, 1861—

Height,	.	.	.	59 feet 3 inches.
Girth at the root,	.	.	.	16 " 1 "
Do. at 4½ feet,	.	.	.	18 " 6 "
Spread of branches,	.	.	.	77 " 3 "

Mr W. R. M'Nab exhibited specimens of the pine-destroying beetle (*Hylurgus piniperda*), which had been sent from Churchill, Verner's Bridge, Mayo, Ireland, by Mr J. B. Webster, wood-forester to Sir William Verner, Bart., M.P. Shoots of the pines destroyed by the beetle were also shown.

Professor Balfour stated that he had received a letter from Dr Clegghorn, dated Cawnpore, 2d December 1861, in which he states that he had been able to convey the *Cinchona* plants safely from Kew to Madras, and that he had despatched them to the Nilgiris to be planted. Dr Clegghorn was on his way to the Punjaub, to examine the forests there.

Mr Saxsby sent specimens of monstrosities in leaves. In one of them the midrib was split, and a separated portion bore a small leaf-like lamina at its extremity.

T. C. Archer, Esq., sent for exhibition a New Zealander's cloak, made almost entirely of New Zealand flax (*Phormium tenax*). In the note which accompanied it Mr Archer said: "Robes of this kind are common amongst the natives of New Zealand. The black colour, I am told, is produced by a black ferruginous mud. The only material in the cloak

not New Zealand flax is the sheep's wool, which is stuck on in tufts here and there.

Mr M'Nab exhibited flower-buds of *Galanthus nivalis* (Snowdrop) nearly expanded.

13th February 1862.—T. C. ARCHER, Esq., President,
in the Chair.

The following Gentleman was duly elected a Resident Fellow of the Society:—

JOHN LINTON, M.D.

The following Donations to the Society's Library were laid on the table:—

Proceedings of the Royal Horticultural Society, Vol. II., Nos. 1 and 2.—From the Society.

List of Fellows of the Royal Horticultural Society, corrected to January. 1862.—From the Society.

Transactions of the Tyneside Naturalists' Field Club, Vol. V., Part 2.—From the Club.

Transactions of the Royal Scottish Society of Arts, Vol. VI, Part 1.—From the Society.

The following Donations to the Society's Herbarium were announced:—

From Mr R. Brown—Arctic Mosses and Lichens, collected on "Duck Islands" and "Hare Islands."

From Mr F. B. W. White—Collection of British Plants.

From Mr James M'Vey, Old Physic Gardens—A Collection of Ferns, gathered by Mr Joseph M'Vey, near Dunedin, New Zealand.

There has also been added to the University Herbarium a collection of Arctic Plants, collected by Mr James Taylor.

The following Donations to the Museum of Economic Botany at the Botanic Garden were noticed:—

From Mr R. Brown—A Persian Pen, made from a species of *Calamus*.

From Mr Archibald Hewan, Calabar—Ordeal Beans (*Physo stigma venenosum*, Balfour.)

From Mr Daniel Hanbury—Fruit of *Amomum Danielli*, from Fernando Po.