

OF THE

ROYAL SOCIETY

of

TASMANIA

FOR THE YEAR

1879.



Casmania:

JAMES BARNARD, GOVERNMENT PRINTER, HOBART TOWN.

1880.



ROYAL SOCIETY OF TASMANIA.

Patron :

HER MAJESTY THE QUEEN.

President:

HIS EXCELLENCY FREDERICK ALOYSIUS WELD, ESQ., C.M.G.

Vice-Presidents :

VENERABLE ARCHDEACON DAVIES, B.A. HON. J. W. AGNEW, M.D., M.L.C. THE RIGHT REV. BISHOP BROMBY, D.D. JAMES BARNARD, ESQ.

Members of Council:

- * C. T. BELSTEAD, ESQ.
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 A. G. WEBSTER, ESQ.

Treasurer :

C. J. BARCLAY, ESQ.

Mon. Secretary :

HON. J. W. AGNEW, M.D.

Auditors of Annual Accounts:

F. BUTLER, ESQ. JOHN MACFARLANE, ESQ.

Auditors of Monthly Accounts:

H. J. BUCKLAND, ESQ. F. ABBOTT, ESQ.

Curator of the Museum:

Superintendent of Gardens: MR. F. ABBOTT, JUN.

^{*} Members who retire next in rotation.

Corresponding Members.

- * Members who have contributed Papers which have been published in the Society's Transactions.
 - W. H. Archer, Esq., Sydney, New South Wales.

John Gould, Esq., F.R.S., London.

Sir Joseph Dalton Hooker, C.B., K.C.S.I., &c., &c., London. *Baron F. Von Müeller, K.C.M.G., M.D., F.R.S., F.L.S., &c., Government Botanist, Melbourne, Victoria.

C. Tomlinson, Esq., F.R.S., F.C.S., &c., Highgate, near

London.

*G. Bennett, Esq., M.D., F.Z.S., Sydney, New South Wales.

*G. Kreft, Esq., F.L.S., C.M.Z.S., &c., &c., Sydney.

Professor G. Neumayer, Munich.

*Rev. Julian E. T. Woods, F.L.S., F.G.S., F.R.G.S., &c. Dr. W. O. Sonder, Foreign Hon. Sec. Society of Naturalists, Hamburg.

Rev. J. J. Bleasdale, D.D., F.G.S., Melbourne

*Captain W. V. Legge, R.A., F.Z.S., M.R.A.S., England. Professor John Agardh, M.D., University of Lund, Sweden.

Dr. Julius Haast, F.R.S., Director of Museum, Christchurch, New Zealand.

Archibald Liversidge, Esq., F.G.S., Professor of Geology and Mineralogy in the Sydney University.

Professor W. Harkness, U.S.N., United States Naval Observatory, Washington.

Henry Haylin Hayter, Esq., Government Statist, Melbourne.

* Frederick M. Bailey, Esq., Brisbane, Queensland. * Ralph Tate, Esq., Assoc. Lin. Soc., F.G.S., Professor of Natural History, University of Adelaide.

*John Brazier, Esq., C.M.Z.S., Sydney.

* Richard Schomburgh, Ph.D., C.M.Z.S., &c., &c., Director of Botanic Gardens, Adelaide.

Professor G. F. H. Ulrich, F.G.S., Melbourne.

Alexander Wallace, Esq., Secretary Board of Agriculture, Victoria.

*F. W. Hutton, Esq., F.G.S., C.M.Z.S., Professor of Biology, Canterbury College, Christchurch, New Zealand.

Rev. George Brown, C.M.Z.S., Sydney. Professor F. M'Coy, F.G.S., University, Melbourne.

R. J. L. Ellery, Esq., F.R.S., F.R.A.S., &c., Government Astronomer, Melbourne.

Mons. J. N. Verschaffelt, Ghent, Belgium.

Robert Etheridge, jun., F.G.S., Geological Survey of Scotland.

James Hector, M.D., F.R.S., F.G.S., &c., Director Geolo-

gical Survey of New Zealand, Wellington. Rev. Charles Rogers, LL.D., &c., &c., Secretary Royal Historical Society, London.

E. P. Ramsay, F.L.S., &c., Curator of Australian Museum, Sydney.

Hon. W. M'Leay, F.L.S., Sydney.

William Tompson Bednall, Adelaide, South Australia.

List of Fellows and Members.

- * Fellows who have contributed Papers which have been published in the Society's Transactions. + Denotes Life Membership.
- *Abbott, Francis, F.R.A.S., F.R.M.S., Hobart Town.

*Abbott, F., jun., ditto. Adams, G. P., ditto.

*Agnew, Hon. J. W., M.D., M.L.C., Fellow of the Linnean Society of New South Wales, ditto.

Aikenhead, Hon. J., M.L.C., Launceston.

Adams, R. P., Solicitor-General, Hobart Town.

Aubin, Mrs. F., ditto.

Allport, Morton John Cecil, ditto.

Bilton, H., Glenorchy.

Barry, Sir Redmond, Melbourne. *Barnard, James, Hobart Town.

Butler, Francis, ditto.

*Bromby, Right Rev. C. H., D.D., Lord Bishop of Tasmania, Hobart Town.

Bright, R. S., M.R.C.S., Eng., ditto. Butler, Henry, F.R.C.S., Eng., ditto.

Buckland, H. J., ditto.

Browne, Justin M'C., ditto. Baynton, W. E., Kingston.

Bryant, G. W., Hobart Town.

Barclay, C. J., ditto.
Bedford, W., Anstey Barton.
Belstead, C. T., Hobart Town.
Belbin, W., M.H.A., ditto.

Benjafield, H., M.B., ditto.

Browne, Hon. N. J., M.H.A., Meadow Banks, Glenora.

Bidencope, J., Hobart Town.

Butler, E. H., ditto.

Bailey, Rev. J. H. Brooke, ditto.

Barnard, C. E., M.D., &c., ditto.

Brock, H. J., Campania.

Beddome, C. E., Hillgrove, Brown's River Road. Burgess, W. H., Mayor of Hobart Town. Barnes, William, Launceston.

Chapman, Hon. T. D., M.L.C., New Town.

Cook, Henry, Hobart Town.

Clark, J. M., ditto.

Creswell, C. F., ditto. * Cotton, Francis, Swanport. Crawford, Lieut.-Colonel, Hamilton-on-Forth. Crosby, W., Hobart Town. Clarke, J. K., ditto. Cruttenden, Thomas, Woodsden, Buckland. Coote, Audley, Sandy Bay. Cowle, Miss, Hobart Town. Crowther, A. B., M.R.C.S. Eng., ditto. Crosby, R., ditto. Crowther, E. L., M.D., ditto. Crouch, E. J., M.R.C.S. Eng., ditto.

Davies, Ven. Archdeacon, V.P., ditto. *Dobson, His Honor Mr. Justice, ditto. Dobson, H., ditto. Dowdell, C., ditto. Davies, R. L., ditto. Dear, Rev. R. E., ditto. Dodds, the Hon. J. S., ditto. Dobson, Hon. Alfred, ditto.

Elliston, C. H., ditto. Evans, T. M., ditto.

Fysh, Hon. P. O., ditto. Freeman, E. J., ditto.

Giblin, Thomas, ditto.

†Gunn, R. C., F.R.S., F.L.S., Launceston. †Gellibrand, Hon. W. A. B., M.L.C., Hon. Member Leeds Institute, River Ouse. Grant, C. H., Hobart Town.

*Gould, C., F.G.S., late Government Geologist, London.

Gray, Rev. John, Glenorchy. Graham, Rev. Horace, ditto.

*Hall, E. Swarbreck, M.R.C.S. Eng., Hobart Town. Harris, Rev. R. D. P., M.A., ditto. Hunter, Henry, ditto. Huybers, A., ditto. Howell, F. G., ditto. Hammond, W. S., ditto. Holden, L. A., M.R.C.S. Eng., ditto.

Irving, M. H., M.A., &c., Melbourne. † Jeffery, Molesworth, Bournbank, Lachlan. Jackson, Hon. J. A., Hobart Town.

*Johnson, R. M., Launceston.

Kennerley, Hon. Alfred, Hobart Town. Kelsh, Rev. Thomas, Fingal. Kermode, W. A., Mona Vale.

Lewis, the Hon. David, M.H.A., Hobart Town.
Legge, R. V., Cullenswood.
Lucas, R. J., Hobart Town.
Latham, G. 11., ditto.
Lovett, W., Colonial Auditor, ditto.
Lord, R. W., Launceston.

Maclanachan, the Hon. James, Ballochmyle.
Macfarlane, James, Hobart Town.
Macfarlane, John, ditto.
Mather, J. B., ditto.
Maxwell, C. M., ditto.

† Milligan, Joseph, F.L.S., England.
Marsh, H. J., ditto.
† Mace, G., Spring Bay.
Morriss, W. V., Hobart Town.
Murphy, Most Rev. D., Bishop of Hobart Town, ditto.
Macmichael, Jno. C., ditto.

Napier, G. R., ditto.
*Nowell, E. C., ditto.
Newstead, Rev. A. C., George Town.

Rawson, Rev. R., M.A., Richmond.

Pillinger, J., Antill Ponds. Perkins, H. A., M.D., M R.C.S. Eng., Hobart Town.

Roberts, H. L., ditto.
Read, R. Cartwright, Redlands, New Norfolk.
Riddoch, A., M.H.A., New Norfolk.
Roblin, T., Curator of Museum, Hobart Town.
Reynolds, W. J. J., ditto.
Richards, Rev. George B., President of Horton College,
Ross,
Rex, R. R., Hobart Town.

Seal, M., Hobart Town.
Smith, His Honor Sir Francis, Chief Justice, ditto.
†Solomon, Joseph, Hobart Town.
*Stephens, T., M.A., F.G.S., Inspector of Schools, ditto.

Story, Dr. G. F., Swanport.
Salier, F. J., Hobart Town.

*Swan, J., New Town.
Smith, P. T., England.

*Shoobridge, W. E., New Norfolk.
Shoobridge, E., ditto.
Simson, A., Launceston.
Scott, Hopton, Hobart Town.
Swan, E. D., ditto.
Sharp, J., ditto.
Shoobridge, R. W. G., New Norfolk.
Smith, C. H., Launceston.
Stone, T., Hobart Town.
Stanley, Captain, R.N., ditto.

*Travers, S. Smith, New Town.

Walch, James H. B., Hobart Town.
Weaver, W. G., ditto.
Whyte, Hon. James, ditto.
Wilson, George, Mount Seymour.
Wise, F. H., Hobart Town.
Webster, A. G., ditto.
Wright, Stephen P. H., Glenorchy.
Westbrook, G. C., Hobart Town.
Woodgate, E. W., Launceston.
Walker, James Backhouse, Hobart Town.
Wagenknicht, Albert, George's Bay.

Young, Russell, Hobart Town.

Obituary.

SPICER, REV. WILLIAM WEBB, M.A., F.R.M.S.—Died at Notting Hill, London, on the 28th April, 1879. Prior to his return to England in March, 1878, Mr. Spicer had resided for some years in Tasmania. During this period he contributed some valuable papers to the Society, which appeared in the Transactions. He also published the "Handbook of Tasmanian Plants." A Fellow of the Society from 1875, he was elected a Member of the Council in 1877, and was made a Corresponding Member on his departure from the Colony. At home Mr. Spicer was a frequent contributor to publications on Natural History, and in 1869 translated and edited a work on "The Collection and Preservation of Algæ," &c. by Johann Nave.

LANGDON, WILLIAM, J.P., Commander R.N., formerly Member of the Legislative Council.—Died 23rd May, 1879, aged 90. A Fellow of the Society since 1853. A long and interesting obituary notice of Captain Langdon was published in the *Mercury* of May 26th, 1879.

OFFICER, SIR ROBERT, KNT.—Died at New Norfolk, 8th July, 1879, aged 79. Sir Robert arrived in the Colony in 1822, and for many years afterwards pursued a highly prosperous and successful career in the practice of medicine. During his long life he held many public appointments, and was Speaker of the House of Assembly for sixteen years before he resigned that office in 1877. As one of the founders of this Society he invariably took a peculiar interest in its welfare, and always gave it a most willing and zealous support. He was appointed a Vice-President in 1863.

Manley, E. J.—Died at Hobart Town, 22nd December, 1879, aged 68. A Fellow of the Society from 1876. Was also a member in 1856-7.

MINUTES of the Annual General Meeting of the Royal Society of Tasmania, held at the Museum, Macquarie-street, at half-past Seven P.M., on Monday, 26th January, 1880: James Barnard, Esq., V.P., in the Chair.

THE advertisement by which the meeting had been convened having been read, the Chairman called upon the Secretary to read the Annual Report.

The Report for 1879 was then read.

On the motion of Mr. F. Butler, seconded by Mr. Hopton Scott, the Report was adopted, and ordered to be printed for circulation amongst the Fellows.

The accounts for the year were laid on the table for the inspection of the Members.

Dr. Agnew reported that the retiring Members of Council were Messrs. F. Abbott, John Swan, Justin Browne, and A. G. Webster; and that no other nominations had been received.

It was agreed, on the motion of Mr. C. T. Belstead, seconded by Mr. F. Butler, that the four retiring Members of Council be re-elected.

Messrs. F. Butler and John Macfarlane were elected Auditors of Annual Accounts.

Captain Stanley, R.N., and Mr. Wm. Barnes, of Launceston, were elected Fellows of the Society.

A vote of thanks to Dr. Agnew (Honorary Secretary), proposed by Mr. Stephens, and seconded by Mr. Scott, was carried unanimously.

Dr. Agnew having returned thanks, the meeting terminated.

Commence Processing

REPORT.

THE session of 1879 opened on the 8th April with a paper by R. Ethridge, jun., F.G.S. (of the Department of Geology, British Museum), "On the identification of the First Secondary Fossil found in Australia;" and the following papers were read at subsequent meetings:-"Description of three new Tasmanian Helices," by Lieut. C. E. Beddome, I.N.—" Notes on the discovery of Amnicola Tasmanica, Tenison Woods; with description of a new species of Helex," by R. M. Johnston, F.L.S .-"Notes on the discovery of Spondylostrobus Smithii, and other Fossil Fruits in the 'deep lead' drift at Brandy Creek, Tasmania," by the same.—"Third contribution to the Natural History of the Tertiary Marine Beds at Table Cape, with a description of 30 new species of Mollusca," by the same.—"Observations on the distribution variability of Tasmanian Land Shells," by the same. "On recent addition to the Flora of Tasmania," by Augustus Simson, F.L.S.—"On the Codling Moth (Carpocapsa pomonella)," by His Honor Mr. Justice Dobson —"The Codling Moth," by F. Abbott, jun., Superintendent, Botanic Gardens.—"On some Tasmanian Trochidæ," by the Rev. J. E. Tenison Woods, F.G.S., F.L.S., &c .-"Notes on the Wild or Canadian Rice," by F. Abbott, jun.—"Notes on Bythinella," by the Rev. J. E. Tenison Woods, F.G.S., F.L.S., &c.—"The Codling Moth," by Augustus Simson, F.L.S.—"Notes on the relations of the Yellow Limestone (Travertin), of Geilston Bay, Hobart Town, with other fluviatile and lacustrine deposits in Tasmania and Australia," by R. M. Johnston, F.L.S.— "The Law of Storms," by the Right Rev. the Bishop of Tasmania.—"On the habits of the Platypus," by A. B. Crowther, M.R.C.S. Eng.—"On Sewage and Health," by the Right Rev. the Bishop of Tasmania.

In addition to the above-named papers, communications on the following subjects were brought forward during the Session:—"Specimens from Hicks Island, New Britain;

and from New Ireland and Duke of York Island," from the Rev. George Brown.—" Geological Specimens from Rosevere, River Tamar," from Mr. S. H. Wintle.—"The Codling Moth," from Department of Agriculture, United States.—"The destruction of Strawberry Plants by the larva of a Beetle," from Mr. Augustus Simson, F.L.S.

Meteorological Observations have been carried on, and monthly tables furnished, as usual, by Mr. F. Abbott, Mr. W. E. Shoobridge, and the Superintendents of the various Lighthouses; and the yearly abstracts are in course of compilation. The "Simultaneous Observations" are still registered by Mr. Abbott, and are forwarded by the Society, not only to America, but also to the various Government Observatories in the Australian Colonies and New Zealand.

Nine Fellows and one Corresponding Member were admitted. One Corresponding Member and three Fellows have been lost by death.

A vacancy having occurred in the list of Vice-Presidents by the death of the Hon. Sir Robert Officer, His Excellency was pleased to appoint Mr. Barnard to the office.

COUNCIL.

A vacancy in the Council, also caused by the death of Sir Robert Officer, has been filled up by the election of Mr. Charles T. Belstead.

The list of retiring Members has been posted in the library for the last three days, in accordance with No. 33 of the amended rules of the Society.

FINANCE.

The income from all sources was as follows:—Government grant in aid to Museum, £200; ditto to Gardens, £600; subscriptions, £132; from Marine Board, £20; sale of plants, &c. at Gardens, £66 16s. 9d.; sale of cases to Launceston Mechanics' Institute, £30. This, with £30 12s. in the hands of the Superintendent of the Botanic

Gardens for weekly payment of men's wages, and arrears of subscriptions £50, will give a total of £1128 8s. 9d. The expenditure, with liabilities, as per balance sheet, amounted to £1244 3s. 11d., leaving a balance to debit of £114 15s. 2d.

GARDENS.

The principal new work performed at the Gardens has been the laying out, forming, and planting of the Arboretum. The work in connection with this is now almost complete, and the plants are, with few exceptions, in position.

Some of the finest views from the Gardens are visible from this part, and there is no doubt it will soon become a favourite resort, especially when the trees have made sufficient growth to afford shade.

About 500 new plants, many of considerable merit, have been introduced. From seeds received from the Royal Gardens, Kew, plants of *Pithocolobium Saman* have been raised. This is a lofty shade tree, producing an abundance of sweet pods, which are eagerly devoured by cattle; the leaves fold up at night, allowing the rain and dew to fall to the ground, which favours the growth of grass beneath the trees. It is a native of South America, and probably better suited for cultivation in warm climates, but hitherto the plants have done well with us.

Special thanks are due to the donors of plants and seeds, especially to Baron Ferd. Von Müeller, Government Botanist, Victoria; Sir J. Hooker, Royal Gardens, Kew; C. Moore, Director, Botanic Gardens, Sydney; W. R. Guilfoyle, Director, Botanic Gardens, Melbourne; and the Chamber of Agriculture, Washington, United States, for their valuable donations.

The gang of prison labour supplied during the year has been of material assistance in performing the rougher work, and especially in the formation of the Arboretum, which could not have been carried out if this labour had not been supplied.

The estimated number of visitors for the year is 55,956.

Museum.

Mr. Legrand has completed the naming and arrangement of all the Tasmanian shells in our possession, and has also presented several specimens to the Museum from his private collection. Mr. C. E. Beddome has contributed several new species of land shells. Many specimens are, however, still wanting in this department, and will be added as opportunities offer.

The ornithological collection has received much attention from Mr. E. D. Swan, who has rendered most valuable service in naming the European, Indian, and many other birds, which will now, for the first time, be properly labelled. Mr. Swan has also devoted much time and trouble to relaxing and mounting a collection of dried specimens of Lepidoptera from New Britain and New Ireland, presented by the Rev. George Brown.

The cases in the Library having become inconveniently crowded, additional shelving, capable of holding about 500 volumes, has been provided. Further accommodation in this respect is, however, still required. We are much indebted to Mr. Legrand for the able and zealous assistance he has rendered in re-arranging the books generally. A really good catalogue is still an urgent desideratum, as the old one is now very imperfect in many respects.

The Museum has again been opened to the public from 2.30 to 5 o'clock on Sunday afternoons, the attendance during the year being,—on Sundays, 12,369; on week days, 12,620,—total, 24,989.

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STATEMENT of the Funds of the Roxal Society of Tasmania for the Year 1879.

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Expenditure. £ s. d. £ s. d.	Jan. 23—Balance overdrawn at Commercial Bank, as per statement for 1878	Interest on overdrawn account, 30th June, £7 11s. 3d.; 31st December, £9 9s. 8d.	Royal Society. Printing and Advertising.	Postage, Parcels, &c	Messenger Furniture, Fittings, &c	SundriesLibrary Books, Stationery, &c	Clerical assistance for completing Meteorological Tables	Total Royal Society	Salary of Curator	Wages of Attendant	Premium of Insurance	Purchase & preparation of Specimens	Water Rate	Sweeping Chimneys	Fuel and Light	Ironmongery, Brushware, &c
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Receipts.	Annual Subscriptions from 83 Members Ditto, arrears from former years From Marine Board for clerical assist-	ance in completing Meteorological Tables from Light-houses, &c From Launceston Mechanics' Institute	for Museum cases	Total Royal Society	fuseum. Grant in aid from Treasury		Grant in aid from Treasury	Total Botanic Gardens								

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Carriage of Specimens	Botonic Gardens. Salary, Superintendent Wages of Labourers.	Freight and Carrage of Flants Stationery and Stamps Forage History	Ironmongery	Sundries.	Water RateFlower Pots	Prison labour in erecting Porter's Lodge at entrance	Cartage	Tools and repair of ditto				Audited and found correct.	JOHN M'FAKLANE, FRANCIS BUTLER, 28th January, 1880.
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			1880.	Jan. 20. Balance overdrawn at Com-	mercial bank		Nore.	Dr. To overdrawn balance as above	Balance due to Messrs. Wheatley & Co.	Loudon, estimated at	By Cash in hands of Superintendent of Gardens for weekly payment of Wages	Subscriptions due	Balance to Debit

BOOKS, &c. Purchased and Presented during 1879.

[Presentations marked thus *.]

Agricultural Gazette, The, current numbers.

Athenæum, The, ditto.

Arts, Journal of Society of, ditto.

* Astronomical Society, Royal, ditto.

* Astronomical and Meteorological Observations, 1874 and 5. United States Naval Observatory, Washington.

* Aborigines of Victoria, The, by R. Brough Smyth. From Government of Victoria.

* Association, Historical and Archæological of Ireland, Proceedings, Journal, &c. 1871 and 1878. From Hon. J. W. Agnew, M.D., M.L.C.

* Animals, On the Extinct of the Colonies of Great Britain, by Professor Owen, C.B., F.R.S., &c. From the Government of Tasmania.

Bewick's British Birds, 2 vols., 1821. From Joseph Milligan, Esq., F.L.S.

* Bewick's British Quadrupeds, 1 vol., 1811. From the same.

* Bench, a Voice from the, on the abuse of intoxicating liquors. From the

Birds of Ceylon, parts 1 and 2. By Capt. R. V. Legge, R.A., F.Z.S.

- * Brandy, Regulations for Distillation of. From United States Government.
- * Craniorum, Thesaurus and Supplt., by Dr. J. Barnard Davis, vols. 1 and 2. From Joseph Milligan, Esq., F.L.S.

* Charges, Two, by the Recorder, to Grand Juries at Birmingham, 1850-1. From the same.

* Cyprus, its value and importance to England. From the same.

* Conchology, Quarterly Journal of, current numbers. From the publisher. * Catalogues, British Museum, "Cheiroptera" and "Gigantic Land Tortoises." From the trustees.

Catalogue of Australian Fossils, by R. Etheridge, jun.

- * Confederation, &c., by J. G. Orpen, Cape Town. From the author. Chemistry, Wilson's Inorganic.
- * England and Her Colonies at the Paris Exhibition, 1878, by F. Young, Hon. Sec., Royal Colonial Institute.

* Earth, the true Theory of. From the (anonymous) author.

* Eucalyptographia, a descriptive Atlas of the Eucalypts of Australia; Decades 1, 2, and 3, by Baron Ferd. Von Müeller, K.C.M.G., &c. From Government of Victoria.

* Engineers and Shipbuilders in Scotland, Proceedings of Institution of 1877-8. From the Institution.

* Entomological Commission, United States, Bulletins of. From U.S. Government.

Florist and Pomologist, current numbers.

* Fungacious Organisms, in relation to infectious disease, by Prof. Carl Von Naegeli. Translated by Baron Von Müeller, K.C.M.G., &c.

* Free Trade, Sophisms of. From Josh. Milligan, Esq., F.L.S.

* Forests, Suggestions for Creation and Maintenance of, by Baron Von Müeller, K.C.M.G., &c. From the author.

• Flora of British India, The, part 6, by Sir J. D. Hooker, C.B., K.C.S.I.

From the India Office.

* Fig, Cultivation of the. From United States Government.

Gardener's Chronicle, current numbers.

Geological Magazine, ditto.

* Grasses of Queensland, by F. M. Bailey, F.L.S. From the author.

Grampian Club Publications: - Registers of Cupar Abbey, vol. 1; Genealogical Memoirs of John Knox; and Chartulary of the Cistercian Priory, Coldstream, by the Rev. Charles Rogers, LL.D. From the Hon. J. W. Agnew, M.D., M.L.C.

Geologists, International Congress of at Paris, 1878.

- * Hydrographic Office, United States, Publications of, 1876-7. From the U.S. Government.
- * Health, Questions on Public, by J. M. Tonor, M.D. From the author.
- * Historical Records of Port Philip, by J. J. Shillingham. From Government of Victoria.
- * Horti Petropolitani, Acta, Tome 1, fasc. 1. From the Director, Imperial Botanic Garden, St. Petersburg.
- * Institute, Essex, U. S. America, Bulletin, vol. 9; Nos. 1 to 12, 1877. From the Institute.

---, New Zealand, Proceedings, vol. II., 1878. Indians, North American, Catalogue of Photographs of.

Journal of Science, Quarterly and Monthly, current numbers.

* Jupiter, Tables of Satellites of, by D. P. Todd, B.A. From the author.

* Journal, Canadian, vol. 15, No. 6. July, 1877.

* Lincei, Accademia R. dc., Transunti, December, 1878, to July, 1879. From the Academy.

Magazine, Country Gentleman's, current numbers.

* Medical Practitioners, Queensland, 1879.

* Medical and Surgical History of the War of the Rebellion, part 2. From Surgeon Generd, U. States Army.

Education and Institutions in America.

- ---, Teyler, (Harlem), publications of, vol. 4, parts 2, 3, 4; vol. 5, part 1.
- * Mining Surveyors and Registrars, Victoria, Reports, 1878.
 * Mines, Victoria, Report of Chief Inspector, 1878.

- * Microscopical Society, Royal, Journal, current numbers.
- * Microscopical Petrography, by Ferd. Zirkell. Presented by the Government, United States.
- * Molluscan Fauna of Tasmania, by the Rev. J. E. Tenison Woods, F.G.S., From the author.
- * Montana Territory, United States, Report of Reconnaisance. From U.S. Government.
- * Mississippi River, Report on Physics and Hydraulics of. From ditto.
- * Malakozoologischen Gesellschaft Jarbucher der Deutschen, Heft 4, 1. 10. 78.
- * Meteorological Office, London, publications of; viz: Meteorology of N. Atlantic, with Charts; Quarterly Weather Reports; Report of Permanent Committee on Vienna Congress; Meteorology of Arctic Regions,
 - Society, Quarterly Journal of, current numbers.
- * Meteorologia, Annales de la Officina Argentina, (Clima de Buenos Ayres), Tomo 1.

- * Meteorology of the Bombay Presidency, with Maps. From C. Chambers, Esq., F.R.S., Supt. of Colaba Observatory, Bombay.
- * Meteorological and Magnetic Observations, Government Observatory, Batavia, vols. 2 and 3, 1878. From the Director of the Observatory.
- Observations, Melbourne, 1876. From R. J. L. Ellery, Esq., F.R.S.
- -, Adelaide, 1878. From C. Todd, Esq., C.M.G.,
- F.R.S., &c. - Department, Calcutta, Report for 1877-8; the Madras Cyclone of May, 1877. From the Government of India
- -, United States Daily Weather Reports, April, 1873, to April, 1874.
- Meteorology of New Zealand, 1877. From Dr. Hector, F.R.S.
 Meteorological Tables for Hobart Town, monthly. From Dr. From F. Abbott, F.R.A.S., &c.
 - Mt. Nelson, South Bruni, Goose Island, Swan Island, Kent's Group, and King's Island; monthly. From the Marine

Natural History, Annals of, current numbers.

Nature, ditto.

- * Naturwissenschaftlichen Verein von Hamburg, Altona, Verhandlungen des, 1875-1878; Abhandlungen, 1872-6.
- * Proceedings of Davenport (United States) Academy of Natural Sciences,
- vol. 2, part 1, 1876-7. From the academy. - American Association for the advancement of Science.
- From the association. American Philosophical Society, vol. 17, No. 100. From the
- society. - Boston Society of Natural History, vol. 19, parts 1 and 2; and Memoirs, vol. 2, part 4, No. 6.
- American Academy of Arts and Sciences, vol. 5, part 1. From the academy.
- Royal Institution of Great Britain, vol. 7, parts 3 and 4; vol. 8, parts 5 and 6.
- Royal Colonial Institute, vol. 9.
- Prisons, "The Crofton System," (United States). From Dr. Milligan., "The Prussian System." From the same.
- -, International Congress "On the prevention and repression of Crime, (Washington)." "On treatment of Criminals in Germany." "The Prison Mission." From the same.

Poisons, Taylor on.

- * Report, Leeds Literary and Philosophical Society, 1877-8.
- * _____, Launceston Mechanics' Institute, 1878.
 * _____, Smithsonian Institution, 1876.
- * Société Entomologique de Belgique, Publications of, current numbers.
- Society, Royal, New South Wales, Transactions, 1875, and Rules, 1878.
- , London, Proceedings of, Nos. 190-193. -, Linnean of N. S. Wales; Five papers read before, by Rev. J. E. Tenison Woods, F.L.S., F.G.S., &c. From the author.
- -, Royal Geographical, Journal of, vol. 47, 1878; Proceeding, vol. 22, Nos. 2 to 6, 1878; vol. 1, (N.S.), Nos. 1 and 2, 1879. From the
- , Zoological, of London, Proceedings of, parts 3 and 4, 1877; parts 1, 2, 3, 1878. From the society.

Society, Linnean, Journal of, vol. Nos. 95-97; vol. 17, (Botany); vol. 13, Nos. 72, 73; vol. 14, Nos. 74, 75, 76. List for 1878. From the society.

______, Asiatic of Japan, Transactions, vol. 7, part 3. From the society. ______, Geological, Quarterly Journal of, vol. 24, parts 1, 2, 3, 4; vol.

25, part 1. List for 1878. From the society.

* Société Geologique de Belgique, Annales de, Tome 2, 3, (1874-5, 1875-6).
From the society.

* — Malacologique de Belgique, Annales de la, Tome 10; Proceedings

of, 1876-7. From the society.

* Society, Leeds Literary and Philosophical, Report 1878-9.

* Sugar Cane Industry, United States. From Smithsonian Institution.

- * Shells, Tasmanian Land, Monograph of, by W. F. Petterd. From the author.
- * Times, The, Reprint of Annual Summaries for a quarter of a century. From Dr. Milligan, F.L.S.
- * Tobacco, The cultivation and curing of. From the Smithsonian Institution.
- * Transactions of the Plymouth Institute, vol. 7, part 1, 1878-9.
- * University, Adelaide, Calendar, 1879.
- * Victorian Year Book, 1878. From the Government Statist, Victoria.
- * Weeds, Naturalised, in South Australia, by R. Schomburgh, Ph. D., C.M Z.S., &c. From the author.

* Woorali, or Urari Poison, On the. By the same.

- * Wissenschaften, K. B., Akademie der Munich, publications of, 1875 to 1878. From the academy.
- * Yellowstone Park, Report, 1878. From the Smithsonian Institution.
- * Zoology, Bulletin of, Museum of Comparative, Harvard College, vol. 5, Nos. 11 to 14. From the Museum.

LIST of Donors to the Museum during 1879.

(For particulars of Donations see Lists in Monthly Proceedings.)

Allen, Mr., Auckland, New Zealand. Atkinson, —, Esq., Latrobe. Allport, C., Esq., Hobart Town. Baynton, Mr. S. J., Kingston. Burdon, Mr., Hobart Town. Bett, Mr., ditto. Brown, Rev. George, New Britain. Brazier, Mr. John, Sydney. Boyes, W. L., George's Bay. Cole, Mr. W., Oatlands. Freeman, E. J., Esq., Hobart Town Featherstone, Mr. H., Sorell. Giblin, T., Esq. Geeves, Mr., Franklin. Hill, Mr. R., ditto. Hull, Mr. H. M., Hobart Town. Jones, J. Alun, Esq., ditto. North Johnston, A. K., Esq., Queensland. Jacks, Mr., Swansea. Lewis, H. S., Bsq., Geelong. Lodder, Mrs., River Don. Lewis, N., Esq., Hobart Town. Lewald, Mr. D., ditto.

Long, F. H., Hobart Town. Martin, Mrs., Bellerive. Moore, J. A., Esq., New Norfolk. M'Namara, Mr. M., Hobart Town. M'Farlane, John, Esq., ditto. M'Dowell, A., Esq., Bothwell. M'Dowell, Rev. T., Glenorchy. Nelson, Mr. W., Orford, Power, G. A., Esq., Ross. Rawson, Rev. R. Smith, Mr., Southport. Simson, A., Esq., George's Bay. Shoobridge, W. E., Esq., New Norfolk Sprent, C. P. Esq., Table Cape. Swan, Jno., Esq., Hobart Town. Shaw, Bernard, Esq., Launceston. Swan, E. D., Hobart Town. Taylor, Mr. J. A., ditto. Thorne, Mr. F., ditto. Wintle, Mr. S. H., George's Bay. Whitcomb, G., Esq., Hobart Town. Wilson, G., Esq. Winter, Mr. A., Hobart Town. Young, Mr. T., Margate.

DONORS OF PLANTS AND SEEDS TO THE ROYAL SOCIETY'S GARDENS, 1879.

February. From Dr. Hector, Wellington Museum, New Zealand-9 packets seed.

From the Chamber of Agriculture, Washington, United States-32 packets seeds.

From Baron Von Müeller, Government Botanist, Melbourne-I packet

March. From the Botanic Gardens, Saharunpore, N.W. Province India-60 packets seeds.

From the Chamber of Agriculture, Washington-60 packets seeds. April. From H. Hull, Esq -9 packets seeds from Philadelphia.

From Mrs. C. Meredith-10 packets seeds from Cashmere.

From Baron Von Müeller-14 packets seeds.

May. From J. N. Kerschaffelt, Ghent, Belgium-17 plants.

From Mr. Hugh Low, Clapton Nursery, London-Case containing 28 plants.

June. From Mr. Joseph Harris, Nurseryman, South Yarra, Victoria-Case containing 46 plants.

From Messrs. Shepherd & Co., Darling Nursery, Sydney-Case containing 55 plants.

From Mr. G. Brunning, Nurseryman, St. Kilda, near Melbourne-Case containing 39 plants.

From Mr. E. B. Heyne, Seedsman, Adelaide - 6 plants.

From Baron Von Müeller-9 packets seeds.

From the Chamber of Agriculture, Washington-Seeds, Zizania Aquatice. July. From Baron Von Müeller—36 packets seeds.

August. From Mr. G. Brunning, St. Kilda, Victoria—Case containing

36 plants.

From the Victorian Horticultural Society-100 varieties fruit scions.

From Ch. Huber, Seedsman, Paris-36 packets seeds.

September. From the Royal Gardens, Kew, near London-60 packets

From Ch. Huber, Seedsman, Paris-3 packets Primula seeds.

From Mr. S. Purchase, Paramatta, near Sydney-Case containing 36 plants.

From Mr. C. F. Creswell, Melbourne-Case containing 18 plants.

From Mr. James Jones, Melbourne-2 packets seeds.

From the Botanic Gardens, Melbourne-6 packets Palm seeds. From Mr. Joseph Dall, Nelson, New Zealand-6 species Ferns.

December. From Mr. C. H. Callet, Burwood, near Sydney-Case containing 36 plants.

From Messis. Shepherd & Co., Darling Nursery, Sydney-Case Arancaria excelsa.

From the Melbourne Botanic Gardens—Case containing 63 plants.

From Mr. J. Sangwell, Mrs. Henty's, St. Kilda Road, Melbourne - Case containing 36 plants.

From Mr. Joseph Harris, South Yarra Nurseries, near Melbourne-Case containing 45 plants.

From the Chamber of Agriculture, Washington-30 packets seeds.

DONATIONS OF PLANTS AND SEEDS SENT FROM THE ROYAL SOCIETY'S GARDENS, 1879.

January. To Mons. J. Linden, Ghent, Belgium-1 case plants.

To the Royal Gardens, Kew, near London-1 packet Eucalyptus seeds.

To the Chamber of Agriculture, Washington-1 packet seeds. To Mons. J. Verschaffelt, Ghent, Belgium-1 packet seeds.

To Messrs. Vilmorin, Andreiu, & Co., Paris—1 packet seeds. To Jules de Cock, Seedsman, Paris—1 packet seeds.

February. To Mr. Wm Bull, New Plant Merchant, London-6 Tree Ferns.

To Mons. J. N. Verschaffelt, Ghent, Belgium-4 large Tree Ferns.

To Mons. J. Linden, Ghent, Belgium-2 large Tree Ferns. To August Van Geert, Ghent, Belgium-2 large Tree Ferns.

To Hugh Low, Clapton Nursery, London-6 Tree Ferns.

March. To Mons. J. N. Verschaffelt, Ghent, Belgium-6 Tree Ferns. May. To Baron Von Müeller, Government Botanist, Melbourne-160 packets seeds.

To Mr. E. B. Heyne, Seedsman, Adelaide-150 packets seeds. To Mr. James Jones, Seedsman, Melbourne-1 package seeds.

To Mr. George Brunning, St. Kilda Nurseries, Melbourne-1 case seedling plants.

To Mr. Joseph Harris, South Yarra Nurseries, near Melbourne-Case of

seedling plants.

To Mr. S. Purchase, Nurseryman, Paramatta, near Sydney-Case plants and seeds.

To Messrs. Shepherd, Darling Nursery, Sydney-Case plants and seeds.

To Mr. C. F. Creswell, Seedsman, &c., Melbourne—Collection seeds. To His Excellency F. A. Weld—Seeds for transmission to Cyprus.

September. To Mr. C. F. Creswell, Seedsman, Melbourne-36 Dahlias.

To Mr. James Jones, Seedsman, Melbourne-36 Dahlias. To the Botanic Gardens, Melbourne-2 bags Sphognum Moss.

To the Botanic Gardens, Sydney-2 bags Sphognum Moss.

To the Acclimatisation Society, Queensland-2 bags Sphognum Moss. December. To Mons. Ch. Huber, Paris-1 packet seeds.

To Messrs. Vilmorin, Andrieux, & Co., Paris--1 packet seeds.

PLANTS GIVEN FROM THE GARDENS FOR THE PLANTING OF PUBLIC PLACES, 1879.

The Industrial School, Harrington-street—100 plants.

The Municipal Council, Richmond-42 plants.

St. Mary's Convent-18 plants. The Memorial Chapel, Brisbane-street-36 plants, 15 trees.

St. George's Church, Hobart Town-18 shrubs.

The Municipal Council, Launceston-600 small seedling plants for public

A. Coote, Esq., for George Town and Low Heads-100 plants.

The Government House Grounds-48 plants.

PLANTS INTRODUCED INTO THE ROYAL SOCIETY'S GARDENS DURING THE YEAR 1879.

Abutilon August Paswold Abutilon Darwinii tassellatum Abutilon rosæflora Acacia spectabilis Acer dasycarpum Acrostichum repandum Adiantum cardiochlænum Adjantum concinnum lætum Adiantum Farleyense Adiantum gracillimum Adiantum macrophyllum Adiantum Peruvianum Adiantum Sancha Catherinæ Adiantum trapæziforme Agave atrovirens Agave jaquiniana Agave microcarpa Agave picta Agave striata Agave striata vittata Albizzia Saman Alpinia nutans Alisma plantago Allantodia Australis Ampellopsis Veitchii Anthurium Scherzerianum Aponogeton distachyon Arctium edule Areca monastachya Aspidium aristatum Aspidium hispidulum Asplenium attenuatum Asplenium cicutarium Asplenium paleaceum Asplenium repens Asplenium Veitchii Asplenium viviparum Astartia fascicularis Athyrium filix fœmina Azara microphylla Bambusa argentea striata Bauera sessilifolia Beaumontia grandiflora Bœckia plicata Begonia metallica Berberis Lycium Bignonia argyrea violacea Boronia elatior Boronia denticulata Boronia heterophylla Brahia filamentosa Brachicheton rupestro Buxus arborea variegata

Caladium argyrites Caladium Belleymei Caladium Festonii Caladium Dr. Lindley Caladium Lipley Caltha palustris Catalpa bignonioides speciosa Choisva ternata Cistus formosus Clerodendron Balfourianum Combretum purpureum Conostylis albifrons Crassula vaginata Croton Mortii Croton paradoxa Croton Schomburgkii Croton undulatum Cupressus Lawsoniana aurea Cupressus Lawsoniana variegata Cupressus torulosa variegata Cyanophyllum Bowmannii Cyathea Cunninghami Cycas media Cymbidium albiflorum Cyrtomium falcatum Daphne hyemalis Davallea Mooreana Davallea plattyphilla Davallea pixidata Davallea Ronaldsii Dennistadtia davalliades Youngii Deparia Moorei Dictyosperma alba var. rubra Dictyogramma japonica Dictyogramma japonica variegata Dietes ixioides Dieffenbachia Bausei Dioscorea versicolor Dipladenia Breardsleyana Dombeya Dregiana Doodia aspera Doodia media Dracæna amabilis Dracæna Chelsonii Dracæna fragrans Dracæna magnifica Echeveria Abyssinica Echeveria atropurpurea Elymus condensatus Eranthemum macrophyllum Erica ampullacea oblata Erica Everiana superba Erica Lowesworthi

Erica profusa Erica Regerminans Erica urceolaris Erica vernix coccinea Erica vestita rosea Erica vestita coccinea Euonymus argenteus elegans Euonymus elegantissimus Euonymus ovatus variegatus Euonymus latifolia variegata Eugenia dealbata Eugenia parviflora Ficus vesca Ficus columnaris Ficus Muelleri Fraxinus expansa Furcroya longiva Gazania splendens Gleditschia Sinensis Gleichenia microphylla Goniopteris lineatum Goniopteris pennigera Goniostoma ligustrifolia Grangea Sutherlandi Grewia didyma Grewia oppositifolia Grevillea longiflora Grislea tomentosa Hakea dactyloides Hedera arborescens albo-lutescens Hedera rhombea Hedera rubra argentea Hedera tricolor variegata Hedychium Gardneri Henna myrtifolia Hydrangea Thomas Hogg Ilex Hodginsi Ilex nobilis Ilex Perry's weeping variegated Ilex weeping golden queen Iris Sinensis Iris Robinsoniana Ixia secunda patens Jambosa vulgaris Jochroma grandiflora Juniperus japonica aurea Kentia mocrocarpa Lagerstræmia rosea Latania glaucophylla Lawsonia inermis Leidenbergia rosea Ligustrum ovalifolium Ligustrum tricolor variegata Lomaria Fraseri Macrozamia corallipes Macrozamia tenuifolia Magnolia Campbelli Maranta Leitzii

Marica cærulea Menischium serratum Meryta macrophylla Mesembryanthemum aureum Mesembryanthemum album Mesembryanthemum bicolor Mesembryanthemum florabundum Mesembryanthemum mutabilis Mesembryanthemum spectabile Metrosideros scaudens Microlepia hirta cristata Nephelium leiocarpum Nephrodium extensum Nephrodium melanocaulon Nephrodium palmatum Nephrolepis davallioides Nephrolepis Duffei Nephrolepis furcans Nymphæa cœrulea Nymphæa fimbriata Olearea Armstrongii Onychium japonica Oreodaphne Californica Ormosia emarginata Pandanus Saman Pandanus utilis Paulinia thalictrifolia Pellea falcata Pellea paradoxica Pentzia virgata Phytolocca dioica Pimelia clavata Pimelia spectabilis Pittosporum eugenoides aurea Pittosporum eugenoides variegata Planera japonica Plectocoma elongata Polistichum triangulare Polypodium paradasica Prostanthera Sieberi Pteris longifolia Pteris serrulata cristata Pteris umbrosa Quercus glabra Raphiolepis intermedia Retinospora filicoides Retinospora filifera Retinospora pisifera alba variegata Rhodochiton volubile Rochea falcata Rochea splendens Rogiera macrophylla Rondeletia versicolor Selaginella Schottii Selaginella umbrosa Selaginella Wallichi Selaginella Wildenovi Sedum carneum variegatum

Sedum japonicum variegatum Solanum capsicastrum variegatum Solanum hematocarpum Solanum jasminoides variegatum Sparaxis pulcherrima Sterculea lurida Tacsonia tomentosa speciosa Thuja occidentalis variegata Todea Fraseri

Tupidanthus calyptratus
Viburnum punctatum
Vitis chantonensis
Vitis labrusca
Weigela hortensis
Weigela Lowii
Xanthozylon hastile
Xerotis Ordii
Yucca quadricolor

Rose.

Countesse le Berthe Duke of Connaught Marie Guillot Marie Van Houtte

Pelargonium.

Aristocrat Celeste Claribel Duke of Cambridge Ethel Bead Fairy Queen Fanny Gair Lady of the Lake Leamington Lassie M. Buchler Mrs. Mardel Prince of Wales Princess Teck Siren

Pelargonium.

Zonal Lady Suffield Madame le Marechal M'Mahon Prince Leopold Prince Silver Wings Princess of Wales The Shah Unique W. E. Gumbleton

Fuchsia.

Gracilis variegata Regalia Splendens

Coleus.

Agnes Bayne
Anna Boleyn
Antagonist
Croyden
Diadem
Duchesse of Edinburgh
Gardneri
K etleri
Mrs. Broomfield

Picturata
Quadricolor
Rainbow
Sabel
Sentinel
The Queen
White Lady
Zinzibar

Miss Essie

Apples.

Peasgood's Non-such Roundway Magnum Bonum Waltham Abbey Pearmain Worcester Pearmain William's Favourite Wyken Pippin Yellow New Town Pippin

Barcelona Pearmain Beauty of Hants Brabant Bellefleur Early Almond Esopus Spitzbergen Fox Whelps Greeve's Pippin Grey Leadington Pears.

Beurre d'Anjou Beurre Hardy Douchess d'Angouleme Madame Treyne

Suffolk Thorn

Plums.

Imperatrice de Milan Pourparts Transparent Gage

Millet d'Nancy

Rousselet Infant Prodigue

Agen Col di Signora Nero Figs. | Early Violet

Northumberland Fillbasket October Red Raspberries.
| River's Monthly

Strawberries.

Edith
Eleanor
Premier
Princess Alice Maud

Princess Frederick William Princess Royal Warner's Chilian

F. ABBOTT, Jun., Superintendent.