

RECORDS OF THE EARLIER FRENCH BOTANISTS AS REGARDS AUSTRALIAN PLANTS.

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[With Plates III - XV.]

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"Great geniuses have the shortest biographies. Their cousins can tell you nothing of them. They lived in their work, so their house and street life was trivial and commonplace. Plato, especially, had no external biography. If he had lover, wife or children, we hear nothing of them."—EMERSON.

In the early days of Australian settlement the French Expeditions which arrived in Australasian seas rank next in importance to the British. Between the years 1791 and 1840 no less than seven expeditions of circumnavigation were despatched to these shores, or to the adjacent seas, by the French Government, and the scientific staff of each included one or more botanists or at least a botanical collector, while the publications of each expedition include an account, always enriched by valuable plates, of the plants discovered.

Sir J. D. Hooker¹ gave an admirable statement of these and other expeditions to our shores, but I think the time

¹ "Introductory Essay to the Flora of Tasmania," cxviii-ix ("Outlines of the Progress of Botanical discovery in Australia,—French").

has arrived for a more detailed account of the botanical literature of these expeditions and of the botanists who undertook the work of determination and description of the plants. It is a duty we owe to French botanists to recall their labours, while the practical utility of such information requires no emphasis in a company of scientific men.

It will be seen that some of the most brilliant botanists of France have been engaged in the work of the elucidation of the Australian flora, and this remark would be even more true if I had attempted to enumerate the whole of our obligations to French botanists.

For various reasons the whole of the collections brought home by the French expeditions were not fully examined, and it is hoped that, at some convenient time, these remaining specimens will be dealt with by the compatriots of those who often endangered their lives to procure them.

The Australian flora has been elaborated by many botanists¹ of various nations, and I will endeavour, on some future occasion, to give some account of our indebtedness to those other than French and British.

0. 1785-8. "Boussole" and "Astrolabe," commanded by J. F. G. de la Perouse.

This expedition started from France in June 1785, not directly destined for New South Wales, while Governor Phillip and his expedition left England nearly two years later, viz., 13th May, 1787. Governor Phillip arrived in

¹ See also my (1) "Records of Australian botanists" (a. General, b. New South Wales), this *Journ.*, XLII, 60; (2) Notes on South Australian botanists in *Journ. Aust. Assoc. Adv. Sci.*, Adelaide Meeting, 1907; (3) "Records of Victorian botanists," *Vic. Nat.*, xxv, 101; (4) "Records of Tasmanian botanists," *Journ. Roy. Soc. Tas.*, 1909; (5) "Records of Western Australian botanists," *Journ. W. A. Nat. Hist. Soc.*, 1909; (6) "Records of Queensland botanists," *Journ. Aust. Assoc. Adv. Sci.*, Brisbane Meeting, 1909.

Botany Bay on 18th January, 1788, followed by M. de la Pérouse on the 26th (the day on which the British Flag was unfurled in Sydney Cove).

On 10th March la Pérouse sailed out of Botany Bay, and no trace of his expedition was obtained until some wreckage was found in 1825 by Captain Peter Dillon, of H.M.S. "Research" at Vanikoro or Matlikoro, the southernmost island of the Santa Cruz group. This expedition therefore belongs to the pre-settlement era of Australia, and as la Pérouse only touched Australian land on one occasion and later his expedition was wrecked with the loss of all hands, it is evident that an account of it can contain but little of Australian botany. Collections and journals had, however, been sent to France from various other places, and particulars of them and the "instructions" make a valuable volume.

Following is a title-page :—

"A voyage round the world performed in the years 1785, 1786, 1787 and 1788 by the *Boussole* and *Astrolabe*, under the command of J. F. G. de la Pérouse. Published by order of the National Assembly under the superintendence of L. A. Milet-Mureau.

In two volumes, illustrated by a variety of charts and plates in a separate volume. Translated from the French, 4 to. London, 1799."

Vol. I, pp. lvi, 539, contains la Pérouse's portrait as frontispiece; at pp. xxv—lii is a biographical sketch.

On board *La Boussole* were Prévost junior, botanical draughtsman, and Collignon, gardener and botanist.

On board *L'Astrolabe* were De la Martinière, (Bossieu) doctor of physic, medical officer and botanist. He described insects and, as regards plants, the leguminous genus *Bossiaea* was named after him; Dufresne, naturalist; Père Receveur was a Franciscan friar, "naturalist and doing

the duty of chaplain," (his grave is at La Perouse, Botany Bay near Sydney); Prévost, the uncle, botanical draughtsman.

The instructions to the staff are very copious, and include: Vol. I, Botany, pp. 129-30. "Memoir for the direction of the gardener in the duties he has to perform on his voyage round the world. By M. Thouin, first gardener to the Botanic Garden" (in Paris), pp. 156-181. See also "Catalogue of books provided for the voyage" p. 189, Chapters iv-v, Easter Island; v, Sandwich Islands.

Vol. II, contains pp. 529 and index. Chapter xxiii-v deals with Navigators' Islands; Chap. xxvi, Friendly Islands. Norfolk Island. Arrival at Botany Bay.

There is also a folio of "Charts and Plates to la Pérouse's Voyage." These are 69 in number and are very interesting, but the only botanical ones are Nos. 6 and 8, male and female Lianes of Chili; 7 and 9 larger views of the same. There are a number of charts and plants valuable to the student of the South Sea Islands.

We now come to the Australian expeditions proper.

1. 1791-4. "Recherche" and "Esperance," commanded by Bruny D'Entrecasteaux.

This expedition was of considerable importance from a geographical point of view, as the maps of Tasmania and Western Australia abundantly testify. But it is chiefly memorable to Australian botanists from being the means which enabled the genial Labillardière to produce his classical "*Novæ Hollandiæ Plantarum Specimen*," while the adventure of 'Naturaliste' Riche near Esperance in Western Australia, nearly resulted in tragedy, and he became one of the forerunners of many worthies who have sacrificed, or nearly sacrificed, their lives for the advancement of science in Australia.

Bruny D'Entrecasteaux' flag-ship was the "Récherche." The scientific staff included, *Récherche*, Labillardière, naturaliste; Deschamps, naturaliste; Louis Ventenat, naturaliste, 'faisant les fonctions d'aumônier,' (not to be confused with E. P. Ventenat, see p. 131); Piron, peintre (not to be confused with Péron, see p. 132); Lahaie, jardinier. *Esperance*, Riche, naturaliste (see p. 130); Blavier naturaliste.

Following is a title-page:—

"Rélacion du voyage à la recherche de La Pérouse, fait par ordre de l'Assemblée Constituante, pendant les années 1791, 1792, et pendant la 1ère et la 2me année de la République Française, par le Cen *Labillardière*. . . l'un des naturalistes de l'expédition. 2 vols., 4to Paris (an viii) 1799."

Tome Premier pp. xvi, 442. The following references are especially interesting to Australians:—

Chapitre v, Tasmania. Chapitre vi, New Caledonia. Chapitre ix, South-western Australia. Riche lost. At p. 403 is a reference to "*Eucalyptus cornuta*, Planche 17," which should be 20 (see the folio Atlas below).

Tome II, pp. 332; supplementary pages, Vocabulaires, 1—69; Tables de la route de l'Esperance, 71—99; Table des planches contenues dans l'atlas; 103—8.

Chapitre x, Western Australia; xi, Tasmania; xii, Society Islands; xiii, New Caledonia; xiv, Solomons, Louisiades and New Britain.

Then there is a folio "Atlas pour servir," Paris 1811, consisting of forty-four plates, of which Plates xii (part) and xiii—xxiv are botanical (Tasmania and West Australia), and xl and xli, botanical (New Caledonia).

Then we have:—

"Voyage in search of La Pérouse performed by order of the Constituent Assembly, during the years 1791, 1792, 1793 and

1794, and drawn up by M. Labillardière." Translated from the French, illustrated with 46 plates (reduced to 8vo size from the preceding work). London, 1800, 4to, pp. 476 with an Appendix of 65 pages.

Bearing in mind the industry and eminence of Labillardière, we cannot but regret that his opportunities for collecting in Tasmania and the mainland were so limited. Following is an account of him :—

Labillardiere, Jacques Julien Houton de (1755–1834). Born at Alençon, studied medicine and botany at Montpellier, and graduated at Paris, 1780. Visited England, Switzerland, and Italy. In 1786 he visited the Levant, and on his return published *Icones Plantarum Syriæ rariorum descriptionibus et observationibus illustratæ*. Lutetiae Parisiorum (Parisiis), 1791–1812. 4to. V decades. (See also Willdenow's "Principles of Botany," English trans. 2nd Edit. p. 494). He then came with D'Entrecasteaux' expedition. Author of *Novæ Hollandiæ Plantarum Specimen*, 2 vols. 4to, Paris, 1804-6; *Sertum Austro-Caledonicum*, 4to Paris, 1825, which with the "Relation" contain the results of his researches and observations in Australasia and the East Indies. Died at Paris. Lithograph 1821, by Julien L. Boilly. [See Plate 3.] (1), with a few unimportant additions.

"Lorsque la discorde eut mis fin à l'expédition d'Entrecasteaux, et que les collections de M. de la Billardière furent transportées en Angleterre, il réussit à se les faire remettre; et non seulement il s'empessa de les renvoyer ici, il ajouta à tant de soins la délicatesse de les renvoyer sans même les avoir regardées : il aurait crainte d'enlever, écrivait il à M. de Jussieu, une seule idée botanique à un homme que était allé les conquérir au péril de sa vie. Dix fois des collections adressées au Jardin du Roi, et prises par des vaisseaux anglais, furent recouvrées par lui et rendues de la même

manière." [His other services to French scientific men during those troublous times were then enumerated.] Extract from Cuvier's Eulogy on Sir Joseph Banks, read 2nd April, 1821. (*Mémoires de l'Institut*, 1821 p. 224.)

The following Australian plants were named after him :

Brathys Billardieri, Spach, = *Hypericum gramineum*, Forst.; *Colobanthus Billardieri*, Fenzl.; *Hibbertia Billardieri*, F.v.M.; *Nitraria Billardieri*, DC. = *N. Schoberi*, L.; *Phebalium Billardieri*, A. Juss.; *Ræpera Billardieri*, A. Juss. = *Zygophyllum Billardieri*, DC.; *Trymalium Billardieri*, Fenzl.; *Turræa Billardieri*, A. Juss. = *T. pubescens*, Hellen; *Bauera Billardieri*, D. Don = *B. rubioides*, Andr.; *Eucryphia Billardieri*, Spach.; *Phyllota Billardieri*, Benth. = *P. phyllicoides*, Benth.; *Apalochlamys Billardieri*, DC. = *Cassinia spectabilis*, R. Br.; *Brachycome Billardieri*, Benth.; *Calythrix Billardieri*, Schau. = *C. tetragona*, Labill.; *Epilobium Billardieri-anum*, Ser.; *Lagenophora Billardieri*, Cass.; *Marquisia Billardieri* A. Rich. = *Coprosma Billardieri*, Hook. f.; *Senecio Billardieri*, F.v.M. = *Bedfordia linearis*, DC.; *Siebera Billardieri*, Benth.; *Styphelia Billardieri*, F.v.M. = *Cyathodes glauca*, Labill.; *Obione Billardieri*, Moq. = *Theleophyton Billardieri*, Moq. = *Atriplex Billardieri*, Hook. f.; *Rhagodia Billardieri*, Br.; *Adriana Billardieri*, Baill. = *Trachycaryon Billardieri*, Kl. = *Adriana quadripartita*, Gaudich; *Leptomeria Billardieri*, Br.; *L. Billardieri*, Sieb. = *Choretrum Candollei*, F.v.M.; *Phyllocladus Billardieri*, Mirb. = *P. rhomboidalis*, Rich.; *Agrostis Billardieri*, Br. = *Deyeuxia Billardieri*, Kunth.; *Desvauxia Billardieri*, Br. = *Centrolepis fascicularis*, Labill.; *Festuca Billardieri*, Steud. = *Agroporum scabrum*, Beauv.; *Grammitis Billardieri*, Willd. = *Polypodium australe*, Metten.; *Lycopodium Billardieri*, Spreng. = ?; *Pentapogon Billardieri*, Br.; *Phymatodes Billardieri*, Presl. = *Polypodium Billardieri*, Br. = *P. pustulatum*, Forst.; *Poa Billardieri*, Steud.; *Schedonorus Billardieri*, Nees = *S. littoralis*, Beauv.; *Tmesipteris Billardieri*, Endl. = *T. tannensis*, Bernh.; *Phaceolocarpus Labillardieri*, J. Ag. (Figured in Harvey's *Phycologia Australica*).

Riche, Claude Antoine Gaspar (1762–1797). Born at Chamelet en Beaujolais, 20th August, 1762, educated at Lyons and Montpellier but did not finish his studies through ill-health. He died 5th September 1797 at Mont d'or, where he had gone to take the waters. He had not put his papers in order, and left an unpublished work "*Chimie des végétaux*." He was a botanical collector, but did not write on botany. He was more interested in entomology, and was a correspondent of Fabricius (2) Tome 39 (1824). He was "Naturaliste" on the "*Esperance*," and helped with the botanical collections.

Allan Cunningham gives an excellent account of Riche under t. 3251, *Bot. Mag.*, from which the following particulars are abstracted.

He begins with an extract from Robert Brown's MSS. in regard to the variability of *Leucopogon Richei*, R. Br. He then points out that the name has reference to a tale of distress and privation to which M. Riche was subjected in December, 1792. D'Entrecasteaux' ships anchored amongst the islands named after one of them Recherche Archipelago. The discoveries made by Nuyts in 1627 on the South Coast had terminated at that Archipelago, and it does not appear that either the Dutch, or Vancouver a century and a half later, effected a landing, so that our earliest knowledge of the vegetation of this portion of "Nuyts' Land," slight as it was, was due to M. Riche and his misfortune.

We learn from Labillardière that a boat had been sent from L'Esperance (the modern Esperance) to the "main shore," and M. Riche accompanied the party. Quitting the beach on which he had landed, (some miles to the westward of Cape le Grand, in long. $121\frac{1}{4}^{\circ}$ E.), he lost his way while botanising.

M. Labillardière formed one of a search party and they traced M. Riche to the shores of a salt lake (Lake Warden presumably—J.H.M.) near Esperance. They finally found him after an absence of 54 hours, and he had been almost without food, his slender supply being eked out with fruits of the shrub now known as *Leucopogon Richei*. It is figured at t. 3251.

Riche had lost all his specimens, but Labillardière made a collection in the search after him, his specimens including *Leucopogon Richei*, *Banksia repens* and *nivea*, *Chorizema ilicifolia*, *Eucalyptus cornuta* and *Anigozanthus rufa*.

Labillardière wrote later that Riche died from consumption on his return to France, having, while ill, undertaken a long and fatiguing journey in the cause of science.

Besides the plant referred to, he is commemorated by the genus *Richea*, R.Br., and *Craspedia Richea*, Cass.

Ventenat, Etienne Pierre. I cannot find that the companion (Louis) of Labillardière, although a "naturaliste," was a botanist, but Etienne Pierre (1757—1808), librarian of the Pantheon at Paris and member of the National Institute, was author of several works dealing with plants brought home by, or raised from seeds brought home by D'Entrecasteaux' or Baudin's Expeditions. For example:

"Description des plantes nouvelles cultivées dans le jardin de J. M. Cels. Paris (1800). 4to; (2) Tableau du règne végétal, etc. Paris (1799). 4 vols. 8vo; (3) Choix des plantes . . . , dans le jardin de Cels. Paris, 1803, fol.; (4) Jardin de la Malmaison, etc. Paris, 1803(-4), 2 vols. fol.; (5) Decas generum novorum aut parum cognitorum. Parisiis, 1808, 8vo. In this work he founded the genus *Callitris*.

The following plants bear his name:—

Eugenia Ventenatii, Benth.; *Frenela Ventenatii*, Mirb. = *F. rhomboidea*, Endl.

2. 1800 – 1804. “Geographe,” “Naturaliste,” and “Casuarina,” commanded by Nicholas Baudin.

There was no Labillardière on this expedition, and the natural history results were chiefly zoological. The botanical collections were incorporated in the Paris herbarium, and, instead of being described as a whole, some of them were examined by monographers at odd intervals for many years afterwards, and we lack, even yet, a full account of them. Leschenault appears to have allowed his travels in other parts of the world to have crowded out thoughts of Australian plants. He however, published but little on scientific subjects. Besides his brochure on Australian plants, he published a short account of the Cinnamon tree.

As far as Australian plants are concerned, this expedition visited, (1) The islands of the north-west and west coasts of Western Australia, also the south coast of Western and South Australia (overlapping Flinders). (2) King Island, Bass' Straits. (3) Port Jackson.

In October 1800 the expedition left Havre, and the “Geographe” was Baudin's flag-ship. The “Naturaliste” had Captain Hamelin in command, while the “Casuarina” was commanded by Lieutenant Louis Claude Desaulces de Freycinet. F. Péron and Lesueur were the zoologists and Leschenault de la Tour was botanist. Anselme Riedlé was head-gardener (*jardinier-en-chef*). He died at Timor, 21st October, 1801. *Cycas Riedleyi*, Gaud. (= *Macrozamia Fraseri*, Miq.), was named after him. Antoine Sautier was gardener (*garçon jardinier*) of this expedition, and died at sea, 15th November, 1801. Antoine Guichenot was also gardener, but I have no further details concerning him.

A. Michaux (afterwards author of “*Sylva Americana*”) and J. Delisse also embarked on this expedition, but left it at the Isle of France on the outward voyage. Bory de St.

Vincent, afterwards eminent as a botanist, embarked as zoologist, and was also left at the Isle of France. See pp. 139 and 142.

The following work is from the pen of **Bory de St. Vincent** (Jean Baptiste M.A.G.):—

“Voyage dans les quatre principales îles des mers d’Afrique, fait par ordre du gouvernement pendant les années ix et x de la République (1801 et 1802), avec l’histoire de la traversée du Captain Baudin jusqu’au Port Louis de l’île Maurice.” Paris, 1806, 3 vols. atlas of 58 plates in 4to.

The most important work relating to Baudin’s expedition is:—

“Voyage de découvertes aux Terres Australes . . . rédigé par M. F. Péron, Naturaliste de l’Expedition etc.” 1st vol. 4to Paris, 1807. 2nd vol. edited and continued by Louis Freycinet, 1816 (after Péron’s death).

This work treats in the most cursory way of the plants. Nevertheless, the following itinerary taken from it is valuable to those who study the plants brought home by the expedition.

Livre ii, Chap. v. Voyage from Isle of France to New Holland, Terre de Leuwin (King George’s Sound to Cape Leuwin), 25th April to 19th June, 1801; Terre d’Endracht (Shark’s Bay) 19th June to 12 July, 1801. Chap. vi. Terre de Witt (South of King Sound) 23rd July to 18th August, 1801. Chap. ix. Opérations du Naturaliste à la Terre d’Edels (Victoria district) 8th June to 16th July, 1801. Chap. x. Opérations du Naturaliste à la Terre D’Endracht, 16th July to 21st September, 1801.

Livre iii, Chap. xv. Terre Napoléon (South coast of Western Australia and South Australia), 29th March to 8th May, 1802. Chap. xix. At Port Jackson (20th June to 18th November, 1802.

Vol. ii, Livre iv, Chap. xxiv. Retour à la terre Napoléon: Ile Decrès (Kangaroo Island), 27th December, 1802 to 1st February, 1803. Chap. xxv. Golfes de la terre Napoléon: Port Champagny.

1st January to 2nd February, 1803. Chap. xxvi. Suite de la terre Napoléon. Séjour aux îles Joséphine, 1st to 17th February, 1803. Chap. xxvii. Opérations à la terre de Nuyts. Séjour au port du Roi George (King George's Sound), 11th February to 8th March, 1803. Chap. xxix. Terre de Leuwin: Retour à la terre d'Edels, 7th to 16th March, 1803. Chap. xxx. Fresh stay at D'Endracht's Land, 16th to 26th March, 1803. Chap. xxxi. Second stay at terre de Witt: "Nouvelle reconnaissance de l'archipel. Bonaparte," 27th March to 28th April, 1803. Chap. xxxiii. Last operations at terre de Witt, 3rd June, 1803. Chap. xxxviii. "Notice sur la végétation de la Nouvelle Hollande par M. Leschenault," pp. 358 to 372.

Leschenault de la Tour, Louis Theodore (1773–1826). Born 13th November, 1773 at Châlons-sur-Saône, son of a procurator of the King. He joined the "Naturaliste," at Timor 7th October, 1801; the "Geographe" at Port Jackson 3rd November, 1802, and was left sick at Timor, 2nd June, 1803. He explored Java and also Philadelphia before returning to France in July, 1807. Between 1816 and 1822 he was at the Cape de Verde Islands, Cape of Good Hope, India, Ceylon and the Island of Bourbon, returning to the Cape of Good Hope in May, 1822. In 1823-4 he was in Brazil and British Guiana, returning home in 1824. He died 14th March, 1826. He wrote a sketchy "Notice" of the Australian vegetation for Péron's work, which should be translated.¹

Urban in Martius' *Flora of Brazil*, Vol. I, Part 1, quotes the following bibliography concerning him:—

"J. Eugène Deschamps: Jean-Baptiste-Louis-Claude-Théodore Leschenault de la Tour in Didot *Nouv. Biogr. génér.* vol. xxx, (1859) p. 923–927. E—s: Louis Théodore Leschenault de la Tour in Michaud *Biogr. univ.* vol. xxiv, p. 294 Lasègue *Mus.*

¹ See my note in *Proc. Aust. Ass. Adv. Science*, Adelaide Meeting, (1907) page 166.

Delessert (1845) p. 271—275, 430—432. *Bull. Soc. Sciences Saône et Loire*, II, (1884) p. 123—158, cum indice operum (n.v.). Pritz. *Thes.* ii ed p. 182; *Cat. Sc. Pap.*, III, p. 967, VI, p. 712, XII, p. 442."

In Western Australia, Cape Leschenault, near the Moore River, and Leschenault Estuary near Bunbury are named after him, while the remarkably beautiful Goodeniaceous genus *Leschenaultia* bears his name, also *Hemistemma Leschenaultii*, DC. = *Beyeria Leschenaultia*, Baill. = *B. opaca*, F.v.M.; *Indigofera Leschenaultia*, DC.=?; *Calythrix Leschenaultii*, Schauer.

Desfontaines, Rene Louiche (1752—1833). Born at Tremblay in Brittany, 14th February, 1752, died at Paris, 16th November, 1833. In 1786 he was appointed professor of botany in the Jardin des Plantes, and was several times Director of the Natural History Museum, at Paris. Elected in 1783 to the Academy of Sciences, he contributed many valuable papers to its *Transactions*, among them his celebrated memoir on the structure of monocotyledons, 1796 (1).

Works which specially interest Australians are:—

(1) Mémoire sur le genre *Anthistiria*, etc. (*Journ. Phys.*, xl), Paris, 1792, 4to.

(2) Tableau de l'école de botanique du Muséum d'histoire naturelle, Paris, 1804, 8vo; Ed. 2 (du jardin du roi) *ib.* 1815, 8vo; Ed. 3 (*Catalogus plantarum horti regii parisiensis*), Parisiis, 1829, 8vo. [This work contains names for various species of *Eucalyptus* not now maintained. It also contains other selections from the Western Australian plants collected on Baudin's expedition.]

The genera *Fontanesia* and *Louichea* were dedicated to him. Line and stipple engraving, ad vivum 1824, by Ambroise Tardieu. Bust (in an oval), face three-quarters to the right. [See Plate 5.] (1)

Bonpland, Aime Jacques Alexandre (1773 – 1858). Born at La Rochelle, 29th August, 1773. Studied botany and medicine, but his studies were interrupted by the troublous times. Introduced to Humboldt and went to America with him and collected and dried “more than 6,000 new plants.” Visited Venezuela, Cuba, New Granada, Peru, Mexico (1799–1804). Napoleon gave him a pension and the Empress Josephine accepted rare American seeds for her garden at Malmaison from him. The post of “Intendant” of her garden being vacant, Bonpland was appointed and remained until 1804-15. Author of “Descriptions des plantes rares cultivées à Malmaison et à Navarre,” Paris 1813, Folio, 157 pages and 64 coloured plates (published in 11 parts). This beautiful work treats of the following Australian plants, mostly raised from seed brought home by Baudin’s expedition:—

Metrosideros (*Callistemon*) *saligna*, *Goodenia grandiflora*, *Melaleuca chlorantha*, *Gompholobium furcellatum*, *Correa viridiflora*, *Eucalyptus diversifolia*, *Acacia linifolia*, *Pittosporum tomentosum*, *Zieria Smithii*, *Tristania neriifolia*, *Pimelea linifolia*, *Metrosideros* (*Callistemon*) *glauca*, *Chorizema ilicifolia*, *Metrosideros* (*Callistemon*) *pallida*, *Acacia subulata*, *Banksia marcescens*, *Elæocarpus acuminatus*, *Hovea Celsi*, *Bossicea coccinea*, *Duvalia oxalidifolia*, *Acacia armata*. There is no preface.

Emigrated to the Argentine, 1816, starting a medical practice at Buenos Ayres. Cultivated Maté at Santa Anna, was imprisoned by the Dictator of Paraguay (Francia) from 1821-31, it being alleged that he was a French spy. He emigrated to Brazil (Rio Grande do Sul), and thence to Uruguay, later in 1853 to the Corrientes province, where he was Curator of the Natural History Museum. He died 11th May, 1858, at San Francisco de Borja (Corrientes).

Besides the Malmaison work already referred to, he co-operated with Humboldt in various botanical works con-

cerning South America. The Australian *Hydrocotyle Bonplandi* A. Rich.=? commemorates him.

Jussieu, Adrien de (1797–1853). Born 23rd December, 1797, died at Paris 29th June, 1853. Professor of Botany at the Jardin des Plantes 1826, professor at the Sorbonne, 1845. Described some of the plants brought home by Baudin's Expedition together with some from other Australasian expeditions, in the following:—

- (1) "Considérations sur la famille des Euphorbiacées." (*Mémoires du Muséum d'hist. nat.*, x, 1823) pp. 39.
- (2) "Mémoires sur les Rutacées" etc. (*Mém. Mus. Hist. Nat. Par.*, xii), Paris, 1825, 4to pp. 160, 16 tab.
- (3) "Monographie du genre Phebalium." (*Mém. de la Soc. d'hist. nat. de Paris*, tome ii, 1825) pp. 13, 3 tab.
- (4) "Mémoires sur la groupe des Méliacees." (*Mém. du Mus. d'hist. nat.*, xix, 1830) 152, pp. 12 tab.

3. 1817–20. "Uranie" and "Physicienne," commanded by Louis de Freycinet.

This expedition visited Port Jackson and Gaudichaud was the first French botanist of these expeditions to botanise in the Blue Mountains and Bathurst, which he did on a brief journey, with the assistance of Cunningham and Fraser. The botanical works of this expedition are not numerous, but they include Gaudichaud's fine work (as principal contributor) and a splendid folio atlas of 120 plates, including some Australian plants.

Following is a title-page:—

"Voyage autour du monde, entrepris par ordre du Roi . . . et conformément aux instructions de Son Exc. M. le Vicomte du Bouchage, . . . exécuté sur les Corvettes de S.M. *l'Uranie* et la *Physicienne* pendant les années 1817, 1818, 1819 et 1820. Publié sous les auspices de Son Exc. M. le Comte Corbière, . . . pour la partie historique et les sciences naturelles, et de S. Exc. le Comte

Chabrol de Crouzol, . . . pour la partie nautique ; Par M. Louis de Freycinet, Capitaine de Vaisseau, commandant de l'expédition. *Navigation et Hydrographie.*" Atlas, Paris, 1826.

This folio work is valuable to the botanist for the specific localities of plants collected.

Port Jackson, Botany Bay, the Blue Mountains (New South Wales) and Shark's Bay ("baie de Chiens") in Western Australia were visited, and a minute geographical survey was made of Shark's Bay. More or less exploring was done off the west and north-west coasts.

The 4to vol. of text (Botany) has a similar title-page and date, except that it has for sub-title "Botanique, par M. Charles Gaudichaud, Pharmacien de la Marine," pp. vii, 522. He gives acknowledgments to "MM. Desfontaines, Jussieu, pere et fils, Deleuze, Kunth."

Chap. vii, pp. 33-37, "Nouvelle Hollande, Baie des Chiens Marins" (Shark's Bay).

Then there are chapters on various South Sea Islands,—very useful. Chapter xvi, p. 108, "Nouvelle Hollande (Port Jackson, Botany Bay, Montagnes Bleues, Bathurst, etc.)." This chapter should be translated and published. Gaudichaud of course followed the old road to Bathurst described in the paper of myself and Mr. Cambage.¹ Then we have a valuable list of species, arranged in botanical sequence, with localities at end of each species.

This volume of text in which Gaudichaud received the assistance (in addition to those already acknowledged), of Christian Heinrich Persoon for Lichens and Fungi, of Carl Adolph Agardh for Algæ, and Christian Friedrich Schwaegrichen for Mosses and Hepaticæ, was accompanied by a folio atlas of 120 plates by Poiret fils. (Paris, 1826).

¹ This Journal, Vol. XLIII, p. 123.

Gaudichaud-Beaupre, Charles was born in Angoulême, 4th September 1789, and died in Paris, 16th January, 1854. He was a "Pharmacien de la 1e Classe de la Marine," and professor of botany. He accompanied the present expedition as pharmacien-botaniste.

The official botanical publications of this expedition already referred to are an important contribution to science, while his other works include "Mémoire sur les Cycadées" (1824-5), "Notice sur les genre *Adriana*" (1825). Most of his papers are, however, on physiology or morphology. Biographical accounts of him will be found in (2), (3), (4).

The following plants were named after him:—

Commersonia Gaudichaudii, J. Gay; *Philotheca Gaudichaudi*, G. Don. = ?; *Stephania Gaudichaudi*, A. Gray = ?; *Galium Gaudichaudi*, DC.; *Hydrocotyle Gaudichaudiana*, DC. = ?; *Sambucus Gaudichaudiana*, DC.; *Senecio Gaudichaudianus*, A. Rich.; *Enchysia Gaudichaudii*, Presl. = ?; *Laurentia Gaudichaudi*, A. DC. = ?; *Grevillea Gaudichaudii*, Br.; *Plantago Gaudichaudii*, Barn. = ?; *Rhagodia Gaudichaudiana*, Moq.; *Trichinium Gaudichaudii*, Stew. = *T. corybosum*, Gaudich.; *Adriana Gaudichaudi*, Baill. = *A. tomentosa*, Gaudich.; *Carex Gaudichaudiana*, Kunth. = *C. vulgaris*, Fries, var. *Gaudichaudiana*, Boott; *Freycinetia Gaudichaudii*, Benn.; *Isolepis Gaudichaudiana*, Kunth. = *Scirpus Gaudichaudi*, Bœckel = *S. inundatus*, Spreng.; *Polypodium Gaudichaudii*, Bl. = *P. rigidulum*, Swartz.

4. 1822-5. "Coquille," commanded by L. J. Duperrey.

The renowned **D'Urville** was a member of this expedition as he was also of the three subsequent ones. **Bory de St. Vincent** (see Baudin's expedition), again comes on the scene. Two fine illustrated works depict the floral treasures which are invaluable, in spite of the careless editing of one volume of plates, which has caused some little trouble to bibliographers and botanists. This expedition gave special attention to the Algae.

Following is a title page of what we may term Vol. I, (Cryptogams), although it has not a number :—

“Voyage autour du Monde, exécuté par ordre du Roi, sur la Corvette de Sa Majesté *La Coquille*, pendant les années 1822, 1823, 1824 and 1825, sous le ministère et conformément aux instructions de S. E. M. le Marquis de Clermont-Tonnerre, . . et publié sous les auspices de Son Excellence M. Le Cte de Chabrol par L. I. Duperrey, Commandant de l'expédition.” *Botanique*, par MM. D'Urville, second de l'expédition, Bory de St. Vincent et Ad. Brongniart.

Cryptogamie, par M. Bory de St. Vincent, 4to pp. 301, Paris, 1828. Introductory pp. 1—61; Agamie (Algae) 62—242; Lycopodiaceæ 244—249; Filices 249—285. A useful “Table des Matières” at pp. 287—298 and Table des planches, pp. 299-300, necessary for bibliographers.

The corresponding Atlas (*i.e.*, Cryptogams) published (or at least dated) two years before, *i.e.*, in 1826, has practically the same title-page. Its sub-title is “Histoire Naturelle, botanique,” Folio, 39 plates; Paris, Arthur Bertrand, 1826. The plates are marked 1—38, 13 bis. Plates 1—24 (*i.e.*, 25 plates) are coloured, and consist of Algae; plates 25—38 are uncoloured and consist of Lycopodiaceæ and Filices. See also the following work by Bory de St. Vincent :—

“Histoire des Hydrophytes, ou plantes agames des eaux, récoltées par MM. D'Urville et Lesson dans leur voyage autour du monde sur *la Coquille* pendant les années 1822—1825, sous le commandement du Capitaine Duperrey,” Paris, 1829, folio, 240 pp., 24 tabl. col.

This is a separate account of the Algæ, but I have not seen it.

In the introduction to Vol. I (Cryptogams, already referred to) at page 7 the following passage occurs :—

. . . “c'est par elles que nous commencerons le catalogue des richesses botaniques dues au zèle infatigable de MM. d'Urville et Lesson.”

At p. 2 of the introduction to Vol. II (Phanerogams), we have—

“La plus grand partie des collections botaniques est due à M. d'Urville : mais nous avons reçu aussi de M. Lesson, médecin de l'expédition, un grand nombre d'échantillons, dont plusieurs n'existaient pas dans l'herbier formé par M. d'Urville, et dont les autres ont souvent complété nos matériaux.”

Vol. II (Phanerogams) is also not numbered, and has the same title-page as Vol. I, except that it has for sub-title “Phanerogamie, par M. Ad. Brongniart.” Paris, 1829, 4to pp. 200, (according to the Botanic Gardens and Mitchell Library copies, but Hooker *op. cit.* and Pritzel say 232, while the copy of the Public Library of N.S.W. has that number of pages).

The work is mainly devoted to grasses, as the following will show :—Grasses, pp. 1–148 ; Cyperaceæ, 149–182 ; Juncaceæ, 183–4 ; Bromeliaceæ, 185–7 ; Orchidaceæ, 188–205 ; then Dicotyledons, Urticaceæ 206–216 ; Euphorbiaceæ, 217–228 ; Santalaceæ, 228–232. The work ends abruptly at p. 232, at an incomplete description of Planche LII A. Probably further sheets were printed off, or at all events additional material was got ready for the press, and I hope French botanists will endeavour to complete this valuable work or inform us where the missing pages are.

The Australian plants were all collected at Port Jackson. Specimens were also collected in the Society Islands, Caroline Islands, Islands near New Guinea, New Zealand.

There is an Atlas of folio plates for Phanerogams as for Cryptogams. Speaking of the Phanerogam atlas, Pritzel says there are 78 plates. He adds “Opus nescio qua negligentia adhuc incompletum desinit in verbis “au sommet ”—in tabularum ordine desunt 23, 55, 57, 58, 63, 65, 66, 67, 72, 73, 74, 76.”

I have collated the Botanic Gardens copy and note Pritzel's remarks. All the plates are uncoloured. No. 23 is missing. There are two plates 30 (*Hierochloe antarctica*, var. *redolens*, and *Carpha arundinacea*). All the other plates are missing as enumerated by Pritzel.

D'Urville, Jules Sebastien Cesar Dumont (1790—1842). Circumnavigator and botanist. Born 23rd May, 1790, at Condé sur Noireau, Calvados, and was killed on 12th May, 1842, in a train which caught fire between Paris and Versailles. There is an account of his life in *Tas. Journ.* II, 75. A list of his works will be found in (2) and includes:—

Mémoires sur la flore des îles Malouines; Mémoire sur la distribution géographique des fougères à la surface du globe. (*Ann. Sc. nat.* t. 6, p. 51, 1835); Reports on the voyage of the "Astrolabe" (1829) and of the "Astrolabe and Zélée" (1840).

He was an indefatigable collector as well as a cryptogamic botanist. See also Expeditions (5) and (7).

The following plants bear his name:—

Quinetia Urvillei, Cass.; *Centrolepis Urvillei*, Hieron = *Desveauxia Urvillei*, Steud. = *Centrolepis Drummondii*, Hieron; *Eragrostis Urvillei*, Steud. = ?; *Eurostorrhiza Urvillei*, Steud. = *Caustis pentandra*, R. Br.; *Gahnia Urvilleana*, Kunth. = ?; *Isolepis Urvillei*, Steud. = *Scirpus Urvillei*, Boeckel = *S. inundatus*, Spreng.; *Plinthanthesis Urvillei*, Steud. = ?; *D'Urvillæa potatorum*, Aresch. (figured in Harvey's *Phycol. Australica*).

Bory de St. Vincent, Jean Baptiste George Marcellin, Baron de (1778—1846). Already alluded to at pp. 133, 139. Born at Agen, 6th July, 1778. Went on a geological journey to Bourbon (1798—1802). Entered the Institut as Member of the Academy of Sciences in 1832. Went on a botanical journey to Algeria 1840-2. Died at Paris, 23rd December, 1846. A cryptogamic botanist mainly. Some interesting letters from Bory de St. Vincent when in

Algeria are given *in extenso* at XCIII—CI, *Bull. Soc. Bot., France*, Vol. 58 (1909), and M. Ed. Bonnet has annotated these in an interesting manner with particulars concerning the writer and contemporary botanists.

Brongniart, Adolphe Theophile [son of Alexandre Brongniart, also a botanist] (1801—1876). Born at Paris, 14th January, 1801, graduated doctor of medicine in 1826. A distinguished botanist, he wrote chiefly on palæontology and vegetable physiology. His works include:—"Enumération des genres de Plantes cultivées au Muséum d'histoire naturelle de Paris suivant l'ordre établi dans l'école de botanique en 1843." Paris 1843, 8vo pp. xxxii, 136. Works in *Ann. de Sc. nat.*, *Ann. du Mus. d'histoire nat.* He died 18th February, 1876 at Paris. There is a short obituary notice concerning him in the "*Gardeners' Chronicle*" for 26th February, 1876, p. 274.

5. 1826-9. "Astrolabe," commanded by J. Dumont D'Urville.

M. D'Urville commanded this expedition, and with M. Lesson, a well known zoologist, also gave some attention to the plants, as they did on the "Coquille." The "Astrolabe" visited Port Jackson, and also voyaged amongst the Line Islands.

M. D'Urville planned the publication of the scientific results of this expedition on adequate lines. Again he and M. Lesson co-operated. The botanical results are more valuable to New Zealand than to Australia, but there are a number of Australian plants described, some of which were given to M. Lesson by Mr. Fraser, then Superintendent of the Sydney Botanic Gardens.

The results of the voyage of the "Astrolabe" were published in 12 octavo volumes. That of Botany forms the "Deuxième Division" and is described "Botanique. Texte

de MM. Lesson jeune et A. Richard ; 1 volume grand in 8; atlas de 80 Planches au moins en taille-douce, la plupart colorées, sur demi-feuille jésus-vélin."

Of No. 1 (Botany) the title-page is "Voyage de découvertes de l'Astrolabe, exécuté par ordre du Roi, pendant les années 1826, 1827, 1828, 1829, sur le commandement de M. J. Dumont D'Urville. Botanique par MM. **A.** (? **R. P.**, J.H.M.) **Lesson** et **A. Richard**. Paris, J. Tastu Editeur, 1832."

This contains 376 pages, and is entirely devoted to New Zealand botany. No. 2 has a similar title-page, except that the author is A. Richard, and the date of publication 1834. It consists of 167 pages.

This second part is styled *Sertum Astrolabianum* and is a description of species collected by "M. Lesson jeune, Chirurgien de la Marine Royale." The plants described are from various groups of Pacific Islands, and the Australian ones include a number from Mr. Fraser, Superintendent of the Botanic Gardens, Sydney, from the Blue Mountains, Moreton Bay, Port Macquarie and Melville Island, and other places.

Plants are also described from Tasmania (the vessel touched at Bass' Straits), King George's Sound, Kangaroo Island and Port Jackson, some of the plants having been collected by M. Gaudichaud.

The volume also contains some notes on New Zealand and Australian Algæ. Accompanying these is a folio atlas of 78 plates published in 1833, consisting of "Flore de la Nouvelle-Zélande," 39 plates, and "*Sertum Astrolabianum*" 39 plates.

Lesson, Rene Primevere (1794 – 1849). Born at Rochefort, 20th March, 1794, and died in the same city 28th April, 1849. He entered the Naval Service and became Pharmacien-en-chef of the Marine. He was a zoologist

mainly, though he pursued the study of botany. He became Professor of botany at Rochefort, and his botanical works include "Flore Rochefortine" (1836), and "Etude sur les farines." He published a "Journal d'un voyage pittoresque . . . la Coquille."

Co-operated actively with M. D'Urville in the botanical work of these expeditions and is commemorated by the following plants:—

Panætia Lessoni, Cass. = *Podolepis Lessoni*, Benth.; *Senecio Lessoni*, F.v.M. = *Erechthites arguta*, DC.; *Enchysia Lessoni*, Presl. = ?; *Stylidium Lessoni*, DC. = ?; *Cyperus Lessonianus*, Kunth. = *C. trinervis*, R. Br.; *Adenocystis Lessoni*, Hook., fil. et Harv. (fig. in "Phycologia Australica").

Richard, Archille (1794–1852). Born in Paris, 27th April, 1794, and died 5th October, 1852. He was the son of a distinguished botanist, Louis Claud Marie Richard. He was the author of a botanical text-book which passed through many editions in France and was translated into German, Dutch, Russian, and English (the last by William Macgillivray, Edinburgh, 1831). He was the author of other botanical books, and he probably was mainly responsible for the botanical results of the "Astrolabe" expedition already referred to. The following monographs are of interest to Australians:—

Monographie du genre *Hydrocotyle* (*Ann. Gén. Sc. Phys.* iv), Bruxelles, 1820, 8vo; Mémoire sur la famille des Rubiacées . . . (*Mém. Soc. Hist. Nat. Par.*, v) Paris, 1829, 4to.

He is commemorated by the following plants:—

Grewia Richardiana, Hook. = *G. latifolia*, F.v.M.; *Erechthites Richardiana*, DC. = *E. hispidula*, DC.; *Senecio Richardianus*, DC. = *S. australis*, Willd.

Achille completed the following work of his father, which does not, however, refer to the collections of any special expedition:—

“Mémoires sur les Conifères et les Cycadées,” also entitled “Commentatio botanica de Conifereis et Cycadeis” opus posthumum ab Achille Richard, folio . . . Stuttgart, Cotta, 1826 large 4to, xv, 212 pp., 30 tab.

It consists of a “Premier Mémoire,” devoted to Conifers, pp. 1–170, and a “Seconde Mémoire” devoted to Cycads, pp. 171–212. Specially interesting to Australians are the notes on and plates of *Dacrydium cupressinum* (N.Z.), *Phyllocladus rhomboidalis* (Tasmania), *Callitris rhomboidea* R. Br., *C. oblonga*, Rich.

The Cycad Memoir contains nothing specially dealing with Australian plants, except the “note sur l’opinion de M. Robert Brown, relativement à la structure des fleurs femelles dans les conifères et les Cycadées,” at p. 203. No Australian Cycads are figured.

6. 1836-9. “Venus,” commanded by Abel du Petit-Thouars.

The chief botanical interest concerning this expedition lies in the volume of plates published in 1846. The small volume describing the botanical results did not make its appearance until eighteen years later. The Australian plants are chiefly of the Western State.

Following is a title-page:—

“Voyage autour du monde sur la Frégate *La Venus*, pendant les années 1836–1839, publié par ordre du Roi, sous les auspices du Ministre de la Marine, par M. Abel du Petit-Thouars, Capitaine de Vaisseau etc.” Atlas de Botanique, Paris, Gide et Cie 1846. Folio, 28 plates.

The text of the above was published in 1864, Paris, Théodore Morgand (se trouve aussi chez Gide). Botanique par *M. J. Decaisne* 8vo, pp. 34 and “Table des Matières 2 pp.”

The plants figured are from Borneo; King George’s Sound (W.A.); Isle Sulu; Natal; W. Coast of W. Australia;

South Coast of Australia; New Zealand; California; Tahiti and Marquesas; Philippines, New Ireland; Friendly Islands; Levuka (Fiji); Chatham Island (N.Z.); Malay Peninsula. The expedition visited Sydney.

Decaisne, Joseph (1807 – 1882). Born at Brussels 7th March, 1807. He went to Paris, and in 1824 was attached to the Jardin des Plantes, becoming, in 1832, assistant naturalist for rural botany under A. de Jussieu and began the publication of interesting works, which, in 1847, opened to him the gates of the Academy of Sciences. In 1848 he was appointed to the chair of Statistical Agriculture in the Collège de France, and succeeded M. de Mirbel, in 1850, as professor of "Culture" in the Museum. He was afterwards President of the Academy of Sciences and Director of the Jardin des Plantes. He died at Paris 8th February, 1882.

A distinguished botanist, who rose from the position of a simple gardener to be leading botanist in France, it is doubtful whether his reputation will so much be based on his botanical monographs as on his admirable pomological works. He worked at the plants of the "Venus" and "Astrolabe and La Zélée" expeditions.

For accounts of him see *Flore de Serres*, Tome 19, p. 29 (1873) with portrait, and *Gardeners' Chronicle*, 18th February, 1882, p. 215.

The following Australian plants commemorate him:—

Eucalyptus Decaisneana, Blume; *Tabernaemontana Decaisnei*, A. DC. = ?; *Andrachne Decaisnei*, Benth.; *Casuarina Decaisneana*, F. v. M.; *Asparagopsis Decaisnei*, Kunth. = *Asparagus racemosus*, Willd.

7. 1837-40. "Astrolabe" and "Zelee," commanded by J. Dumont d'Urville.

The commander was unfortunately killed near Paris in the year 1842, as has already been stated, so that he was

not able to see the results of his last expedition presented to the world. Considering the predilection of M. D'Urville for botany, there is no doubt that botanists at large suffered a great loss by his tragic death.

An account of the scientific results (particularly as regards New Zealand) will be found at p. 393 of "The Subantarctic islands of New Zealand," (edited by Dr. Charles Chilton, and published by the Philos. Inst. of Canterbury, N.Z., 1909).

The botanical results published have little direct interest for Australian botanists. As M. D'Urville and M. Lesson had co-operated on former occasions in regard to botanical work, so in regard to the presentation of the results of this expedition a naval commander (**M. Jacquinot**), co-operated with a surgeon of the expedition (**M. Hombron**).

For an account of the exploratory work of D'Urville, see Dr. H. R. Mill's Introduction (p. xv) to Shackleton's "The Heart of the Antarctic."

Following is a title-page:—

Vol. I. "Voyage au Pole Sud et dans l'Océanie sur les corvettes *L'Astrolabe et La Zélée*, . . . pendant les années 1837, 1838, 1839, 1840 sous le commandement de *M. J. Dumont D'Urville*, Capitaine de Vaisseau, publié par ordonnance de sa Majesté, sous la direction supérieure de *M. Jacquinot*, Capitaine de Vaisseau, Commandant de la *Zélée*." Botanique par **MM. Hombron et Jacquinot**. Tome Premier, Plantes cellulaires, par **M. C. Montagne, D.M.** 8vo. pp. 349. Paris, Gide et Cie, 1845.

The cellular plants described were obtained from Australia and New Zealand and its coast, the Pacific Islands, etc. The expedition collected, besides in Antarctica, at the following places amongst others:—Sydney, Port Essington, Raffles Bay, Darnley Island, Torres Strait, etc., but Hooker says that very few of the plants have been published.

Vol. II, (Title the same as Vol. I to here). . . Publié par ordre du Gouvernement sous le direction supérieure de M. Jacquinot Capitaine de Vaisseau, commandant de la Zélée. Botanique par MM. Hombron et Jacquinot. Tome Second. Plantes vasculaires, par **J. Decaisne**, Membre de l'Institut. 8vo. pp. 96. Paris, Gide et J. Baudry, 1853.

In the preface to Decaisne's volume (pp. 7-10), it is stated that the phanerogams were collected by M. Hombron. The plants described were collected in the Straits of Magellan, Auckland Isles and New Zealand. None were collected in Australia.

The plants generally were figured in a separate folio atlas with v + viii + xxxi plates, making 44 in all), some of the plates depicting several species. Decaisne's volume has at pp. 88-90 a "tabula iconum," of "Cryptogames vasculaires" i-v, and "Monocotyledones" i-viii, and "Dicotyledones" i-xxxi.

In the National Herbarium, Sydney, are a few specimens collected by M. Le Guillou, the author of the following work, at Raffles Bay:—

Le Guillou, Elie "Voyage autour du monde de L'Astrolabe et de La Zélée sous les ordres du Contre-Amiral Dumont d'Urville . . . 1837-40 . . . enriché . . . de notes . . . par (D. F.) J. Arago, Paris, 1844, 2 vols. 8vo."

Mr. Hedley tells me that Dr. Le Guillou wrote a series of zoological articles in which he is styled "Chirurgien-major de la Zélée."

The following botanists performed important services to Australian botany during the period of the circumnavigating expeditions, although they were neither attached to such expeditions, nor did they specially work upon the material brought home by such expeditions.

L'heritier (de Brutelle), Charles Louis (1746–1800). Born at Paris, 1746; assassinated in Paris (27 Thermidor, an x) 16th August, 1800. He came to England in 1786-7, and studied the Kew collections, which appear to have been freely placed at his disposal. See *Kew Bull.* 1891, 296; *Journ. Bot.* 1905, p. 325; Willdenow's "Principles of Botany" p. 490. Cuvier, *Notice historique*, Paris, 1800. (4) His principal works are:—

(1) *Stirpes novæ aut minus cognitæ, quæ descriptionibus et iconibus illustravit.* Parisiis, typ. P. D. Pierres 1784-85, vi fasciculi. folio vi, 184 pp. 84 tab.

In bibliotheca Candolleana asservantur præterea tabulæ 28 ineditæ fasciculorum vii et viii.

Tabulas ineditas 85–124 vidi in Bibliotheca Morettiane 91 tab., sign. 1–84, 7, 30, 52, 53, 56, 57, 59 bis.

(2) *Sertum Anglicum, seu plantæ rariores, quæ in hortis juxta Londinum imprimis in horto regio Kewensi excoluntur, ab anno 1786-87 observatæ.* Paris, typ. Didot. 1788, folio, 36 p., præf., 34 tab. (Pritzel, *Thesaurus Literaturæ Botanice*)

The latter work is specially memorable to Australians, in that it contains the first description of the genus *Eucalyptus*, from specimens collected in Cook's Third Expedition at Adventure Bay, Tasmania. He is commemorated by the genus *Heritiera*, Ait.

Guillemin, Jean Baptiste Antoine (1796–1842). Born at Pouilly-sur-Saone, 20th January, 1796; died January, 1842, at Montpellier. Studied Pharmacy at Dijon and then botany at Geneva under J. P. Vaucher and P. De Candolle. In 1819 he went to Paris and was employed in the Delessert Herbarium and became conservator of it in 1827. A little afterwards he became aide-naturaliste in the Museum at Paris, and from 1830 to 1834 taught botany in the Institut horticole de Fromont. From 1838 to 1840 he was on a

botanical mission in Rio Janeiro. He was author of many botanical papers and other works. Of special interest to us are :—

(a) *Icones Lithographicæ; plantarum Australasiæ rariorum. Decades duæ quas botanicis offert*, J. B. A. Guillemain, Societ. Histor. Natur. Paris, Musæi Lessertiani Curator, Paris, 1827.

(b) "Enumération des plantes découvertes par les voyageurs dans les Iles de la Société, principalement dans celle de Taiti, par J. (B) A. Guillemain, aide de Botanique au Muséum d'histoire naturelle de Paris, Paris, 1837." In the text this work is headed "Zephyritis Taitensis." 8vo. pp. 84.

The plants are those chiefly collected by MM. Moerenhout and Bertero, but those of Lay and Collie and other collectors and unpublished MSS. of Forster are employed.

"**M. Moerenhout**, négociant belge très distingué, aujourd'hui consul-general des Etats-Unis aux îles de la Société, avait expédié, en 1834, à M. d'Orbigny, une caisse de plantes récoltées par lui et par le docteur Bertero dans l'île de Taiti." (Guillemain's "Zephyritis Taitensis," p. 1.)

Moquin Tandon, Horace Benedict Alfred (1804—1863). Born at Montpellier, 7th May, 1804. Took his degree as M.D. In 1829 was professor of zoology at the "athénée" at Marseilles, and in 1833 was professor of botany at Toulouse. He was a distinguished litterateur. Went on a botanical mission to Corsica in 1850. Succeeded Achille Richard in the chair of "histoire naturelle médicale" at Paris, with charge of the plants of that faculty at Jardin des Plantes. Published medical works and also "Essai sur les dédoublements ou multiplications d'organes dans les végétaux. 4to. illustrated. Montpellier, 1826. His "Chenopodearum monographica enumeratio" (Paris, 1840) is valuable to all Australian students of saltbushes. He specialised also on the Amarantaceæ. He was author of "Elements de Téra-

tologie végétale" (Paris, 1841); "Polygalées Brasiiliens" (with Aug. St. Hilaire) and other works on the same family of plants. Cooperated with the same author in a work on Capparidacæ. Died at Paris, 15th April, 1863.

Mr. Hedley informs me that there is a brief obituary notice in the *Journal de Conchyologie*, XII, 1864, p. 86-7. He was a distinguished ornithologist and conchologist as well as a botanist, also a member of the Institute. Went to Paris in 1853. For biography and list of works see *Toulouse Mém. Acad. Sci.*, v, 1864, pp. 5-46; *Adansonia*, v, 1864-5, pp. 149 - 175.

He is commemorated by *Atriplex Moquiniana*, Webb, also a monotypic genus of Cape Campanulacæ, *Moquinia*.

Planchon, J. E. (1823 - 1888). Speaking of the "vast" Hookerian herbarium at Kew, "the chief foundation" of the *Flora Australiensis*, Bentham, who was never prodigal of personal praise, says,

"The value of this herbarium for a work like the present, is also greatly increased by the notes and determinations it contains from the hands of various botanists who have worked in it, and especially of Dr. Planchon, who had examined and corrected the determination of a large portion of the specimens it contained during several years that he had charge of it." (Preface to *Flora Australiensis* 8*).

Planchon had been Sir William J. Hooker's herbarium curator, and surely any account of the services of the early French botanists to Australia would be incomplete without a brief notice of him.

He was born at Ganges, Hérault, 21st March, 1823. He studied botany under Auguste Saint-Hilaire, and became Doctor of Sciences, 1844; Curator, Kew Herbarium 1844-49. Professor "Institut Horticole," Ghent, 1849-51. Doctor of Medicine and Professor in the School of Medicine and

Pharmacy at Nancy, 1851-3. Later on, he was Director of the School. "Correspondent" of the Academy of Sciences 1872. In 1873 was charged with a mission to America to study phylloxera-resistant vines and the way he performed his mission is a matter of history. Author of "*Eucalyptus globulus*" (*Revue des Deux Mondes*, January, 1875). Director, Botanic Gardens, Montpellier. Died at Montpellier, 1st April, 1888. An account of a memorial to him, with an illustration, will be found in the *Gardeners' Chronicle* for 13th April, 1895.

He is commemorated by *Drosera Planchoni*, Hook. f. = *D. Menziesii*, R.Br. var. *albiflora*; *Gnaphalium Planchoni*, Hook. f. = *Raoulia Planchoni*, Hook. f.; *Eucalyptus Planchoniana*, F.v.M.

Verreaux, J. P. This Frenchman, resident in Tasmania, was an active botanical collector, but I cannot trace any of his writings. If I can get further particulars of him I will gladly make them known. He was styled "Naturaliste," and was elected a member of the Tasmanian Society, 2nd January, 1843, see p. 74, *Tas. Journ.*, Vol. II; see also p. 159, where he is called J. P. Verreaux. In a list of members, at p. 160, his address is given as Hobart.

"Nov. Holl. specimine mihi humanissime oblato cum multis aliis plantis Novæ Hollandiæ, a Celeb. Inventore Verreaux dum hoc anno 1850 in nostra urbe degebat. Plurimas etiam alias stirpes ab hoc Naturæ Investigore repertas et ad Goodenovieas relatas, vidi in Herb. Musei Horti Parisiensis." ("Goodenovieæ" by H. De Vriese, p. 118 in dedicating *Dampiera Verreauxii* to him.)

This species = *Verreauxia paniculata*, Benth. *Croton Verreauxii*, Baill. also perpetuates his memory.

Coming rather later than the dates I have set as the limits of my paper, the name of **Anthelme Thozet** (1826-1878) should not be forgotten. He was a resident of Rock-

hampton, Queensland, for many years, where he introduced many useful plants and collected the indigenous flora most carefully. I have given notes of his life in my paper.¹ A valuable paper by M. Thozet on Aboriginal foods will be found in "Bulletin de la Société d'Acclimatation," Jan. 1873, under the title of "Quelques détails sur l'Australie," and also in *Revue Horticole* 1872, p. 182.

Works quoted—"Kew Catalogue of Portraits of Botanists" (*Kew Bulletin*, 1906, p. 72). Quoted as (1).

Biog. Universelle (Michaud) Ancienne et Moderne. Quoted as (2).

"Rév. Gén. Biogr." Ed. 2, Paris, 1844. Quoted as (3).

Nouvelle biographie générale, published by MM. Firmin Didot Frères under the direction of M. le Dr. Hoefer. Quoted as (4).

Catalogus Illustratus Iconothecæ Botanicae Horti Bergiani Stockholmiensis, anno 1903 (Wittrock).

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¹ "Records of Queensland Botanists," *Proc. Aust. Assoc. Adv. Science*, Brisbane Meeting, 1909.

EXPLANATION OF PLATES.

- Plate III.—J. J. DE LA BILLARDIERE. From the lithograph by Julius Boilly. See p. 128.
- Plate IV.—BORY DE ST. VINCENT. From the "Dictionnaire des Sciences Naturelles, atlas biographique." Engraved by Ambroise Tardieu.
- Plate V.—RENE DESFONTAINES. Original bears the inscription: "Dessiné d'après Nature à Paris en 1824, et Gravé par Ambroise Tardieu."
- Plate VI.—RENE DESFONTAINES (in very old age). From original in Muséum d' Histoire Naturelle, Paris.
- Plate VII.—AIME BONPLAND. From a lithograph by Rud. Hoffmann, 1859, drawn by J. Haller from a photograph in the possession of Alexander von Humboldt. Published by George André Lenoir, Vienna. Lithograph in Botanic Gardens, Sydney.
- Plate VIII.—ADRIEN DE JUSSIEU. From a daguerrotype not later than 1850.
- Plate IX.—DUMONT D'URVILLE. Lithograph by A. Maurin, 1833. From the large plate in the collected works of the "Astrolabe."
- Plate X.—AD. BRONGNIART. From a painting by Marquerie, 1856, in the Muséum d' Histoire Naturelle, Paris.
- Plate XI.—J. DECAISNE. From "Flore des Serres," XIX, 30 (1873).
- Plate XII.—C. H. B. A. MOQUIN-TANDON. From a bust in the Muséum d' Histoire Naturelle, Paris, bearing neither signature nor date.
- Plate XIII.—J. E. PLANCHON. From an illustration in a botanical or horticultural serial, which has not been traced.
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Maiden, J. H. 1910. "Records of the earlier French botanists as regards Australian plants." *Journal and proceedings of the Royal Society of New South Wales* 44, 123–155. <https://doi.org/10.5962/p.359558>.

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