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## Contents

- |   |         |
|---|---------|
| Equivalences of alternative series and numbering sequences on the variant title-pages of otherwise identical volumes of J. C. Loudon's <i>The Gardener's Magazine</i> (1826–1843)<br>R. B. Williams | 63–99   |
| The eccentric Lutheran pastor “Dr. Lippold” (1790–1852): From scandal in Germany to plant-collecting in Europe, Madeira and Brazil<br>R. B. Williams  | 101–221 |

# The eccentric Lutheran pastor “Dr. Lippold” (1790–1852): From scandal in Germany to plant-collecting in Europe, Madeira and Brazil

R. B. Williams

## Abstract

Hitherto, there has apparently been no published account of the true identity and obscure life of “Dr. Lippold”, currently known to botanists only by a few allusions in the literature to his plant-collecting in Madeira and his association with the Rev. R. T. Lowe, the renowned naturalist and notorious chaplain of the British Church in Madeira. New evidence correcting previous speculations has established his correct full name, Julius Friedrich Lippold, his birth in Altenberg, Germany, and his vital dates (1790–1852). His father was an Evangelical Lutheran Church pastor, and in 1815 he also was ordained, serving parishes in the Rhine Valley, where he developed an early interest in botany. In 1821, following a financial dispute involving “forbidden dealings” with a maidservant, he was dismissed from his benefice and fled to Alsace. There, assisted by the Baumann brothers, nurserymen in Bollwiller, he became an author and horticulturist, and during the 1820s and 1830s he botanized around Europe, including France, Switzerland, Germany and Belgium. From 1825, for seven years, he was head gardener at the Château de Baye, near Rheims, France. In 1834, under the patronage of the English Quaker, William Christy, junior, he eventually made his way to London, where he gained the influential support also of J. C. Loudon, W. J. Hooker and N. B. Ward. In 1837, sponsored by Christy and others, he left England, bound for Madeira as a professional botanical collector. In Funchal the “little German” became a local celebrity for his eccentric ways and strange mode of dress. His energy and botanical knowledge, together with his linguistic skills and cultural leanings were much admired by Lowe, who later named *Melilotus lippoldiana* for him. In 1840 Lippold sailed for Rio de Janeiro, where he eventually became a protégé of the Emperor of Brazil, Dom Pedro II. Following William Christy’s death in 1839, it was possibly his brother Henry who further sponsored Lippold to collect plants around the Rio Doce in 1842. Later in the same year, having returned to Rio de Janeiro, he joined the Rio

Xingú expedition of Prince Adalbert of Prussia who was then visiting Brazil. From Rio, Lippold continued to send seeds and plants to Europe, at least until 1845. In 1846 he was reinstated in the Lutheran Church as the first pastor of Petrópolis, Dom Pedro’s new city for immigrants. However, in 1852, while recuperating from surgery in Rio de Janeiro, Lippold died of yellow fever. Dried specimens collected by him from Madeira (and one from England, but none from Brazil) are in at least nine herbaria in five countries on three continents: **BM**, **CGE**, **DBN**, **E**, **G**, **GH**, **K**, **MEL** and **OXF**. Their provenances involve multiple transferences between the collections of various individuals and institutes, but no personal herbarium of Lippold’s has been identified. Lippold never married, and no portrait is known; justification for his adoption of the title “Dr.” is yet to be discovered. Appendices provided herein include: (1) Insights into Lippold’s character; (2) An annotated bibliography; (3) Archival records; (4) Herbarium specimens; (5) Legacy as a plant-collector; (6) Identification of handwriting; (7) Biographical lacunae.

## Keywords

Adalbert of Prussia, Alexander Home Renton, Botanical collectors, Brazil, British Post Office, Charles Morgan Lemann, Dom Pedro II, Funchal, George Loddiges, Henry Christy, John Russell (Duke of Bedford), Julius Friedrich Lippold, Lutheran Church, Madeira, Petrópolis, Richard Thomas Lowe, Rio de Janeiro, William Christy, junior.

## Introduction

Perhaps the best-known naturalist in 19th-century Madeira was the Rev. Richard Thomas Lowe (1802–1874), also notorious as the Chaplain of the British Church in Funchal, a proselyte there of the High Church practices of the Oxford Movement, which caused a major schism among British Anglicans in Madeira.

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Indeed, despite his celebrated reputation as the pre-eminent botanist, ichthyologist and malacologist of Madeira, it is mainly Lowe's religious controversies upon which the most detailed 20th-century biographical accounts of him are focussed (Newell 1931; Nash 1990). More recently, however, there has been revived interest in Lowe's scientific work (Williams 2017a, 2018, 2019; Williams et al. 2019; Mesquita et al. 2022), addressing bibliographical aspects of his seminal *A Manual Flora of Madeira* (Lowe 1857–1872 [1868]), and his network of correspondents and the naturalists then active in the Macaronesian archipelagos (Williams 2016, 2017b, 2017c; Mesquita et al. 2021, 2022).

Lowe's associates included not only highly respected, internationally known naturalists but also other individuals, particularly professional specimen-collectors and enthusiastic amateurs, who aided him in many ways. The amateurs included mainly members of the wealthy British families resident in Madeira, who often facilitated social introductions and practical support for visiting naturalists of various nationalities (Mesquita et al. 2021). Few of the lesser-known naturalists in Lowe's social network have been thoroughly studied, however. These minor characters are often passed over as “unknown” or “forgotten”, but in truth they have usually been under-researched or simply considered not to be worthy of further investigation.

For instance, in the most recent literature, the subject of the present study, the obscure “Dr. Lippold”, has been mentioned only briefly, apparently with no attempt having been made to resolve the inconsistencies in the sparse available information, even regarding his correct name (Mesquita et al. 2021, 2022, 2024; Alcorn 2023). However, rationalization of erroneous allusions to “Dr. Lippold” has now revealed him to be of rather more interest in the network of Victorian naturalists in Madeira than was previously realized.

Menezes (1914, pp. 222–232), Hansen (1980) and Wilhelm (1996) compiled brief annotated lists of past botanists and collectors in Madeira. Amongst the many individuals associated with the Rev. Lowe, I have already investigated Francis Martin Norman (1833–1918) and John Gray (1812–1881) in greater depth (Williams 2016, 2017b). Now, this present study explores the life of the German plant-collector and horticulturist “Dr. Lippold”, as he was usually known. Although he appears in Lowe's publications with references to his Madeiran plant records, including an eponymous species, little attention has hitherto been paid to his life. He is very briefly mentioned in the comprehensive Madeiran encyclopaedia, *Elucidário Madeirense* (da Silva and de Meneses 1940–1946), but has also occasionally been alluded to in diaries of British middle-class social life of Funchal during the late 1830s. Those obscure social diaries, often overlooked by historians of science, together with the little-known archival materials of the Evangelical Lutheran Church in Germany (of which Lippold was an ordained pastor) and later historical accounts of the Brazilian Empire of Dom Pedro II, have now revealed a fuller picture of the life of this intriguing botanist.

Most surprising are the bizarre circumstances in which, having been dismissed from his benefice in the Lutheran Church for a financial scandal involving a maidservant, Lippold became a professional botanist and horticulturist, eventually spending several years in Madeira. Moreover, his later collecting activities in Brazil, where he died, seem to have remained entirely unrecorded by historians of botany, probably because his life there is documented mainly in the literature of political and church history of Brazil, rather than in botanical works, and also because no herbarium specimens that he collected in Brazil seem to have survived. Thus, much of the information about Lippold exists only in

unpublished archives, and the scant published information is widely scattered and largely derivative and uncorroborated. Hence, every effort has been made to trace original sources, employing approaches exemplified by Williams (1990). The results presented herein address more than just botanical research, since they depend on multi-disciplinary exploration of social, ecclesiastical, political, economic and bibliographical history (see Appendices 1–7).

### Finding “Dr. Lippold”

The true identity of the obscure “Dr. Lippold” has long been a mystery. Neither his Christian names, nor even their initials, seem ever to have been published in any references to his sojourn in Madeira, in which he is named simply as “Dr. Lippold” (for example, Entomological Club 1838; Wilde 1840, 1844; Ouseley 1852; Burney 1926; da Silva and de Meneses 1940–1946, 2:522). In his own publications, transcribed from his letters to the journal's editor, he was sometimes named as “Dr. Lippold” (Lippold 1836, 1838a) but occasionally as “Dr. J. F. Lippold” (Lippold 1838b, 1838c, 1838d), “Dr. I. F. Lippold” (Lippold 1838e, 1838f) or “D. I. F. Lippold” (Lippold 1841). In his two books (Lippold 1824, 1831) he appears simply as “J F. Lippold”. There has been no consensus about the forenames for which his initials might stand.

Jackson (1901, p. 41) and Menezes (1914, p. 226) referred only to “Dr. Lippold”, whilst in 1907, Ascherson and Graebner (1896–1939, 6(2):465) erroneously called him “Dr. Lippoldt” (probably following Anonymous 1831). Furthermore, most of his herbarium specimens at the Royal Botanic Garden Edinburgh are attributed to “Dr. Lippolt”; Lanjouw and Stafleu (1954, p. 450) accordingly list him as “Lippold (Lippolt), J. F.”. Gilmour and Tutin (1933, p. 22) referred to “Dr. I. F. Lippold” (as given in Lippold 1838e, 1838f).<sup>1</sup> Hansen (1980, p. 8) knew that his correct

initials were “J. F.”, but Clokie (1964, p. 201) had given them as “J.-F.”, as if he were French, apparently following Lasègue (1845, p. 449), who also alluded to “docteur Lippold”.

More recently, Correia (2015, p. 15) cited Conceição and Menezes de Sequeira (in Menezes de Sequeira et al. 2007, 6:190–191), who recorded a naturalist in Madeira by the name of Christian Lippold but inexplicably appended the same vital dates assumed for Julius Friedrich Lippold (see below) listed by Wilhelm (1996). However, since Lippold's initials were without doubt “J. F.”, the forename Christian may certainly be eliminated. To complicate matters further, however, Mesquita et al. (2021, 2022, 2024) respectively named a Johann, a Johann Friedrich, or a Friedrich Lippold—all three apparently referring to the same man (see also Mesquita et al. 2021, tab. S2).<sup>2</sup> Thus Lippold's possible forenames may be narrowed down to either Julius Friedrich or Johann Friedrich. Although Wilhelm (1996, pp. 2–3) appears to have been the first and hitherto the only author to state explicitly that “J. F.” stands for Julius Friedrich, he cited no source; unequivocal evidence may now be presented.

Regarding Lippold's vital dates, they have variously been presented extremely vaguely, again with questionable evidence or none at all. Hansen (1980) recorded only “data unknown”. Lanjouw and Stafleu (1954, p. 450) and Clokie (1964, p. 201) gave just “fl. 1836”. Mesquita et al. (2021) stated “fl. 1824–1840”; but most confusingly, Mesquita et al. (2022) offered either “fl. 1824–1837” or 1790–1852 for a “Johann Lippold”, citing Wilhelm (1996) for the latter dates. In fact, Wilhelm (1996, p. 2) had cautiously suggested “cerca de 1788... 1852 (?)” for “Lippold, Julius Friedrich (?), Dr.”. Unsurprisingly, it has proved impossible to state with any confidence “Dr. Lippold's” name and dates from such tangled and inconsistent information.



The solution to the foregoing problems has now been facilitated by vital clues to Lippold's earlier life provided in a contemporary account by a transitory British resident in Funchal. Frances (Fanny) Anne Burney<sup>3</sup> recorded in her journal certain crucial facts based upon conversations with Lippold himself, revealing that he was German and that "The Doctor was originally educated for the Church and held a benefice" (see Burney 1926, pp. 204, 205). Without those leads, my searches in natural history literature would not have been widened to embrace ecclesiastical history, from which Lippold may be at last firmly identified and much else may be found about his life before and after his known sojourn in Madeira.

Ecclesiastical historians clearly have encountered the obverse situation. For instance, when Wiemer (1954) wrote his account of Lippold's religious and social life in Brazil, he admitted his failure to discover any information about Lippold between 1821 (when he fled Germany, for reasons to be revealed later) and 1846 when he was appointed as the first pastor of Petrópolis in Brazil. However, had Wiemer, during his examination of the Lutheran Church records held by the Landesarchiv Baden-Württemberg, consulted botanical sources to follow up the brief allusions to Lippold's botanizing excursions in Germany before 1821, he would have discovered much of relevance (see later).

Despite such difficulties, the present multidisciplinary approach has now linked "Dr. Lippold's" correct full name and vital dates, facilitating a thorough account of his travels and publications. He is established to have been Julius Friedrich Lippold (1790–1852), confirming that the unsourced information provided by Wilhelm (1996, p. 2) was mainly, though not quite completely, correct. Though Lippold's botanical and horticultural work has been largely ignored by recent botanists, he is even now well remembered in Petrópolis,

though rather for his involvement in the establishment of the Lutheran Church in the city: "Aqui na cidade ele é um nome bastante lembrado" (Lucas Ventura, pers. comm., 12 December 2023).

### Timeline of Lippold's life

A timeline of Lippold's life is interposed here to provide an easily accessible chronology of the major events described in the following account. Information has been obtained from reliable original sources, either published or unpublished; fuller evidence may be found under the appropriate headings or in the end-notes that follow. Much of the original material by or about Lippold is in German, French, Latin or Portuguese, which has necessarily been freely rendered into English, employing online translation resources.

1. 1790: Lippold born in Altenburg, Thuringen, Germany (22 June).
2. 1790: Baptized at Röpsen, Thuringen (24 June).
3. 1803: His father, Christian Friedrich, dies (9 January).
4. 1804: Commences at Altenburg Gymnasium (a humanistic-classical secondary school).
5. 1807: Completes school education and matriculates at University of Jena (31 July).
6. 1808: Commences theological studies at Jena.
7. 1815: Ordained as an Evangelical Lutheran pastor at Karlsruhe by the Baden State Church.
8. 1815–1821: Successively pastor of the Rhine Valley parishes of Mannheim, Bickensohl, Bischoffingen, Grenzach, Neuenweg and finally Bischoffingen again.
9. 1821: Involved in a financial scandal and dismissed from his benefice of

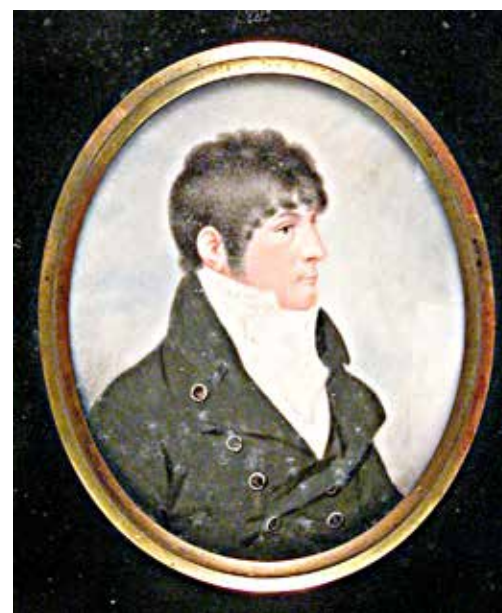


Figure 1. Dr Lippold's principal patron, William Christy, junior (1805–1839), aged ca. 25 years (ca. 1830). Photograph by Claire Reeves (image no. 352075) of miniature, watercolour on ivory, British (English) School (courtesy of National Trust<sup>®</sup>, UK).

- Bischoffingen, fleeing from creditors to Alsace, France (18 June).
10. ?1821–1824: Associated with the Baumann brothers, nurserymen in Bollwiller, Alsace.
11. 1824: Publishes *Taschenbuch des Verständigen Gärtners* (ca. February).
12. 1824: Botanizing in Switzerland (February–May).
13. ?1825–1832: Head gardener at the Château de Baye, near Rheims, France.
14. 1831: Publishes *Neues Handbuch des Verständigen Gärtners* (ca. 3 August).
15. 1834: Travels to England via Belgium (January and February).
16. 1834–1837: Residing in London, England, sponsored primarily by William Christy, junior (1805–1839; Fig. 1), also supported by John Claudius Loudon (1783–1843; Fig. 2), William



Figure 2. John Claudius Loudon (1783–1843), aged ca. 57 years (ca. 1840). Oil on canvas by John Linnell (courtesy of Linnean Society of London<sup>®</sup>, UK).

- Jackson Hooker (1785–1865; Fig. 3) and Nathaniel Bagshaw Ward (1791–1868; Fig. 4).
17. 1837: Sails for Madeira aboard the *Myrtle* (27 February).
18. 1837: Arrives at Funchal, Madeira (8 March).
19. 1837–1840: Residing in Funchal, collecting plants for British subscribers; meets Richard Thomas Lowe (see Williams et al. 2019, fig. 1 for portrait), Alexander Home Renton (1793–1848), Henry Gordon Veitch (1781–1857),<sup>4</sup> Joseph Dalton Hooker (1817–1911; Fig. 5), William Robert Wills Wilde (1815–1876; Fig. 6) and Frances (Fanny) Anne Burney (1812–1860; Fig. 7).
20. 1839: Lippold's patron, William Christy, junior, dies (24 July).

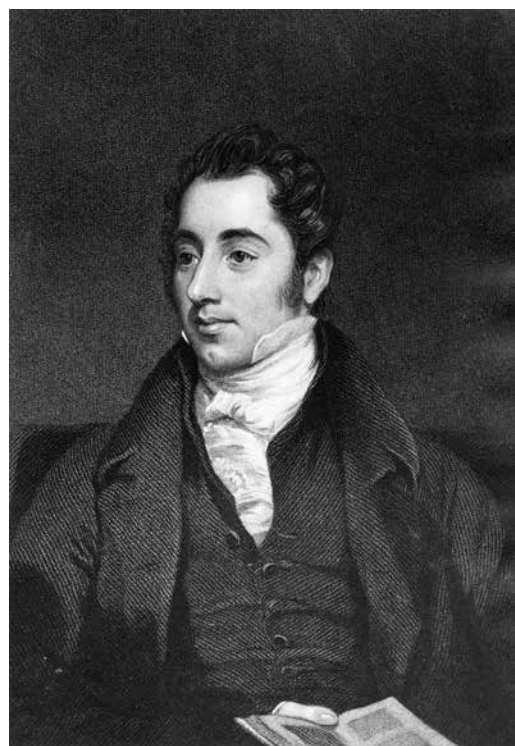


Figure 3. *Left*, William Jackson Hooker (1785–1865), aged 49 years (1834). Engraving by H. Cook after a painting by T. Phillips (courtesy of Hunt Institute for Botanical Documentation, Carnegie Mellon University, Pittsburgh, Pa., USA).

Figure 4. *Above*, Nathaniel Bagshaw Ward (1791–1868), aged 67 years (1858). Oil on canvas by John Prescott Knight; from original full-length image (courtesy of Linnean Society of London<sup>©</sup>, UK).

21. 1839: Another patron, John Russell, 6th Duke of Bedford (1766–1839; Fig. 8), dies (20 October).
22. 1840: Sails from Funchal on the *Courrier* [or *Courier*] for Rio de Janeiro, Brazil (13 July).
23. 1840: Arrives in Rio de Janeiro (ca.1 September).
24. 1840: Meets the botanist Ludwig Riedel (1790–1861; Fig. 9) (24 September).
25. 1842: Rio Doce expedition, possibly sponsored by William Christy's brother Henry Christy (1810–1865; Fig.10). The steamer *Rio Doce* grounded at the mouth of the river, leaving Lippold stranded with the indigenous Botocudo tribe (13 July).
26. 1842: After returning to Rio de Janeiro, meets Prince Adalbert of Prussia (1811–1873; Fig. 11) (5 September).

27. 1842: Joins Prince Adalbert's Amazon expedition (22 November).
28. 1843: Returns from Amazon expedition (2 January).
29. 1843: Colony of Petrópolis in Brazil founded by Dom Pedro II (16 March).
30. 1843: Lippold's supporter, J. C. Loudon, dies (14 December).
31. 1844: His mother, Johanna Magdalena, dies (10 August).
32. 1845: Lutheran Church community established in Petrópolis (29 August).
33. 1846: Befriended by the Roman Catholic Emperor Dom Pedro II (1825–1891; Fig. 12).
34. 1846: Nominated as Lutheran pastor of Petrópolis (19 June).
35. 1848: His benefice in Petrópolis approved by the Evangelical Lutheran Church in Karlsruhe, Germany (19 August).

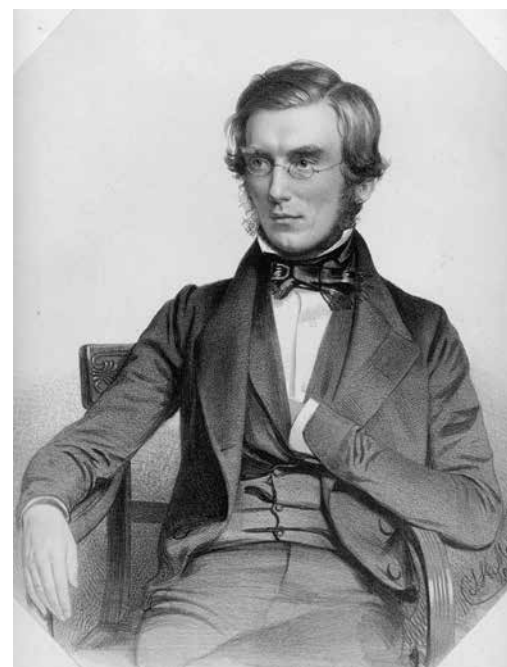


Figure 5. Joseph Dalton Hooker (1817–1911), aged 34 years (1851). Lithograph by T. H. Maguire (courtesy of Hunt Institute for Botanical Documentation, Carnegie Mellon University, Pittsburgh, Pa., USA).

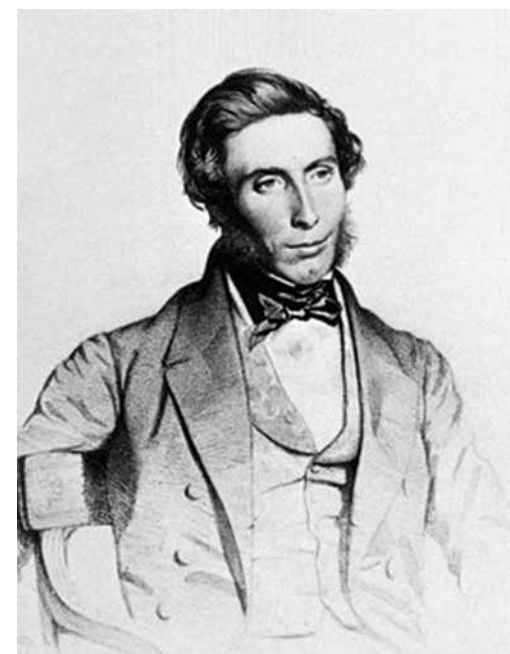


Figure 6. William Robert Wills Wilde (1815–1876), aged 32 years (1847). Drawing by T. H. Maguire (Wikipedia, public domain).



Figure 7. Frances (Fanny) Anne Burney (1812–1860), aged 23 years (1835). Crayon drawing by [George] Richmond. Ex Rolt, M. S. (ed.), 1926. *A Great-Niece's Journals* [see Burney 1926] (personal collection, R. B. Williams<sup>©</sup>).



Figure 8. John Russell, 6th Duke of Bedford (1766–1839), date unknown. Photograph of lithograph at Linnean Society of London (courtesy of Hunt Institute for Botanical Documentation, Carnegie Mellon University, Pittsburgh, Pa., USA).





Figure 9. Ludwig Riedel (1790–1861), aged 56 years (1846). Painting by Johann Moritz Rugendas (Wikipedia, public domain).

36. 1852: Undergoes surgery in Rio de Janeiro, funded by Dom Pedro II; while recuperating, dies of yellow fever (6 June).

### Birth and family

Julius Friedrich Lippold (1790–1852) was born at Altenburg (not Attenburg, *pace* Wilhelm 1996), Thuringen, Germany, on 22 June 1790 to Christian Friedrich Lippold (1752–1803) and his wife Johanna Magdalena (died 1844). Their place of worship was the Evangelical Lutheran Church in the village of Röpsen, Thuringen. Figure 13 shows the original source record in the Church Book of Röpsen that provides, for the first time, unequivocal evidence for Lippold's correct name, date and place of birth, and parentage. However, nothing about his early childhood



Figure 10. Henry Christy (1810–1865), brother of William Christy, junior. Photograph by Claire Reeves (image no. 352073) of miniature sepia photograph (hand painted) by Hennah and Kent, Brighton (courtesy of National Trust<sup>®</sup>, UK).

has been discovered, except that he had seven younger siblings.<sup>5</sup>

### Education

In the Duchy of Saxe-Gotha-Altenburg, where Lippold grew up, children normally first attended elementary school (*Volksschule*) at six or seven years of age, remaining usually for 4–6 years before proceeding to a secondary school (Dr Stefan Gerber, pers. comm., 8 June 2022). In Lippold's case it seems very likely that his father, as a Lutheran pastor, would have had some influence on his first child's early education, but he died in 1803 when Lippold was only 13 years old. However, it is known that from 1804 to 1808 the young Lippold attended the Altenburg Gymnasium, a typical Prussian classical-humanistic secondary school providing a liberal education in Latin, ancient



Figure 11. Prince Adalbert of Prussia (1811–1873). Ex Adalbert, Prince of Prussia, 1857. *Reise Seiner Königlichen Hoheit des Prinzen Adalbert von Preussen nach Brasilien* (Harvard University copy, public domain).

Greek, Hebrew, French, German, religious studies, aesthetics, philosophy, ancient classical literature, geography, history, mathematics and physics (Matthiä 1808, pp. 5–17). There Lippold finished in the senior class in 1808 (Matthiä 1808, p. 4), having obtained the *abitur* (matriculation qualification) to study theology at the Universitatis Litterarum Jenensis, Thuringen (now Friedrich-Schiller-Universität Jena).

According to the register of *Academiae Jenensis* (see Fig. 14), Lippold had in fact already matriculated on 31 July 1807, aged 17 years,<sup>6</sup> even before he gained his *abitur* from the Altenburg Gymnasium (Matthiä 1808). Clearly, he was an extremely intelligent, assiduous pupil. Fortuitously, since his studies at the University of Jena did not commence until 1808, he just avoided the bloody Battle of Jena of 1806, in which Napoleon



Figure 12. Dom Pedro II (1825–1891), aged 24 years (1849). Oil painting by Ferdinand Krumholz, in Kunsthistorisches Museum Wien. Scan aus: Claudia Augustat Hrsg. (2013) *Jenseits von Brasilien*, Museum f. Völkerkunde Wien, Austria (Wikimedia Commons, public domain in Austria and USA).

Bonaparte's army overran the poorly prepared Prussian forces. Notwithstanding those dire circumstances, however, the university had managed to maintain its high reputation, already well established by some of the most outstanding German poets, dramatists, philosophers and natural scientists of the 1790s. Neither should it be overlooked that the celebrated Johann Wolfgang von Goethe (1749–1832), having settled in nearby Weimar following his ennoblement by Karl August, Duke of Saxe-Weimar (1757–1828), had become highly influential in the affairs of the University of Jena. Although having been neither a student nor a professor there, as a member of the duke's privy council, von





Figure 13. Extract from page 87 in the Röschen Parish Church Book for 1790, showing Lippold's birth record on 22 June 1790 (line 1); his full name at end of lines 1 and 2 ("Julius Frie | drich Lippold"); his parentage ("Christian Friedrich Lippold" on line 2 and "Johanna Magdalena" on line 3); and his baptism on 24 June 1790 (line 4) (courtesy of Landeskirchenarchiv Eisenach<sup>©</sup>, Germany, KG Röschen, Kirchenbuch 1771–1808, K 11/21–4, Blatt 87).

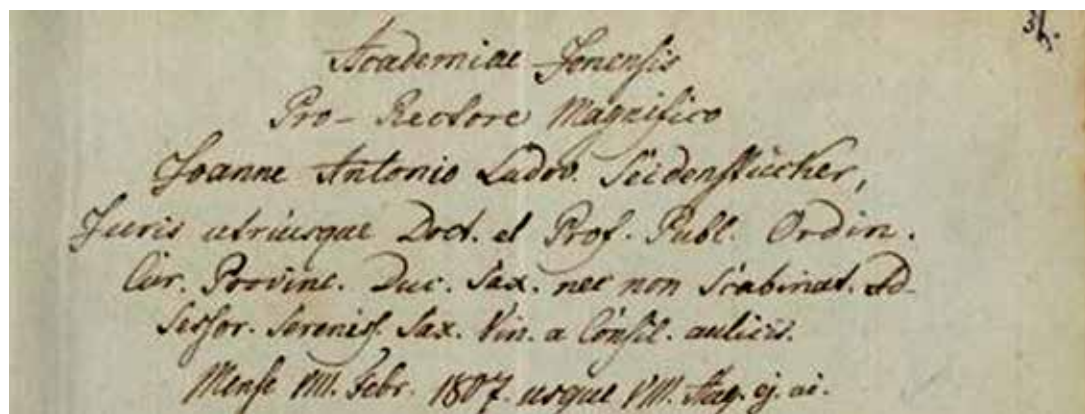


Figure 14. Extracts of *Academiae Jenensis* for 8 February to 8 August 1807. A: Heading of folio 31. B: Extract of folio 32 showing Lippold's matriculation on 31 July 1807, last 2 lines at lower right, "d. 31 Jul. | Jul. Frid. Lippold, Altbg." (courtesy of Friedrich-Schiller-Universität Jena<sup>©</sup>, Germany).

Goethe was nevertheless largely responsible for administrative and curricular reforms.

Lippold's choosing to study at Jena was likely to have been influenced by his family's religious background. As de la Croix and Stelter (2021, p. 25) have noted,

From the beginning, the University of Jena had a sharp Lutheran character and was one of the most politically radical universities in Germany. At the turn of the 19th century, the University flourished and emerged as a center of German idealism and early Romanticism that attracted some of the most influential scholars of the time.

Typically of the German universities of that era, there were four faculties: Theology, Law, Medicine and Philosophy. Theological teaching at Jena would have broadly included studies of the Old Testament, the New Testament, dogmatics, church and dogmatic history, and homiletics (Dr Stefan Gerber, pers. comm., 8 June 2022). Although no specific account of Lippold's studies from 1808 up to 1815 has been discovered, there are some published records of lecturers and their courses during 1814–1822 (University of Jena 1814–1822). It seems likely that the lectures then offered would not have been very different from those available when Lippold commenced studies.

Surprisingly, in view of his ultimate botanical aspirations, what is especially notable regarding Lippold's earlier Gymnasium education is the lack of instruction in the natural sciences, other than some physics. However, at Jena there were lectures delivered in the faculties of medicine and philosophy that might have been attractive to him (University of Jena 1814–1822). Hence, it is quite possible, though direct evidence is lacking, that Lippold's interests beyond theology were piqued, for instance, by the lectures on mineralogy, botany, zoology and natural history delivered in the faculty of philosophy by the inspirational Lorenz Oken

(1779–1851). In addition, another important facility at Jena was the botanical garden, founded in 1794 and organized according to a natural system developed by August Johann Georg Karl Batsch (1761–1802), under the direct influence of von Goethe (Breidbach 2007, p. 178). Its director from 1807 to 1850 was the botanist Friedrich Siegmund Voigt (1781–1850), who, when Lippold arrived in Jena, had just published his *System der Botanik* (Voigt 1808).

Both Oken and Voigt were still lecturing at Jena, in the faculties of philosophy and medicine respectively, up to when Lippold was ordained in 1815 (University of Jena 1814–1822), so quite possibly he could have been influenced by them. It will later become apparent how Lippold's classical education and his exposure to the intellectual environment of Jena during his formative years likely affected his adult life. Deeper insights into his complex character are provided in Appendix 1.

#### Ordination and incumbencies (1815–1821)

After graduating, Lippold was ordained in 1815 as an Evangelical Lutheran pastor at Karlsruhe, under the auspices of the Baden State Church (Anonymous 1816; Spliesgart 2006, p. 134). Following ordination, he lived for a short time in Mannheim; the Mannheim municipal records state that "Julius Friedrich Lippold, Vicarius of the Lutheran parish church in the village of Röschen in the principality of Altenburg, Saxony, allegedly 25 years old in 1815, on 5 July 1816 departed from here".<sup>7</sup> It is difficult to understand why, if as stated, Lippold's alleged first incumbency was in Röschen (near where he was born), he was then residing in Mannheim, about 270 miles southwest of Röschen). However, his documented departure from Mannheim accords with his authenticated appointment on 13 July 1816 to the parishes of Bischoffingen and Bickensohl.<sup>8</sup>



Then in November 1817 he became pastor of Grenzach,<sup>8</sup> and in November 1818 he moved again, to Neuenweg (Anonymous 1818).<sup>9</sup> This succession of parish appointments is corroborated by other published sources.<sup>10</sup>

Nevertheless, much confusion about Lippold's true first incumbency is apparent; for instance, a much later secondary source (Wiemer 1954, p. 56) alleges that it was at Neuenweg:

In his first community, at Neuenweg, a place with a bad reputation [it is not stated why], he felt unwell and shortly after his inauguration he asked for another parish with a better climate and a more pleasant environment... Lippold did not even stay in Bischoffingen. [Translated from the Portuguese]

That seems to be erroneous since, as already mentioned, Lippold's first incumbency was apparently in Röpsen. However, it matters not whether it was in Röpsen or Neuenweg in 1816. What is crucial is that his final transfer was certainly from Neuenweg to Bischoffingen for a second time in December 1820 (Anonymous 1821a; Wiemer 1954).<sup>9</sup> Moreover, whatever the precise order may have been, Lippold had in just six years (1815–1821) somewhat unusually served six parishes, spaced along about 170 miles of the Rhine Valley. Although the reason for these frequent moves cannot be certainly stated, the following account may be suggestive.

### Scandal in Bischoffingen (1821)

On Monday, 18 June 1821, began the dramatic series of events alluded to by Wiemer (1954, p. 56) that was to change Lippold's life for ever. The official reports are among the unpublished Lutheran Church records in the Landesarchiv Baden-Württemberg.<sup>11</sup> They elucidate Wiemer's account of Lippold's sudden departure from Bischoffingen and, moreover, reveal much more that explains

the startling circumstances, which were not mentioned by Wiemer.

On 19 June 1821 the district office of the Evangelical Church at Breisach reported that:

at 5 o'clock that morning [18 June 1821], Pastor Lippold, *having recently transferred from Neuenweg to Bischoffingen*, came to request a passport to Alsace, pretending that he was to go on a botanical excursion, and that Dean Fecht of Leiselheim had granted him eight days' leave for that purpose. Since, when he was parish administrator in Bickensohl, Pastor Lippold had made several such excursions to Bollweiler [now Bollwiler] and the valleys of the Vosges, and is *already known as a botanist by his many published essays*, nobody thought this suspicious and he was given the requested passport. However, Dean Fecht of Leiselheim has now announced that Pastor Lippold has actually absconded. We request instructions as to whether we can reveal publicly the fugitive Pastor Lippold, who most likely proceeded to Paris, or keep this known only in these pages. The reason for his absconding is not yet known, but *there is no reason to believe that he is responsible for a misdemeanour, or, at most for incurring certain debts*. In the meantime, auditors have been appointed to administer the inventory and judicial custody of his estate and at the same time the Grand Ducal District Office of Schopfheim requests *the necessary information from Neuenweg to substantiate claims on the estate*. [Translated from the German; all italics are my own]

These salient facts agree so closely with Wiemer's obfuscated account related below that it must surely have been extracted from the same documents just alluded to. Thus wrote Wiemer (1954, p. 56):

In charge of that parish at Easter in 1821, in June of that year he [Lippold] applied for a permit and passport to make a botanical excursion through the forests of Alsace. He already had a certain reputation as a scientist for his numerous publications on the various species of plants. It was for this reason that he obtained the permit for the expedition, from which he never returned to the parish of Bischoffingen. [Translated from the Portuguese]

Thus, Wiemer conveys the vague impression that Lippold simply decided not to continue as

a pastor and resigned, implying that he perhaps preferred a more congenial occupation as a botanist. In fact, however, it seems that the real reason for Lippold's absconding was to do with his "incurring certain debts", as shown in the report of the district office of the Evangelical Church at Breisach:

The reason for his clandestine disappearance concerns *forbidden dealings* [my italics] with his former maid in Neuenweg. On Sunday evening [17 June], accompanied by another woman, she visited him in Bischoffingen, demanding payment with threatening words. In the early morning following, he absconded. [Translated from the German]

Whether Lippold's erstwhile maidservant's demand for payment was for outstanding wages, an unreturned loan, or for some other "forbidden dealings", will possibly never be known, although it may still lie undiscovered in the voluminous Lutheran Church archives. However, in a remarkably odd farewell letter to Dean Fecht (see below), Lippold relinquished all his property, perhaps in order to pay off debts, but possibly also as an act of atonement. However, it appears unlikely that the value of his meagre belongings was sufficient to make amends. His property was said to have consisted of little more than "books and exotic plants", which "required special care, and were inventoried before their public sale". Nevertheless, the church authorities moved with alacrity to appoint, by 19 June 1821, auditors for the administration of his estate (see previously).

On the afternoon of Lippold's flight from Bischoffingen, his farewell letter reached Dean Fecht, requesting him to act as executor of what was effectively a "living will". It read:

Dearest Dean!  
In handing over the parish to you, with the rectory key, I request that you be the executor of my last will in Europe, which states that all my property should be shared among N. N. [= *nomina nominanda* or "the names to be provided"] as universal heirs in equal portions.

Remember me kindly when I am overseas, and live well and happily!  
Yours as always, Julius Friedrich Lippold, until now but no longer, Pastor of Bischoffingen.  
[Translated from the German]

On receiving this letter, Dean Fecht hurried to Bischoffingen, where, with the local bailiff Herr Guthmüller and a school teacher, Herr Seyfried, he found that the front door of Lippold's lodgings had been locked from inside, indicating that he must have left by the courtyard door and scaled the rear garden wall to make his dramatic escape. Presumably because he no longer had a servant, his apartment and belongings were vulnerable, so he had locked up and returned the key with his letter.

It seems quite possible that persons other than Lippold's maidservant might have been involved in his so-called "forbidden dealings". First, in his letter to Dean Fecht, Lippold directed that his belongings should be shared equally among a number of persons, who significantly were at that time un-named. Second, the request of the Grand Ducal District Office to obtain "information from Neuenweg to substantiate claims on the estate" might confirm that multiple creditors were still to be identified. Moreover, it would appear that more was previously known by the church authorities about Lippold's unauthorized activities than is explicit in the documents discovered so far. Thus, the Bischoffingen scandal was seemingly not the first matter that had brought Lippold to the attention of the Evangelical Upper Church Council. On 20 June 1821 the Großherzoglich Badisches Direktorium des Dreisamkreises [Grand Duchy of Baden Board of Directors of Dreisamkreis] in Freiburg was stated to have been aware of "earlier incidents in Grenzach" involving the "not very creditably known Pastor Lippold". It seems possible that therein may lie a reason for Lippold's aforementioned frequent changes of parish.

On 25 June 1821 the Ministerium des Inneren, Evangelische Sektion, Karlsruhe [Ministry of the Interior, Evangelical Section] referred to the report of the “Dreisamkreis Direktorium of the 20th of this month, No. 12246, concerning the absconding of the Evangelical Lutheran Pastor Julius Friedrich Lippold of Bischoffingen”. Intriguingly, it is stated that “The reason for this is *not yet officially known, but will immediately emerge* [my italics] from the required report from the Dean’s Office”. It was also stated that although Lippold had personally renounced his parish and terminated his service, this “was a matter of course anyway as a result of what is *already privately known* [my italics], and even if he were to return, the parish could not be transferred back to his charge”.

These events were brought to a head with remarkable rapidity; Lippold’s effective dismissal was determined in just eight days (17–25 June 1821) following the altercation with his maid. On 14 July 1821 it was publicly announced in the Baden State records that Lippold had been “removed”, although no reason was stated (Anonymous 1821b). Whatever the exact circumstances, this affair clearly caused great consternation at the highest level within the Evangelical Lutheran Church and was officially held to be a “*großen Skandal für die Gemeinde Bischoffingen*” [a great scandal for the town of Bischoffingen].

The Baden State official papers record a decision not to pursue Lippold into France, no doubt a choice that saved face for both parties, since it would have been embarrassing for the state church to forcibly remove their pastor from a foreign country to face his creditors. Thus, this brings to a close the known official records regarding Lippold’s flight to Alsace; no documents could be traced in those records about Lippold’s life after June 1821.

It is inconceivable that Wiemer (1954, p. 57) could have quoted so accurately, in the original

German, Lippold’s letter of 18 June 1821 to Dean Fecht without his having seen the archives summarized above—he reproduced the letter with not a word changed. It therefore also seems impossible that he did not know that Lippold’s departure from his parish was the direct result of this humiliating “*großen Skandal*”. Hence, perhaps unsurprisingly, the aforementioned details of how and why Lippold had “obtained the permit for the [botanical] expedition, from which he never returned to the parish of Bischoffingen” were diplomatically omitted (Wiemer 1954, pp. 56–58).

### New horizons: botanizing in Europe (1821–1837)

As will later be seen, Lippold seems to have been in a more or less constant state of impecuniosity for most of his life. After his dramatic flight from his parish in 1821, leaving behind his few possessions, he needed to establish, without delay, some means of financial support, and as far from Bischoffingen as reasonably possible. And so, his long-standing passion for botany unexpectedly provided a means of launching an alternative career, also fortuitously affording a feasible excuse for his sudden change of profession (at least as far as any blissfully ignorant strangers were concerned). His implied intention in his farewell letter to Dean Fecht of immediately quitting Europe came to naught, however, and he remained for some time in Alsace.

#### What to do next?

Having decided to become a horticulturist and apparently realizing that the quickest way to make a living and to gain recognition in that field was to publish books, Lippold began to travel around Europe, visiting gardens and nurseries to gain experience. Employing his

linguistic skills, he translated and elaborated on previously published French gardening works, adding information based on his travels or gleaned from his associates, the Baumann brothers in Bollwiller, Alsace. He had probably already visited the Baumann brothers on several occasions, as implied by the Lutheran Church records (see previously). For instance, information from “Dr. Lippold” about *Pyrus bollwyllleriana* de Candolle, cited by Loudon (1838, 2:890) in his *Arboretum et Fruticetum Britannicum*, was no doubt attributable to the Baumanns when Lippold was at their nurseries.

Lippold’s first book, the *Taschenbuch des Verständigen Gärtners* (Pocketbook for experienced gardeners; Lippold 1824), was published as two volumes in Stuttgart by the publishing house of J. G. Cotta’sche Buchhandlung.<sup>12</sup> The title-pages are replete with self-laudatory information. No doubt hoping that his foreign associates remained ignorant of the full facts of the Bischoffingen scandal, Lippold disingenuously stated that he had “voluntarily resigned as pastor of Bischoffingen on Kaiserstuhl”. In truth his only option had been to renounce his benefice, or he would otherwise have been ignominiously expelled. It is not known whether public knowledge of his official removal by the Lutheran Church (Anonymous 1821b) spread beyond the state of Baden.

Nevertheless, Lippold’s first book apparently fulfilled its intended purpose, initiating his public recognition as a horticultural authority. In an article on the German rampion, *Oenothera* (Anonymous 1827a, p. 437), it was later stated: “According to Lippold, in the *Verständigen Gärtners* (p. 282), it has not been long in use as a culinary vegetable”. A further article indicated that his book was by then well-enough established not to need mention of its title, since reference was made just to “Lippold” (Paxton 1834, p. 87).

Later still, Loudon (1836a) described the introduction of two varieties of *Lobelia* into Europe from Mexico, based on the authority of “an eminent German botanist and horticulturist, now in London, and the author of the *Volständige* [sic] *Gärtner*, 2 vols. 8vo.”. His work no doubt became even more widely known when Loudon’s note was reprinted in the *American Gardener’s Magazine* (see Anonymous 1836a). Curiously, Lippold is not included in the contemporary “Notes on the trees, gardens, gardeners, garden artists, and garden authors of Germany” by Ritter (1836)<sup>13</sup> nor in the later *Guide to the Literature of Botany* (Jackson 1881) and *Vegetable Technology* (Jackson 1882). However, the year before Lippold’s death, his *Taschenbuch* was still referred to by Hogg (1851, p. 74) in *British Pomology*.

#### Building a new life

Outside academic libraries, the *Taschenbuch des Verständigen Gärtners* is now a scarce book, but it presumably must have been a commercial success, since a second edition was commenced in 1831 as *Neues Handbuch des Verständigen Gärtners, oder Neue Umarbeitung des Taschenbuchs des Verständigen Gärtners von 1824* (New handbook for experienced gardeners, or a revision of a pocketbook for experienced gardeners of 1824; Lippold 1831). Quite possibly, Lippold decided to write books on horticulture partly because they were much more likely to have been commercially successful than scholarly treatises on taxonomic botany. Indeed, he never personally described any new taxa; at least, he does not appear in the *International Plant Names Index* (IPNI), neither is he listed by Stafleu and Cowan (1976–1988, 3). I have failed to find the alleged pre-1821 German publications mentioned by Wiemer (1954,



p. 56) and Spliesgart (2006, p. 134), neither of whom provided any bibliographical references. In fact, Lippold seems to have published very little in periodicals (Appendix 2).

Lippold must have been acquiring the knowledge and skills of a practical horticulturist even before his flight from Bischoffingen in 1821, presumably during his previous visits to the Baumann nurseries. By 1824 he was a member of the Botanical Society of Altenburg in Saxony (Lippold 1824, title-page). By 1831, presumably hoping to widen his remunerative opportunities, he described himself as “Professor of ancient and modern languages, as well as of history and natural history in Paris, Member of the Paris Horticultural Society, the Pomological Society in Altenburg in Saxony, etc.” (Lippold 1831, title-page). It is unclear to what “etc.” might refer, but most probably it was to membership of other botanical or horticultural societies.

Lippold’s adopted style of “Professor” seems to have been the German equivalent of the French “Professeur”, a term employed for teachers in general. Although he is uniquely described in the catalogue of the Deutschen LiteraturArchiv, Marbach, as a “Hochschullehrer” (a university teacher), I have found no evidence of his ever occupying a faculty position in any university in Germany or France. When in England between 1834 and 1837, he offered private tuition in “German, French, botany, the classics, natural history, theology, &c.” at the modest charge of one shilling per lesson (see Loudon 1837a). By then he was apparently always addressed as “Dr. Lippold”, which may have been the origin of his assumed title, but in Great Britain, its validity has not been substantiated (see “The ultimate mystery”).

#### *European travels and associates*

Lippold’s books include information, apparently not published elsewhere, about some of his aspirations and early professional connections. Combined with clues from his letters, this has facilitated the tracing of his movements and occupations in Europe from 1821 to 1834. It would, however, be unwise to assume that his membership of various societies meant that he was currently resident in those respective places, because “corresponding member” was a class of membership commonly conferred by scientific societies on individuals not living locally, often abroad. For instance, on 11 January 1832, when Lippold was elected as a corresponding member of the Königliche Botanischen Gesellschaft, Regensburg, Germany (now Regensburgische Botanische Gesellschaft), he was apparently living in Rheims, France, about 440 miles from Regensburg (Anonymous 1832, p. 109).

Connections with some specific collaborators and employers are revealed on the title-pages and in the dedications of his books (see Appendix 2). They include: the aforementioned Baumann brothers (Gebrüder Baumann), renowned landscape gardeners and nurserymen of Bollwiller, Alsace;<sup>14</sup> Étienne Soulange-Bodin (1774–1846), who played a major role in the establishment of professional horticulture in France, 1815–1845 (Loudon 1831, pp. 15–16; Quérard 1827–1864, 9:221); the Baroness Amalie de Baye (1798–1872), wife of the Baron de Baye (see below); Jean François Godefroy (ca.1770–1850), proprietor and nurseryman of Ville d’Avray, near Sèvres (Loudon 1831, p. 15); and the Countess von Bohm (née Countess Girardin),

It is not known whether Lippold ever returned to Bischoffingen or Altenburg after his flight from Germany, but it seems doubtful considering his tarnished reputation there,



Figure 15. Château de Baye, seat of the Barons de Baye, near Rheims, where Lippold was head gardener in 1831. Ex Girault de Saint-Fargeau, E. 1838. *Guide Pittoresque du Voyageur en France* (University of Michigan copy, digitized by Google Books, public domain).

though he must have visited other German localities, as indicated by the dedication in his *Taschenbuch*. A major aspiration of his in the early 1820s was to travel much further afield, as intimated in his farewell letter to Dean Fecht (see previously). Still hopeful, in the preface of his *Taschenbuch*, he invited any “censure or praise” but informed his readers that “I shall find it difficult to read in the interior of Africa, where my journey goes first”, although it would be possible after “my return in 1824 or 1825” (Lippold 1824, 1:XII). However, no such expedition ever materialized. I have found no record of his ever visiting Africa; indeed, he did not travel beyond continental Europe until 1837 (see Loudon 1837a).

Lippold’s letters deposited in the Deutsches Literaturarchiv, Marbach (see Appendix 3), provide much valuable information about his whereabouts at various times. Remaining in Europe for the time being, in the late 1820s, his stated teaching commitments in Paris would have required residence there, if only sporadically. According to a letter to the Königliche Botanische Gesellschaft on 3 August 1831, inviting the society’s review

of his *Taschenbuch*, he was then in Rheims, France, “départ. de la Marne, rue de Écossais No. 9”. A few months later, on his election to membership, he was described as “Obergärtner in Rheims” (Anonymous 1832, p. 109). From contemporaneous letters mentioning “Schloß Baye” and “Mr. le Baron de Baye”, it may be deduced that Lippold was at that time the head gardener at the Château de Baye (Fig. 15), the seat of Amour Auguste Berthelot de Baye (1783–1868; 3rd Baron de Baye) near Rheims. Furthermore, the Baroness Amalie de Baye, is another one of the dedicatees of Lippold’s *Neues Handbuch* in 1831 (see above).

Lippold’s 83 letters archived at Marbach (Appendix 3) are addressed variously from (1) France: Bollweiler [= Bollwiller] (between 1 May 1822 and 7 March 1824), Carouge (15 August 1824), Paris (between 5 January 1825 and 17 December 1829), Reims [= Rheims] (between 10 September 1828 and 15 December 1830) and Pontavert (2 August 1831); (2) Germany: Stuttgart (8 April 1824) and Frankfurt am Main (14 September 1830); and (3) Switzerland: Basel (10 February 1824 and 3 May 1824) (Dr Sabine Borchert,

pers. comm., 3 June 2022). The letters from Basel probably relate to an expedition in Switzerland, apparently in 1824, mentioned by Lippold to W. J. Hooker (Royal Botanic Gardens, Kew, Directors' Correspondence, 14 April 1837, DC/58/156).

During January and February of 1834, Lippold travelled through Belgium on his way to England: "On my arrival in London, I gave some of the [chicory] seeds to my esteemed friend and patron, William Christy, Esq., Clapham Road" (Lippold 1836).<sup>15</sup> On arrival from Belgium, Lippold was reported as "Dr. Lippold of Belgium" (Anonymous 1837a), giving rise to the incorrect assumption that he was of Belgian nationality or residence (Alcorn 2023, p. 356). However, he was apparently just *en route*; letters sent from specific places do not necessarily prove residence there.

Although Lippold resided in England for just over three years, it is strange that so few records of his presence there survive; unfortunately, his sojourn did not coincide with one of the British decennial censuses. His only known address, possibly in lodgings, at 10 Commerce Place, North Brixton Road, London, was revealed in a publication, dated December 1835 (Lippold 1836). However, while in London, he apparently took the opportunity to botanize in the countryside, although only a solitary English herbarium specimen has been traced (see Appendix 4).

#### Further afield: Botanizing in Madeira (1837–1840)

Most of the published information about Lippold as a botanist pertains to his collecting in Madeira, although there is yet again confusion about dates. Despite various unsubstantiated claims (see below), he actually arrived in Funchal in 1837, remaining until 1840 (see under "Timeline"). Ascherson and Graebner (1896–1939, 6(2):465), stated rather

vaguely that "in 1838 he spent some time in Madeira". Mesquita et al. (2022) averred that he collected there during 1836 and 1837, whilst Alcorn (2023, p. 356) alluded to a Madeiran expedition that "he undertook in 1836", but the starting-date is too early. In fact, letters received by W. J. Hooker from Lippold in Madeira are all dated from 1837 to 1840, corroborating his true dates of residence (J. D. Hooker 1902, p. ccii; see also Appendix 3). The incidental allusion by Lasègue (1845, p. 449) to "L'île de Madère, visitée encore, en 1856, par les docteurs J.-F. Lippold et Charles Lemann", is clearly a misprint for 1836 (itself incorrect with regard to Lippold), since both botanists died in 1852.

#### Expedition preparations

No doubt encouraged by his patron William Christy, junior, Lippold prepared a "Prospectus" soliciting subscriptions to fund an expedition to Madeira and the Canary Islands to collect plants and other natural history specimens. His proposal was enthusiastically supported by J. C. Loudon, who was, as well as a respected horticulturist, the "conductor" (that is, the proprietor and editor) of his own periodical, *The Gardener's Magazine* (see Williams 2025) in which he generously publicized Lippold's credentials and potential as a botanical collector. Loudon seems never to have missed any opportunity to bring Lippold to the attention of amateur and professional botanists alike, especially wealthy and influential ones. He was, however, personally unable to assist Lippold financially, since, despite his prodigious publishing output, he was frequently financially insecure himself (Jane Loudon 1845, p. xxxix; Dewis 2014, pp. 18, 34, 188).

Thus, in July 1836, Loudon reported on current botanical expeditions, suggesting that Lippold might appropriately be similarly employed (Loudon 1836b):

A botanical collector has recently been sent out from Kew, to South America; and another, it is said, will soon proceed to Mexico, under the auspices of the Horticultural Society. Lord Mountnorris's collector has arrived safely in New Zealand. We wish we could hear of our friend Dr. Lippold being engaged in an expedition of this kind.

A little later, in November 1836, in an obituary of the renowned botanist David Douglas (1783–1834), Loudon (1836c, p. 608) wrote, "Dr. Lippold is himself a candidate for filling a situation as Botanical Traveller and Collector, in foreign countries". Loudon's repeated recommendations of his friend's talents eventually bore fruit, and Lippold's "Prospectus" was finally issued, also in November 1836. The proposed Macaronesian expedition took some months to gain sufficient financial support, but once achieved, events proceeded rapidly with crucial approbation from influential botanists. By the time Lippold was finally ready to set sail for Madeira, his major supporters included not only William Christy, junior, and J. C. Loudon, but also John Russell (6th Duke of Bedford) and various academics, collectors, horticulturists and nurserymen (see below).

#### Arrival in Madeira

In those days, the voyage from England to Funchal routinely occupied 10–12 days, depending on the weather (Burney 1926, pp. 174–178). Lippold sailed aboard the *Myrtle* on 27 February 1837, arriving on 8 March (Hooker 1837a). Loudon lost no time in reminding readers of *The Gardener's Magazine* of Lippold's progress (Loudon 1837a):

A botanical collector has sailed for Madeira and the Canary Isles. — Our readers may recollect the advertisements of Dr. Lippold on the wrapper of former numbers of this Magazine, in some of which he proposed giving lessons in German, French, botany, the classics, natural history, theology, &c., for a shilling a lesson; and, in

others, he proposed to go out to some foreign country as a botanical collector. Through the exertions of a most benevolent individual, and an ardent lover of botany and natural history (W. Christy, jun., Esq.), Dr. Lippold has at last been able to accomplish the object which was nearest his heart—that of going out as a botanical collector. It was proposed that he should go out on a subscription principle; the subscriptions not to be less than 5*l.*, paid in advance; and the subscribers to receive for each subscription of 5*l.* a certain proportion of seeds, bulbs, or dried specimens. A dozen or two of subscribers were soon found; some, as the Duke of Bedford, anxious to patronise so good a man, and so enthusiastic a botanist, advancing a double subscription; and, on Feb. 27, Dr. Lippold having been completely fitted out, and furnished with letters of credit and of recommendation by his patron and friend, Mr. Christy, sailed in a small vessel, called the *Myrtle*, for Madeira. The doctor is now in a fair way of realising what has been, as he informed us, his uppermost wish for the last twenty-five years; viz. that of botanising in an extra-European country. We sincerely hope and trust his gratification may be equal to his expectations. We hope there are still a number of wealthy botanical amateurs, who will send their subscriptions for the doctor, in order that, after he has explored Madeira and the Canaries, he may be enabled to proceed to Madagascar, which is his ultimatum. It is highly gratifying to see so deserving a man as Dr. Lippold meet with such patrons as he has done; men who have not only the will, but the power, to do good. It is most gratifying, also, to observe among the subscribers, not only noble and wealthy amateurs, but the first botanists and cultivators in the country, such as Professors Hooker, Graham, Daubeney, Dr. Greville, N. B. Ward, Esq., W. Borrer, Esq., Messrs. Loddiges, Messrs. Rollisson, &c.

Loudon (1837b) employed a useful term for such groups, thus: "A subscription society have sent Dr. Lippold to Madeira, whence he will proceed to the Canaries". If it is true that Lippold's "uppermost wish for the last twenty-five years" was indeed to "botanise in an extra-European country", he apparently must have conceived the idea about three years before his 1815 ordination in Germany,



but probably with little confidence in ever achieving it, unless perhaps as a missionary. W. J. Hooker, a close friend of R. T. Lowe, was in 1837 the professor of botany in the University of Glasgow. Being the editor of *Companion to the Botanical Magazine*, he also was in an advantageous position to promulgate Lippold's interests. He reported in detail on Lippold's arrival in Madeira (Hooker 1837a), including extracts of a letter that he received from Lowe (the original letter is in Directors' Correspondence, DC/58/186, Royal Botanic Gardens, Kew), thus taking the opportunity to keep Lippold's prospectus in the public eye:

Another enthusiastic and moreover very accomplished Botanist, Dr. J. F. Lippold, at the suggestion of William Christy, jun., Esq., and some other Naturalists, is now investigating the Island of Madeira. Previously to embarking, he issued the following PROSPECTUS to which we are anxious to give still greater publicity ... Dr. Lippold safely reached that interesting island, as we are informed by Mr Christy, after a voyage from the Thames of ten days. He writes in extasy [*sic*] on the luxuriance of the vegetation, though he had then seen nothing but Funchal and its environs. Mr. Lowe received him most kindly, and offered him every assistance in his power in pointing out plants, naming the rarer species, &c, &c. He has already become acquainted with a wealthy Portuguese gentleman, who possesses a very fine garden, and who has kindly given him a piece of ground wherein to sow his seeds. He took out with him about three hundred different seeds, and by a vessel which has since sailed, Mr. Christy has sent out to him many more, and also a basket of *Cacteeae*, *Stapeliae* and *Mesembryanthema*, together with many kinds of Indian *Chrysanthemum*, all of which are highly prized in that island, and will be valuable in the way of exchange. By the same ship Mr George Loddiges dispatched to him in one of Mr. Ward's admirably contrived cases,<sup>16</sup> *Araucaria excelsa*, *Berberis fascicularis*, *Benthamia fragifera*, *Deutzia*, many succulent plants, &c. Thus will the visit of Dr. Lippold to Madeira occasion an interchange of vegetable products, which cannot fail to be advantageous both to that island and to England. Collections of dried plants may be expected to be dispatched

in about two months from the date of his arrival, and may be looked for by us some time in June. Mr. Lowe, as may be supposed, has taken a great interest in the success of Dr. Lippold, as will be seen by an extract from a letter just received. —“The sight of your hand-writing again was most welcome to me indeed: but as far as Dr. Lippold was concerned, Mr. Christy, by mentioning your name, had already engaged me sufficiently to do all in my power for him ... At present he has enough to do with our “*Regio maritima*.” Next month and the following, I shall get him off into the mountains. It was too late for two or three of the best plants. I took him to the stations of *Chamaemeles* and *Sideroxylon*: but the flowers were over. Dr. Charles Lemann, a friend of Dr. Boott's,<sup>17</sup> has been here all winter. He is an excellent and active Botanist, and has made a capital Herbarium. Altogether, this spring has been quite a revival in Botany for me; and you need not be surprised to see, ere long, in the Cambridge Transactions, a “*Novitiae Florae Maderensis*,” for which I have collected some twenty or thirty new, unpublished, or obscure species.

Lowe's casual mention of an intention to “get him off into the mountains” belies the difficult excursions involved during Lippold's exploration of Madeira; Figure 16 shows the extreme complexity of the mountainous, riverain topography of the island, while Figure 17 exemplifies the typically challenging terrain to be traversed. Hooker (1837a) concluded his article with his hopes for Lippold's travelling further afield, judiciously adding, on the advice of the Duke of Bedford and Philip Barker Webb (1793–1854), the caveat that certain lawless places that had been suggested, such as the Mauritanian Atlas Mountains and rural southern Spain, could be fraught with danger for vulnerable foreigners and were best avoided!

#### *Integration into Madeiran society*

During his brief visit to Madeira in 1839, Joseph Dalton Hooker (1817–1911; son of William Jackson Hooker) noted “with special

pleasure, in the little parties got up to meet him, the absence of ceremony among the British families living there” (Huxley 1918, 1:88). Lippold also was similarly welcomed in Funchal by the middle-class social circle of British resident merchants and health-seeking visitors, some of whom will be mentioned later. Apart from R. T. Lowe, of immediate importance in facilitating Lippold's botanizing may be mentioned a resident physician, Dr. Alexander Home Renton, though not a botanist himself, as Lowe had previously informed Hooker (Royal Botanic Gardens, Kew, Directors' Correspondence, 20 June 1832, DC/58/175).

Not long after arrival in Madeira, Lippold wrote to Hooker on 14 April 1837 (Royal Botanic Gardens, Kew, Directors' Correspondence, 14 April 1837, DC/58/156), informing him of his meeting “Dr. Renton” and “Mr. Muir”, who had made him feel at home on the island. Indeed, Renton had already written to Hooker on 9 April 1837, assuring him of his best efforts to assist Lippold (Royal Botanic Gardens, Kew, Directors' Correspondence, 9 April 1837, DC/58/213). Andrew Muir was a former Glasgow merchant and a great friend of Joseph Hooker (1754–1845), father of W. J. Hooker and grandfather of J. D. Hooker (Huxley 1918, 1:88; Allan 1967, p. 114). In view of such valuable introductions, it seems strange, however, that in his April 1837 letter to Hooker, Lippold made no mention of having met the respected botanist Charles Morgan Lemann (1806–1852; Fig. 18), who, according to Lowe, had “been here all winter”, particularly since Lippold and Lemann are alleged to have collected plants together in Madeira (see Appendix 4).

Later in 1837, Lippold's patron William Christy, junior, sailed to Madeira on the *Julia*, staying there from 19 November to 31 December 1837 (Christy 1838a). Before continuing to Teneriffe (Christy 1838b), he

would surely have spent time with Lippold, who although by then well ensconced in Funchal, would have greatly appreciated his patron's interest and encouragement, especially as Christy was then suffering from his chronic and ultimately fatal illness. Indeed, Lippold was extremely concerned for Christy's health and wrote despairingly to him on 16 July 1838:

Please pity me in my debilitating anxiety, not having heard from you since your departure from Madeira. I fear that you are still ill, indeed extremely ill, after what Dr. Renton and Mr. G. Lewis told me of your condition. If, as I fear very much, you are unfortunately not able to write to me yourself, I beg you to send me just a line, by one of your brothers or sisters. [Translated from the French]

In his aforementioned letter to Hooker on arrival in Funchal (Royal Botanic Gardens, Kew, Directors' Correspondence, 14 April 1837, DC/58/156), Lippold had written that Renton had given him access to his own library and his garden, a detailed description of which he later published (Lippold 1838a). However, Hooker (1837a) had previously reported that Lippold “has already become acquainted with a *wealthy Portuguese gentleman* [my italics] who possesses a very fine garden, and who has kindly given him a piece of ground wherein to sow his seeds”. I have been unable to identify this alleged benefactor; no contemporary Portuguese resident of Madeira appears in the list of botanical collectors compiled by Hansen (1980). A possible candidate, though like Renton not a botanist, might be Count João Carvalhal (1778–1837), civil governor of Madeira from 1835; according to Hoare (2004, pp. 161, 163), he was “a man of generous and liberal beliefs” and “a kind landlord and much respected throughout the whole of the island”. An estate of some 500 acres (ca.202 hectares) surrounds his Quinta do Palheiro Ferreiro (see Hoare 2004, pp. 161–169), where Lippold collected *Lavendula viridis* L'Hér. in June 1837, shortly before the count died on 11 November.

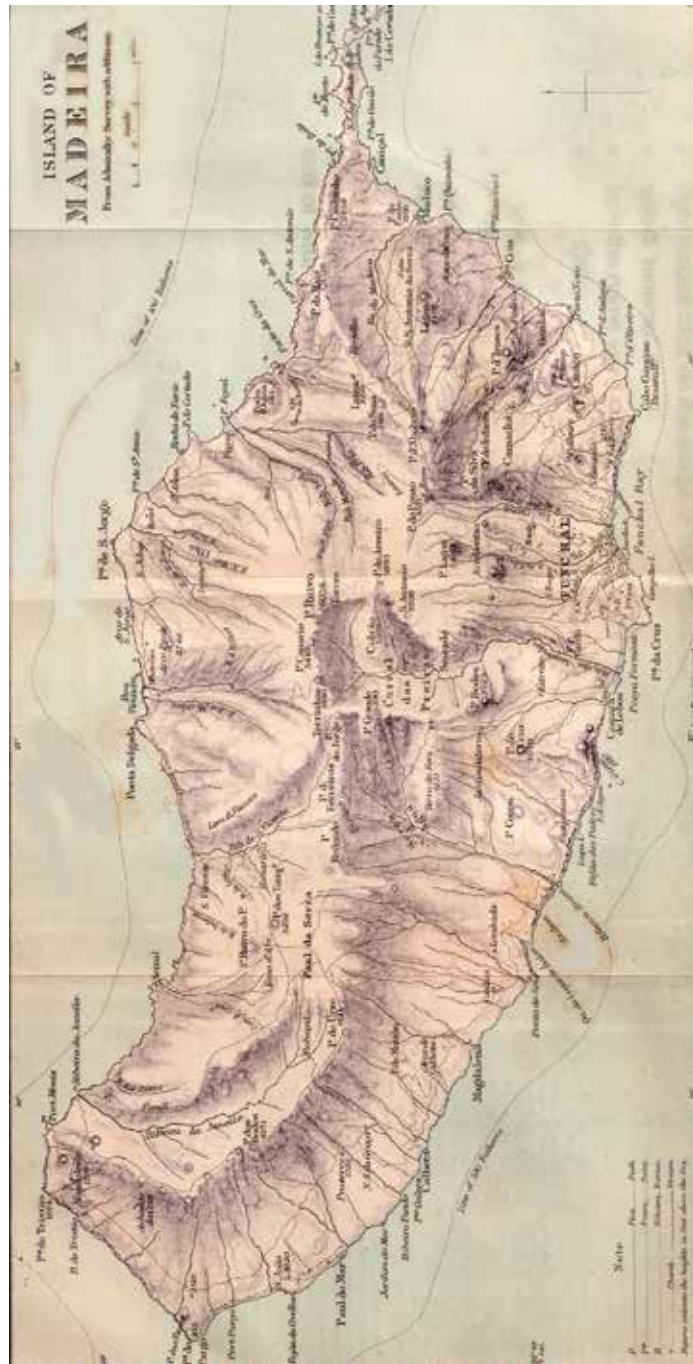


Figure 16. Topographical map of the Island of Madeira. Ex Johnson, J. Y., 1885. *Madeira, its Climate and Scenery*, ed. 3 (personal collection, R. B. Williams<sup>©</sup>).



Figure 17. “The Ravine of the Fairies”, Madeira. From a pencil drawing by Fanny Anne Burney, May 1839. Ex Rolt, M. S. (ed.), 1926. *A Great-Niece's Journals* [see Burney 1926] (personal collection, R. B. Williams<sup>©</sup>).

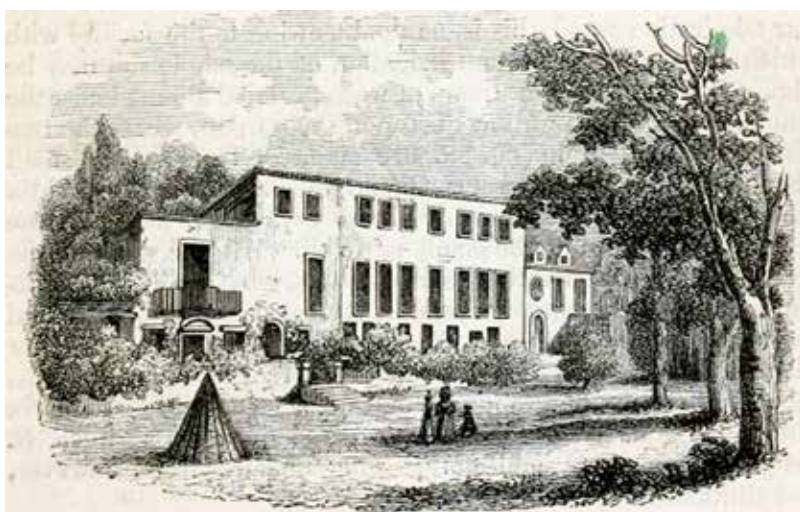


Figure 18. Charles Morgan Lemann (1806–1852), date unknown. Oil painting in Cambridge University Herbarium (courtesy of Department of Plant Sciences<sup>©</sup>, University of Cambridge, UK).

Nevertheless, it seems possible that Hooker might have misunderstood Lippold and that the alleged “wealthy Portuguese gentleman” was not, in fact, some eminent Madeirense but one of the permanent British professional residents of Madeira. If so, the garden alluded to may actually have been Dr. Renton’s at Quinta do Valle (Fig. 19). Although Lippold did not mention any specific arrangement with Renton, he noted that the extensive description and inventory of plants and trees at Quinta do Valle (Lippold 1838a) had been obtained while Renton was in Scotland (Royal Botanic Gardens, Kew, Directors’ Correspondence, 16 July 1838, DC/50/210). Moreover, Lippold was also allowed access to the villa to draw and publish internal plans (Lippold 1838a), and he gave personal language lessons to Mrs Renton (Royal Botanic Gardens, Kew, Directors’ Correspondence, 16 July 1838, DC/50/211), all of which evidences a close and trusting relationship with the Renton family.<sup>18</sup>



Figure 19. Quinta do Valle, Funchal, Madeira, home and gardens of Dr. Alexander Home Renton. Ex Lippold, J. F., 1838. *Gard. Mag. & Reg. Rural Domest. Improv.*, dec. 2, 4(103): 449 (Smithsonian Institution copy, digitized by Biodiversity Heritage Library, public domain).



#### Horticulture in Madeira

An important entrepreneurial resident with whom Lippold became associated was Henry Veitch, the British consul-general of Madeira (1809–1836), who built the Quinta da Jardim da Serra (known locally as the “jardim” or the “jardine”). There, at about 2,500 feet (770 m) above sea level, in 1827 he initiated the cultivation of tea on the island (H. Veitch 1840a). Lippold took a particular interest in this project, encouraging Veitch to submit an account of his plantation to *The Gardener’s Magazine* (Lippold 1838d), and in the meantime, he collected samples of Veitch’s tea plants, which he sent to Loudon. They were described as “of most extraordinary vigour” (H. Veitch 1840a), and they grew “to a greater height and with greater luxuriance than they generally do in China (H. Veitch 1840b). Veitch also showed Lippold the “Ceylon cinnamon” growing in his garden in the town of Funchal, a plant that “promises equal future advantages to this island, through its cultivation in the low lands, as the tea does in the mountains, and Dr. Lippold has taken

a small branch with berries on it to forward it to you [Loudon]” (H. Veitch 1840b).

When Lippold wrote to Loudon about 15 August 1840, on the eve of his departure from Madeira for Brazil (Fig. 20A), he reminded him that “Mr. Veitch here is quite impatient to see his name celebrated as Tea-planter in your Magazine” (Hunt Institute Archives General Autograph Collection (GAC), collection no. 370, Lippold, Julius Friedrich, 1). On 15 March 1840 Veitch had written to Loudon that “I am glad to find by your letter of the 21st of January, that the account of my tea plantation in the mountains of this island proved acceptable to you” (H. Veitch 1840b), and Loudon duly published his communication in March 1840 (see H. Veitch 1840a). However, that was still unknown to Veitch in mid-August, apparently still not yet having seen the March number of *The Gardener’s Magazine*, no doubt because of delayed mail from England to Funchal.

Veitch’s quinta would also have been brought to the attention of W. J. Hooker, when on 20 October 1839 J. D. Hooker wrote to his father about the stop-over of HMS *Erebus* at Funchal, from 20 to 31 October (Lourdes et

al. 2017, p. 147), *en voyage* to the Antarctic.<sup>19</sup> Recounting his already having met Mr. Muir, Mr. Lowe, Mr. Reilly, Dr. Renton and Dr. Lippold, he added on 22 October that he intended to accompany Lippold in an excursion to the hills (Royal Botanic Gardens, Kew, Sir Joseph Hooker Papers, 20 October 1839, JDH/1/2/9). This eventful trip duly occurred on the following day (see Appendix 1; also Royal Botanic Gardens, Kew, Sir Joseph Hooker Papers, 3 February 1840, JDH/1/2/15–23).

Apart from their horticultural interest, Madeiran quintas provided much valuable material for botanists because their gardens had been laid out on previously untended land surrounding the new buildings, “a vibrant ecosystem sustained by the quality of its gardens and the rich diversity of its ancient woodlands” (Hoare 2004, p. 9). Hence, as well as cultivated exotics, many gardens would have supported elements of the indigenous flora, which would have burgeoned when soil disturbance during landscaping stimulated the germination of dormant seeds (see Bell 1970; Hopkins and Graham 1984; Williams-Linera 1990).

Apart from the quintas already mentioned (Renton’s Quinta do Valle, Carvalhal’s Quinta do Palheiro Ferreiro and Veitch’s Quinta da Jardim da Serra), others owned by British residents, such as the Hon. Caroline Norton’s Quinta das Maravilhas; Quinta do Monte, which belonged to the Gordon family, and later the Cossarts; and the Penfold family’s Quinta da Achada, were also productive hunting grounds. The Quinta das Angústias was particularly notable for its fine trees (Lowe 1834; Hoare 2004, p. 33).<sup>20</sup>

#### Collecting in Madeira

Whilst Lippold’s successful collecting in Madeira is amply demonstrated by his specimens in various herbaria (Appendix

4), there is little in the literature recording any really exceptional finds, other than his posthumous memorialization in *Melilotus lippoldiana* Lowe, in recognition of his correction of Lowe’s previous misidentification of this putative species (Lowe 1856, p. 292):

The name commemorates a German horticultural botanist, Dr. Lippold, who resided a year or two [!] in Madeira nearly twenty years ago, and who first called my attention more particularly to this plant, as differing more than varietally from the common *M. parviflora* and *sulcata*, Desf.

The **BM** herbarium sheet shown in Figure 21 is particularly instructive in this regard. The manuscript specimen labels illustrate the series of determinations and associated name changes leading up to Lowe’s decision to describe *Melilotus lippoldiana* as a new species (Lowe 1856). Moreover, they corroborate Lowe’s later comment that “I had long ago (Febr. March 1828) observed this pl., but without separating it from *M. parviflora* Desf.; and my attention was more particularly drawn to it in 1838 by Dr. Lippold. More recently it has again been observed by Sr. [J. M.] Moniz and Mr. [J. Y.] Johnson” (Lowe 1862, p. 155). The sheet brings together three conspecific Madeiran specimens, all from Lowe’s herbarium. Specimen BM000056664, at that time identified as *Melilotus parviflora* Desf., was collected from Loo Fields on 12 March 1828 by Lowe. Specimen BM001042521, initially determined as *Medicago sulcata* Desf. by Lippold, was collected and labelled by him in 1838. The names on both labels have subsequently been altered by Lowe to that of his new species, *Melilotus lippoldiana*. The third specimen (BM001042522), identified as *M. lippoldiana*, was collected from Praia Formosa in 1856 by João Maria Moniz (1822–1898) but was labelled by Lowe, apparently very soon after his published description.

Despite Lowe’s original naming of *Melilotus lippoldiana*, according to Article

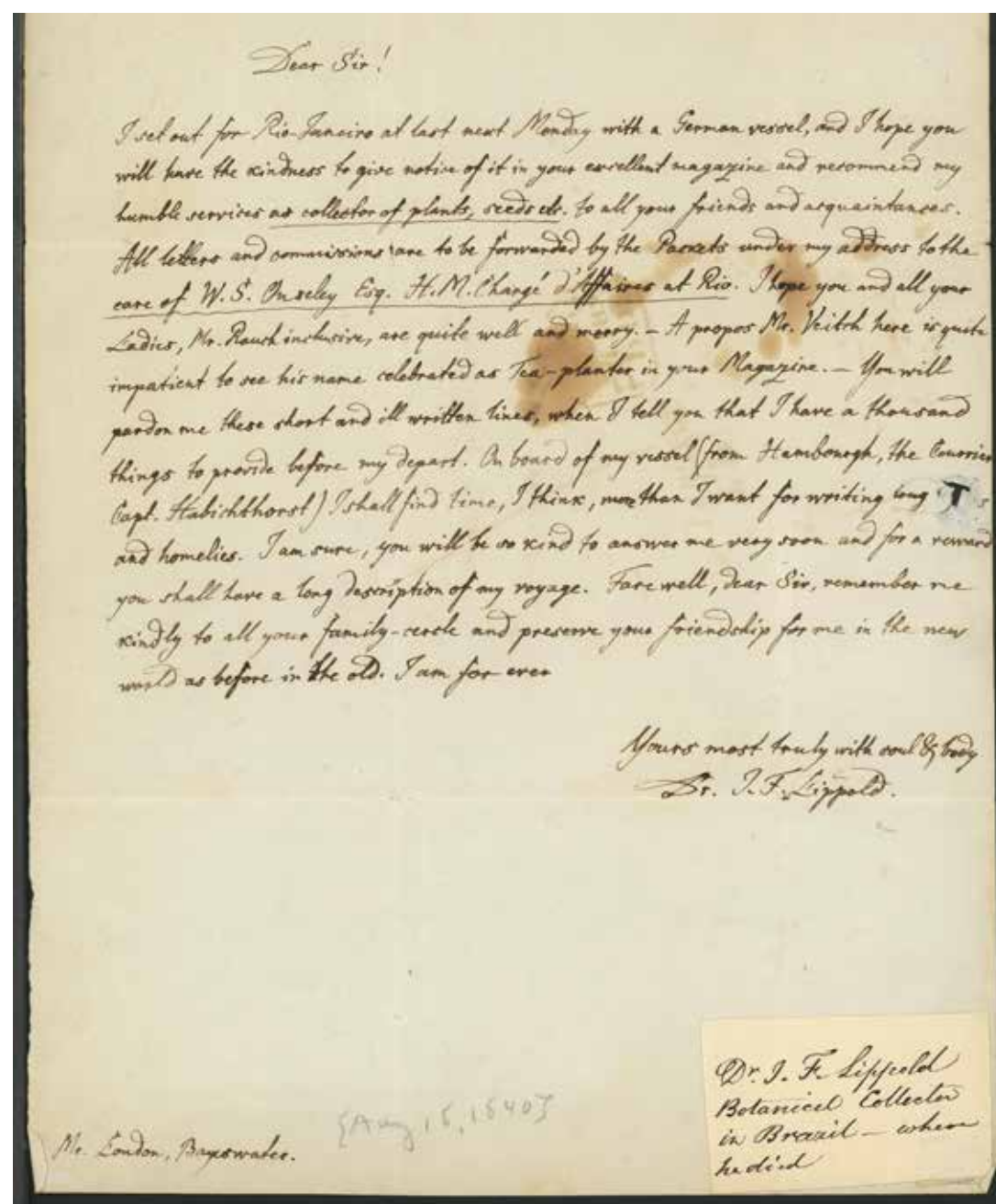


Figure 20. Above, A: Letter from J. F. Lippold to J. C. Loudon in Bayswater, London. Right, B: Reverse side with Post Office franking marks and address of William Pamplin in Soho Square, the London receiving agent for the letter (courtesy of Hunt Institute for Botanical Documentation, Carnegie Mellon University, Pittsburgh, Pa., USA).



62.1 of the International (Shenzhen) Code of Nomenclature for Algae, Fungi, and Plants (Turland et al. 2018), *Melilotus* must be treated as masculine. Nevertheless, a modern label, dated 1993, identifies all three specimens as *Melilotus elegans* Salzm. ex Ser. The type-specimen of *M. lippoldiana* is actually BM000829007 in the Banksian Herbarium at BM (Dr. Mark A. Carine, pers. comm., 7 July 2022); its label inscription agrees with Lowe's wording in the protologue, thus "*Trifolium Melilotus italica* Linn. Sp. Pl. 1078, Madera" (see Lowe 1856, p. 292; 1862, p. 155).

Lippold's broader legacy of plant collecting is summarized in Appendix 5. Curiously, he never published any of his most important Madeiran finds himself. Fortunately, however, at least some of the more notable examples were recorded by Lowe, thus: *Nyctarium triphyllum* Lowe "Hab. in Madera rariss: in orientali prope *Portella* serius detexit Lippold" (Lowe 1838, p. 536); *Cynara horrida* Aiton "Hab. in Maderae Promontorio Ponta S. Lourenço dicto solo rariss. nuperrime (A. D. 1837)

invenit Lippold" (Lowe 1838, p. 541); *Trifolium resupinatum* L. on the "Ascent of Cabo Girão (Dr. Lippold)" (Lowe 1862, p. 146); *Lathyrus sphaericus* Retz. "by the road approaching the Curral das Freiras on the E. side, Dr. Lippold, 1837" (Lowe 1862, p. 210); *Inula viscosa* L., "first observed in Mad. by the late Dr. Lippold in Sept. 1838" (Lowe 1868, p. 479); and *Normania triphylla* (Lowe), "above P<sup>to</sup> da Cruz, along the Levada dos Lamaceiros, a little beyond the Rocha Furada, Dr. Lippold" (Lowe 1872, p. 87).

Even many years after Lippold's death, a specimen from Madeira, identified by him as *Eucalyptus perfoliata*, was employed in a taxonomic study of *E. pulverulenta* Sims by Maiden (1902, p. 550), who determined Lippold's specimen as a conspecific. Maiden detailed it as "Cult. Madeira (Mount Villa, July, 1837). Coll. Dr. J. F. Lippold, ex herb. Prof. R. Graham in herb. Cant. [CGE]". It was apparently, therefore, collected from the Quinta do Monte, which was noted for its fine eucalypts in 1844 (Hoare 2004, p. 155).





Figure 21. Sheet of specimens at BM (BM000056664, BM001042521 and BM001042522) exhibiting the nomenclatural history of *Melilotus lippoldiana*, now *Melilotus elegans* (Creative Commons Attribution CC-BY, The Trustees of the Natural History Museum<sup>©</sup>, London, UK).

Professor Graham was one of the subscribers to Lippold's Madeira initiative (see previously). However, other Lippold specimens, labelled just “Mount”, in the OXF herbarium were presumably collected from “the elevated district surrounding the twin-towered church of Nossa Senhora do Monte on the side of the hill at the height of 1,965 feet” (Johnson 1885, p. 112).

Despite the generosity of his subscribers, it is apparent that Lippold still had to engage in other work to supplement his financial income in Madeira. Therefore, in addition to the plants that he sent to collectors, he also provided zoological and mineralogical specimens, though sometimes, as a courtesy, he would present samples to scientific societies. For instance, at a meeting in London of the Entomological Club on 21 December 1837, a donation by “Dr. Lippold” of “various insects collected by himself in the Island of Madeira” was acknowledged (Anonymous 1838, p. 208). By March 1837 he had already visited the nearby Ilhas Desertas and had later also sent shells [?molluscs] and a lobster to W. J. Hooker (Royal Botanic Gardens, Kew, Directors' Correspondence, 6 August 1837, DC/58/158).

#### *Morphological, physiological and experimental botany*

Lippold was interested just as much in the biology of plants as in their taxonomy and geographical distribution. For instance, he was fascinated by the variety of form and colour of the flowers of cultivars. Already he had become familiar with the new Asian varieties of oleander (*Nerium*) coming into Europe; these exhibited not only morphological variety, but striking fragrances, which the Mediterranean oleander flower does not possess. His enthusiasm for the Asian imports is plain to see from his detailed account under *Gartenneuigkeiten* (Garden news) in his

*Neues Handbuch* (Lippold 1831, pp. 61–63). That earlier interest was sustained by his observations in Madeira on differences between flower colours in *Cynara horrida* (see Lowe 1838, p. 541).

Pondering over the possible effects of soil chemistry on colouration and vigour of flowers and leaves, Lippold compared hydrangeas growing in Funchal town and those on the surrounding mountains, proposing as possible causes of their differences various combinations of the iron and organic content of the soil and atmospheric conditions. His enthusiasm even extended to sending samples of soil from the Madeiran mountains to gardeners in England who might have wished to cultivate blue hydrangeas, rather than pink ones (Lippold 1838b):

Amateurs should address their orders, by letter (post paid), to me, within three months from this time (October 21. 1837), so that I might be able to execute their orders before my departure for the Canaries, which will probably take place next spring.

#### *Where next and how?*

Lippold's income from specimen-collecting had, as usual, to be supplemented by language-teaching, which occasioned difficulties in finding time for botanizing, as he explained to his patron, William Christy (Royal Botanic Gardens, Kew, Directors' Correspondence, 16 July 1838, DC/50/211):

I still had to take care of five students in the city [Funchal] twice a week until now which kept me in the city longer, because above all you have to earn your bread. Now I have no pupil but the excellent Mrs Renton who gives me complete freedom for collecting-trips, which I shall gladly enjoy despite the pleasure I find in giving her lessons. [Translated from the French]

Seemingly, when he arrived in Madeira, Lippold had intended to spend only the summer

and winter of 1837 there before continuing to the Canary Islands and ultimately to Madagascar (see Loudon 1837a; Anonymous 1837a; Lippold 1838b). Apparently believing that still to be Lippold's plan, in December Loudon (1837b) assured his readers and quickly announced that Lippold, "According to the last accounts, will, early in the next spring, leave Madeira for the Canaries" Loudon (1837c, p. 611). This idea may have come from Lowe, who, after Lippold's arrival in Madeira, had suggested to Hooker (1837a) that:

If Lippold is to accomplish any thing effectual here, he should not go away before July. But on the other hand, I see no use in his staying after that time, unless he remains altogether till the following spring, which certainly is not advisable, since I do not believe by doing so he would add one hundred and fifty species to what he may secure before July.

However, Lippold actually remained in Madeira until 13 July 1840 and apparently did not proceed to the Canary Islands at all,<sup>21</sup> nor indeed to Madagascar. On his meeting J. D. Hooker in October 1839, when Ross's Antarctic Expedition paused at Funchal, Hooker had urged him to visit the Cape Verde Islands (Royal Botanic Gardens, Kew, Archives, Correspondence from Antarctic Expedition, JDH/1/2/15–23), but Lippold did not act on that suggestion either; in fact, Lowe had already suggested the same (Hooker 1837a). However, in his belated account of their meeting in Funchal during 1837, William Wilde noted that "Dr. L. has since left Madeira for the Azores and the Brazils" (Wilde 1844, p. 68); there seems, however, to be no evidence of Lippold's collecting in the Azores, although his ship may have stopped there for water and supplies on the way to Brazil. I have found no Azorean, Canarian or Madagascan plants collected by him in any herbarium. Given his professed enthusiasm for foreign exploration, it is remarkable that Lippold repeatedly failed

to realize so many predicted expeditions to widespread places. He had aspired to visiting Africa (ca.1824), the Canary Islands (1837–1840), Madagascar (1837–1840) and the Azores (1840), but his usual lack of funds apparently thwarted his ambitions.

Lippold's continuing financial impediment became especially aggravated during 1839, when his patron William Christy, junior, died on 24 July; and another eminent sponsor, the Duke of Bedford, also died, on 20 October (Thompson 2008). Having lost these major supporters, his confidence in being able to proceed to Brazil is somewhat surprising. Nevertheless, still in Madeira, he wrote on 12 April 1840 to W. J. Hooker that "I have now the project, to go on the end of this year from here [Funchal] to Brezil [*sic*; a corruption of the French Brésil] as a much richer country for Botany, if I should find a good and cheap opportunity for executing such a voyage"; he even followed with a request for letters of introduction to possible contacts in Rio de Janeiro (Royal Botanic Gardens, Kew, Directors' Correspondence, 12 April 1840, DC/50/210).

In view of his previous indecisions and his currently straitened circumstances, Lippold's optimism in achieving his aim seems inexplicable. However, his usual persuasive lobbying (which was sometimes not so subtle!) seemingly again bore fruit, since he was soon to be sailing to Rio. Clearly, some benefactor had responded to finance his Brazilian undertaking, since he was able, on 11 July 1840 to inform Hooker that he was on the verge of embarking (Royal Botanic Gardens, Kew, Directors' Correspondence, 11 July 1840, DC/58/157). It seems very likely that this act of philanthropy might have resulted from Hooker's influence, perhaps supported by Loudon. Moreover, it is conceivable that the generous, anonymous supporter was William's brother Henry Christy (Boase 1892–1921,

1:618; Milligan 2007, p. 103; Harrison and Van Riper 2022).

### Botanizing in paradise: Brazil (1840–1846)

In Brazil a change of fortune eventually resulted in Lippold's remarkably surprising reinstatement as a Lutheran pastor in the city of Petrópolis (see later). But what became in the meantime of his botanical aspirations? Writing of Lippold from an ecclesiastical historian's point of view, Wiemer (1954, p. 56) opined that:

It was certainly not Dr Lippold's main idea when he arrived in Brazil to become parish priest of a community, even though he had all the qualities and all the legal documents for such a position. *We cannot say with certainty what had taken him to this country—we can only guess it, just as we do not know the date of his entry into Brazil* [my italics]. [Translated from the Portuguese]

Wiemer clearly knew nothing of Lippold's aspirations as a plant-collector, despite having surely seen in the Lutheran archives the mention of his early botanical expeditions from Germany into France. Lacking knowledge of Lippold's life between 1821 and 1840, his purpose in Brazil could not have been suspected by Wiemer (see previously), although lacunae may be filled from other sources. It is now evident that Lippold did indeed have a clear objective in travelling to Brazil, which was, as might be expected, to continue with his botanizing, as was announced in the English gardening press at the time (Anonymous 1840a):

Dr. Lippold, the botanical and natural history collector, now in Madeira, where he has been for some years past, proposes soon to leave that part of the world for Brazil, and to occupy himself there in the same pursuits. He will be happy to receive commissions for dried specimens of plants, roots, or seeds, or for specimens of birds, insects, reptiles, &c. He

would prefer devoting his services entirely to one individual, should such be found. As he will go to Brazil an entire stranger, he would be very much obliged by any introduction which may be sent to him, either through Mr. Christy, jun., Clapham-road, or to the care of Mr. Pamplin, 9, Queen-street, Soho.

The preceding newspaper article is dated 4 July 1840 and accords chronologically with his intention to set sail on 13 July 1840, as he had advised Hooker when he wrote about plans for Brazil and asked for advice on his future research there (Royal Botanic Gardens, Kew, Directors' Correspondence, 11 July 1840, DC/58/157). However, Lippold's request for correspondence to be sent to him through Christy is clearly incongruous, since his patron had died on 24 July 1839—how can such a blunder be accounted for?

Perhaps Lippold had conceived the idea of sailing to Brazil rather more than a year before this publication, when Christy was still alive, and had prepared this article in anticipation of the financial support of his patron. This may suggest that Lippold had submitted it with the intention of its being held back until his imminent departure. If William Christy's death had prevented his fulfilment of a promise to finance Lippold's voyage to Brazil, it seems likely that the family would have been aware of this, and Henry Christy might therefore have decided to honour his late elder brother's undertaking. Such a possibility might explain Lippold's apparently inexplicable confidence in his proposed venture and would also support the previous suggestion that Henry Christy could indeed have been the benefactor who facilitated Lippold's voyage to Brazil and the later Rio Doce expedition (see later). If all that were true, perhaps Lippold, on receiving permission to proceed, hurriedly sanctioned publication of his article, forgetting to amend William Christy's proposed function as a contact. Curiously, the article appeared in



the same newspaper twice in the same week, but apparently never in any other publication.

There can be no doubt, therefore, that Lippold had already acquired letters of introduction, probably through Hooker, and prepared a plan for botanical work to commence immediately on his arrival in Brazil. Evidently, though, the opportunity that he had wished for, to devote “his services entirely to one individual” apparently never arose. This is evidenced by his request to Hooker, immediately after landing at Rio de Janeiro, for help by recommending him to further subscribers (see below). But although Wiemer (1954) had no knowledge of future proposals for Brazil, he was certainly correct that Lippold had no intention of becoming the “parish priest of a community”.

#### *Arrival in Brazil*

The archive of the Lutheran Church in Petrópolis records that Lippold arrived in Rio de Janeiro on 4 September 1840 on the brig *Courrier* [sic]<sup>22</sup> (Elisabete Noel, pers. comm., 11 April 2023), but *Lloyd's List* (Anonymous 1840b) stated the ship's arrival to be 1 September. The difference might be accounted for by the time taken to establish contacts and lodgings, although in a letter from Rio, dated 26 September 1840, to Loudon (which was later published; see below), Lippold told him that he had arrived “a fortnight ago”, apparently, therefore, on 12 September. However, that must have been a very rough approximation, and since *Lloyd's List* is likely to be the more reliable source, he probably indeed arrived on or about 1 September. Given the embarkation date of 13 July in Lippold's letter of 11 July 1840 to Hooker (see above), his voyage would have taken about 50 days. Since Rio is 4,679 nautical miles from Funchal, the average speed of the *Courrier* must have been about 3.9 knots (<http://www.shiptraffic.net/2001/05/sea-distances-calculator.html>).

This is rather slower than the average of about 5 knots expected for a sailing ship of that period, but she most likely stopped over at the Canary Islands or the Azores to pick up passengers, cargo or provisions, and unsettled autumn weather may have further slowed progress. Nevertheless, although of interest for maritime history, Lippold's actual date of arrival is not a crucial matter in the present context.

On 26 September he wrote excitedly to Loudon (Lippold 1841):

Here I am at last, in an almost tropical climate ... I could not feel more charmed than I was the day before yesterday, finding myself with the celebrated traveller, Riedel, in one of the remaining small portions of primitive forest behind Corcovado Mountain,<sup>23</sup> surrounded with tree ferns and myristicas and melastomas and rhexias and epiphytes and pothoses and Piperaceae and bambusas, &c., under a concerto of chirping and humming giant-grasshoppers and minute colibris, and loud-screaming many-coloured parrots, and whistling ugly monkeys, and all that only two or three leagues far from the Emperor of Brazil's residence, the good city of Rio Janeiro [as Rio de Janeiro was apparently called in those days] ... I am not a little embarrassed, having failed until now in my project to support myself with German and French lessons until I could send to Europe large collections of plants, seeds, insects, &c. I trust, therefore, in your long friendship not only, but also in your zeal for botany and horticulture, to recommend as soon and as powerfully as possible my poor exertions to generous amateurs, in order to keep me alive amidst all these treasures ... *Only arrived a fortnight ago* [my italics], all my ideas are so excited ... If you will answer this letter, you must recommend it to the care of Mr. Ouseley, H. B. M. Chargé d'Affaires, in Rio Janeiro.

This account seems likely to have been extracted by Loudon from a letter describing the trans-Atlantic voyage that Lippold had promised him on his departure for Rio (see Fig. 20A). Lippold's thrill in his new circumstances is palpable, but it seems doubtful



Figure 22. Corcovado Mountain, near Rio de Janeiro. Lithograph of watercolour painting by John Gray (1812–1881), ex H. Clark (1867) *Letters Home* (personal collection, R. B. Williams<sup>©</sup>).

that much remained of any money that he might have earned from his collecting and teaching in Madeira. Remedial action was again essential.

#### *Establishing new contacts*

Here, in Brazil, Lippold hoped to improve his situation, and he lost no time in establishing influential contacts in Rio, beginning with the British Chargé d'Affaires William Gore Ouseley (1797–1866). Ever supportive, in accordance with Lippold's plea (see Fig. 20A), Loudon appended the following note to his publication of Lippold's first letter from Brazil, amending Lippold's pre-embarkation error in giving Christy's name as a contact (Lippold 1841):

We sincerely hope that such of our readers as have the taste and the means will patronise this excellent man, and scientific, and we need not say enthusiastic, botanist. He may either be addressed to the care of the British consul at Rio, or orders will be received by Mr. Pamplin, Natural History Agent, No. 9. Queen Street, Soho, who will take charge of articles sent home by Dr. Lippold if required.<sup>24</sup> The postage to Rio is 2s. 3d.

Among other botanists already in Brazil, a valuable advisor was the explorer Ludwig Riedel, who at that time was the director of the Botany Department and Botanical Garden of the National Museum in Rio de Janeiro. Accounts of Riedel's extensive travels through Brazil had been published by Faldermann (1831, 1832), which Lippold may well have previously read. He visited Corcovado Mountain (Fig. 22) with Riedel on 24 September 1840, soon after arrival in Rio de Janeiro (Lippold 1841), and also carried a letter of introduction to George Gardner (1812–1849) from W. J. Hooker via Lowe (Royal Botanic Gardens, Kew, Directors' Correspondence, 1 March 1841, DC/68/64). Riedel was, of course, already acquainted with Gardner (Hooker 1838).

Gardner had sailed from Liverpool on 20 May 1836 (Hooker 1836) and so was already well experienced in Brazil (Gardner 1838; Hooker 1838). He spent 1836–1841 there, sponsored by 24 individuals, including his mentor W. J. Hooker (Anonymous 1849; Harris 2018) and the Duke of Bedford, who was “One of the most liberal supporters of my mission to Brazil” (Gardner 1849, p. 49).

Both the latter individuals were also supporters of Lippold, and no doubt of other collectors. While Lippold was still in Madeira, Gardner had investigated the Corcovado Range around Rio de Janeiro and the Serra dos Órgãos (Organ Mountains), supplying British and European subscribers with plants (Hooker 1837b, 1838; Anonymous 1839, p. 243).

Unfortunately, Lippold's Brazilian botanizing had an inauspicious beginning, as he explained to W. J. Hooker in a letter from Rio de Janeiro on 1 March 1841. For about three months he was stricken with erysipelas, yet he had apparently still managed to discover two or three new plants.<sup>25</sup> Lippold was then selling seeds, aided by W. G. Ouseley, and the English Chaplain, Thomas Thornton Champnes (1809–1849), and was giving German lessons to supplement his income (Royal Botanic Gardens, Kew, Directors' Correspondence, 1 March 1841, DC/68/64). Seemingly anxious, therefore, to widen his clientele, he wrote to the Königlische Botanischen Gesellschaft of Regensburg on 28 March 1841 (Anonymous 1842a).

Our corresponding member informs us from Rio Janeiro that he is now busy in Brazil with collecting living and dried plants, seeds, bulbs, tubers, insects, etc., and wishing to be helpful to our association and its members, he supplies his address, inviting orders [as usual c/o Mr. Ouseley, "oder auch an den Königlichen Preuss. Consul"].

Apparently about this time, Charles William Wentworth Fitzwilliam (1786–1857), Viscount Milton, requested, on behalf of some unnamed associate, Hooker's advice as to whether Lippold could be relied upon, "through his character and acquirements", to realize the expectations of his correspondent (Royal Botanic Gardens, Kew, Directors' Correspondence, 26 April 1841, DC/16/121). This disconcerting enquiry perhaps came from one of Lippold's current subscribers,

or a prospective subscriber, occasioned by the unpredicted, but unavoidable, delayed start to his collecting in Brazil. His continual unexpected changes of fortune must have been exasperating, and as shall be seen they unfortunately were to continue.

It is clear that Lippold's financial situation was still not good, because when Hooker urged him to investigate the interior of Brazil he did not then have the resources to do so, but Riedel had assured Lippold that the flora of Rio de Janeiro was "far from exhausted" (Royal Botanic Gardens, Kew, Directors' Correspondence, 1 March 1841, DC/68/64). In fact, great treasures were reasonably near at hand; William Dunlop Brackenridge (1810–1893) a member of the Wilkes Expedition of 1838–1842 averred that "The Organ Mountains, seventy miles from Rio, after all that Mr. Gardner and others have done, abound in thousands of fine plants not yet known...I calculate that more than *one-half* of the plants of Brazil are still unknown to botanists" (Brackenridge 1844).

#### *Brazilian expeditions*

At some time in 1841, the late William Christy's brother Henry wrote to W. J. Hooker to suggest sending Lippold from Rio de Janeiro to collect along the Rio Doce (Royal Botanic Gardens, Kew, Directors' Correspondence, ?1841, DC/16/81). The expedition, conducted in 1842, seems almost certainly to have been a further instance of the generous patronage of the Christy family, although the evidence is as yet circumstantial (see previously). Unfortunately though, the Rio Doce venture was not a great success, being thwarted at the outset by Lippold's ship running aground (see later). Returning from his stranding on the Rio Doce, however, came the chance at last to explore the Amazon that Lippold had for so long desired.

Thus, when Prince [Heinrich Wilhelm] Adalbert of Prussia visited Brazil from 5 September 1842 to 21 January 1843 (Adalbert 1849, 1:211–2:373), Lippold contrived to meet him on the very first day after he landed at Rio de Janeiro. Their conversation turning to botany, Lippold helpfully (though perhaps not entirely altruistically) began to identify trees for the prince: "Dr. Lippold considered it a *Nissolia*, darker and more violet than the *Sapucaja*" (Adalbert 1849, 1:235). Anxious to see the interior of Brazil, the prince decided to undertake an expedition by boat from Belém, up the Amazon into the rainforest, then to ascend the little-explored Rio Xingú, returning the same way; the trip occupied 22 November 1842 to 2 January 1843 (Adalbert 1849, 2:161–368).

Lippold was delighted to be invited as the botanist to accompany Prince Adalbert and his Prussian entourage. It is perhaps surprising, however, that the prince's countryman Riedel was not appointed, but maybe he was otherwise engaged in directing work at the National Museum in Rio. The expedition members included Adalbert's "two faithful travelling companions", Count Bismarck (1815–1898) and Count Oriolla, his captain of General Staff (Fig. 23).<sup>26</sup> Herr Theremin, the Prussian Consul in Brazil, several servants and sailors, and Lippold, made the complement up to fifteen, later supported by an experienced local guide, Padre Torquato Antonio de Sousa (Adalbert 1849, 2:171, 214; Guerra 2010, p. 15). Their river-craft, of a type called an *igarité*, designed with a shallow draught especially to navigate the Amazonian river system and propelled by paddling or by sail, was loaded with "our scanty baggage" and "Dr. Lippold's heavy boxes; they occupy, it is true, a large share of the room in our little bark, but at the same time this gives an honourable proof of the space we concede to science in our expedition" (Adalbert 1849, 2:163).

In Adalbert's account of his expedition, he referred in passing to Lippold's unexpectedly ill-fated voyage, earlier in 1842, from Rio de Janeiro to the Rio Doce (see previously): "Dr. Lippold embarked in the first steamer of the Rio Doce Company, which was wrecked in that river: he reached the Botocudos in the neighbourhood of Linhares, with whom he staid six months, before he could return to Rio de Janeiro".<sup>27</sup> This fortuitously gave Lippold the experience of living under tropical field conditions and of learning to cook in the open, to which Adalbert attributed Lippold's skill as "our preceptor in the culinary art"; this art several times received the highest praise in his report (Adalbert 1849, 2:169). The "good-natured" Lippold was always content to assist in any mundane tasks: "The Doctor usually plucked the fowls and birds which we had shot, and made himself generally useful in the preparation of our meals; although his *Hortus siccus*, it must be owned, gave him ample occupation" (Adalbert 1849, 2:194). Whether Lippold received any remuneration for his contribution to Adalbert's expedition is not known, but perhaps he was at least able to sell some of the specimens that he had collected.

At the time of the arduous Rio Xingú expedition, Lippold was 52 years old, however, and apparently not as physically fit as he was in Madeira where, only about five years previously, he had quite effortlessly outpaced William Wilde on foot (Wilde 1840, 1:98–99). Moreover, he had ascended there some impressive heights over rough terrain (though no doubt mainly on horseback). These included Cabo Girão at 1,920 feet (585 m; see Johnson 1885, pp. 96–97), Palheiro at about 2,000 feet (610 m; see Lowe 1857, p. xii), the Rocha Furada at 2,059 feet (628 m; see Brown 1932, p. 120), and the Quinta da Jardim da Serra at about 2,500 feet (770 m; see Lowe 1857, p. xii). However, progress on the Rio Xingú expedition was not so easy, as Adalbert



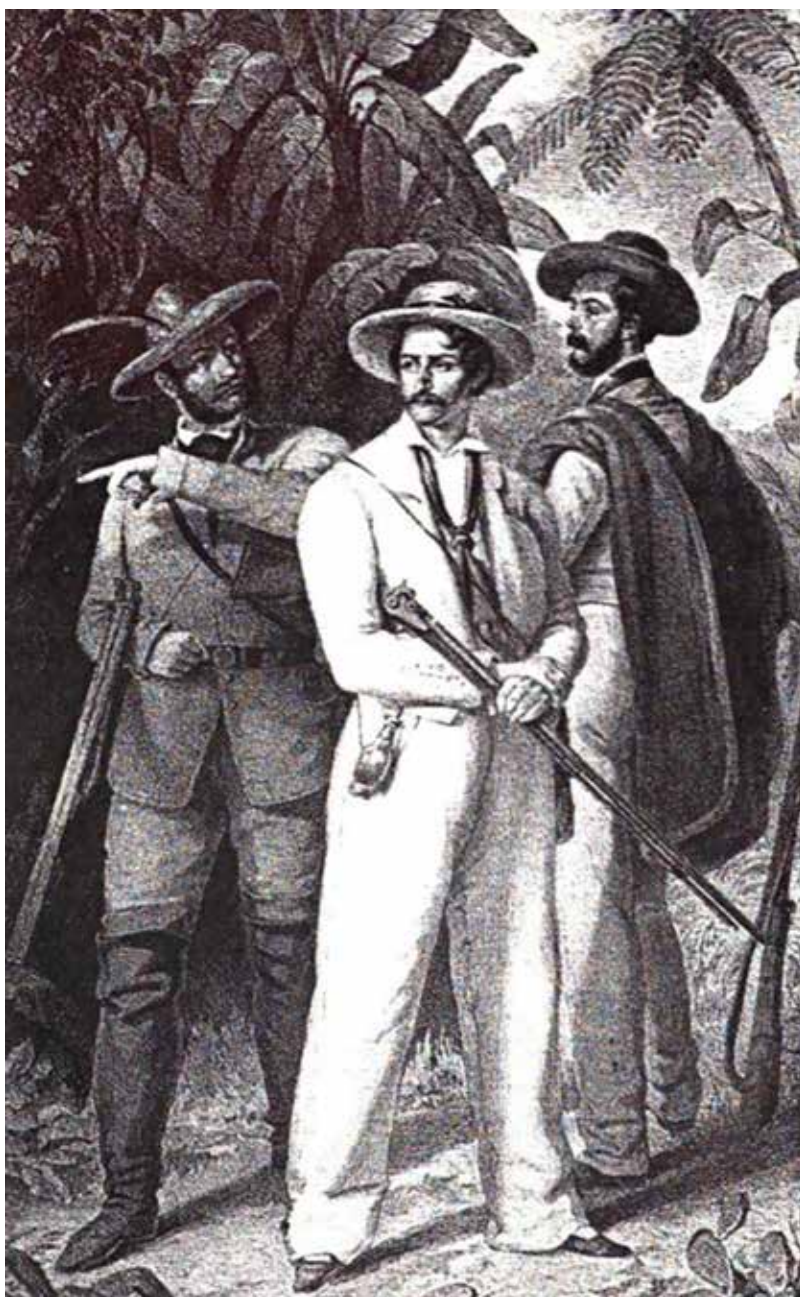


Figure 23. Uncaptioned image, apparently depicting Prince Adalbert and Counts Bismarck and Oriolla on their Rio Xingú expedition. Ex Adalbert, 1849. *Travels of His Royal Highness Prince Adalbert of Prussia*, ed. 2, transl. R. H. Schomburgk and J. E. Taylor. Vol. 1 frontispiece (Harvard University copy, digitized by Google Books, public domain).

(1849, 2:232–234) later recalled,

The poor Doctor was much to be pitied,—he had great difficulty in keeping up with the Padre ... Dr. Lippold carried a long spear,

provided with a hook instead of a point, for the purpose of reaching the climbing plants; this instrument seemed however to have a natural predilection for the lianes, for at every step the hook got entangled in them, and

more than once pulled the unfortunate Doctor down on his knees. Nevertheless the worthy botanist evinced no intention of relinquishing his weapon, and we succeeded at length, after many bootless attempts, in freeing him from his plant-box and the great-coat with which he had loaded himself. The Padre himself disburdened him in part, and, amongst other things, attached the Doctor’s large facão [machete] to his own person ...

We had scarcely proceeded for an hour from our resting-place, when the Doctor’s strength quite failed him, and we were obliged to leave him in charge of one of the negroes, partly not to lose too much time, and partly to enable the Doctor to follow us slowly to our halting-place at noon.

#### *Final botanical work*

It is probable that Lippold’s expedition days were finally over after 1842, due to his increasing age and also to the onus of his unofficial voluntary work, almost by default, for the Lutheran Church, ultimately leading to his reinstatement as a pastor (see later). However, his botanical work was not yet entirely neglected, for instance, his supplying of seeds of *Hibiscus jerroldianus* Paxton, “raised in the spring of 1843 from seeds gathered in the Brazils by Dr. Lippold, and presented to his Grace the Duke of Devonshire [of Chatsworth House], by Mrs. Berry” (Paxton 1846), which was also noted in an American periodical (Anonymous 1846a). Although he seems not to have left such a lasting impression on botanical collecting in Brazil as he did in Madeira, Lippold is known to have employed an ingenious method of acclimatizing Brazilian plants to the potential vagaries of the British seasons (Ouseley 1852, pp. 4–5):

Madeira is not within the tropics, nor is the climate like that of the torrid zone; but most tropical plants will thrive there. Naturalists have found that in order to fit the more delicate plants of Brazil for the climate of England, a system of gradual hardening by transplantation in the first instance to this island, has succeeded

remarkably in “acclimatizing” (as Dr Lippold, a German botanist at Rio, found by experience) tropical fruits and flowers; and after two or three years the seeds and cuttings produced on the island throve much better in England than those imported thither directly from South America.

It is uncertain whether Lippold was the originator of this idea, because Wilde (1840, 1:104) mentioned a similar strategy regarding Henry Veitch’s cultivation of Chinese tea in Madeira, “proving the advantages of acclimatization, and the value Madeira would be of for introducing plants into Europe”. Perhaps Lippold had the idea from Veitch. However, Ouseley was not explicit, though he presumably would have known whence it came, having assisted Lippold with his seed business in Rio some years before. If, as previously suggested, it might have been Dr. Renton’s garden at Quinta do Valle where Lippold was allowed to cultivate his plants on first arriving in Madeira, it would be quite feasible also for Renton to have played some small part in the acclimatization of Brazilian plants after Lippold departed for Brazil. If that were the case, Renton’s assistance would have ceased abruptly when he was forced to return to England late in 1844 because of his wife’s serious illness (see later). The transport of living plants from Brazil to Madeira and thence to England no doubt also depended on the use of Wardian cases, already employed by George Loddiges (1786–1846) in sending plants from England to Lippold in Madeira (Hooker 1837a).

Although Lippold was noted in a biogeographical review of world travellers for his work in Madeira (listed among “Webb, Holl, Lippold, Ch. Lehmann [*sic*], L. Buch, Ch. Smith, Scouler”), his work in Brazil was not documented (Anonymous 1846b, p. 57). The lack of recognition for his botanizing in Brazil is puzzling, since his activities

there were widely known, certainly among contemporary British and German collectors. Furthermore, Prince Adalbert's (1849) account of the Rio Xingú expedition, which also mentions Lippold's Rio Doce trip, appeared in German and in English, yet neither the prince nor Lippold appears in the list of botanical collectors in Brazil provided by Urban (1906) in von Martius's monumental work of *Flora Brasiliensis*.

I have been unable to trace any herbarium specimens collected in Brazil by Lippold or Prince Adalbert, but perhaps neither of them deposited material in museums. Lippold's Madeiran specimens found their way into various private and institutional herbaria via the subscribers to his well-publicized venture, but it might reasonably be supposed, judging by his plea so soon after his arrival in Rio de Janeiro for W. J. Hooker's help in finding clients, that he had significantly fewer subscribers for Brazilian material than for Madeiran (Royal Botanic Gardens, Kew, Directors' Correspondence, 1 March 1841, DC/68/64). It probably did not help that Lippold was preceded in Brazil by Riedel and Gardner, as well as the renowned botanist John Miers (1789–1879), and that Gardner, at least, was already supported by the same benefactors who financed Lippold in Madeira. However, Lippold's Brazilian endeavour may have been financed solely by the Christy family, at least initially, as suggested by the circumstantial evidence of his speedy acquisition of the necessary funds for travel (see previously).

The possibility that Lippold may have lacked the numbers of clients necessary to fully support him in Brazil may explain the lack of specimens to be found in apparently likely herbaria. Hence, if, as might be inferred, he had no, or very few, regular clients for dried specimens, that might in turn explain the change of strategy that he communicated to Hooker (Royal Botanic Gardens, Kew,

Directors' Correspondence, 1 March 1841, DC/68/64):

You give me the friendly advice to penetrate in the interior of Brazil rather than to stay at Rio but you have forgotten, dear Sir, how almost impossible that would be for me, not favoured like Mr. Gardener [*sic*] for travelling on rich amateurs' expenses, nor possessing myself an independent fortune. But I have still some hope to be useful for botanical knowledge, particularly for amateurs [*sic*] of living plants, having begun the trade of a botanical seedsman in a small line already with some success... But my particular intention is to introduce among the Europeans a great many most beautiful ornamental plants and shrubs quite unknown in European hothouses and much more ornamental I dare say than a great many there cultivated, and that can not better, shorter and cheaper be done than by seeds. I sell the half century here of species of seeds with names for the very moderate price of 1 £<sup>s</sup> [one pound sterling currency] and I was with some friends' (the British Chargé d'Aff. Mr. Ouseley's and the Engl. Chaplain Rev<sup>d</sup>. Mr. Champnes's) help until now successful enough. This small revenue with some German lessons like in Madeira will soon me make able [*sic*] to extend my collections and knowledge in tropical plants in order to become daily more useful to European friends of botany and horticulture. I hope, dear Sir, you also will kindly recommend me to such amateurs [*sic*] and I shall be still more obliged to your kindness.

Hence, instead of supplying herbarium specimens to clients, Lippold apparently turned to sending seeds and living plants. There is, indeed, firm evidence for this, for instance, his provision of *Hibiscus jerroldianus* seeds, from which plants were raised in England by "Mrs. Berry" (Paxton 1846). Furthermore, it is known that he had organized transplantation of live specimens from Brazil to Madeira for acclimatization before transference to England (Ouseley 1852, pp. 4–5). Lippold's change of strategy perhaps reflected a realization that supplying live plants, seeds or bulbs could possibly facilitate the eventual creation of new varieties with commercial value, which,

as averred by Alcorn (2023), would have been more profitable than selling limited quantities of herbarium specimens.

Despite the then enormous potential for discovery of undescribed plants in Brazil, I have been able to find only one species for which Lippold is cited as an authority, namely *Lantana mutabilis* J. F. Lippold (Verbenaceae). Even this seems a doubtful attribution because Lippold does not appear to have been the author of the protologue. Instead, a brief description was published by Otto and Dietrich (1842, p. 314), apparently based upon their own observations on the growing plant supplied by Lippold:

This species has been preserved by the local botanical garden [Berlin; ?*Königlichen Botanischen Gartens*] from Dr Lippold of Rio de Janeiro; it has not yet bloomed, but is already very distinct by the shape of the leaves and in its whole habitus. The leaves are 3½ inches long, and 3 inches wide, coarse and bluntly notched, making them very recognizable. It is not *L. nivea* var. *mutabilis* of the Bot. Mag. t. 3110. [Translated from the German]

A short synopsis by Lindley (1843) of Otto and Dietrich's revision of *Lantana* spp. appeared in *Edwards's Botanical Register*. Although *Lantana mutabilis* J. F. Lippold ex Otto et A. Dietr. is not conspecific with the *L. nivea* var. *mutabilis* described by Hooker (1831), it is in any case a *nomen illegitimum*, being a later homonym of *L. mutabilis* C. E. Weigel (see Sanders 2006, p. 400). It is also noted by Sanders (2012, p. 435) as a synonym of *L. strigocamara* R. W. Sanders. Discussing the taxonomy of *Lantana* L. sect. *Lantana*, Sanders (2006, pp. 381–382) explained that:

confusion arises in part from the convoluted history of exploration, cultivation, hybridization, and artificial selection... Records that have been compiled... suggest that, during the eighteenth century, fanciers hybridized different wild species and infraspecific taxa of *Lantana* L. sect. *Lantana* from Mexico, the West Indies, and Brazil.

Lippold's specimen(s) apparently arrived in Berlin directly from Brazil. Because of modern wartime action, Sanders's (2006, p. 411) inevitable conclusion regarding the fate of type-specimens of *L. mutabilis* Lippold could only be as follows: "TYPE. — Unknown (no original material known; if herbarium specimen from material cultivated in Hort. Berlin [Otto s.n.,?] existed in **B** [ZE Botanischer Garten und Botanisches Museum, Freie Universität Berlin], now destroyed; no material of Lippold found at **RB** [Jardim Botânico do Rio de Janeiro]". In any case, attempts to trace the progeny of Lippold's living specimens in Berlin would be fruitless because of the translocation in 1842 of the *Königlichen Botanischen Gartens* at Schöneberg, where they were originally planted, to Dahlem between 1897 and 1907, which was then practically destroyed during the Second World War. It is impossible to say precisely for how long Lippold pursued his collecting of natural-history specimens in Brazil, but it is known that in 1845 he gave some specimens to Thomas Edmonston (1825–1846), the naturalist of HMS *Herald*, when she moored at Rio de Janeiro (Royal Botanic Gardens, Kew, Directors' Correspondence, 27 August 1845, DC/70/37).

However, in 1846 the Lutheran Church offered Lippold the benefice of the emerging city of Petrópolis (see below). Petrópolis is situated in a valley at 2,667 feet (813 m) above sea level, in the Organ Mountains, about 25 miles (40 km) north of Rio de Janeiro, which was a major objective of naturalists and collectors of many specialities (see Hooker 1837b; Anonymous 1839; Brackenridge 1844; Gardner 1849; and Williams 2017b). There seems to be no evidence that, when Lippold finally had to leave Rio to take up his new benefice, he availed himself of the opportunity to collect in the Organ mountains, despite their close proximity. Quite probably, his heavy parochial responsibilities would have



heralded the end of his botanical activities by this time (see later).

### The closing years (1846–1852)

Prince Adalbert's 1842 Rio Xingú expedition proved to be Lippold's final botanical adventure. On 14 December 1843, his last major supporter, J. C. Loudon had died, and with his loss, as well as the previous deaths of William Christy and the Duke of Bedford in 1839, any chance of financial or practical support remaining was remote. Nevertheless, the most influential of all Lippold's supporters in Brazil came to be the Emperor Dom Pedro II, though in ways quite unrelated to botany or horticulture. Although his close association with Lippold is well known (Spliesgart 2006, p. 134), it is unclear exactly when they first met. Based on one particular account, it seems possible that it was in 1846, when Lippold began to conduct Lutheran Church services in Petrópolis, which Dom Pedro occasionally attended when at his imperial summer retreat there, despite his being a Roman Catholic (Anonymous 1852a).

Petrópolis was founded on 16 March 1843 by Imperial Decree 155 (Fróes 2006; Alcântara de Oliveira 2014). In 1845 the German Lutheran Protestant, Julius Friedrich Koeler (1804–1847), a major in the Brazilian Imperial Army, was appointed to oversee the construction and development of the newly founded *colônia*, with authority to allocate plots of land to the immigrants who were to populate the city. Koeler conceived the street plan, and the immigrants themselves, together with the slaves essential to the enterprise, built the dwelling-houses and Dom Pedro's imperial summer palace (Pereira and Ferreira 2017, p. 168).

The potential composition of this new foreign populace was the subject of much deliberation particularly with regard to

ethnicities and religions. As recounted by Fróes (2006), a contract had been made in 1844 with Casa Del Rue & Co. to arrange for the transport of 600 European settlers and their families, with the closely defined skills of “carpenters, stonemasons, blacksmiths and road workers”. The first arrivals came on the brig *Virginie*, which docked in Rio de Janeiro on 13 June 1845, carrying almost a hundred German immigrants. Soon after, it was confirmed that over 2,000 more would arrive in the coming months. From a political point of view, especially considering the ancestry of the Emperor's mother, it was important to dispel any suspicions about any imperial interference in the preliminary arrangements for the arrival of the German settlers, whether Roman Catholics or Evangelical Protestants, particularly because original plans had proposed a wider cross-section of European nationals. Nevertheless, by August 1845 many Germans had moved into their own dwellings.

Although Rio de Janeiro was well served by the Lutheran Church, the new *colônia* initially had neither a pastor nor a dedicated place of worship for Protestants. However, the foundation of the Lutheran Church of Petrópolis took place on 29 August 1845, presided over by the Pastor of Rio de Janeiro, Friedrich Ave-Lallemant, who began to conduct the first Lutheran services there, sometimes attended by Dom Pedro (Pereira and Ferreira 2017, p. 173). Since it eventually became impracticable for Ave-Lallemant to commute to and from Petrópolis for each and every service, and with increasing numbers of Germanic Lutherans arriving in Petrópolis, it became essential to provide a more stable foundation for their spiritual needs, and eventually it fell to Lippold to do so.

On 15 November 1845 the Evangelical settlers held an ecumenical service, officiated over by Pastor Avé-Lallemant and attended by a large number of Evangelical and Catholic

settlers. In view of how delicate the religious problem was for Germanic Catholics, no time was wasted in hastening the arrival of a German priest, Fr. Franz Anton Weber, who had been in Rio de Janeiro for several months, waiting for his assignment to Petrópolis. Lippold, however, had been providing unofficial religious support in Rio from soon after his arrival in 1840 (Fróes 2006), so it was already known that he had been ordained in the Evangelical Church. Hence, on 19 June 1846, he was appointed as the first permanent pastor of the Lutheran community in Petrópolis (Pereira and Ferreira 2017, p. 174). However, since his ordination had to be sanctioned from Karlsruhe, his official inauguration was delayed until 19 August 1848 (Wiemer 1954, p. 56). Renovation of the Provincial Barracks of Petrópolis, which previously had been used by the Catholic settlers for their worship, was ordered, and as soon as work was completed, the building was granted to the Lutheran Church. With the establishment of their respective religious communities, both Father Weber and Pastor Lippold assisted their co-religionists with great proficiency and harmony.

### A final change of course

Lippold's ratification by the Evangelical Lutheran Church authorities in Germany as the new pastor of Petrópolis seems quite remarkable in view of their certain knowledge of the Bischoffingen scandal of 1821. It has not been ascertained whether the church authorities in Rio de Janeiro were aware of this, but approval took two years and two months to obtain, which might be indicative. In any case, Lippold's appointment was duly confirmed, and it therefore appears that from 1846, or even just before, he probably ceased his botanical activities and devoted himself

entirely to parochial responsibilities, supported by Major Koeler and the Emperor Dom Pedro.

### Imperial patronage

In view of Lippold's close association with and ultimate dependence on Dom Pedro II, a brief account of the life and times of the emperor is pertinent here. Dom Pedro became Emperor of Brazil on 7 April 1831 when only five years old, following the abrupt abdication of his father Dom Pedro I after a political revolution and military mutiny. Sporadic insurrections continued up to 1845, when peace was finally restored. During most of this time, the young emperor was represented by successive regencies until, on 23 July 1840, he declared himself of age, established a new ministry and took full control of Brazil (Adalbert 1849, 1:265–267). On 30 May 1843 he was married by proxy to Princess Teresa Cristina Maria of Naples (1822–1889); the actual marriage was celebrated in Rio on 4 September that year (Fróes 2006; Adalbert 1849, 1:268).

Dom Pedro, like his new wife, was a devout Roman Catholic, but his family background was quite different from hers. The emperor's mother was Princess Maria Leopoldina of Habsburg-Lorraine, Archduchess of Austria (1797–1826), a woman of deep Christian faith, well-educated, cultured and politically acute, with ardent interests in anti-slavery and botany; quite unlike her Portuguese husband, Dom Pedro I, a notorious philanderer who was barely interested in any form of culture. Although she had died when her son was an infant, he clearly aspired to match his mother's intellectual and humanitarian proclivities and perhaps inevitably possessed a marked affinity with Germanic culture. On the other hand, the parents of Dom Pedro's young wife, the new empress consort, were King Francis I of

the Two Sicilies and Maria Isabella of Spain, where religious tolerance beyond Roman Catholicism was perhaps not so easily accorded as in the Germanic states.

Spliesgart (2016) has provided further context for the formative years of Petrópolis. It was essential, of course, for Germanic—Prussian, Austrian and Swiss—immigrants to establish political and economic relationships with the Brazilian population, necessarily setting aside the religious differences of the Evangelical immigrants and the Catholic majority of Brazil. In fact, it was not unusual in the early days of Petrópolis for Catholics and Protestants to attend each others' church services, especially because the Catholics had no German-speaking priest at that time (Spliesgart 2016, p. 155), a position that was soon to be occupied by Fr. Franz Anton Weber (see previously).

This ecumenical cooperation, although shunned by the established Brazilian Catholic Church, was perfectly acceptable, however, to the open-minded and religiously tolerant Dom Pedro, who, as previously mentioned, himself occasionally attended Lutheran church services in Petrópolis, which is most likely how he came to meet and to establish his close association with Lippold. Impressed by the new pastor's philosophical and sometimes controversial sermons, Dom Pedro invited him into the imperial household for occasional intellectual discussions, on the strict condition that Lippold should not curb his open, compulsive frankness, which seemingly the emperor greatly admired and enjoyed, being a keen advocate of free speech (Anonymous 1852a).

Dom Pedro was an enthusiastic patron of the arts and sciences, particularly botany, as was his late mother. "I was born to devote myself to culture and sciences", he noted in his private journal (Lira 1977, 2:104; Carvalho 2007, p. 77). The range of topics that

interested him was astonishing and included anthropology, history, geography, geology, medicine, law, religion, philosophy, painting, sculpture, theatre, music, chemistry, physics, astronomy, poetry and technology, among others (Lira 1977, 2:99; Barman 1999, p. 542). Furthermore, he also became an accomplished linguist. Although his mother-tongue was Portuguese (Vitor Hugo, pers. comm., 20 April 2023), he eventually learnt to speak and write Arabic, Chinese, English, French, German, Greek, Hebrew, Italian, Latin, Occitan Sanskrit, Spanish and Tupi (see Lira 1977, 2:103; Carvalho 2007, p. 226).

Moreover, Dom Pedro not only corresponded with but also became a friend of many of the leading scientists, philosophers and authors of the time and became known internationally for his encouragement of education and scholarship. He was greatly esteemed by, among others, Charles Robert Darwin (1809–1882), who said of him: "The Emperor has done so much for science, that every Scientific man is bound to show him the utmost respect" (Lira 1977, 2:182; Vainfas 2002, p. 200). In 1871 he was elected a fellow of the Royal Society of London and wrote appreciatively from Paris on 31 January 1872 to General Sir Edward Sabine (Pedro d'Alcantara 1872):

Dear Sir,—I am highly pleased by the honour that the Royal Society of London has conferred upon me, electing me as one of its Fellows, and very happy that the Statutes allow the intrusion into such a learned body to a Foreign Prince whose merit only consists in being an admirer of science and a friend to its noble interpreters. I beg you, Sir, to present my hearty thanks to your colleagues, that I feel proud to call now *our colleagues*. (Signed) D. Pedro d'Alcantara.

In Brazil the emperor surrounded himself with erudite men, such as Lippold, Filipe Ferdinand Koch, Carl Henning and Christian Friedrich Seybold, all German Lutherans (Chavante 2013). But of those members of the emperor's scholarly circle, perhaps none

of them was better qualified to feed Dom Pedro's personal enthusiasm for cultural improvement than Lippold, with his wide knowledge of science (especially botany), religion, philosophy and linguistics. The arrangement also suited Lippold perfectly and was, as shall be seen, ultimately to his considerable advantage.

The Empress Teresa involved herself in many projects and was particularly anxious to preserve the state religion of predominantly Catholic Brazil. Although it would not be true to say that she discriminated against non-Catholics, when recalling the admirable qualities of a deceased language teacher, the empress observed (one would hope in jest) that it was "too bad he had been Protestant!" to which Dom Pedro resignedly replied, "So for that, my good Lippold will go to hell?" (Chavante 2013, p. 64). Although there was indeed a special relationship between Lippold and Dom Pedro, Lippold's pastoral work doubtlessly also benefitted from the generous nature and humanitarian proclivities of the empress.

Lippold's usually precarious financial status had been much improved by his appointment as the pastor of Petrópolis. No longer was there a need to continue selling biological specimens, because, according to the official statistics of the *colônia* for 1848, he was receiving an annual salary of 310\$969 mil-réis—equivalent to about GB£34 or US\$166 at that time (Moura Filho 2006), in addition to an allowance for his apartment (Spliesgart 2006, p. 134). This was quite sufficient for his personal needs, and in any case, it seems unlikely that he would have been able to spare any time from his onerous pastoral duties for botanizing. Stated to have been extraordinarily zealous, perhaps his greatest contribution to the community was his leadership of a scheme to build an Evangelical Church in Petrópolis, for which he obtained Dom Pedro's permission, together with land

donated by the emperor and funding from the state (Anonymous 1852a; Alemão, n.d.).

#### *An assiduous pastor*

Perhaps unsurprisingly, considering his eccentricities, Lippold's Petrópolis incumbency sometimes caused controversy, mainly because he did not hold back from criticizing the secular lives of his parishioners and their local customs, particularly regarding the keeping of slaves.<sup>28</sup> As a result, on one hand, his opinions antagonized those parishioners who used slaves; and on the other hand, they antagonized the administrators of Petrópolis, who had to rely, at least in part, on slave labour for municipal works (Wiemer 1954).

Furthermore, Lippold's widely known close relationship with Dom Pedro rather exceeded the degree of familiarity that might have been expected between a Catholic emperor and a Protestant pastor, which disconcerted those who regarded the emperor's defence of religious freedom as an affront to Catholicism (Chavante 2013). Nevertheless, as Wiemer (1954) averred, their relationship had no bearing on the religious convictions of either man; and despite Lippold's occasionally controversial preaching, his incumbency ran smoothly in the main (Fróes 2006).

A letter in the archives of the Imperial Museum in Petrópolis (Museu Imperial, Arquivo Histórico: Maço 112 – Doc. 5520) serves to illustrate Lippold's admirable devotion to duty. We see therein his commitment to protecting the interests of a poor widow in Germany, criminally cheated out of her son's legacy by legal professionals in Brazil; and also his proactivity in personally obtaining power of attorney from the Hamburg Embassy in Rio. We see his courage in challenging corruption in the Brazilian legal system and in daring to place it before the emperor. We see also his persuasiveness in his petition to



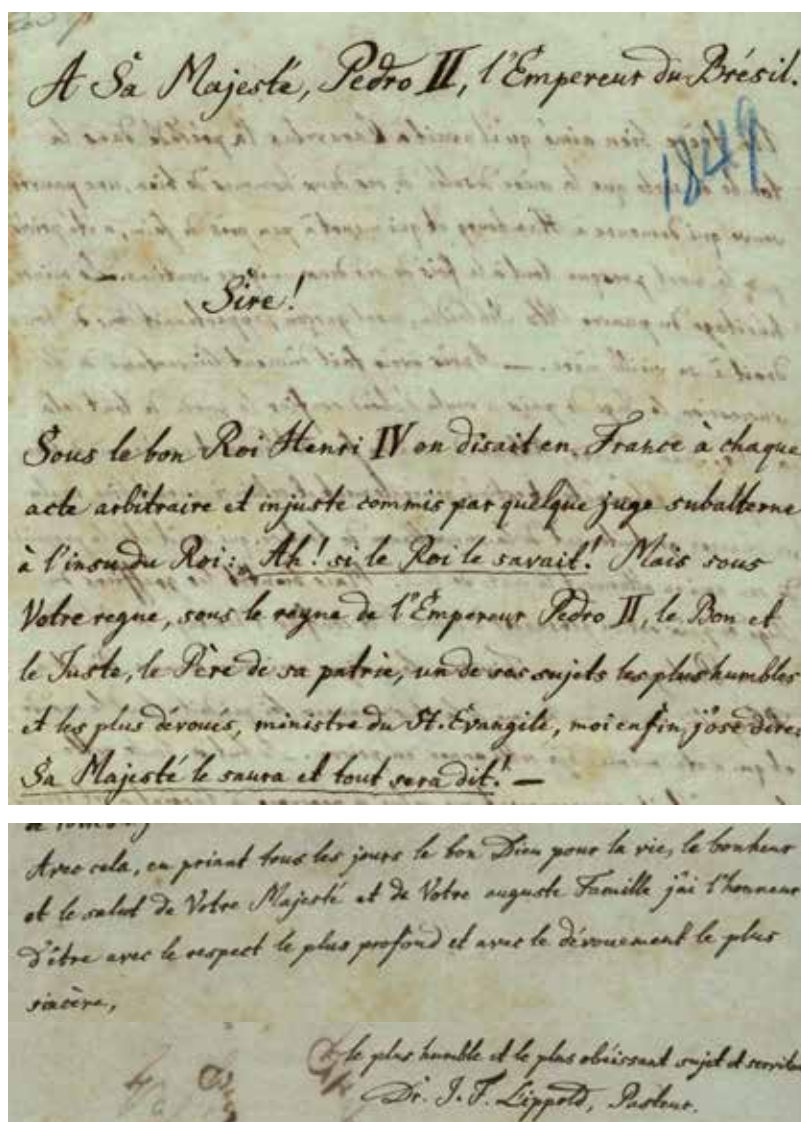


Figure 24. Extracts from a letter in the Imperial Museum, Petrópolis: “Dom Pedro II from Julius Friedrich Lippold, 7 March 1849: Maço 112 – Doc. 5520: Museu Imperial/Ibram/MinC” (courtesy of Museu Imperial®, Arquivo Histórico, Petrópolis, Brazil).

Dom Pedro; and while his obsequiousness was perhaps somewhat excessive (just as in some earlier letters to W. J. Hooker, Loudon and William Christy), it cannot be denied that by such means he usually achieved his desired result. It might be noted in passing that the nature of the deceased son’s business, the growing of mulberry bushes for rearing silkworms, must have appealed to Lippold’s

interests. The essence of his letter (Fig. 24) is conveyed by the following extracts:

**To his Majesty, Pedro II, Emperor of Brazil**

**Sire!**

Here is the account of an act as cruel as it is unjust against a poor widow whom I take the liberty of presenting to your Majesty and whose exact truth I guarantee ... It is therefore the

case ... that I, as a friend of Schleiden, whom I buried, and as a pastor who must by his status be the father of the poor and of poor widows especially ...

The Justice of the Peace first wished to entrust the custody of everything to Mr. Jean Meyer, in Germany, the friend of the late Schleiden ... But then the clerks of the Justice of the Peace managed to persuade him to entrust Schleiden’s inheritance to their worthy friend, a Portuguese named Teixeira, well known in Rio and Petrópolis as a man of the poorest credibility who owes everyone and has even been in prison this year ...

The purpose of this plot was apparently to obtain money for this man by an enormous charge to the estate having taken everything to his own house. I myself duly received and presented to the Justice of the Peace a power of attorney from the Consul-General of Hamburg in Rio to oversee the inheritance of Schleiden for his poor mother ...

I shall not dare to say in vain: His Majesty the Emperor will know it and he will put it in order! While placing my boundless trust in the goodness and justice of Your Majesty. With this, praying daily to God for the life, happiness and salvation of Your Majesty and Your august Family I have the honour to be with the deepest respect and with the most sincere devotion of Your Majesty, the most humble and obedient subject and servant, Dr. J. F. Lippold, Pastor.

7 Mars 1849.

[Translated from the French]

Despite his best efforts, Lippold’s proposed Evangelical Church was unfortunately not built during his lifetime because in 1852 he fell seriously ill and required surgery in Rio. The Rio de Janeiro correspondent of the Vienna newspaper *Abendblatt der Oesterreichisch-Kaiserlichen Wiener Zeitung* revealed that the benevolent emperor had funded Lippold’s surgery with 5000\$000 mil-réis, equivalent to about £575 or US\$2,826 (Clark 1867, p. 110; Moura Filho 2006). This was a huge sum in comparison to Lippold’s annual stipend of £34. A personal letter from Dom Pedro advised Lippold to “use it judiciously to restore his [Lippold’s] health, which is so precious to

him [Dom Pedro] and to his parishioners”. However, there had been for some months an epidemic of yellow fever in Rio, and while convalescing, Lippold unfortunately contracted the disease, of which he died on 6 June 1852, only 16 days short of his 62nd birthday (Spliesgart 2006, p. 134).

Thus Lippold’s life came full circle, from his beginnings in Germany as an intelligent young schoolboy who became a disgraced Evangelical Lutheran pastor, rebuilt a life as a botanist and horticulturist and was finally reinstated by his church in Brazil, where he died as a much-appreciated community leader, highly respected by his parishioners and the imperial family. He left no issue, never having married. There can be few individuals who, after such an inauspicious start as an ordained cleric, have been able to recover their lost respectability owing to a passion for botany.

#### *A final resting place*

The question of Lippold’s final resting place has not been completely resolved.<sup>29</sup> As the Anglican clergyman Hamlet Clark (1867, p. 128) wryly observed, “The Brazilian laws will not permit a heretic ... to be buried in their consecrated grounds! ... nay, they will not allow a Protestant to be buried anywhere without leave, except in the Protestant burial-ground at Rio”. The records of the Cemitério dos Ingleses, Gamboa, in Rio de Janeiro include a certain “S. F. Leppald, died 7 June 1852, buried in plot Sect-2, Grave# 954” (<https://www.findagrave.com/memorial/125030465/sf-leppald>; accessed 28 January 2024). This is almost certain to be the burial record of J. F. Lippold, the name and date apparently having been mistranscribed from a manuscript register, which seemingly no longer exists. The Cemitério dos Ingleses was opened in 1811 (Fig. 25), and it was the only place at the time of Lippold’s death that he, being a Protestant,



Figure 25. Wall-plaque of Cemitério dos Ingleses, Gamboa in Rio de Janeiro (photographer Bob Boston®; <https://findagrave.com/cemetery/2346318/british-cemetery-gamboa#view-photo=26383933>).

would have been permitted by the municipal authorities of Rio de Janeiro to be buried.

### Lippold's social and scientific circles

The unequivocal establishment of the true identity of the obscure “Dr. Lippold” as Julius Friedrich Lippold (1790–1852) has revealed a much fuller picture of his life and circumstances than was previously known. As related herein, he developed a hitherto uninvestigated international network of

fellow naturalists and other associates up to the highest levels of society. The foregoing account of his life considerably improves our understanding of his social and scientific status and increases the importance of his inclusion in R. T. Lowe's Madeiran network, described by Mesquita et al. (2021, fig. 3).

Some of Lippold's previously overlooked associates, discovered from original letters, diaries, scientific and historical publications, church records and travel journals, may now be incorporated in Lowe's

sociogram. Accordingly, Figure 26 presents a geographically based sociogram with Lippold as the primary node and Lowe as a secondary node. The geographical limits incidentally mirror the chronology of Lippold's life in Europe, Madeira and Brazil. It is remarkable, however, that among the many letters known in various archives, none to or from his seven siblings has been found. It seems quite possible that he had become estranged from his family following his fall from grace resulting from the Bischoffingen scandal.

From his early days Lippold seems to have been constantly financially insecure, which may have been the root cause of the scandal. Subsequently, as reflected in his sociogram, his livelihood appears to have depended on a continuous chain of financial supporters and providers of short-term employment. Beginning in Alsace with the Baumann brothers and in Marne with the Baron de Baye, it continued with William Christy, junior, the Duke of Bedford, Nathaniel Ward and George Loddiges in England, extending to Henry Veitch and Alexander Renton in Madeira. Henry Christy picked up the reins in Brazil, where Lippold was able to join Prince Adalbert's Rio Xingú expedition and benefitted from Dom Pedro's funding of his life-saving surgery, only to die tragically of yellow fever. Nor should be forgotten his publishers, Johann Friedrich Cotta and John Loudon, who promoted his reputation in many ways. Indeed, it seems doubtful that Lippold would have survived the vagaries of life without the constant help of such a band of kindly supporters.

### The ultimate mystery of “Dr. Lippold”

Much effort has been expended in trying to establish how Lippold became known as “Dr. Lippold” and what was his entitlement to that style. The few facts discovered unfortunately

do not lead to any certain conclusion but are presented here as a basis for further investigation.

1. Lippold graduated from the University of Jena. If he had continued his studies to doctoral level, the university archives would have recorded this, but apparently no such documentation exists. Moreover, unlike in contemporary Austria, it was not customary in 19th-century Germany to use the title “Dr.” unless one had earned a doctorate (Dr Stefan Gerber, pers. comm., 24 May 2022).
2. References to Lippold in official archives of the Evangelical Lutheran Church from 1815 to 1821 describe him at various times as “Pfarrcandidat” (Candidate pastor), “Pfarrer” (Pastor), “Vikar” (Vicar) or “Pfarrverweser” (Parish administrator), but never “Dr.”. In some of these same documents, there are references to certain other individuals styled “Dr.” or “Professor”, which emphasizes the differences in social standing regulated by these academic distinctions. Current opinion is that it is extremely unlikely, therefore, that a Lutheran pastor would have been addressed by right as “Dr.” (Prof. Wilhelm Ilg, pers. comm., 20 May 2022).<sup>30</sup> In fact, an official document dated 1861, certifying Lippold's performance of a marriage ceremony in Petrópolis on 9 April 1846, refers to him as “Protestantischen Pfarrer Herrn Lippold [Lutheran pastor Mr. Lippold]” (Transcription of a protocol at the Royal Consulate of Prussia of Rio de Janeiro, witnessed on 8 February 1861: <https://jasieben.wixsite.com/genealogiasieben/page3>).
3. Fróes (2006) referred to Lippold as “Médico, Professor e Pastor Praticante”, implying that he may have gained a medical degree at some time. However, Fróes presented no evidence for Lippold's being a member of the medical profession, apparently assuming



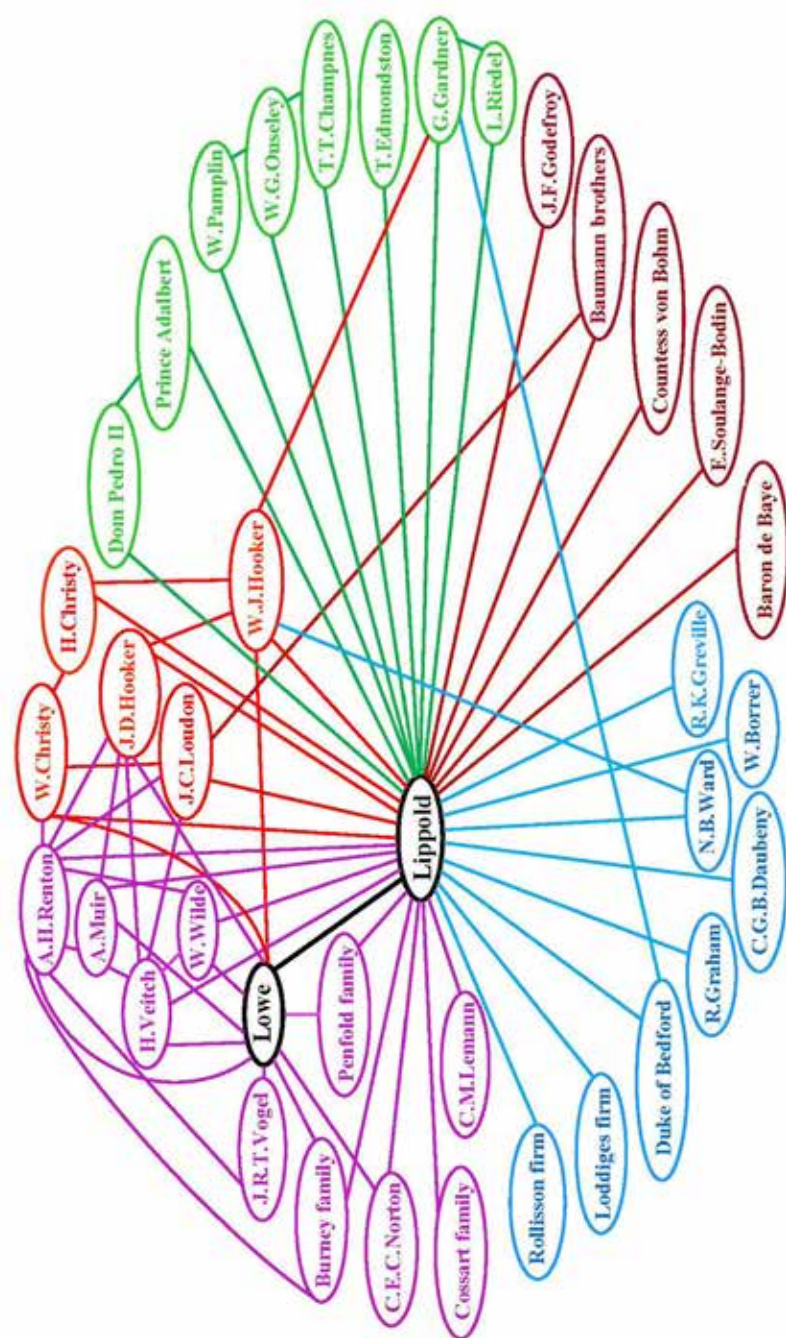


Figure 26. Sociogram based on Julius Friedrich Lippold and Richard Thomas Lowe. Colour key: Black = primary (Lippold) and secondary (Lowe) nodes; Brown = Lippold's associates in France (1821–1834); Red = Lippold's British-based sponsors (1834–1837); Blue = British subscribers to Lippold's Madeira venture (1837–1840); Mauve = contemporaneous Madeira residents and visitors (1837–1840); Green = Lippold's associates in Brazil (1840–1852). R. B. Williams<sup>6</sup>.

that he was a physician simply because of his having been addressed as “Dr. Lippold”. In 1832, when Lippold was elected a corresponding member of the *Königliche Botanische Gesellschaft*, he was listed as “Dr.” in the published announcement of new members. Some others in the same list appear as “Dr. Med.” or “Apotheker” (Anonymous 1832, p. 109), emphasizing the clear distinction between medically qualified persons and others. In mainland Europe, medical degrees were doctorates, but in the United Kingdom they were bachelor's degrees, and “Dr.” was (and still is) a courtesy title. I have found no evidence in Lippold's own writings or in any account of him that suggests that he had gained any medical qualification. Indeed, when he was assaulted in the street in Funchal one night, he described being attended by a local physician who medicated and bled him, which would have hardly been necessary if he were qualified himself (Royal Botanic Gardens, Kew, Directors' Correspondence, 7 September 1837, DC/58/159).

4. Another account of Lippold's occupations, this time as “Hochschullehrer, Botaniker, Pfarrer, Philologe [University teacher, botanist, pastor, philologist]”, appears in the online catalogue of the *Deutschen LiteraturArchiv*, Marbach. Since, again, no supporting evidence is cited for such avocations, this description appears to have been inferred from previous knowledge of Lippold's ordination, the information on the title-page of his second book (see Lippold 1831) or from his letters, either in French or German, in the *Deutschen LiteraturArchiv* (see Appendix 3). Lippold signed those letters, between 1824 and 1830, thus: “J. F. Lippold, botaniste voyageur” (1824); “J. F. Lippold, botaniste et gouverneur de Mr. le Baron de Baye” (1825); “J. F. Lippold, Professeur de la langue Allemande et de

l'histoire naturelle à Paris” (1828); “J. F. Lippold, Prof. des langues et naturaliste” (1829); or “J. F. Lippold, Prof. der älteren und neueren Sprachen und Naturgeschichte in Reims” (1830; Dr Sabine Borchert, pers. comm., 3 June 2022). He signed his letter to the *Königliche Botanische Gesellschaft* in 1831 as “J. F. Lippold, Professor und Naturalist” (Fig. 27).

5. It was in or about 1828 when Lippold first described himself as a professor in languages, whilst the earliest example that I have discovered of his being addressed by others as “Dr. Lippold” was in 1832 (Anonymous 1832, p. 109). In letters that he wrote between 1824 and 1831, Lippold did not sign himself as “Dr.”. Perhaps his horticultural colleagues began, therefore, to refer to him as “Dr.” as a courtesy after publication of his second book (Lippold 1831); or other associates, perhaps simply not knowing whether he possessed a doctorate or not, may have addressed him thus to avoid causing offence in case he was indeed thus qualified (a common practice even now!). In Germany at that time, the term “Professor” had a meaning equivalent to the French “Professeur”, a term for teachers in general at all educational levels; it did not necessarily imply a university professional, who would correctly have been called a “Hochschullehrer”, a seemingly erroneous term used by the *Deutschen LiteraturArchiv*, Marbach (see above). However, since he was anxious to establish a reputation as a professional botanist, Lippold would no doubt have realized the advantage of being referred to as “Dr.” and even if not thus qualified, he therefore may have acquiesced quietly in the use of the unearned honour. The only explicit reference to the degree of Doctor of Philosophy that I have discovered appears in a letter addressed to him by his publishers



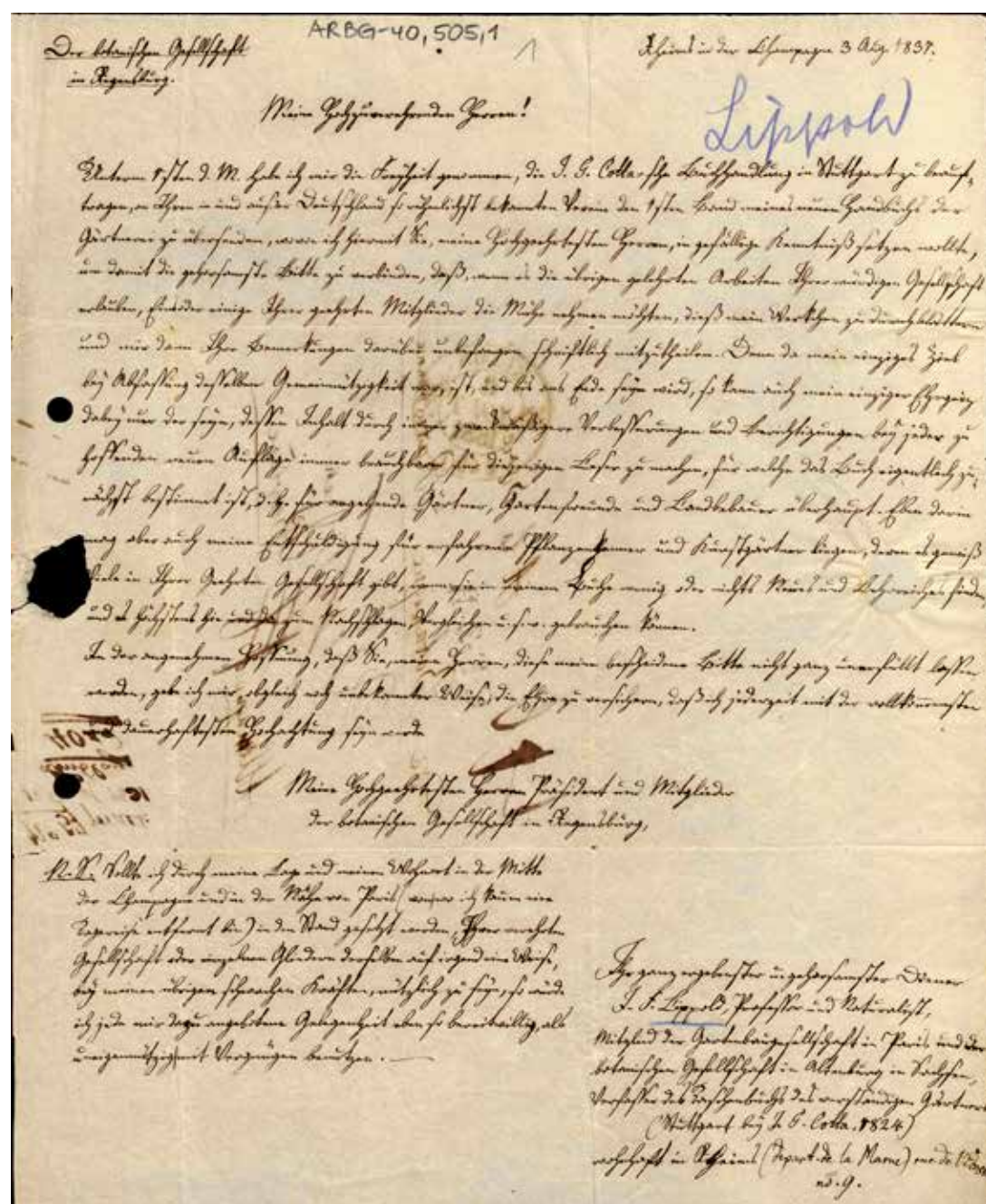


Figure 27. Letter of 3 August 1831 from Rheims, France, in Julius Friedrich Lippold's correspondent's hand, to the Königl. Bot. Ges. in Regensburg, Germany (courtesy of Regensburgische Botanische Gesellschaft<sup>®</sup>, Germany).

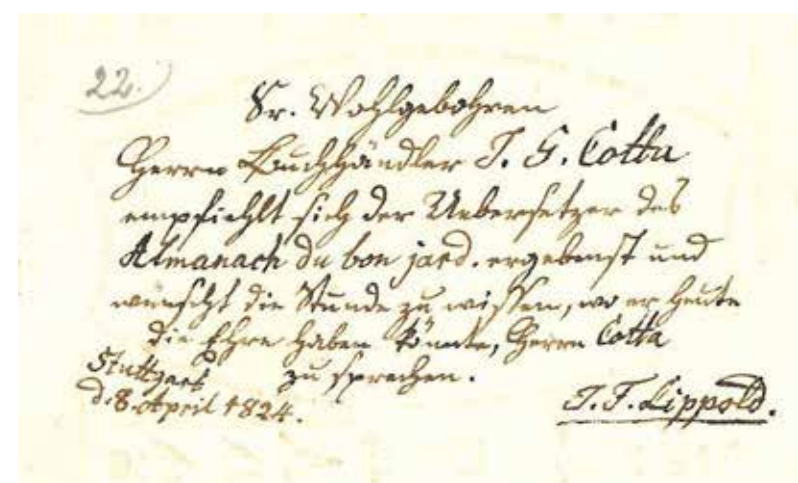


Figure 28. Visiting-card (8 April 1824, Stuttgart) signed in Lippold's formal hand (cf. Fig. 27) (courtesy of Deutsches Literaturarchiv Marbach<sup>®</sup>, Germany).

on 6 March 1834, thus: "an Herrn J. F. Lippold Dr. phil. Passy Prof. Reims" (Appendix 3: Deutsches Literaturarchiv Marbach, Archive). Nevertheless, this unique example seems very likely to be, again, an assumption made to avoid any unintended offence, bearing in mind that Lippold's long-standing contact was with Johann Friedrich Cotta, who had died in 1832. There is no record in the archives of the University of Reims that Lippold gained a Dr. Phil. there or occupied any official post in the university (Philippine Le Berre, pers. comm., 25 April 2025); nor in the archive of the Département de Marne (Cédric Gourjault, pers. comm., 16 May 2025).

6. In the papers based on Lippold's letters to Loudon, he is occasionally credited with the title of "Dr.", for which Loudon is likely to have been responsible, since all such examples appeared in *The Gardener's Magazine*. The earliest of these appeared in May 1836, although the article is signed December 1835 (Lippold 1836). Loudon himself referred to "Dr. Lippold" in April 1836 (Loudon 1836a). The title was perpetuated as "le docteur Lippold" by Lasègue (1845, p. 449).

7. Being addressed by others as "Dr. Lippold" apparently from about 1832 (Anonymous 1832), in the late 1830s Lippold himself began to use that style on herbarium labels (see Appendix 6). Examples may be seen, for instance, in the **BM** and **K** herbaria, authenticated by the notes on some specimen sheets that could only be his personal observations (see Appendix 4). His early formal signature ("J. F. Lippold") on his visiting-card (Fig. 28) and on his letter to Dom Pedro ("Dr. J. F. Lippold, Pasteur") (Fig. 24) is clearly in the same hand as the "Dr. Lippold" on specimen labels (see Appendix 6), but differs somewhat from signatures on letters in his less neat correspondent's hand (cf. Fig. 27). They are, however, clearly distinguishable from "Dr. Lippold" written on herbarium sheets and labels by others, such as R. T. Lowe.<sup>31</sup>
8. The exact date when Lippold began to adopt the style "Dr." in signing letters cannot be certainly established. However, he apparently did not use the title until after others began to address him so. It may also be significant that such examples that have been traced were all written to British correspondents, who would perhaps have known little of his past life in Germany.





Figure 29. Street sign of “Rua Dr. Lippold” in the suburb of Cascatinha, Petrópolis (courtesy of the photographer João Vitor Borde<sup>®</sup>, Petrópolis, Brazil).

The earliest that I know of was to W. J. Hooker on 14 April 1837 (Royal Botanic Gardens, Kew, Directors’ Correspondence, 14 April 1837, DC/58/156), which was written in French, closing with the words “Sir, your very humble and dutiful servant, Dr. J. F. Lippold”. He also wrote to Loudon on the eve of his departure from Madeira for Brazil, ca.15 August 1840 (Fig. 20A), signing himself “Dr. J. F. Lippold”, as Loudon had begun to address him ca.1836. Hence, justification for Lippold’s use of the style “Dr.” remains obscure, but on balance it appears most likely that initially he tacitly, but apparently somewhat disingenuously, accepted it as a courtesy title, which he then adopted permanently. However, whatever the truth of the matter, there exists to this day, a “Rua Dr. Lippold” in the Carangola area (25715–250) of Petrópolis (see Fig. 29); it is misspelt “Lipold” on some modern maps.

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#### Appendix 1. Insights into Lippold’s character

Rather few published sources mention “Dr Lippold” in a scientific context, but it is fortunate for historians that he appears in contemporary accounts by several residents of and travellers and invalids who visited Madeira. There he caused much amusement among the Portuguese and English residents alike on account of his strange dress and behaviour. Nevertheless, being a well-educated man with unbounded enthusiasm and energy, on his arrival in Funchal he immediately gained the confidence of R. T. Lowe (not an easy man to impress), who reported to Hooker (1837a),

I have introduced him, shown him about, and shall continue to help him as far as I can. He seems to be very diligent and active, and is really a well-informed and superior man upon other subjects besides Botany. I have been highly delighted to find in him a kindred passion for my favourite Klopstock [a German poet].<sup>32</sup>

Despite his eccentricities, Lippold was quickly accepted into the British social circle of Madeira, who evidently knew nothing of the scandal over his alleged debts in Germany. He became particularly friendly with the Burney family, who resided in Funchal from September 1838 to July 1839 for the health of a family member suffering from tuberculosis.

Fanny Anne Burney wrote in her journal on 13 October 1838 (see Burney 1926, pp. 204–205):

Spent the morning with Mrs. Renton,<sup>33</sup> who has introduced us to a German—Dr. Lippold, sent out here by the Duke of Bedford and some other persons to collect seeds... This worthy little man is one of the most singularly plain men I ever saw; the formation of his head is so remarkable that I do hope that he will leave his skull as a legacy to some German Phrenological Society... The Doctor was originally educated for the Church and held a benefice, *but was so passionately attached to the pursuit of Botany and Horticulture, that he gave up his Profession in order to pursue his favourite studies exclusively* [my italics]. It is by no means easy to understand his dialect, which is a most amusing compound of German, English, French, Portuguese, and Latin... When botanizing he walks about in a peculiar dress, carrying a large Tin Box for preserving plants and flowers, strapped on his back; a thick stick, and a gourd to hold water. The Portuguese, who have a good deal of humour, go about at Easter masked in the streets and dressed up as caricatures of anyone who has any peculiarity of manner or appearance. Little Dr. Lippold was an excellent mark for their ridicule, and accordingly last year a man appeared dressed at the Masquerade exactly like the simple-minded German, carrying a Tin Box on his back, and pretending to botanize on the Trees, etc.

Fanny’s journal reflects her spontaneous, frank expression and thus happily provides this vivid impression of Lippold’s appearance, which in the absence of any portrait of him, we could otherwise never have known. She was not alone in remarking upon his small stature; a similar comment occurs in the diary of J. D. Hooker about his meeting Lippold (see Huxley 1918, 1:91). However, she may have exaggerated Lippold’s mixing of languages in his speech—certainly his letters in French or English appear to be quite idiomatic, although his occasional use of French in writing letters to Englishmen seems rather odd. Later (20 November 1838), Fanny records in her journal how she was regaled with yet more stories

about Lippold's unfortunate experiences at the hands of pranksters, which, in the main, he seems to have borne patiently and with good humour (Burney 1926, pp. 212–213):

Dr. Lippold called to-day, and told me some very diverting anecdotes of his Botanizing Expeditions, told in his odd language. Upon one occasion he hired a Portuguese to row him out to the Gruguglio [*sic*, probably Gorgulho] Rocks in order that he might search for marine plants and Fuci. The Boatman landed the little Doctor safely, but then went off with his boat, leaving the unfortunate Botanist upon a ledge which had the sea on either side, so that there was no escape except by scrambling up the cliff, under which the rocks were situated.

On another occasion, however, in September 1837 poor Lippold had suffered a much more serious assault on his dignity and welfare, when he was attacked and robbed of his purse while walking home one evening, apparently, he believed, because he was a foreigner (Royal Botanic Gardens, Kew, Directors' Correspondence, 7 September 1837, DC/58/159). But there were pleasant memories, too.

Fanny records her visit with Lippold to the palace and gardens of the Portuguese Bishop of Funchal (Burney 1926, pp. 215, 216). She had told Lippold that she would like to see there the "remarkably tall *Camellia Japonica* trees", and "unknown to me, the good-natured man wrote to request the Vicar to allow me to see his garden". Not only was that wish granted, but during the visit Lippold diplomatically mentioned Fanny's fondness for drawing, which elicited an invitation from the bishop for her to make use whenever she wished of the high turret of his palace for landscape-drawing. The closeness and apparent affection that developed between Lippold and the Burneys was further in evidence following the tragic death from tuberculosis of Fanny Wood's niece, Jane, on 14 February 1839, only

eleven days short of her seventeenth birthday (Burney 1926, pp. 234–236). On 19 February,

Dr. Lippold went at our request to plant and adorn our poor Jane's grave with flowers, my Husband [Major James Wood] accompanying him. Dr. Renton had kindly given me, from his own garden, some Fuchsias, Noisette and Macartney Roses, Passion Flowers and Geraniums for the purpose.

Some time previously, Dr William Wilde had visited Madeira on the yacht *Crusader* in September 1837 as companion to his consumptive Glaswegian friend, Robert Meiklam, seeking healthier climes. Wilde, no doubt well prepared with letters of introduction, made a rapid survey of the sights and social life of Madeira between 24 October and 22 November, fitting in a side-trip to the Canary Islands from 5 to 14 November 1837. Particularly entertaining is his memory of an exploratory walk with Lippold near Funchal (Wilde 1840, 1:98–99):

Great quantities of eels are taken upon this part of the coast, and we met several of the natives returning from fishing. My companion, a German botanist, well known in Funchal, purchased some, but having already filled all his capacious pockets with the wonders of the vegetable world, he, without a moment's hesitation, placed some six or eight of the live eels in the crown of his large straw hat, and, to keep them down, bound it under his chin with his pocket-handkerchief. Poor good-natured man, his costume and appearance were at all times a source of ridicule and amusement in the island, particularly among the ladies, with whom, however, he is a great favourite ... when he turned round to me, with the heads and tails of half a dozen slippery eels protruding themselves from beneath his hat ... but for the good humour that beamed in his expanded Hanoverian countenance, I should have likened it to the Gorgon. However, he took it all in good part, and pushing them up every now and then, set forward at a pace such as few pedestrians I ever met could long keep up with; and I should soon have been left behind, but that suddenly calling his attention to a lump of basalt that lay by the road-side, he inquired if

I considered it valuable. Having gained a few minutes' rest in descanting upon the qualities of the specimen, which weighed about ten or twelve pounds, the simple-hearted man stated his desire to carry it with him the remaining four miles of our journey, in which, as may be supposed, I readily encouraged him, for acting as a drag-anchor upon the powers of the German, it enabled me to keep pace with him to Funchal, which we reached late in the day. I need hardly state that the story of the stone became a tender point to the naturalist for some time after ... Dr. L. will be long remembered in Funchal.

This account of Lippold and his eels is just one of the bizarre experiences recorded by visitors to Madeira who met him; one might even suspect that, given an audience, he delighted in playing up to his comedic reputation. For instance, when HMS *Erebus* and HMS *Terror*, outward bound on the Ross Expedition to the Antarctic, paused their voyage at Funchal during October 1839, the assistant surgeon on HMS *Erebus* was Joseph D. Hooker, the son of one of Lippold's main supporters, William Jackson Hooker. The ships' crews naturally took full advantage of the hospitality bestowed on them by the British residents, particularly by Andrew Muir. As previously mentioned (see Royal Botanic Gardens, Kew, Sir Joseph Hooker Papers, 20 October 1839, JDH/1/2/9), it was arranged for a party to make a visit on 23 October 1839 to the famous valley of the Grand Curral (see Johnson 1885, pp. 119–122).

At the top of the valley, at about 3,500 feet (1,067 m), they became surrounded by a large group of "ragged, dirty Portuguese" (see Huxley 1918, 1:88–91), described by J. D. Hooker as

most troublesome ... a brood of the most extraordinary urchins I ever beheld, of all ages from five to twelve, dressed in tatters ... On a grass bank, where we had left our horses, there was spread for us a famous cold luncheon prepared for us by Mr. Muir. Dr. Lippold

had joined us just before reaching the Jardine [Veitch's Quinta da Jardim da Serra], and he certainly amused us not a little during dinner. The young half savages clustered around us whilst eating, forming a ring, which gradually approached and hemmed us in. Now the little German abhors the Portuguese beyond any other nation, and he could not brook these unfortunate urchins drawing near us. He used accordingly, every now and then, to start up, take his stick, shout, hooroosh, shake his coat-tails at and scare the poor little snips out of their senses.

It is difficult to believe that Lippold's behaviour was anything other than for comic effect, much like his earlier theatrical performance with the eels. He would certainly have anticipated, of course, that an account of these events would be relayed to Hooker's father; indeed, the original letter relaying the story from son to father still survives (Royal Botanic Gardens, Kew, Archives, Correspondence from Antarctic Expedition, ref. JDH/1/2, pages 8–9). J. D. Hooker's claim that "the little German abhors the Portuguese" must certainly have been with tongue in cheek, since Lippold seems not to have been an unkindly man, and was often described as "good-natured" by diarists.

Perhaps it was this latter quality and his helpfulness to others that almost automatically elicited a natural desire in people to assist him. There are many examples of Lippold's support by acquaintances, many of whom became firm friends throughout his life from the time when he left Germany in 1821. Beginning with the Baumann nurserymen brothers, who effectively, but understatedly, launched his horticultural career, he then came to rely much upon the Christy and the Loudon families in London, whence with their practical aid, and supported by the influential W. J. Hooker, N. B. Ward and the Duke of Bedford, he proceeded to Madeira. There, he developed close relationships with R. T. Lowe, Henry Veitch and resident professional families,



particularly the Rentons and Muirs, as well as the visiting Burney family. Proceeding thence to Brazil, probably facilitated again by the Christy family, Lippold immediately attracted the support of residents such as the German botanist Ludwig Riedel, the British Chargé d’Affaires William G. Ouseley and the English Chaplain Thomas T. Champnes, and later the visiting Prince Adalbert of Prussia; however, perhaps the most remarkable friendship that Lippold developed in Brazil was with the imperial family of Dom Pedro II.

Lippold clearly maintained his early association with the Muir family to the end of his sojourn in Funchal, when he wrote to W. J. Hooker that “I am under so many obligations to you, that I think it my duty to profit of Miss Muirs [*sic*] kindness to send you some Madeira-Seeds, acceptable perhaps to you for the botanical garden in Glasgow” (Royal Botanic Gardens, Kew, Directors’ Correspondence, 12 April 1840, DC/50/210). In this same letter he also made grateful allusions to his continued assistance by Hooker himself, and by the Muir and Renton families, while hinting at his need of funding for his anticipated voyage to Brazil, which possibly came to be provided by Henry Christy (see under “Further afield”).

Much of Lippold’s support in Madeira and Brazil depended upon influential botanists and horticulturists, such as W. J. Hooker, Loudon, Loddiges and Ward, who helped to solicit the financial contributions of wealthy philanthropists, such as the Duke of Bedford and the Christy family. The close relationships that he developed with some of these people are illustrated by the familiar language and content of many of his letters quoted herein. Not only did the Christy family render valuable assistance for scientific purposes, but also they were equally attentive to Lippold’s personal requirements. For instance, writing to “Mon cher ami et protecteur” (again, one wonders why in French!) after his patron

William’s brief visit to Madeira, Lippold closed with this surprising post-script (Royal Botanic Gardens, Kew, Directors’ Correspondence, 16 July 1838, DC/50/211):

Will you allow me to ask you what happened to the other six shirts that your good mother was kind enough to buy for me, the first half dozen of which you gave me yourself? I would be very upset if they were lost in transit! Farewell!!  
[Translated from the French]

A particularly affectionate letter is one that he wrote to Loudon just before leaving Madeira for Brazil, which he signed off as, “Farewell, dear Sir, remember me kindly to all your family-circle and preserve your friendship for me in the new world as before in the old. I am for ever yours most truly with soul & body” (Fig. 20A). It also includes the note, “I hope you and all your Ladies, Mr. Rauch inclusive, are quite well and merry”, which prompts the question of who those individuals were. The answer is provided by Jane Loudon (1845, p. xl), who later wrote of her husband, John,

To us, who saw the state of his health [since 1838] ... we determined to do every thing in our power to prevent the necessity of his exerting himself. Two of his sisters learned wood-engraving; and I, having acquired some knowledge of plants and gardens during the eight years I had acted as his amanuensis, began to write books on those subjects myself.

Clearly then, Loudon’s “Ladies” were his sisters, Mary and Jane (Dewis 2014, p. 2), and his wife. “Mr. Rauch”, who complemented this team, had been described as Loudon’s “able and excellent assistant and pupil” (Anonymous 1840c), moreover “now an able assistant of Mr. Loudon in laying out grounds, and a contributor to the *Gardener’s Magazine*, &c.” (Lhotsky 1840). This was Carl Rauch, previously the curator of the Imperial Gardens at Rennwege, Vienna (Loudon 1836c, p. 608). It is curious that the obviously close personal relationship between Lippold and the Loudon

family is not mentioned by Dewis (2014) in her account of *The Loudons and the Gardening Press*.

Overall, Lippold emerges as an intelligent, acutely observant botanist, and a highly engaging and accomplished linguist. He was energetic and assiduous in his botanizing and, at least in his early years, was extremely physically fit. His mischievous disregard of social conventions was expressed in his anarchic sense of humour and eccentricities, which seem to have been even more marked in the presence of an audience. Yet his behaviour seems never to have caused offence; on the contrary, onlookers usually found him highly amusing. In graver situations, however, he was unfailingly kindly, helpful and reliable.

Although described variously as “simple-minded” (i.e., unsophisticated, rather than in a pejorative sense), “good-natured” or “simple-hearted”, it must not be supposed that Lippold was naïve. He must have felt keenly the stigma and humiliation of the Bischoffingen scandal in Germany. His realization that any general knowledge of it would adversely affect his future professional prospects is almost certainly the reason for his misrepresentation of circumstances regarding “voluntary resignation” from the benefice of Bischoffingen that appears on the title-page of his *Neues Handbuch*. Furthermore, as previously discussed, his tacit acceptance of the style “Dr.” is perhaps best interpreted as a fortuitous opportunity of retrieving his reputation. Thus, his disingenuousness relating to the Bischoffingen affair (see also Fanny Burney’s account of his “resignation”) was understandable, though hardly commendable, in the circumstances.

This appears, however, to be his only serious deviation from the essentially frank and honest characteristics displayed in his later life. Indeed, he ultimately redeemed himself in Brazil by his pastoral service to Petrópolis. The unfortunate Bischoffingen scandal, possibly

the result of an immature young man’s poor judgement, no doubt taught him a salutary lesson, and he clearly determined to make amends. The fact that his dismissal from his German parish in 1821 did not militate against him when he was inducted to the benefice of Petrópolis in Brazil in 1848 (see under “The closing years”) appears to be sufficient proof of his successful recovery of respectability.

Lippold’s demeanour during his final years in Brazil contrasts sharply with his more playful character in Madeira. Most accounts of his later life have come down to us mainly through derivative information, but the Rio de Janeiro correspondent of the *Abendblatt der Oesterreichisch-Kaiserlichen Wiener Zeitung*, who reported Lippold’s death, was clearly a well-informed “insider”. He revealed a man of an apparently quite altered personality, though still one who relished performing before an audience, but now as a challenging, enthusing preacher (Anonymous 1852a). Of Lippold’s sermons, it was recounted:

Although Lippold, in all his sermons (which were worthy of Abraham a Sancta Clara), relentlessly and unforgivingly castigated the moral weakness of his parishioners, the worst weather could not prevent those living at distances of even 1 to 1½ hours from attending church, which was usually full to suffocation. The Emperor, when in Petrópolis, soon came to appreciate this peculiar personality and developed the desire to know the German pastor better. [Translated from the German]

Lippold would no doubt have been delighted to be compared with Abraham a Sancta Clara, the forthright pulpit-orator and satirist of 17th-century Vienna.<sup>34</sup> Probably because of his persuasive oratory, Lippold soon became the spokesman on political and social issues affecting the Germanic colonists, liaising between them and Dom Pedro and the empress, who through her goodness of heart and benevolence supported Lippold in his assiduous guardianship of the poor (see his

previous letter to Dom Pedro). Whilst always ready to intercede on behalf of others, Lippold never sought personal advantage from his association with the imperial family. Indeed, when his serious illness required surgical intervention, Dom Pedro had no idea that the life-saving operation was beyond Lippold's means, but on learning this, his assistance was immediate (Anonymous 1852a).

The reasons for Lippold's apparent change of personality in Brazil are no doubt complex: perhaps the change of occupation from a botanical collector back to a committed pastor; the association with the emperor that demanded a more serious, authoritative and scholarly demeanour; and possibly an increased confidence in being associated again with people of his own culture and language. Ultimately, his greatest achievements in his Brazilian parish were his unceasing efforts to support the Lutheran Church, to protect the poor and to further active opposition to slavery.

## Appendix 2. An annotated bibliography of Lippold's publications

According to Spliesgart (2006, p. 134) when referring to Lippold's occupation after leaving Germany, "From 1821, however, he worked exclusively as a botanist and achieved fame through his publications in the field of botany". However, as far as I can discover, he published very few items in scientific periodicals, which all appeared between 1836 and 1841 in Loudon's *Gardener's Magazine, and Register of Rural & Domestic Improvement*, although some were later reprinted in other journals. These notes were apparently based upon Lippold's letters to Loudon, which, considering his disinclination by then to write papers, strongly suggests that they were published at Loudon's instigation.

Although Lippold's notes were in general rather inconsequential, his two books on

horticulture, published in 1824 and 1831 (see below), certainly played a timely and essential part in establishing a horticultural reputation. An extensive search of the internet revealed that Lippold's 1824 volumes were reviewed, cited, advertised or listed at least 38 times up to 1917, whilst his 1831 volume similarly appeared 23 times up to 1861 and was cited as late as in 1907 (Ascherson and Graebner 1896–1939). It is highly significant that both these books were published by J. G. Cotta'schen Buchhandlung, the publishing house then headed by Johann Friedrich Cotta (1764–1832), who had already published works by famous authors of the Jena circle of intellectuals (Wulf 2015, pp. 30–38). These great writers on literary and political thought, poets, philosophers, explorers, botanists and scientists (Fig. 30), included names, such as Johann Wolfgang von Goethe (1749–1832), Johann Christoph Friedrich von Schiller (1759–1805) and Friedrich Wilhelm Heinrich Alexander von Humboldt (1769–1859), whose reputations more than likely influenced Lippold when he arrived in Jena as an undergraduate.

As Gilray (1877, p. 481) averred, "Cotta was an unfailing friend of young struggling men of talent. In addition to his high standing as a publisher, he was a man of great practical energy, which flowed into various fields of activity. He was a scientific agriculturist, and promoted many reforms in farming". It would thus have been a great honour to have a book accepted by such a discerning and influential publisher as J. F. Cotta (Fig. 31), who no doubt recognized Lippold's talents and, motivated by certain common interests, played a significant part in helping to establish his reputation.

Following publication of his books, however, Lippold evinced little taste for writing, apparently preferring practical field-work. An annotated list of his few publications follows.<sup>35</sup> The format is: year of publication; style of the author's name as printed (**in bold**

— 229 —



Schiller, Wilhelm und Alexander von Humboldt und Goethe  
in Jena.  
Originalzeichnung von Andr. Müller.

Figure 30. "Schiller, Wilhelm und Alexander von Humboldt, und Goethe in Jena. Originalzeichnung von Andr. Müller [ca.1797]" (ex *Die Gartenlaube* (1860) no. 15, p. 229, digitized by Google Books, public domain).

type); title of work; English translation [if necessary, in square brackets]; Harvard-style citation (in parentheses) referring to the end-references for the present paper. The articles published in Loudon's *Gardener's Magazine* by Lippold and others are cited in the references with inclusion of the number of each fascicle, as recommended by Williams (2025, p. 92).

1. 1824 (**J. F. Lippold**). *Taschenbuch des Verständigen Gärtners* [A pocketbook for experienced gardeners] (Lippold 1824). In two volumes, paginated consecutively, referred to herein as the *Taschenbuch*. Figure 32 shows the title-page of volume 1, which, since it is printed in old German Fraktur type-face, is transcribed below:





Figure 31. Johann Friedrich Cotta (1764–1832), proprietor of J. G. Cotta'schen Buchhandlung from 1787 until his death in 1832. Lithograph after painting (ca.1800) by Karl Jacob Theodor Leybold (portrait collection of the Börsenvereinsbibliothek, Leipzig, public domain).

Taschenbuch | des | verständigen Gärtners.  
| Aus dem Französischen übersetzt | von |  
J. F. Lippold, | gewesenem Großherzoglich  
Badischen evangelischen, freywillig  
resignirten Pfarrer | zu Bischoffingen am  
Kaiserstuhl und Mitglied der botanischen  
Gesellschaft zu | Altenburg in Sachsen. |  
[rule] | Nebst | bedeutenden Zusätzen und  
Verbesserungen | von | den bekannten  
Kunst- und Handels-Gärtnern, | Gebrüder  
Baumann, | zu Bollweiler [pro Bollwiller],  
im Departement Oberrhein. | [rule] | Erster  
Band. | Mit 31 lithographirten Tafeln. |  
[rule] | Stuttgart und Tübingen, | in der J.  
G. Cotta'schen Buchhandlung. | 1824.

The title-page of volume 2 differs from that of volume 1 only in that the volume number in line 16 is duly amended and line 17 is omitted, thus: “Zweyter Band | [rule] | Stuttgart und Tübingen,”.

**Notes.** Number printed 1,000 (see Fischer 2003, p. 420). Apparently published during February 1824 (see Cotta'schen Buchhandlung 1824). The title-pages, dedication and preface provide some personal details about Lippold that clarify

his aspirations and activities after 1821. The subtitle of both volumes, freely translated from the German, reads:

Translated from French by J. F. Lippold, formerly Evangelical Pastor of Bischoffingen on the Kaiserstuhl in the Grand Duchy of Baden, now voluntarily resigned [my italics], and Member of the Botanical Society of Altenburg in Saxony. Together with important additions and improvements from the well-known artistic [= landscape] and nursery gardeners, the Baumann brothers of Bollweiler [pro Bollwiller], Département of Oberrhein.

This confirms that Lippold's final incumbency was indeed at Bischoffingen (see under “Ordination and incumbencies”), although his claim of having “voluntarily resigned” has been shown to be in fact untrue. His early collaboration with the Baumann brothers (Gebrüder Baumann) of Bollwiller, Alsace (see Note 14) is confirmed. The somewhat over-fulsome dedication (vol. 1, p. III) reveals that since 1821 he had been teaching in Germany and France and also belonged to two scientific societies. It reads:

The Botanical Society of Saxony-Altenburg with gratitude, the Pomological Society with respect; remembering all his friends and pupils in Germany and France, and as a token of undying friendship and love; finally all loving friends of botany and gardening, reverently dedicated by the translator.  
[Translated from the German]

The rather simple main title of this book belies its content. It is clearly not intended for beginners but is rather for “experienced” or “knowledgeable” gardeners. The work comprises two substantial volumes, a total of 1,349 pages, based upon the volumes of a French horticultural almanac, *L'almanach du Bon Jardinier*, for 1821 (Fig. 33) and 1822 (Pirolle et al. 1821, 1822),<sup>36</sup> which Lippold edited and translated into German. The “Vorrede des französischen Originals (von Herrn Pirolle)” (pp. V–VII) is apparently a

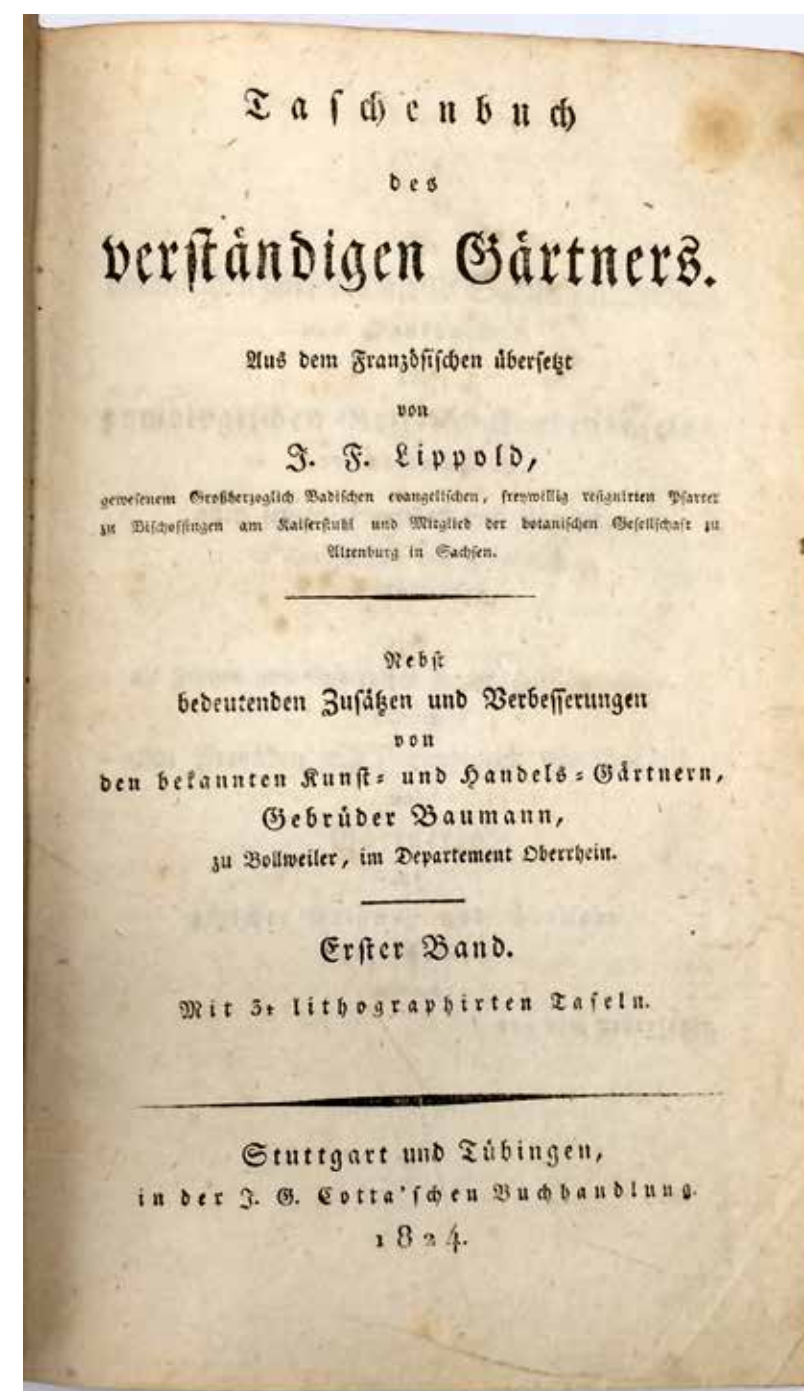


Figure 32. Title-page of volume 1 of *Taschenbuch des Verständigen Gärtners* (Lippold 1824; courtesy of Hunt Institute for Botanical Documentation, Carnegie Mellon University, Pittsburgh, Pa., USA).

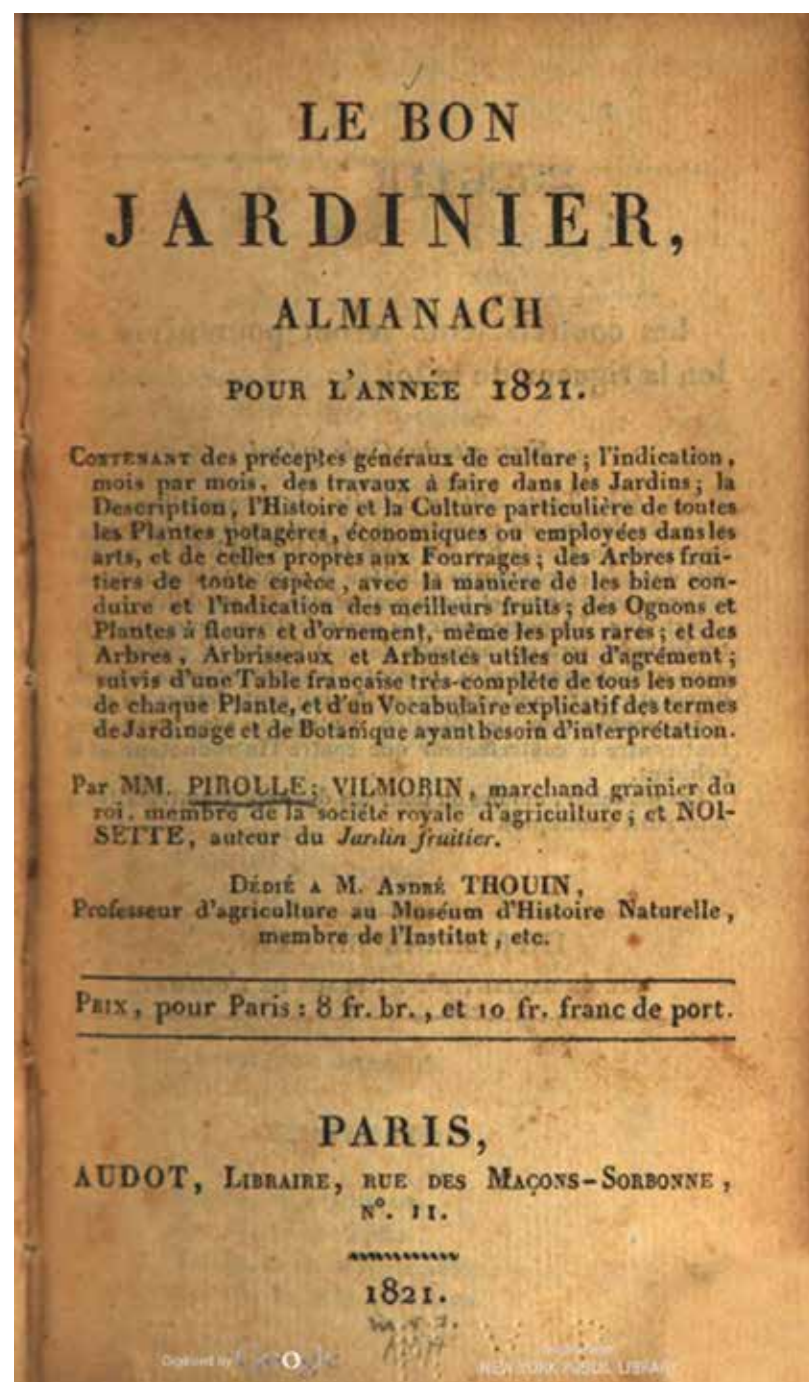


Figure 33. Title-page of the 1821 volume of *L'almanach du Bon Jardinier* (Pirolle et al. 1821; Hathitrust; New York Public Library copy, digitized by Google, public domain).

paraphrased translation of Pirolle’s original “Préface” (Pirolle et al. 1821, pp. xiii–xvi). Lippold also wrote his own preface “Vorrede des deutschen Uebersetzers”, in which he signalled a proposed expedition to Africa that he never undertook (see previously).

The *Taschenbuch* also includes much original information provided by Lippold and his horticulturist collaborators, the Baumann brothers. Although the Baumanns are not explicitly stated to be authors on the title-page, they are credited with co-authorship in some academic library catalogues.

Some libraries have incorrectly attributed this book to “Johann Friedrich Lippold”, but Fischer (2003, pp. 419–420) provides a thorough bibliographical description and a publishing history, confirming the translator as our subject, “Julius Friedrich Lippold”, under a contract of 22 April 1822 with the publishers, J. G. Cotta’schen Buchhandlung.

2. 1831 (J. F. Lippold). *Neues Handbuch des Verständigen Gärtners*. [New handbook for experienced gardeners] (Lippold 1831). Referred to herein as the *Neues Handbuch*, Figure 34 shows the title-page of volume 1 (all published) printed in old German Fraktur type-face, and transcribed below:

Neues Handbuch | des | verständigen  
Gärtners, | oder | neue Umarbeitung des  
Taschenbuchs des verständigen | Gärtners  
von 1824. | Aus dem Französischen des  
Almanach du bon jardinier von | 1825  
bis 1828 frei übersetzt und aus eignen  
und fremden | Erfahrungen ansehnlich  
vermehrt | von | J. F. Lippold, | Professor  
der alten und neuen Sprachen, so wie der  
Geschichte und Naturgeschichte | in Paris,  
Mitglied der Pariser Gartenbaugesellschaft,  
der pomologischen Gesellschaft | in  
Altenburg in Sachsen u. s. w. | Nebst |  
bedeutenden Zusätzen und Verbesserungen,  
mitgetheilt von den | Gebrüdern Baumann,  
den bekannten Kunst- und Handels- |

gärtnern zu Bollweiler [pro Bollwiller]  
im Departement Ober-Rhein; von | dem  
Ritter der Ehrenlegion, Soulange-Bodin,  
Eigenthümer | des großen Pflanzen-Instituts  
zu Fromont bei Ris in der | Nähe von Paris;  
von dem Eigenthümer und Handels-gärtner  
| Geoffroy [pro Godefroy], in Ville d'Arvey  
[pro d'Arvey] bei Paris u. a. m. | Erster Band.  
| Mit 65 lithographierten Zeichnungen und 3  
| großen Tabellen. | Stuttgart und Tübingen,  
| Verlag der J. G. Cotta'schen Buchhandlung,  
| 1831.

Freely translated, this reads:

A New Handbook for Experienced  
Gardeners, or a Revision of the Pocketbook  
for Experienced Gardeners of 1824. From  
the French of the *Almanach du Bon Jardinier*  
from 1825 to 1828, freely translated and,  
based upon his own and foreign experiences,  
considerably expanded by J. F. Lippold,  
Professor of ancient and modern languages,  
as well as history and natural history in Paris,  
Member of the Paris Horticultural Society,  
the Pomological Society in Altenburg in  
Saxony, etc. As well as important additions  
and improvements, communicated by  
the Baumann brothers, the well-known  
artistic [= landscape] and nursery gardeners  
at Bollweiler [pro Bollwiller] in the  
Département of Upper Rhine; by the Knight  
of the Legion of Honour, Soulange-Bodin,  
owner of the great plant institute at Fromont,  
Ris, near Paris; by Geoffroy [pro Godefroy],  
proprietor and nurseryman, in Ville d'Arvey  
[pro d'Arvey] near Paris, and more, etc.

**Notes.** Number printed 1,000 (see Fischer 2003, p. 893). Since Lippold donated a copy of the first, and only, volume to the Königliche Botanische Gesellschaft on 3 August 1831 (see Anonymous 1831 and Fig. 27), it was presumably published not very long before that date. Lippold stated that the book was published not for profit (probably referring to any personal profit); the publishers would presumably have borne the cost of printing and binding since it seems most unlikely that Lippold could have afforded the production costs himself. However, that being the case, the publishers’ sales would have needed to yield enough profit to cover their outlay.





Figure 34. Title-page of volume 1 of *Neues Handbuch des Verständigen Gärtners* (Lippold 1831; HathiTrust; University of California copy, digitized by Google, public domain).

Only one of the two projected volumes was published. As in the *Taschenbuch*, Lippold fully acknowledged the sources of his translation, and, in addition to his own preface (pp. V–VII), included the original prefaces of the 1825, 1826 and 1827 issues of *L'almanach du Bon Jardinier* (pp. VII–VIII) but noted that the 1828 issue had no preface. The title-page and dedication of the *Neues Handbuch* provide some details about Lippold's horticultural associates after 1824. They include Étienne Soulange-Bodin (1774–1846), who played a major role in the organization of professional horticulture in France during 1815–1845 (Quérard 1827–1864, 9:221; see also the title-page), the Countess von Bohm (née Countess Girardin) and Baroness Amalie de Baye (see dedication). In this volume Lippold displayed his skill as a draughtsman for the first time (see plates 1–3; "I. F. Lippold fecit").

Fischer (2003, pp. 892–893) provided a bibliographical description and publishing history, confirming "Julius Friedrich Lippold" as the translator, under contract of 16 February 1828 with J. G. Cotta'schen Buchhandlung. Although certainly a very comprehensive first volume, one reviewer was rather scathing about his perceived poor organization of the mass of information (Anonymous 1833):

To convey an idea of the range of topics is no easy matter ... The work provides no aids for a reviewer: there is no contents-list, no page-headings and no index, but a 54-page explanation of the illustrations. Even if an index might be added to a subsequent volume, the reader would become lost in its complexity ... The reviewer has therefore produced a table of contents ... but the mass of information still lacks organization ... The German public will surely be overwhelmed by the "variety of delights" ... However, the work does credit to the publishing-house by its clear printing on white paper and the beautiful lithographed plates. [Translated from the German]

This reviewer gamely wrote a concise three-page exposition of the whole 784-page work (see Fig. 35). According to Dietrich (1847), the second volume, which never appeared, was intended to deal with ornamental plants. However, the first volume was still being advertised by the publisher in 1837 (Fig. 36).

The reason for only the first of the two projected volumes being published is not known. Perhaps, when Johann Friedrich Cotta died in 1832, his successor(s) in the firm may have decided against publishing a second volume, although letters from the publishers to Lippold continued until at least 1836 (see Deutsches Literaturarchiv Marbach, Archive, Germany). Alternatively, Lippold's urge to travel may have re-emerged, displacing any interest in writing; in 1832 he left his position as the head gardener at the Château de Baye. Oddly, although he obtained permission in 1834 from the Département de Marne (document 126 M 82) to continue residing in France (Cédric Gourjault, pers. comm., 16 May 2025), he in fact recommenced his wanderings, arriving in England via Belgium in the same year.

3. 1836 (**Dr. Lippold**). "On the culture of the chicory as a salad plant, as practised in Belgium" (Lippold 1836).

**Notes.** This article is introduced thus: "By DR. LIPPOLD, Author of the *Taschenbuch des Verständigen Gärtners*". The original text apparently comprised a letter to J. C. Loudon, who presumably supplied the heading, and it provides the only London address known for Lippold: "10, Commerce Place, North Brixton Road". The item was signed December 1835, London, and was published in May 1836. Lippold wrote of two kinds of chicory, *Chicorée de Bruges* and *Barbe de Capucin*, varieties of *Cichorium intybus* L., cultivated primarily in Belgium



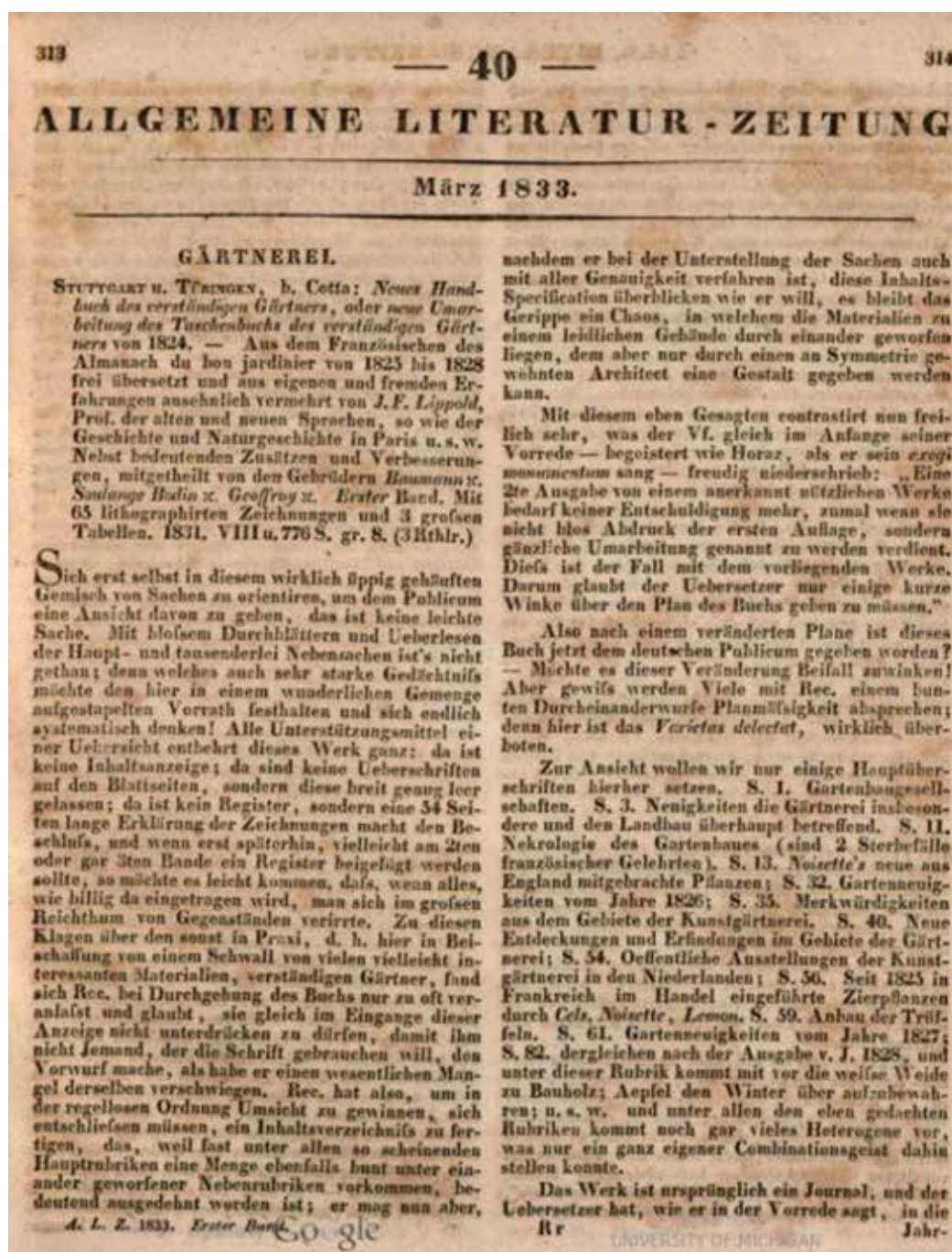


Figure 35. First page of critical review of *Neues Handbuch des Verständigen Gärtners* (Lippold 1831) in *Allgemeine Literatur-Zeitung* (March 1833, vol. 1, no. 40; HathiTrust; digitized by Google, public domain).



Figure 36. Advertisement for *Neues Handbuch des Verständigen Gärtners* in *Allgemeine Zeitung* (14 May 1837, no. 134, p. 904; digitized by Google Books, public domain).

and France, respectively. This note received much approbation (with a certain degree of self-congratulation!) from Cuthill (1837): “It is with much pleasure that I have to notice the success that has attended my cultivation of that most valuable salad plant, the chicory, which was brought into notice last year by Dr. Lippold”; and

seven years later, he had not changed his opinion (Cuthill 1844). Lippold's note is occasionally noticed even in fairly recent gardening books (Carter 1988, p. 56). It is also of particular interest for Lippold's explicit expression of his “predilection for garden culture”, which seems to have gradually replaced his interest in systematic botany (Lippold 1836, p. 250).

4. 1836 (Dr. Lippold). [Translations of] Biographical notice of the late Mr. David Douglas, F.L.S., the traveller and botanist; with a proposal to erect a monument to his memory; and a list of the plants which he introduced (in Loudon 1836c).

**Notes.** This obituary of Douglas is printed in three parallel columns in English, French and German. Loudon noted at its conclusion, “We are indebted for the translation of this biographical notice of Douglas to Dr. Lippold, author of the *Taschenbuch der Verständigen Gärtners*”. Loudon thus wrote the English version, which Lippold translated into French and German. The item was published in November 1836.

5. 1838 (Dr. J. F. Lippold). “Hydrangea hedges in the island of Madeira” (Lippold 1838b).

**Notes.** Apparently extracted from a letter to Loudon and printed in a section headed “Foreign Notices: Africa”. Discusses colours of Hydrangea flowers in relation to soil chemistry and climate; Lippold offered to send Madeiran soil samples for experiments in England. The printed letter is signed 21 October 1837, Funchal. and was published in February 1838. A slightly reduced version of this letter in German, signed “Dr. I. F. Lippold” (see Note 1) also on 21 October 1837, appeared in *Allgemeine Gartenzeitung* in April 1838, but the offer to supply soil samples to English gardeners is not included (Lippold 1838e). This article



was clearly abstracted from Loudon's original publication.

6. 1838 (**Dr. J. F. Lippold**). "Pine-apples in Madeira" (Lippold 1838c).

**Notes.** Apparently extracted from a letter to Loudon and printed in a section headed "Foreign Notices: Africa". Points out the adverse effect of the rainy season on the health of pine-apples and suggests ways to circumvent the problem, based on previous experiences in France. The letter is signed 21 October 1837, Funchal, and was published in February 1838. A much reduced version, signed "Dr. I. F. Lippold" (see Note 1) also on 21 October 1837, was also published in German in *Allgemeine Gartenzeitung* in April 1838; however, it merely observes the poor state of pineapples grown outdoors in Madeira and offers no advice on horticultural improvements (Lippold 1838f). This severely curtailed German version appeared two months after the English version and, like the previous item, was apparently abstracted from the original publication of Lippold's letter.

7. 1838 (**Dr. J. F. Lippold**). "The tea plant" (Lippold 1838d).

**Notes.** Apparently extracted from a letter to Loudon and printed in a section headed "Foreign Notices: Africa". Notices Henry Veitch's tea plantation in Madeira at an altitude where snow falls occasionally in winter and urges Veitch to write to Loudon with a detailed account, which, eventually, he did (H. Veitch 1840a, 1840b). The letter is signed 21 October 1837, Funchal, and was published in February 1838.

8. 1838 (**Dr. Lippold**). "Descriptive notice of the country house of Dr. Renton, in Madeira, called Quinta de la Valle (Villa of the Valley), situated near Funchal" (Lippold 1838a).

**Notes.** This article begins with the words "By DR. LIPPOLD, Author of the

*Wohlstandige [sic] Gärtner, &c.*, natural history collector in Madeira and the Canaries". No doubt introduced thus by Loudon, apparently in anticipation of Lippold's aborted expedition to the Canary Islands, which had been previously announced in his "Prospectus" in November 1836. Though clearly based on Lippold's notes, the paper was probably lightly edited by Loudon. It is not signed or dated but was published in October 1838.

According to a letter from Lippold to W. J. Hooker (Royal Botanic Gardens, Kew, Directors' Correspondence, 12 April 1840, DC/50/210), he was surveying Renton's gardens "during last season [1839?] ... whilst he was on his journey in Scotland". This seems to refer to work during the summer of 1839, coincidental with the birth in Edinburgh in July 1839 of the Rentons' son David (<https://familysearch.org/ark:/61903/1:1:VQC7-85V>). However, since Lippold had already published this paper on the Rentons' garden in October 1838, one can only conclude from that letter that his surveying in 1839 was a continuation of his earlier work.

Renton's house, in the Val Formoso, has also been called Quinta do Valle (see Lowe 1857, p. xii et seq.), Quinta do Val (Johnson 1885, p. 80; Cossart 1984, p. 180) and Quinta do Vale Formoso (Hoare 2004, pp. 232–234). Although unsigned, the illustration and plans of the house and garden were apparently drawn by Lippold, who had previously demonstrated his competent draughtsmanship in the *Neues Handbuch*. He provided a very detailed inventory of plants and trees, with their dimensions, in the garden and referred to William Christy's suggestion to Renton for protecting pine-apples from rain, which must have been in November or December 1837, when he visited Lippold in Funchal (Christy 1838a).

9. 1841 (**D. I. F. Lippold**). "Foreign notices. South America" (Lippold 1841).

**Notes.** This letter finishes with the curious signature shown above. "D." apparently represents "Dr."; the "I" is certainly the Latin representation of "J", by then rather old-fashioned in Britain. Similarly, the initials "I. F." also appear in the German reprints of two of his articles (Lippold 1838e, 1838f). Lippold had rapidly established influential contacts, such as Ludwig Riedel and the British Chargé d'Affaires, W. G. Ouseley. Although he promised to send further botanical progress reports to Loudon, I have been unable to trace any. Loudon added a personal note exhorting readers with "the taste and the means" to "patronise this excellent man". The letter is signed 26 September 1840, "Rio Janeiro", and was published in January 1841.

### Appendix 3. Archival materials relevant to Lippold

The archival materials listed here comprise all the unpublished manuscripts, including letters written by, to or about Lippold, that I have been able to locate. Perhaps surprisingly they include nothing from the archives of **BM**, **CGE**, **E** or **OXF**, but **K** holds important letters, mostly pertaining to Madeira. With the exception of a further letter in Brazil (Museu Imperial, Petrópolis), another in the USA (Hunt Institute for Botanical Documentation, Pittsburgh), documentation of his residence in France (Direction des Archives Départementales) and a record of officiation at a marriage (Royal Consulate of Prussia in Rio de Janeiro), all the rest are in secular or ecclesiastical archives in Germany.

1. Landeskirchenarchiv Eisenach, Germany:
  - a. KG Röpsen, Kirchenbuch 1771–1808, K 11/21–4, Blatt 87. [Röpsen Parish Church Book for the year 1790 (see Fig. 13)].

2. Friedrich-Schiller-Universität, Jena, Universitätsarchiv, Germany:

- a. Academiae Jenensis, Mense VIII Febr. 1807 usque VIII Aug. ej. ai. [Records of matriculations, University of Jena, between 8 February and 8 August 1807 (see Fig. 14)].

3. Landesarchiv Baden-Württemberg, Generallandesarchiv Karlsruhe, Germany.

Lippold is mentioned in seven files of documents generated in various offices of the Evangelical Lutheran Church authorities:

- a. Generallandesarchiv Karlsruhe 229 Nr. 8063: Jeweilige Bestellung des Pfarrdienstes zu Bickensohl [Respective Order of the Pastoral Ministry in Bickensohl].
  - b. Generallandesarchiv Karlsruhe 229 Nr. 8076: Pfarrdienst zu Bickensohl [Pastoral Ministry in Bickensohl].
  - c. Generallandesarchiv Karlsruhe 229 Nr. 9197: Pfarrdienst zu Bischoffingen [Pastoral Ministry in Bischoffingen].
  - d. Generallandesarchiv Karlsruhe 229 Nr. 33982: Pfarrdienst zu Grenzach [Pastoral Ministry in Grenzach].
  - e. Generallandesarchiv Karlsruhe 233 Nr. 23255: Badischen Staatsministeriums: Evangelischer Pfarrdienst zu Bischoffingen [Baden State Ministry: Evangelical Pastoral Ministry in Bischoffingen].
  - f. Generallandesarchiv Karlsruhe 233 Nr. 23480: Badischen Staatsministeriums: Der Evangelische Pfarrdienst in Neuenweg [Baden State Ministry: Evangelical Pastoral Ministry in Neuenweg].
  - g. Generallandesarchiv Karlsruhe 435, no. 187: Evangelischen Oberkirchenrats, Pfarrdienst in Bischoffingen 1796–1858 [Evangelical Upper Church Council, Pastoral Ministry in Bischoffingen 1796–1858].

4. Regensburgische Botanische Gesellschaft, Universitätsbibliothek Regensburg, Germany:

- a. Letter from J. F. Lippold (Reims, France) to Königliche Botanischen Gesellschaft (Regensburg, Germany), 3 August 1831. Regensburgische Botanische Gesellschaft/Neues Archiv / 40. Briefe I-R, DE-611-HS-1448641 (see Fig. 27).

5. Deutsches Literaturarchiv Marbach, Archive, Germany.

There are, in three batches, a visiting-card, 83 letters from Lippold to the publishing house, J. G. Cotta'sche Buchhandlung, and two letters from there to Lippold, as listed below:

- a. Letters from J. F. Lippold (Bollwiller, Alsace, France) to his publishers J. G. Cotta'sche Buchhandlung (Stuttgart), 12 April 1822 to 2 August 1831. Cotta-Archiv, 43 letters: DE-611-HS-596823 (<http://kalliope-verbund.info/DE-611-HS-596823>).

- b. Letters from J. F. Lippold (Bollwiller, Paris, France; Basel, Switzerland; and others) to J. G. Cotta'sche Buchhandlung (Stuttgart), 1 May 1822 to 15 January 1828. Cotta-Archiv: 27 letters and one visiting-card (see Fig. 28), DE-2498-HS01202349 (<http://kalliope-verbund.info/DE-2498-HS01202349>).

- c. Letters from J. F. Lippold (Reims, Paris, France; Frankfurt am Main; and others) to J. G. Cotta'sche Buchhandlung (Stuttgart), 10 March 1828 to 2 August 1831. Cotta-Archiv: 13 letters, DE-2498-HS01202351 (<http://kalliope-verbund.info/DE-2498-HS01202351>).

- d. Letter from J. G. Cotta'sche Buchhandlung (Stuttgart) to J. F. Lippold, 6 March 1834: Cotta:Copierbuch für alle nicht-buchhändlerischen Angelegenheiten 1833–1834.

- e. Letter from J. G. Cotta'sche Buchhandlung (Stuttgart) to J. F. Lippold, 28 January 1836: Cotta:Gelehrten-Copierbuch I.

6. Direction des Archives Départementales (Département de Marne), France.

- a. J. F. Lippold's application to continue residence in France (1834: cote 126 M 82).

7. Royal Botanic Gardens, Kew, Archives, UK.

According to J. D. Hooker (1902, p. ccii), there are seven letters from Lippold when in Madeira (1837–1840) preserved at Kew. However, there are actually six Lippold letters from Madeira and one from Brazil (1841) currently catalogued, with seven more letters from various correspondents who mentioned Lippold. Most of the 14 are archived among the Directors' Correspondence, and all but one are addressed to W. J. Hooker, who became the director of Kew on 1 April 1841 (J. D. Hooker (1902, p. lv). Letters dated before then were received by Hooker when he was professor of botany at the University of Glasgow and later taken by him to Kew. The letters are listed below:

- a. Letter from A. H. Renton (Funchal, Madeira) to W. J. Hooker (University of Glasgow, Scotland), 9 April 1837. Directors' Correspondence, DC/58/213.

- b. Letter from R. T. Lowe (Funchal, Madeira) to W. J. Hooker (University of Glasgow, Scotland), 13 April 1837. Directors' Correspondence, DC/58/186. Published in part (see Hooker 1837a).

- c. Letter from J. F. Lippold (British Hotel, Funchal, Madeira) to W. J. Hooker (University of Glasgow, Scotland), 14 April 1837. Directors' Correspondence, DC/58/156. [In French]

- d. Letter from J. F. Lippold (Funchal, Madeira) to W. J. Hooker (University

- of Glasgow, Scotland), 6 August 1837. Directors' Correspondence, DC/58/158 [In French].

- e. Letter from J. F. Lippold (Funchal, Madeira) to W. J. Hooker (University of Glasgow, Scotland), 7 September 1837. Directors' Correspondence, DC/58/159 [In French].

- f. Letter dated 16 July 1838 in Directors' Correspondence, DC/50/211 [In French]. It is uncatalogued and shows no recipient. However, it is signed by Lippold and internal evidence indicates that the recipient was his patron, William Christy, junior (see Note 15). The highly suggestive salutation; references to the recipient's recent visit to Madeira and his precarious state of health; mentions of family, including his multiple siblings; and his mother's purchase of shirts for Lippold all point cogently to Christy. It is not known how this letter came to be among Hooker's papers.

- g. Letter from J. D. Hooker (HMS *Erebus*, Funchal, Madeira) to his father W. J. Hooker (University of Glasgow, Scotland), 20 October 1839. Sir Joseph Hooker Papers, JDH/1/2/9.

- h. Letter from J. D. Hooker (HMS *Erebus* at St Helena Roads) to his father W. J. Hooker (University of Glasgow, Scotland), 3 February 1840. Correspondence from Antarctic Expedition, JDH/1/2/15–23.

- i. Letter dated 12 April 1840 in Directors' Correspondence, DC/50/210. It is uncatalogued and shows no recipient. However, it is signed by Lippold and the recipient was clearly W. J. Hooker, since it commences "Sir" and is rather stiffly formal, besides containing information relating to Lippold's proposed trip to Brazil.

- j. Letter from J. F. Lippold (Funchal, Madeira) to W. J. Hooker (University of Glasgow, Scotland), 11 July 1840. Directors' Correspondence, DC/58/157.
- k. Letter from J. F. Lippold (Rio de Janeiro, Brazil) to W. J. Hooker (University of Glasgow, Scotland), 1 March 1841. Directors' Correspondence, DC/68/64.

- l. Letter from Viscount Milton [Charles William Fitzwilliam] (Peterborough, England) to W. J. Hooker (Royal Botanic Gardens, Kew?), 26 April 1841. Directors' Correspondence, DC/16/121.
- m. Letter from Henry Christy (Clapham Road, London, England) to W. J. Hooker (Royal Botanic Gardens, Kew?), ?1841. Directors' Correspondence, DC/16/81.
- n. Letter from Thomas Edmondston (HMS *Herald*, Rio de Janeiro, Brazil) to W. J. Hooker (Royal Botanic Gardens, Kew), 27 August 1845. Directors' Correspondence, DC/70/37.

8. Museu Imperial, Arquivo Histórico, Petrópolis, Brazil:

- a. Letter from J. F. Lippold (Petrópolis) to Dom Pedro II (Petrópolis), 7 March 1849. Maço 112 – Doc. 5520 – Petição em bem da usina de Otto Schneider. Anexa uma procuração. [Letter in French, annex in Portuguese]

9. Hunt Institute for Botanical Documentation, Carnegie Mellon University, Pittsburgh, Pa., USA:

- a. Letter from J. F. Lippold (no date or address) to J. C. Loudon (Bayswater, London), care of William Pamplin (Soho, London; see Note 24) [1840]. Hunt Institute Archives General Autograph Collection (GAC), collection no. 370, Lippold, Julius Friedrich, 1 (see Fig. 20).

10. Royal Consulate of Prussia in Rio de Janeiro, Brazil [this original source is no longer extant]:



a. A transcribed copy of a protocol witnessed on 8 February 1861, recording Lippold's officiating at the wedding in Petrópolis on 9 April 1846 of German immigrants Franz Joseph Sieben (a Catholic) and Maria Juliana Mathilda Gall (a Lutheran). Currently (2023) in private hands but an online digitized copy is available. [In Portuguese] (<https://jasieben.wixsite.com/genealogiasieben/page3>).

#### Appendix 4. Herbarium specimens collected by or associated with Lippold

No taxonomic or nomenclatural issues are addressed here. The primary objective is to investigate the scope of Lippold's collecting and to document transferences of his specimens among herbaria belonging to other individuals and institutions. All but one (from England) of Lippold's specimens that have been traced are phanerogams or pteridophytes, except for a single marine alga, all from the Madeiran Archipelago. These results may have wider implications for future research on field-activities of botanists and the acquisitive habits of cabinet-collectors.

##### *Survey methods and caveats*

A remote investigation such as this cannot be comprehensive. Searches of herbarium databases for field-collectors and localities were made online if possible, but not all herbaria have online catalogues. Furthermore, not all relevant specimen sheets are necessarily digitized online, and some herbaria have no catalogue at all, either online or printed. Moreover, holdings of most herbaria are almost certainly not completely databased. For such reasons, information for some herbaria chosen for investigation proved to be inadequate and had to be abandoned. Some enquiries made

directly to herbaria lacking online access did not elicit replies. It is evident, therefore, that failure to discover specimens collected by named individuals does not constitute absolute proof that such specimens do not exist in any particular herbarium.

Scientific plant names employed herein are those inscribed on the original herbarium labels because, corroborated by contemporary literature, they are more relevant to the historical objectives of this investigation than their currently correct names, though the authorities given may sometimes be spurious. Unfortunately for the present purposes, herbaria are generally arranged taxonomically according to current, rather than contemporary, nomenclature. Therefore, because one cannot know in advance what taxa might have been gathered by individual collectors, specimens labelled with earlier synonyms, or perhaps misidentified, may escape detection. Furthermore, if no online search facility is available, the necessary manual searches can only be made for known taxa with current nomenclature, since most herbaria are not organized according to field-collectors or specific localities (except for wider geographical areas). As for scientific names the original, rather than modern, local and geographical names are cited.

For such reasons, curators are, not unreasonably, usually unable to search manually for particular collectors or places. This is potentially limiting in the present study, in that any information provided on original specimen labels about the whereabouts of collectors at specific times will sometimes not be found. Exceptionally, however, Serena Marner and Prof. Stephen Harris kindly carried out manual searches for data on field-collectors at **OXF**, using the original card-indexes of a past curator, Hermia Newman Clokie (1909–1994), and also kindly provided relevant images not currently available online.

The accuracy of information transcribed from original labels onto an online database cannot be guaranteed—a particular problem if a herbarium could not be visited, as in the present circumstances. Therefore, following recognition of any specimens of interest, digitized images of the original labels were requested for examination to corroborate online transcriptions of geographical, temporal and collectors' data. If images were not available, however, caution was exercised in accepting the accuracy of transcribed data, and corroboration was perforce sought elsewhere.

Herbaria are identified herein by their *Index Herbariorum* codes: Thiers, B. M. *Index Herbariorum* (<https://sweetgum.nybg.org/science/ih/>). In addition to the herbaria of contemporary collectors in Madeira noted by Hansen (1980), other collections considered to be likely repositories for Lippold's specimens were selected subjectively, based upon his known travels, sponsors, subscribers and associates (see Fig. 26). Whereabouts of specimens and biographical details of British subscribers, including Lippold's primary patron, William Christy, junior, are provided by Desmond (1977). Lowe and Lemann are of particular interest because either of them may have acquired material from Lippold during their contemporaneous sojourns in Madeira. Specimens supplied to Hooker when professor of botany at the University of Glasgow were taken by him to Kew (**K**) where he became the director in 1841 (Patton 1954, p. 106).

Subject to these limitations, plants collected by Lippold and possibly supplied to any of his known subscribers were sought online or by direct correspondence with curators of the following 46 specific herbaria: **BM**, **CGE**, **E** (incorporating the original **EBH**, **EGH**, **GL**, **GLG** and **GOW** herbaria), **K** and **OXF** in the United Kingdom; **LISI**, **LISU**, **MADJ**, **MADM** and **PO** in Portugal, including Madeira; **B**, **BR**, **DBN**, **FI**, **G**, **JE**, **LE**, **M**, **P**,

**REG**, and **S** in the rest of Europe, including the Canary Islands; **AD**, **AK**, **BRI**, **CANB**, **CANU**, **CHR**, **CNS**, **DNA**, **GH**, **HO**, **JCT**, **LINC**, **LTB**, **MEL**, **MELU**, **MPN**, **NE**, **NSW**, **NY**, **NZFRI**, **PDD**, **PERTH**, **US**, **WELT** and **WOLL** in the rest of the world. Additionally, for Brazilian herbaria only, the databases Re flora Virtual Herbarium and JABOT were searched for me by Clarice Ribeiro at **RB**; and Australasian herbaria were accessed via the Australasian Virtual Herbarium; <https://avh.chah.org.au/>. Essential data abstracted, if possible from original labels, included the contemporary Latin names of genera or species, exact localities (or countries), and collection dates, though such information varied considerably in completeness and precision. It must also be emphasized that herbaria apparently not holding Lippold specimens, may possibly possess some not yet recognized or databased.

A frequent complicating factor in researching historical plant-collecting is the transference of professional collectors' specimens from their original clients' herbaria to others, and perhaps subsequently between institutions—analogous to the problem of translocation of botanical manuscripts among libraries (see Williams 2019). For instance, Jackson (1901) noted in an inventory of plants received at Kew that “though the collections here named were once here, they may have since been transferred to other possessors”. Moreover, Batke et al. (2022) have shown how the contents of a herbarium may have been influenced by historical botanical events, and in their survey of Honduran ferns they identified spatial, temporal and collector biases. To investigate whether Lippold and Lemann collected together, as generally stated (see later), a spreadsheet of records from relevant herbaria was prepared, and coincidental taxa, localities and collection dates for the two botanists were sought.

*Provenance labels and inscriptions*

Almost without exception, it was observed that no specimen is certainly in its original state as mounted by its field-collector or its cabinet-collector recipient (see below). For instance, some specimens have evidently been removed completely from their original sheets and have been directly remounted on new sheets. Alternatively, a piece excised from an original sheet with a specimen still attached, may be affixed to a new sheet. Manuscript labels have all evidently been cut from larger pieces of paper, and in some cases small portions of the writing are cropped off. Since it is impossible to determine the origin of such labels, which may have been transferred between sheets in various ways, any speculation regarding provenances of specimens must be made with extreme caution.

As pointed out by Lucas and Lucas (2014), care must also be taken in the interpretation of collectors' attributions; the terms "field-collector" and "cabinet-collector" that the Lucases employed serve a useful purpose in this context. Whilst field-collectors of plants may often be determined from their original autograph labels if unequivocally identifiable, creators of collections by acquisition (cabinet-collectors: possibly practising botanists or wealthy dilettantes) sometimes added their manuscript or printed labels to identify their personal herbaria. Other printed labels or inked stamps applied to sheets after receipt might evidence receipt by some institution of a donation from a living field-collector or cabinet-collector, or a bequest of a deceased collector facilitated by the executor. Many such provenance labels are to be found in the herbaria now investigated, demonstrating how often specimens have been transferred between custodians.

Although, in the present study, sampling was not strictly random and numbers found

in each herbarium were not overall great, all Lippold's 143 specimens that have been traced appear to have been at some time in herbaria of well-known botanists or amateur cabinet-collectors. Being a field-collector does not preclude being also a cabinet-collector, and vice versa; thus, either term might be applicable to the same person in different circumstances. In some instances, there has been more than one change of ownership, sometimes ultimately having been transferred from one institution to another. Comments on some Lippold specimens with digitized images in the previously mentioned herbaria, with additional notes on specimens collected by other botanists if relevant, follow later. However, there is no evidence apparent from any labels that Lippold maintained a permanent herbarium of his own.

*Remounted specimens*

Remounted specimens may indicate that they were acquired from a previous source. Otherwise, remounting may have been to conserve damaged sheets or fragile specimens. In other cases the purpose appears to have been to divide up specimens of mixed taxa on an original sheet to facilitate separate storage under their appropriate taxonomic groups. Perhaps more rarely, remounting might have been to bring together samples of the same taxon obtained by different collectors. As well as the original labels excised from previous sheets, specimens have usually been allocated modern barcodes, sometimes with a recent curator's notes. If an excised original label is not signed or initialled, an attribution may have been inscribed directly onto the new sheet, often apparently unevidenced, but possibly based on recognition of the handwriting.

An example of a sheet comprising whole specimens removed from original sheets and

refixed on a new one is that in the **K** herbarium (Fig. 37), which brings together four specimens of *Prasium* collected on different occasions: K000975584 (*Prasium* sp. nov., collector C. M. Lemann, ?1837); K000975585 (*Prasium medium* Lowe, collector J. F. Lippold, 1837); K000975586 (*Prasium majus*, collector R. T. Lowe, 1828); and K000975587 (*Prasium medium* Lowe, var.  $\beta$ , collector R. T. Lowe, 1855). They are all attached with the same kind of tape, with the excised original manuscript labels affixed, and are demarcated by pencilled outlines, overlain in places by specimens, tape or labels. In addition there are later labels and inked stamps of various herbaria and the modern barcodes (note the consecutive numbers) of **K**, the final institutional custodian. All the foregoing features are typical of directly remounted specimens having been separated from their original sheets (see also Fig. 21). Portions of original sheets, excised with specimens and labels still fixed to them, then stuck down on larger new sheets, are exemplified by Figure 38; note the remaining pencil outline on the laid-down portion, apparently demarcating it from other specimens when on its original sheet.

*Transference of specimens between herbaria*

Occasionally, when plants incorporated in Lippold's clients' herbaria during their owners' lifetimes were presented to institutions, or were eventually bequeathed or sold after their deaths, such events were reported in the scientific literature. For instance, in 1838 the Botanical Society of Edinburgh received donations of dried plants from William Christy,<sup>37</sup> sourced from many expeditions and collectors, including material received from Lippold (Anonymous 1840d; Greville 1844). On 1 March 1842 the Linnean Society of London received from one of Lippold's subscribers, William Borrer (1781–1862), specimens

collected in Madeira (Anonymous 1842b; see also Linnean Society Archives, Present Book 5, part 2: 1842–1843, ref. PB/5/2). However, the Linnean Society auctioned off most of its botanical and zoological collections in 1863, and the remaining plant specimens were sold to **K** in 1962 or **BM** in 1963 (Gage and Stearn 1988, pp. 175–176). However, none of Borrer's donated specimens was found at **BM** or **K** during the present search. Nevertheless, the sale of Linnean Society collections is corroborated by some labels printed "British Herbarium of the Linnean Society of London. Purchased from the Society, 1963", affixed to some **BM** specimens originally collected by Nathaniel John Winch (1768–1838).

The fern collection of John Riley of Papplewick, which purportedly included materials of Lippold and of a large number of other collectors, was put up for sale by Riley's widow (E. Newman 1847), but its ultimate fate seems to be unknown. In 1852 Madeiran fungi collected by Lippold were presented by the Botanical Society of Edinburgh to the Museum of Economic Botany in the Royal Botanic Garden, Edinburgh (**E**), via another of Lippold's subscribers, Dr Robert Kaye Greville (1794–1866; Anonymous 1852b, 1852c, p. 521). They are not in the online catalogue and could not be found by a manual search, but they are considered likely to be among currently uncatalogued material in the **E** herbarium (Dr Heleen Plaisier, pers. comm., 19 April 2023).

Receipts of materials from other collections may also be expressly recorded in catalogues or indirectly on specimen sheets in various herbaria. Evidence of remounted specimens, as described above, often indicates transference of specimens between institutions. Thus, Lippold specimens from Madeira, but not from Brazil, are included among the Fielding Collection (Daubeney 1854, p. 282) in the University of Oxford's herbarium (**OXF**); the Fielding collection itself includes material from several





Figure 37. Four specimens of *Prasium* spp. at **K** (K000975584, K000975585, K000975586, K000975587), originally from different sheets, remounted directly on one sheet (Creative Commons Attribution CC-BY, The Trustees of the Royal Botanic Gardens<sup>®</sup>, Kew, UK).



Figure 38. Excised portion of original sheet bearing *Silene gallica* Lowe at **OXF** (00148696), remounted on a new sheet (courtesy of Oxford University Herbaria, Department of Biology<sup>®</sup>, Oxford, UK).

significant herbaria (see later). Jackson (1901, pp. 41, 74) recorded plants at **K** collected by Lippold in Madeira in 1837 but, again, no specimens from Brazil that would have been collected when W. J. Hooker was the director of Kew from 1841 (see J. D. Hooker 1902). Incidentally, when Hooker was professor of

botany at the University of Glasgow (1820 to 1841), the university had no herbarium, but he maintained a private collection at home, which would presumably have included any specimens sent to him by Lippold before 1841 (Patton 1954, p. 106). In addition to these contemporary records of specific donations,

Hansen (1980) cursorily noted that specimens collected by Lippold were “in herb. CGE, E, K, OXF and elsewhere”, all of which are confirmed herein. Certainly, however, the **BM** herbarium is also a major additional repository (Murray and Britten 1904, p. 99); specimens in other herbaria were discovered by serendipity or traced through documented subscribers to Lippold’s collecting in Madeira.

Desmond (1977) provided brief details of the repositories of Lippold’s subscribers’ plants (see below), to which some herbaria have been added herein. His subscribers for Madeira included Messrs. Loddiges, the Hackney nurserymen (Anonymous 1837a); Messrs. Rollisson<sup>38</sup> nurserymen of Upper Tooting (Loudon 1837a); Robert Graham (1786–1845; plants at **CGE**); W. J. Hooker (plants at **K**); William Borrer (plants at **K**); Charles Giles Bridle Daubeny (1795–1867; plants at **OXF**); Robert K. Greville (plants at **BM**, **E**); John Russell (Duke of Bedford); Nathaniel Bagshaw Ward (plants at **BM**, **GH**, **K**, **OXF**); and William Christy, junior (plants at **CGE**, **DBN**, **E**, **K**, **MEL**). It is perhaps surprising that the celebrated Veitch nurseries of Chelsea did not subscribe to Lippold’s initiative, but the firm apparently never sent a collector to Madeira (J. H. Veitch 1906).

*Specimens collected by Lippold and associates in Madeira*

Of the 46 herbaria investigated, nine hold material collected by Lippold, comprising 143 specimens, one of them from England, the remainder from the Madeiran Archipelago. Material at **BM**, **DBN**, **E**, **G**, **GH**, **K**, **MEL** and **OXF** was confirmed directly; however, the specimens certainly at **CGE** were not searchable remotely (see later). Any specimens attributed to Lemann, Lowe, Ward, W. J. Hooker and Christy were also investigated in case they might include any

collected by Lippold, which in some cases they do; some transferences between private and institutional herbaria have led to field-collectors’ misattributions. Some examples of Lippold’s collecting follow.

**BM – Natural History Museum General Herbarium, London, UK**

In the online **BM** herbarium catalogue, 27 specimens collected by J. F. Lippold between 24 May 1837 and September 1838 are indicated, but only seven are digitized. Three of them (BM000056011, BM000056554 and BM001042521) bear a printed label, “HERB. R. T. LOWE, 28 May 1875” (see Fig. 39A), to identify Lowe’s bequest to the British Museum (Murray and Britten 1904, p. 164), which was deposited by his executor, Thomas Vernon Wollaston (1822–1878; see also **K** below). Specimen BM000641870, collected from the Rocha Furada, Madeira, bears a label for *Nyctarium triphyllum* in Lippold’s hand, corroborated by the note, “NB Mihi primum detectum”. It was apparently one of five conspecific specimens, of which two of the others are currently in the **K** herbarium (K000414058 and K000414059), one at **G** (G00442729), and yet another at **OXF** (00140907); all five examples bear almost identical autograph labels by Lippold.

Another Lippold specimen (BM013713366) bears a manuscript label “Madeira, ex Hb. Ward (1869)” (Fig. 40). The same wording is pencilled on the back of the sheet of a remounted specimen collected by Lemann, autographed “C. L.” (BM001241214). Materials collected by both Lippold and Lemann were therefore once in N. B. Ward’s herbarium. Ward was one of Lippold’s subscribers (see previously) and apparently one of Lemann’s too. In his will Ward made no explicit provision for the disposal of his herbarium, which was apparently included in “the residue of my



Figure 39. A: Printed label identifying Lowe’s bequest to the British Museum, received 28 May 1875, with Lowe’s 1856 autograph label (Creative Commons Attribution CC-BY, The Trustees of the Natural History Museum<sup>©</sup>, London, UK). B: Printed label identifying Lowe’s bequest to the Royal Botanic Gardens, Kew, received April 1875 (Creative Commons Attribution CC-BY, The Trustees of the Royal Botanic Gardens<sup>©</sup>, Kew, UK).

estate and effects” to be sold by his executors (COW1703698761897W; National Archives, Kew, England); it was actually purchased by **BM** in 1869 (Murray and Britten 1904, p. 99).

In the **BM** herbarium, only four species found by Lippold are repeated among the 35 specimens therein known to have been collected by Lemann from Madeira between October 1836 and 2 April 1838. They are: (1) *Matthiola maderensis* Lowe, collected by Lippold in June 1837 from the Ilhas Desertas (BM000056554); collected also by Lemann (BM001241214), date and Madeira locality unknown, (2) *Culcita macrocarpa* C. Presl., collected by Lippold (BM000787575) and by

Lemann (BM000787577), neither specimen with date or locality, (3) *Asplenium aethiopicum* (Burm.f.) Bech., collected by Lippold in July 1837, locality unknown (BM000787670); and by Lemann (BM000787655 and BM000787665), dates and localities unknown, and (4) *Medicago truncatula* Gaertn., collected by Lippold on 24 May 1837, locality unknown (RT Lowe 2000–43815) and by Lemann on 1 June 1837, locality unknown (BM000056642). Hence, there are no coincidences of dates or stated localities for any species collected both by Lippold and Lemann, but the data are admittedly sparse.



Figure 40. Label at **BM** in Lippold's hand of a specimen of a *Cajanus* sp. from Quinta das Maravilhas (BM013713366) with a separate label "Madeira, ex Hb. Ward (1869)" in another hand, both excised and remounted (Creative Commons Attribution CC-BY, The Trustees of the Natural History Museum, London<sup>o</sup>, UK).



#### CGE - University of Cambridge Herbarium, UK

Currently (July 2022), data from **CGE** are not accessible remotely, but it is known that materials collected by Lippold from Madeira are in the herbarium (Maiden 1902; Gilmour and Tutin 1933; Hansen 1980). Lemann's collection of over 50,000 specimens was incorporated in the Cambridge University Herbarium in 1860 (Gardiner 2019), after it had been named and arranged by George Bentham (1800–1884; Stevens 2003). Unfortunately, localities and dates of Lippold's and Lemann's **CGE** Madeiran specimens could not be compared, because it is not practicable to search the herbarium by collector or geography; specimens are arranged taxonomically, and no online or offline catalogue is available (Dr Lauren M. Gardiner, pers. comm., 28 July 2022).

However, a little about provenances was recorded by Gilmour and Tutin (1933, p. 22); Lippold's specimens came from the private herbarium of C. C. Babington ("B"), and Lemann's specimens came from his own herbarium ("Lem.") or from Babington's. Babington was probably, therefore, another of Lippold's, and perhaps also of Lemann's, subscribers. Additionally, Maiden (1902, p. 550) recorded a specimen of *Eucalyptus*

*perfoliata* at **CGE** as "Coll. Dr. J. F. Lippold, ex herb. Prof. R. Graham in herb. Cant.". Since Graham is another known subscriber, perhaps other Lippold specimens from that source may be present at **CGE**.

#### DBN - National Botanic Gardens, Glasnevin, Dublin, Ireland

Among the collectors whom Nelson (1980) listed at **DBN** is Lippold's patron William Christy, junior, but his specimens there are stated to have come from Italy and Norway (see Christy 1837). However, there are at least two specimens at **DBN** collected by Lippold in Madeira during May 1837 (Dr Wu K. Soh, pers. comm., 11 August 2023). Both bear printed labels of the herbarium of John Thomas Boswell (1822–1888; also known as John Thomas Irvine Boswell-Syme).<sup>39</sup> One specimen is of *Erodium malacoides* Lowe (DBN0008957) from "Gorgulho Fields", and the other is of *Erodium botrys* Lowe (DBN0008958) from "Ribeira de S. João". These are duplicates from the same localities and bearing the same date ("Mai 1837") as specimens 00148734 and 00148730, respectively, at **OXF**. Moreover, the manuscript labels, evidently in Boswell's handwriting, of both the **DBN** and **OXF**

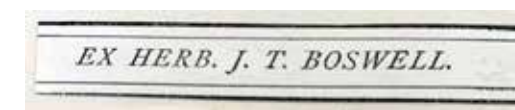
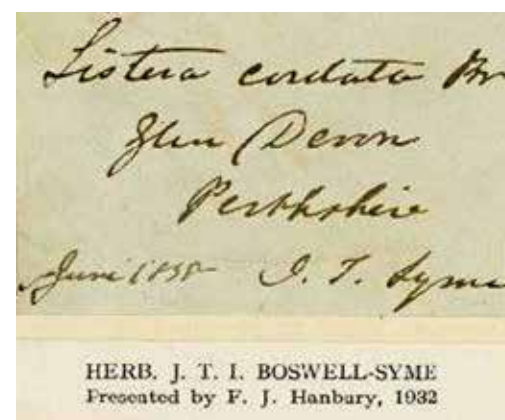


Figure 41. Above, A: Boswell's printed label on Lippold's specimens at **DBN** (courtesy of Herbarium, National Botanic Gardens<sup>o</sup>, Glasnevin, Dublin, Ireland). Left, B: Boswell's printed label at **BM** on a specimen collected by himself (Creative Commons Attribution CC-BY, The Trustees of the Natural History Museum<sup>o</sup>, London, UK).

specimens of each species, are identical in wording and layout, apparently having been copied, including the idiosyncratic spelling of "Mai", from Lippold's original labels (now missing), except that the **DBN** specimen labels have "Dr. Lippold Madeira" added.

According to Desmond (1977), Boswell's main herbarium was deposited at **BM**, where 1,806 specimens of his are currently listed in the online catalogue of the British and Irish Herbarium, and three more are in the General Herbarium covering the rest of the world, but none is from Madeira. It is a mystery, therefore, how some of Boswell's Lippold specimens came to be also at **DBN** and **OXF**. The printed Boswell herbarium labels on specimens at **DBN** collected by Lippold (Fig. 41A) are different from those on specimens at **BM** (see Fig. 41B) that were presented after Boswell's death, none of which were collected by Lippold.<sup>40</sup> However, Boswell's specimens at **OXF** have no printed labels, suggesting that he may have transferred them to **OXF**, perhaps as duplicates, before his remaining herbarium was bequeathed to **BM**.

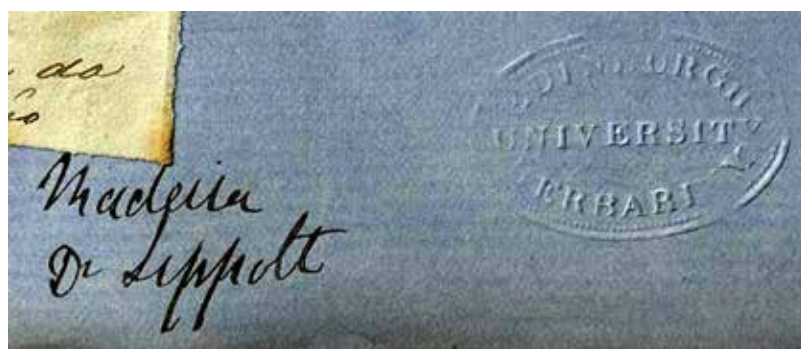
#### E - Royal Botanic Garden Edinburgh Herbarium, Edinburgh, UK

There are seven specimens attributed to Lippold in the **E** herbarium. The sheets of

six of them, collected from Madeira between May and August 1837, are embossed with the blind, oval stamp of the former Edinburgh University Herbarium (**EGH**; Fig. 42), which is associated with the inscription "Dr. Lippold" [*sic*]. These inscriptions, directly on the sheet and adjacent to the specimen labels, are in an unidentified hand (Fig. 42), perhaps that of a curator then at **EGH**. Five single specimens are on blue sheets, only one of which has an autograph label by Lippold (E00718957). The sixth sheet, of off-white paper, bears three remounted specimens of *Solanum* spp. from different sources, one of which (E00812347) is annotated "Monte Video Capt Kings Voyage M[illegible] 18[deletion]45" in the same hand as that for "Dr Lippold" on this specimen and the five on blue sheets.

The colours of the sheets and their distinctive autograph labels suggest that these specimens were at some time in the herbarium of Henry Borron Fielding (1805–1851), whose main collection is at **OXF** (see notes below on the Fielding Herbarium). If, as seems likely, Fielding subscribed to Lippold's Madeira venture, a likely provenance trail would begin with Lippold's supplying specimens to Fielding, who then may have donated them or given them in exchange to the **EGH** herbarium, which was subsequently transferred

Figure 42. Blind, embossed stamp of “Edinburgh University Herbarium” at **E** (Royal Botanic Garden Edinburgh; specimen E00896575; courtesy of Royal Botanic Garden Edinburgh<sup>©</sup>, UK).



to the Royal Botanic Garden Edinburgh (**E**) in 1863 (<https://www.rbge.org.uk/science-and-conservation/herbarium/history-of-the-herbarium/integrated-herbaria/>). That possibility is supported by the fact that none of Lippold's specimens at **OXF** bear the “Dr. Lippold” inscription or any other annotations in the hand noted on his specimen-sheets at **E**.

The seventh Lippold specimen, *Polygonum dumetorum* L. (E00316616), was collected from Combe Wood, Surrey, England, during August 1836. Notably, this is Lippold's only known herbarium specimen not to have been collected from the Madeiran Archipelago. Its only label, printed “Ex Herb. Christy” (Fig. 43), is completed in manuscript by Lippold's patron William Christy, junior, (autograph in letters to John Torrey: <https://www.biodiversitylibrary.org/item/223766#page/1/mode/1up>) with whom Lippold must have left this sample prior to his sailing for Madeira. A label on specimen E00821491 indicates that Christy himself was in Denmark during

July 1836, presumably when on the way with several young friends on his expedition to Norway from 12 July to 3 September 1836 (Christy 1837).<sup>41</sup> Clearly, Lippold had remained in England.

It seems possible that this 1836 English specimen was included in Christy's 1838 donation to the Botanical Society of Edinburgh (**EBH**), later incorporated with the herbarium of the University of Edinburgh (**EGH**) during 1839–1840 and then transferred to **E** in 1863 (<https://www.rbge.org.uk/science-and-conservation/herbarium/history-of-the-herbarium/integrated-herbaria/>). Its arrival in the **E** herbarium separately from Lippold's Madeiran specimens with the embossed **EGH** stamp is strongly suggested by its bearing only the inked stamp of “Royal Botanic Garden Edinburgh”. None of the few specimens at **E** collected by Christy himself came from Madeira, but he certainly visited there (Christy 1838a). Although no further examples of the “Ex Herb. Christy” printed label have been

Figure 43. Specimen E00316616 at **E**, collected by J. F. Lippold, previously in William Christy, junior's herbarium, with his printed label completed in his hand (courtesy of Royal Botanic Garden Edinburgh<sup>©</sup>, UK).

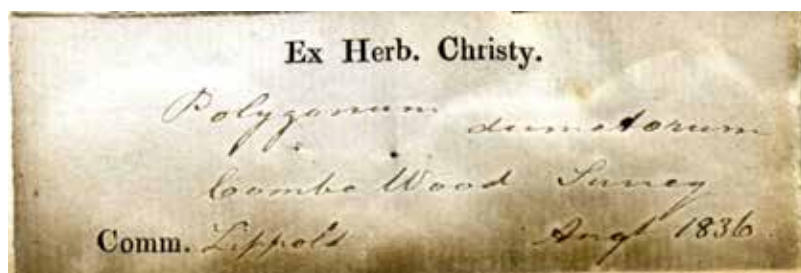


Figure 44. Labels of specimen E00030326 at **E**, including R. T. Lowe's original autograph label; the printed label of his bequest to Royal Botanic Gardens Kew; Kew's printed presentation label to **E**; and the modern barcode of Royal Botanic Garden Edinburgh (courtesy of Royal Botanic Garden Edinburgh<sup>©</sup>, UK).

encountered in this or any other herbarium, Lippold must surely have sent Madeiran specimens to his patron, as intimated in one of his letters to him (Royal Botanic Gardens, Kew, Directors' Correspondence, 16 July 1838, DC/50/211).

Only two specimens from Madeira are listed at **E** for Lemann, both with his autograph labels. One, of *Ammi majus* L. (E00035827) signed “C. Lemann”, was collected in November 1836; it is labelled “From the Herbarium, Royal Gardens, Kew. Presented” and also bears their “Herbarium Benthonianum 1854” inked stamp. The other (E00705159), of *Ephedra* sp. nov., initialled as often only “C. L.”, was collected in May 1838. These details do not coincide in any way with those on the label of the **E** specimen of *Ephedra altissima* Lowe (E00705145) collected by Lippold in June 1837.

Seven specimens from Madeira (four digitized) are attributed to Lowe (two with his autograph labels), six in the late 1820s and one in 1857; they could not, therefore, have been collected by Lippold or Lemann in the 1830s. The earliest of them (E00913867), dated 7 November 1826, bears a presentation label printed “from J. S. Henslow”; John Stevens Henslow (1796–1861) was Lowe's University of Cambridge mentor to whom he sent specimens from Madeira. The latest specimen (E00030326) collected by Lowe,

on 15 December 1857, bears an original label recording its bequest to Kew, “Herbarium of Rev. R. T. Lowe. Received April 1875”; it was then presented to **E** (“From the Herbarium, Royal Gardens, Kew. Presented”; Fig. 44). An isotype of *Lycopodium suberectum* Lowe (E00429085), collected 1 November 1828, bears a printed label, “Ex Herb. Greville”. Whilst several routes of acquisition of these Lowe specimens may thus be inferred, no direct links with Lippold are apparent, although R. K. Greville was one of his Madeira subscribers. As already noted, however, Madeiran fungi collected by Lippold were presented by **EBH** to the Museum of Economic Botany (**E**), via Greville in 1852, but being at present untraceable, their complete provenance cannot be ascertained.

#### G - Geneva, Switzerland

The only specimen catalogued at **G** as Lippold's is an isosyntype of *Nyctarium triphyllum* Lowe (G00442729), collected from the Rocha Furada, Madeira, during July 1837. (As noted previously, this is one of five specimens of the same species collected by Lippold from the same place on the same date, now held by **BM**, **G**, **K** and **OXF** herbaria.) Lowe's original autograph label, which attributes G00442729 to Lippold, is affixed to a larger printed label, “Herbier R. F. [= T.] Lowe. Plantes de



Madère. W. Barbey com. décembre 1895". A modern printed slip describes the Herbar Barbey-Boissier collection as "Constituted by William Barbey after the death of his father-in-law Edmond Boissier (1885); given in 1918, by the children of W. Barbey, to the University of Geneva where it was augmented by different collaborators; transferred in 1944 to the botanical conservatory".

Searching specifically for collectors associated with Lippold, most of the 93 Madeira specimens catalogued for R. T. Lowe at **G** bear original numbered manuscript labels from Lowe's personal herbarium. Caution must be exercised with regard to the recorded collection dates, however, because the online database records a spurious year of collection, almost always 1832 (29 specimens). However, in the same column of data may also sometimes be seen (for another 44 specimens) the statement "reçu en 1832", which is presumably correct. In fact, rather few of Lowe's own labels bear a collection date, but most have, added in another hand, "Madère. M. Eow 1832" (note the misspelling of Lowe and the curious crossed capital letter "E"). This latter statement has occasionally been interpreted as the year of collection but is actually the year of Boissier's receipt (see above). In fact, all specimens labelled as such must have been collected before 1832, thus precluding collection by Lippold. However, as noted above, only Lippold's specimen of *Nycterium triphyllum*, dated July 1837, was attributed to him on one of Lowe's few labels on specimens collected after 1832.

Similarly, one of Lemann's specimens is attributed to him by Lowe. Two samples of *Clethra arborea* Aiton with the same barcode (G00323448) are on the same sheet but have separate, much earlier, labels. Whilst one was apparently collected by Lowe, bearing his Latin annotation and additionally in another hand, "Madère. M. Eow 1832", the other is labelled

only "*Clethra arborea*. Madère. Mr. Leman [*sic*] 1839", but not in Lowe's hand. This latter specimen, presumably received in 1839, must have been collected by Lemann previously, because he had left Madeira by 1839. That specimen may thus be added to the 23 others at **G** expressly catalogued from Madeira as Lemann's, all of which are also labelled "Mr. Leman 1839". Only two of them, *Armeria maderensis* Lowe (G00440150) and *Nycterium triphyllum* Lowe (G00442775), are initialled "C. L." in Lemann's hand; few bear a locality or actual collection date. However, *Euphorbia mellifera* Aiton (G00311561) was collected by Lemann from the Ribeiro Frio on 22 April 1837, and *Armeria maderensis* (G00440150) was collected from an unknown locality in July 1837. No Lippold specimens via Christy, Ward or W. J. Hooker were discovered.

#### GH - Gray Herbarium, Harvard University, USA

Specimens of *Sempervivum tabulaeforme* Lowe (GH01871689) and *S. canariense* L. (GH01871690), collected by Lippold from the Curral, Madeira, with his unsigned autograph labels, both dated July 1837, are held by **GH**. However, since "Madeira, Ward", in a different hand (apparently not Ward's), has been added to Lippold's own labels, both are misattributed to N. B. Ward as the collector. They were most probably among specimens he received as one of Lippold's subscribers, exemplifying the problem of distinguishing between field-collectors and cabinet-collectors alluded to by Lucas and Lucas (2014). Some other specimens at **GH** bear Ward's printed herbarium label ("Ex Herb. N. B. Ward"), annotated in his hand (letters in the Gray Correspondence Files, Gray Herbarium Archives: <https://archive.org/details/nathanielbagsha00ward/page/n19/mode/2up>). Hence, some, at least, were apparently collected by him personally. Although specimens from his herbarium, some

with printed labels dated 1869 (the year of its sale), occur in at least 13 other herbaria that I investigated, those at Harvard were probably given by Ward himself to Asa Gray, who was a close friend (see Gray Correspondence Files).

Incidentally, the Gray Herbarium Library holds an archive of botanists' handwriting assembled by Asa Gray's wife, Jane (née Loring, 1821–1909; Jane Gray autograph collection: gra00084). Included is an excised herbarium label, purported to be in Lippold's hand, but of unknown provenance ([https://iiiif.lib.harvard.edu/manifests/view/drs:48563307\\$434i](https://iiiif.lib.harvard.edu/manifests/view/drs:48563307$434i)). This is, however, a misidentification and the collection apparently includes no actual example of Lippold's autograph. Interestingly, Jane Gray's annotation constitutes the earliest claim, though unevicenced, I have seen that Lippold and Lemann collected together in Madeira (see later).

Another specimen from Madeira, *Orchis secundiflora* Bertol. (01951523), with Lemann's autograph label, without locality or date, was found at **GH**. It has been excised from another sheet bearing a label "Ex Herb. Hort. Bot. Reg. Kew.", and is laid down on a new one, headed "Herbarium of Oakes Ames", a subsidiary herbarium intercalated within **GH**. Some specimens there collected by Lowe have a similar provenance trail.<sup>42</sup> No Lippold specimens associated with William Christy or W. J. Hooker were identified.

#### K - Royal Botanic Gardens Kew Herbarium, London, UK

Six specimens collected by Lippold, four of them digitized, were traced, all collected in June or July 1837 from the Madeiran Archipelago. Specimen K000251938 also bears a supplementary provenance slip printed "Herbarium of Rev. R. T. LOWE. Received April 1875", identifying material deposited by his executor, T. V. Wollaston, after Lowe's

demise in 1874 (Fig. 39B). They are very similar to the **BM** labels, "HERB. R. T. LOWE, 28 May 1875", indicating the same origin (see Fig. 39A). Lowe's herbarium was shared between **K** and **BM**, but as indicated by the date order of these labels, Wollaston clearly dealt with the Kew portion first, some specimens of which later went to other herbaria (see Fig. 44).

As previously mentioned, in 1841, on his appointment as director of the Royal Botanic Gardens Kew, W. J. Hooker brought his private herbarium from Glasgow, initially keeping it in his new home at Kew. Eventually, in 1852, Hunter House was provided for Hooker to accommodate his herbarium and library, which he made available to visiting botanists and which formed the nucleus of the official herbarium of the Royal Botanic Gardens from 1866.<sup>43</sup> In 1854 was added the herbarium of George Bentham, followed in 1862 by the bequest of William Borrer (J. D. Hooker 1902, pp. lxxx–lxxxii). None of Lippold's specimens at **K** has a Borrer label, although some are known to have been included in Borrer's herbarium that he gave to the Linnean Society in 1842. Although Borrer was another of Lippold's Madeira subscribers, it seems likely that no specimens from that source remained in his herbarium when he died.

The sheets of W. J. Hooker's herbarium, bought by the British Government in 1866, are now identified by a blue-inked stamp, "Herbarium Hookerianum 1867" (see Figs. 37, 45, 46). Much of the material thus stamped was without doubt in W. J. Hooker's herbarium when he died in 1865 and since Lippold's Madeira specimens were collected during the 1830s, it is most likely that any sent to Hooker from there were already incorporated in his herbarium before he quit Glasgow in 1841. However, any specimens bearing the Lowe "Received April 1875" labels in addition to "Herbarium Hookerianum 1867" stamps



Figure 45. Blue-inked stamp of “Herbarium Hookerianum 1867” at **K** on sheet of specimen K000975585 with Lippold’s autograph label (Creative Commons Attribution CC-BY, The Trustees of the Royal Botanic Gardens, Kew<sup>®</sup>, UK).

could not have been already in Hooker’s herbarium. Therefore, some specimens from other sources were evidently added during sorting and cataloguing after its purchase, as indicated by certain collectors’ labels being dated after 1867 (Lucas 2007).

Two specimens of *Nycterium triphyllum* Lowe (K000414058 and K000414059), remounted on the same sheet, each bear the “Herbarium Hookerianum 1867” stamp and Lippold’s autograph label with the comment, “NB Mihi primum detectum” (Fig. 46), as do the three aforementioned specimens of the same species at **BM**, **G** and **OXF**. All five were collected by Lippold in July 1837 from “Rocha forada [= Furada] Ravine near S. Ant. de Serra”.<sup>44</sup> Completing the suite of *Nycterium* specimens held by **K** is one collected by Lemann (K000414060), on its own sheet, labelled “*Nycterium* sp. nov.? Madeira July 1837. C. Lemann 1838”; it bears the “Herbarium Benthamianum 1854” blue-inked stamp (Fig. 47), rather than the “Herbarium Hookerianum 1867” stamp found on Lippold’s congeneric specimens.

#### MEL – National Herbarium of Victoria, Melbourne, Australia

A few specimens collected in Madeira by Lippold, Lemann, Lowe and Christy were discovered at **MEL**, but it should not be assumed that there are no more to be found. Two specimens were collected by Lippold (MEL2497744, from “Levada of the Mount”; and MEL2497513, from “Caminho do Curral”), but the latter is mis-attributed in the online catalogue to R. T. Lowe, despite his label’s not being on the sheet. Both Lippold’s specimens are labelled in his unsigned autograph, dated June 1837, the former with a separate note pencilled in another hand, “Mad. Lippold”.

There are also three specimens (MEL2444700A, MEL2448109A, MEL2480006) recorded as collected in Madeira by Lemann (no localities or dates); MEL2480006 bears on the same label the additional note “Herb: Hance no. 4681”. Interestingly, a fourth Lemann specimen (MEL0282507), identified as “Herb: Hance no. 1344”<sup>45</sup> from “Lancerotta” (Lanzarote, Canary Islands), was collected in April 1837.

Two undated specimens possibly collected by Lowe are present (MEL0307636, *Pedrosia glauca* Lowe, from Porto da Cruz; and MEL2348929, *Pedrosia loweana* (Webb), from Porto Santo [Island], though they are not labelled in his handwriting. Both those sheets bear a printed label, “PHYTOLOGIC MUSEUM OF MELBOURNE... BARON FERD. VON MUELLER, PH. & M.D., LL.D.”, which cannot have been used before 30 April 1892, when Mueller was honoured with an LL.D. by McGill University, Canada, but it was also used after Mueller died, at least up to 1899 (Prof. Arthur Lucas, pers. comm., 1 May 2023). Those specimens may have been received long before 1892, however.

A specimen labelled *Laurus foetens* Aiton (MEL2390287) bearing Christy’s name,



Figure 46. J. F. Lippold’s duplicated autograph labels at **K** for *Nycterium triphyllum* Lowe (K000414059 = *Solanum trisetum* Dunal. = *Normania triphylla* (Lowe); Creative Commons Attribution CC-BY, The Trustees of the Royal Botanic Gardens, Kew<sup>®</sup>, UK).

but in an unknown hand, was apparently collected from the Ribeiro Frio in December 1837, when he is known to have been in Madeira (see below). A recent curator’s note on another sheet, which bears a single sample (MEL2390290), states that it had no label before curation, but that copies of the labels of specimens MEL2390287, MEL2390288 and MEL2390289 have been attached; therefore, only those labels on their original specimens are relevant, and specimen MEL2390290 itself must hence be discounted. The labels for specimens MEL2390289 and MEL2390288,

though not bearing Christy’s name, record the collection of *Persea foetens* from Ribeiro Frio on 22 April 1837 and from Dr Renton’s garden in August 1837, respectively. Christy is stated in the online catalogue to have collected these two specimens of *Persea foetens*, but their labels do not permit this conclusion since the collection dates are not in accord with his only known Madeira visit, during November and December 1837 (Christy 1838a). It therefore seems probable that they were actually collected by somebody else, and given to Christy during his visit. A possible candidate



Figure 47. C. M. Lemann’s autograph label at **K** for “*Nycterium* sp. nov. Madeira July 1837” but signed “1838” and stamped “Herbarium Benthamianum 1854” (K000414060 = *Normania triphylla* (Lowe); isotype of *Solanum trisetum* Dunal; Creative Commons Attribution CC-BY, The Trustees of the Royal Botanic Gardens, Kew<sup>®</sup>, UK).



is Lemann, who collected *Euphorbia mellifera*, also from the Ribeiro Frio on 22 April 1837 (see G00311561 in the Geneva Herbarium, above), and was still in Madeira when Christy visited. There is, however, no indication of Lippold's involvement.

#### OXF - Fielding Herbarium, University of Oxford, UK

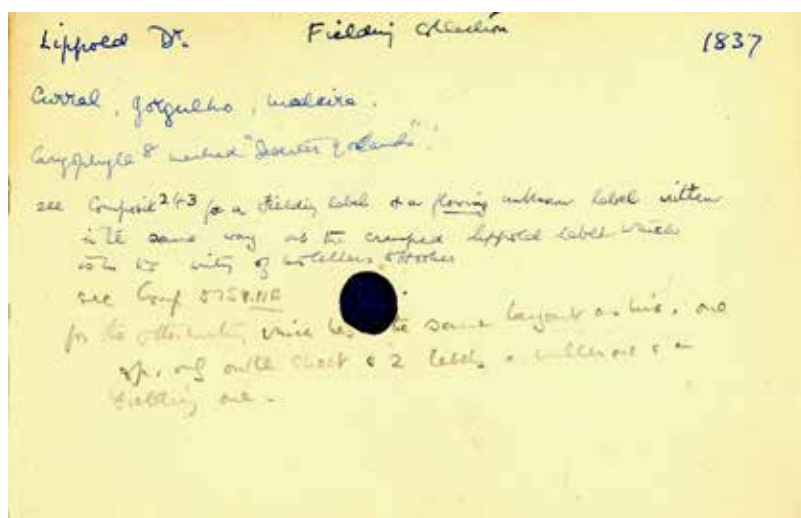
More specimens possibly associated with Lippold are held at **OXF** than in any other herbarium investigated, but only one specimen is currently (June 2023) attributed to him online, a marine alga (*Sargassum vulgare* C. Agardh) from Madeira (00087943). This algal sample and 95 specimens of phanerogams and pteridophytes were kindly retrieved manually and photographed for me by Prof. Stephen Harris and Serena Marner. The provenances provide particularly instructive examples of the potential complexity of transferences of material between collections. The essential starting point for searches at **OXF** is the card index compiled by an erstwhile curator, Hermia Newman Clokie (1909–1994), the authoress of an indispensable account of the **OXF** herbaria (Clokie 1964);

Figure 48 shows Clokie's index card for Lippold's material.

Lippold's specimens at **OXF** were clearly accumulated on multiple occasions from disparate sources; no other herbarium investigated has as many different provenances for Lippold materials. Of particular note is the specimen of *Nyctarium triphyllum* (00140907), one of five gathered on the same occasion, but now distributed between **OXF**, **BM**, **G** and **K** (see previously). Many of Lippold's specimens appear to have been acquired with the herbarium of some 80,000 specimens (Green 1914, p. 559) amassed by Henry Borron Fielding (Serena Marner, pers. comm., 2 June 2023). Fielding's widow donated his herbarium to **OXF** in 1852 with the support of Charles Daubeny (Daubeny 1854, p. 252; Clokie 1964, p. 106).

Fielding, "an ardent collector, added to his accumulations by purchase as opportunity offered" (Green 1914, p. 559) and "He collected Herbaria as one might collect postage stamps today" (Clokie 1964, p. 43). Coincidentally, Fielding employed Pamplin as his British agent (Clokie 1964, pp. 104, 105), as had Lippold (see previously) and other collectors. Fielding also "was a correspondent

Figure 48. Recto of H. N. Clokie's record card for J. F. Lippold's specimens, compiled during her survey of materials in the **OXF** Fielding Herbarium (courtesy of Oxford University Herbaria<sup>®</sup>, Department of Biology, Oxford, UK).



and client of W. J. Hooker and subscribed to the various botanical journeys organized by him" (Clokie 1964, p. 104), probably including Lippold's, which suggests further potential original sources (see below).

Since Daubeny was one of the subscribers to Lippold's Madeira venture, some Lippold specimens may well have come from him, as well as from Fielding, though no such examples have yet been identified. However, whilst Daubeny recorded Lippold specimens from Madeira at **OXF** (Daubeny 1854, p. 282), he did not mention any Lippold material from Brazil (Daubeny 1854, p. 283), and neither did Druce (1897, pp. 13, 14). In fact, it was ascertained during a recent comprehensive digitization project for North and South American specimens that there are definitively no Lippold materials from Brazil at **OXF** (Serena Marner, pers. comm., 2 June 2023). According to Green (1914, p. 559), Daubeny became in 1852 the first official curator of the Fielding Herbarium, aided by Mr. [the Rev. Henry Edward Fowler] Garnsey (1826–1903) and Mr. [Henry] Boswell (1837–1897; the latter not to be confused with John Boswell (*olim* Boswell-Syme—see **DBN** above and Notes 39 and 40)).

Much of Fielding's herbarium is mounted on blue paper or on a textured greyish-cream paper (Serena Marner, pers. comm., 2 June 2023), potentially useful clues to the provenance of remounted specimens (see Fig. 38). Regarding the manuscript labels, on her record card, Clokie recorded two autographs other than Lippold's: "See Composit 243 for a Fielding label & a flowing unknown label written in the same way as the cramped Lippold label..." (Fig. 48). Fielding's well-formed cursive script employs several characteristic forms of capitals, particularly those of "H" (Fig. 49A), and "A", which is often represented by the rather unconventional form "d", though not entirely consistently, since he sometimes used a more traditional shape similar to "A" (cf. Clokie 1964, pl. 11, fig. 1; and Fielding's autograph description of his herbarium: **OXF** MSS.Sherard 397). Curiously, specimens attributed to Lippold and apparently from Fielding's herbarium (judging by the paper and autograph labels) were received by **E** from the **EGH** herbarium before 1863 (see previously).

In attempting to identify the scribe of the "flowing unknown" hand (Fig. 49B), so described by Clokie, George Gardner was considered a possible candidate, since

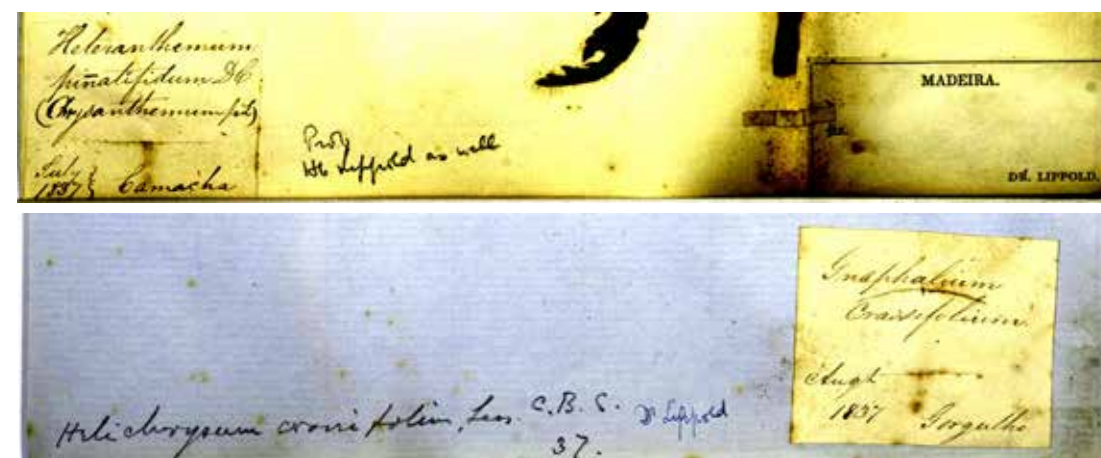


Figure 49. A: Fielding's **OXF** autograph label for *Heteranthemum pinatifidum* (00007202) with his printed label for Lippold's specimens, and H. N. Clokie's annotation. B: The unidentified **OXF** manuscript label for *Gnaphalium crassifolium* (00143468), with C. B. Clark's determination as *Helichrysum crassifolium*, and H. N. Clokie's annotation (courtesy of Oxford University Herbaria<sup>®</sup>, Department of Biology, Oxford, UK).



Figure 50. A: Fielding's printed label at OXF, completed in his hand as *Eclipta prostrata*, for J. F. Lippold's specimen, whose own autograph label it also bears, of *Eclipta erecta* (00119876). B: Fielding's OXF printed label for G. Gardner's specimen of *Panicum pallentis* var. (00019360; courtesy of Oxford University Herbaria<sup>o</sup>, Department of Biology, Oxford, UK).

following his collecting in Brazil, he helped from 1843 to arrange Fielding's herbarium (Clokier 1964, pp. 169–170). However, it was found that Gardner's labels on his Brazilian specimens currently at E, are written in a rather heavy, florid style with no resemblance to the labels in question on Lippold's specimens at OXF. Another possible candidate might be Maxwell Tylden Masters (1833–1907), sub-curator of Fielding's herbarium after its receipt at OXF in 1852, but his writing figured by Clokier (1964, pl. 12, fig 2) precludes him also from consideration.

Clokier (1964, p. 201) seems to have generally assumed that any specimens collected from Madeiran localities in the late 1830s emanated from Lippold, and she inscribed such sheets in pencil or blue ink with comments, such as, for instance, "Lippold collection

Madeira", "Hb. Lippold Madeira" or "Dr. Lippold Madeira" (see Figs. 38, 49A, 49B et al.). However, as a sole criterion for currently identifying Lippold's specimens, this cannot be definitive, since Lowe and Lemann were also collecting in Madeira at that time, although their specimens are usually clearly labelled in their distinctive handwriting. Lowe's specimens usually bear a number, presumably from his personal catalogue, which, however, has not been traced (Williams 2019; Williams et al. 2019).

There might be some doubt, therefore, about some of Clokier's identifications of specimens from Madeira that lack Lippold's autograph labels, particularly because she was unable to identify the handwriting, other than Fielding's, on the contemporaneous labels (and nor can I). Furthermore, it is not exactly clear

Table 1. Identification criteria and collection dates of 96 OXF specimens from Madeira potentially associated with J. F. Lippold

No. of specimens	Lippold's autograph label	Fielding's ms. or printed label	Clokier's annotations	Collection date ranges	Specimens collected May to August 1837
3	+	+	–	June 1837 to March 1838	1
17	+	–	+	April 1837 to March 1838	13
16	+	–	–	May to August 1837	16
1	–	+	+	July 1837	1
7	–	+	–	May to August 1837	7
42	–	–	+	May to August 1837	42
10	–	–	–	May to July 1837	10
Σ=96	Σ=36	Σ=11	Σ=60	April 1837 to March 1838	Σ=90

what Clokier intended by "Lippold collection": did she mean Lippold's personal herbarium; or specimens collected for subscribers; or (most likely) his specimens accumulated by Fielding, possibly from multiple sources?

Considering these difficulties in the context of the present survey, combinations of identifiers for the specimens at OXF with putative associations with Lippold were ranked using three possible criteria (Tab. 1). They are, in descending order of stringency: (1) a manuscript label in Lippold's autograph (unequivocal); (2) one of Fielding's labels printed "MADEIRA... DR. LIPPOLD" or a manuscript label in Fielding's autograph (indicative); (3) any annotation by H. N. Clokier referring to a Lippold collection (weakly suggestive). Of the 96 specimens considered, only 36 satisfy the most stringent criterion, three of them with Fielding's labels in addition; but a further eight may be accepted as Lippold's if Fielding's labels alone are also considered. Clokier's suggestive annotations on 18 of those specimens satisfying either criterion are thus corroborated. The 42 specimens identified only by Clokier's annotations are possibly attributable to Lippold but only with caution. Another ten have Madeira labels dated in unidentified hands and lacking any of the above criteria.

That specimen 00119876 bears both Lippold's autograph label and Fielding's printed label completed by himself (Fig. 50A) suggests that it might have been one of those received by Fielding directly from Lippold's Madeiran collecting. Eleven examples of Fielding's printed label for Lippold's specimens have been noted so far (Tab. 1), but others possibly remain to be found. This evidence, corroborated by the kinds of paper used for the sheets, demonstrates how Fielding remounted many specimens, adding his own printed or autograph labels, and frequently discarded the original field-collectors' labels.

Fielding's aforementioned labels printed "MADEIRA. | No. | DR. LIPPOLD." are uniquely to be found in the OXF Fielding Herbarium. Labels of a closely similar design and size (approx. 6.4 × 3.0 cm), printed as follows: "BRAZIL. | ST. CATHERINE. | No. | TWEEDIE, 1837."; "BRAZIL. | RIO DE JANEIRO [sic]. | No. | GARDNER, 1837."; "BRAZIL. | ORGAN MOUNTAINS. | No. | GARDNER, 1837."; and "PERNAMBUCO. | No. | MR. GARDNER." occur on other sheets. Some of these labels, such as those shown in Figures 50A and 50B, are completed in Fielding's hand. Since evidently none of them



is contemporaneous with their associated specimens, it may be concluded that Fielding had such labels printed to indicate his ownership of specimens that he had acquired from various field-collectors.

As mentioned, manuscript labels other than those by Lippold and Fielding occur on some Madeiran specimens, but because the writer did not include any attributions, it is uncertain who collected them. Some herbarium stamps and labels evidently applied to Lippold's

specimens after his and Fielding's deaths (in 1852 and 1851 respectively) point clearly to several different provenances. Six specimens with an unsigned Lippold autograph label bear an additional printed label, "HERBARIUM OF THE LATE MR. THOMAS MOORE,<sup>46</sup> CHELSEA. Purchased January, 1887." (Fig. 51); perhaps Moore was another subscriber to Lippold's Madeira venture.

Seven other specimens, bequeathed in 1879, are mounted on sheets bearing a variety

Figure 51. J. F. Lippold's autograph label at OXF for *Crambe strigosa* Hér. (00148720), with the printed label for the herbarium of Thomas Moore of Chelsea (courtesy of Oxford University Herbaria<sup>®</sup>, Department of Biology, Oxford, UK).



Figure 52. A–D; specimens from the herbarium of William Wilson Saunders, collected in Madeira by J. F. Lippold, and donated to OXF by J. Cholmeley Russell after Saunders's death (courtesy of Oxford University Herbaria<sup>®</sup>, Department of Biology, Oxford, UK).



of stamped or pencilled provenances, such as "Herb. W. Wilson Saunders<sup>47</sup> pres. by J. Cholmeley Russell (see Note 47) Esq.", or similar (Fig. 52). Another specimen (00148724), ink-stamped "HERB. Rev. Preb. H. E. FOX<sup>48</sup> 1860–1924", also bears a printed label, "From the Collection of the late MR. N. B. WARD" and Ward's own attribution to Lippold (Fig. 53). This specimen may have come to be incorporated in Fox's collection by exchange with Ward, which, in view of his and Fox's relative ages, would have been during the last eight years (1860–1868) of Ward's life (see Note 48).

Since Clokie's index cards preserved in the Fielding Herbarium show that she examined rather less than half of Fielding's specimens, there is possibly even more Lippold material

yet to be discovered there (Serena Marner, pers. comm., 2 June 2023). Moreover, only about 15% of OXF specimens have online records, and many herbarium sheets that would correspond with Clokie's index card entries have not yet been discovered (Prof. Stephen Harris, pers. comm., 31 October 2022).

#### Seeds and living plants

Whilst Lippold's dried specimens were destined for his clients' herbaria, he also supplied seeds, for example, *Cupressus glauca* Lamarck, which he sent from Madeira to the Duke of Bedford at Woburn Abbey, where trees were grown from them (Loudon 1839a, p. 272). Seeds from Brazil may also have been sent directly to Britain for cultivation, as,



Figure 53. A specimen at **OXF** of *Arabis alpina* L. collected by J. F. Lippold (00148724) with an inked stamp of H. E. Fox and a printed label of the collection of N. B. Ward but not labelled by Lippold (courtesy of Oxford University Herbaria<sup>®</sup>, Department of Biology, Oxford, UK).



for instance, the *Hibiscus jerroldianus* grown by Mrs Berry for the Duke of Devonshire (see previously). It is therefore quite possible that living plants derived from Lippold’s seed collections still thrive in old-established gardens somewhere in the United Kingdom, or perhaps in Madeira, for instance at Dr. Renton’s Quinta do Valle.

By 1885 the Quinta do Valle was occupied by the celebrated and eccentric British physician, scientist and oenophile, Dr. Michael Comport Grabham (1840–1935; Johnson 1885, p. xxiv). Forty years after Renton had left Madeira, the gardens were still of interest for botanical rarities (Johnson 1885, p. 80). Although by 2004 the quinta was converted to a residential home for the elderly (Hoare 2004, p. 234), if anything of Renton’s original garden remains, it is possible that plants introduced by Lippold in the 1830s may still be growing there. Moreover, the descendants of Brazilian plants sent to Madeira by Lippold in the 1840s for acclimatization before transplantation to Britain might also survive.

However, Lippold was also successful in transporting living plants from Brazil directly to Europe, such as the specimen, sent to Germany, of *Lantana mutabilis* Lippold growing in the Königlichen Botanischen Gartens at Schöneberg in 1842, but, as previously explained, provenance would now be practically impossible to establish because of the early translocation of the gardens and their subsequent wartime destruction.

*Did Lippold and C. M. Lemman collect together in Madeira?*

Intriguingly, Lippold and Lemann have more than once in the botanical literature been tenuously linked as collectors in Madeira, and since so often reiterated without evidence, that notion has seemed worth investigation. The earliest claim seems to be in Jane Gray’s autograph collection of the late 19th century in the Gray Herbarium Library at Harvard (see previously). More recently, Lanjouw and Stafleu (1954, pp. 429, 450) state not only that Lemann collected with Lippold in Madeira during 1837–38 but also that Lippold collected in Madeira with Lemann in 1836. Though Clokie (1964, p. 198) also averred that “[Lemann] visited Madeira with Dr. Lippold in 1836”, she may have merely reiterated Lanjouw’s and Stafleu’s claim. Hansen (1980, p. 8), however, stated that Lippold collected “in 1837 together with C. M. Lemann” and also that Lemann collected “in 1837–38 together with J. F. Lippold”. But what exactly might be understood by these vague and inconsistent statements?

If Clokie (1964) believed, as she seems to have implied, that Lippold and Lemann sailed to Madeira together in 1836, that is certainly not true. It has been stated that Lemann resided in Madeira with his father “where he passed two years (1837–38)” (Anonymous 1853), but that does not necessarily preclude his arrival in 1836. In fact, Lowe wrote in the spring of 1837 that Lemann “has been here all winter” (see Hooker 1837a), implying his arrival late in

Table 2. Records in R. T. Lowe’s publications of Madeiran plants found by J. F. Lippold and C. M. Lemann

Publication	Lippold records			Lemann records		
	Number	Dates	Notes	Number	Dates	Notes
Lowe (1838)	2	1837	Both with localities but only one dated	8	No dates	None with a date or locality
Lowe (1857–1872)	5	1837 to September 1838	Three with localities; three with differing dates	11	April–July 1837	Six dated 1837; only three stating a month
Aggregated data	7	1837 to September 1838	—	19	April–July 1837	—

1836. This is corroborated by a **BM** specimen of *Asparagus scoparius* Lowe (BM000536483) collected by Lemann in October 1836, and an **E** specimen of *Ammi majus* L. (E00035827) collected in November 1836. Lippold, however, certainly did not arrive in Madeira until March 1837 (see under “Timeline”).

Moreover, in Lowe’s letter of 13 April 1837 to W. J. Hooker (Directors’ Correspondence, DC/58/186, Royal Botanic Gardens, Kew), referring to Lippold’s arrival in Madeira, he observed that by then Lemann had already “made a capital herbarium”, which presumably would have taken some weeks, at least. Although Lippold’s specimens were recorded in the Fielding Collection at **OXF** by Daubeney (1854, p. 282) and Druce (1897, p. 13), neither compiler mentioned Lemann. However, a later account (Clokie 1964, pp. 198, 201) confirms inclusion of specimens collected by both Lippold and Lemann, demonstrating the importance of continually updating published records of collections.

Table 2 summarizes R. T. Lowe’s published references to specimens collected in Madeira by Lippold and Lemann. In *A Manual Flora of Madeira* (Lowe 1857–1872 [1868]), those of Lippold’s dated finds are recorded for 1837 and 1838, one specifically in September 1838;

Lemann’s records are all dated 1837, one in April and two in July. According to Lowe (1838, p. 536), the collectors independently discovered *Nycterium triphyllum* Lowe at widely separated localities in Madeira. Moreover, Lowe’s description of the rare *Cynara horrida* Aiton (Lowe 1838, p. 541) was supplemented by Lippold, who found the species in 1837, but Lemann apparently did not find it. In Lowe’s same paper there are just two of Lippold’s records (one dated 1837) to Lemann’s eight (with no dates or localities).

In the present survey, enough specimens collected from Madeira by Lippold or Lemann have been found at **BM**, **E**, **K** and **OXF** to allow reasonable comparisons of localities and dates. Whilst the plants purchased by **BM** from N. B. Ward’s executor in 1869 include Madeiran specimens collected both by Lippold and Lemann (Murray and Britten 1904, p. 99), Ward may well have acquired them directly from each collector on separate occasions. Of those, only four species found by Lippold are also represented among specimens known to have been collected by Lemann (see previously). Although the data at **BM** admittedly lack some details, there are no coincidences of dates or localities for the species gathered by both field-collectors. At



Figure 54. Labels of J. F. Lippold (K000975585) and C. M. Lemann (K000975584) for *Prasium* spp. at **K**, both with inked stamps of Herbarium Hookerianum 1867 (Creative Commons Attribution (CC-BY), The Trustees of the Royal Botanic Gardens, Kew<sup>©</sup>, UK).



**E**, none of the six species collected by Lippold from Madeira was duplicated by Lemann. At **OXF** a recent manual search, kindly carried out by Serena Marner, revealed no examples of the same taxon having been collected by Lippold and by Lemann, either together or individually (Serena Marner, pers. comm., 2 June 2023).

At **K**, there are specimens of *Echium nervosum* Aiton collected by Lippold in June 1837 (K001276160) and by Lemann in March 1838 (K001276151), whilst three other taxa (identified differently by each collector) shared no localities or dates of collection. An important sheet in the **K** herbarium, already alluded to as an example of remounted specimens (Fig. 37), bears four samples, of which K000975584 is labelled “*Prasium* sp. nov. Madeira C. L.”, and K000975585 is labelled “*Prasium medium* Lowe. (Dr Lippold detexit.) Jul. 1837. Gorgulho”; both are stamped “Herbarium Hookerianum 1867” (see Fig. 54). The undated label initialled “C. L.” is in the hand of Lemann (cf. Williams et al. 2019, fig. 8), while specimen K000975585 from Gorgulho is labelled in Lippold’s hand. It seems extremely unlikely that the two botanists would have identified these specimens differently if they had collected them at the same time in the same place. A much later manuscript label, “*Prasium medium* Lowe. CBClarke 16 July 1904”, on this same

sheet indicates that during preparation of his continuation of Lowe’s *A Manual Flora of Madeira* (see Williams et al. 2019), Charles Baron Clarke (1832–1906)<sup>49</sup> had concurred with Lippold’s identification.

It may further be noted that in the **K** herbarium, Lippold’s specimens are generally stamped “Herbarium Hookerianum 1867” and Lemann’s are usually stamped “Herbarium Benthamianum 1854”. This strongly suggests that while Lippold had been supplying materials to W. J. Hooker in Glasgow, Lemann was concurrently sending most of his specimens to Bentham, although this does not preclude their supplying other persons. In fact, only one of Lemann’s specimens has been found to be stamped “Herbarium Hookerianum 1867 (K000975584; see above). However, no information on labels at **K** provides any evidence that these specimens of Lippold’s and Lemann’s were collected on the same occasion.

In the **OXF** herbarium, a specimen identified as “*Cerastium rupestre* ?” (00148694) bears a label in Lippold’s autograph, curiously crediting a “Dr Lemain” as the collector. Pronounced in the French way, the name is a close homophone of “Lemann”; this idiosyncratic spelling is typical of Lippold’s previously mentioned mixing of languages (see Burney 1926, pp. 204–205). There is no evidence for the two collectors’ having been

together at the time; Lemann’s signature is nowhere evident, but the specimen and its label have been remounted. None of Clokie’s annotations referring to Lippold on his specimen sheets at **OXF** (see previously), occurs on this sheet, which was perhaps a gift from Lemann to Lippold. The location reads “Waterfall near S. Roch. Funchal. June 1837”. Neither the species *Cerastium rupestre* nor the locality appear in Lowe’s contemporary botanical works on Madeira (Lowe 1838; 1857–1872 [1868]), so no published record of this specimen seems to be available for comparison. Specimens collected by Lippold or Lemann are summarized in Table 3.

In none of the foregoing records can both collectors be associated with the same specimen; indeed, only two Madeiran localities where they both collected have been identified, namely the Curral das Freiras and the Rocha Furada, both of which would have been well known to all botanical collectors of that era. Records in Lowe’s publications (Lowe 1838; 1857–1872 [1868]) detail specimens collected in Madeira by Lippold in 1837 and 1838, one specifically in September 1838, while the few dated records for Lemann were all in 1837, some in April or July (Tab. 2). These periods may be slightly extended by additional, more precise, data gleaned from herbarium labels described herein, thus: Lippold, April 1837 to September 1838; Lemann, October 1836 to May 1838 (Tab. 3). Lemann’s collecting dates are corroborated by his known residence in Madeira from 1836 to 1838 (see previously). Therefore, although his collections were made during Lippold’s longer sojourn, this overlap is apparently the only coincidence that links their botanizing, suggesting that their specimens were collected independently. Lippold’s numerous specimens at **OXF** indicate a peak of collecting activity in June and July 1837, within which period he also visited the Ilhas

Desertas in March and in June 1837.

In summary, no herbarium data that I have discovered provide any indication that Lippold and Lemann collected materials from exactly the same place on the same day. In fact, they seemingly collected rather few species in common, and in the aforementioned case of *Prasium*, they not only collected specimens independently but also disagreed about their identification (see above). Indeed, it is curious that I have found no certain evidence, either from published or archival resources, that Lippold and Lemann ever met, although it perhaps seems unlikely that they did not. Lippold’s sole reference to “Dr. Lemain” (see above) in fact might suggest a lack of familiarity between them. It can only be said that, based on present evidence, nothing supports the hypothesis that Lippold and Lemann collected in Madeira in each other’s company.

#### Overview of Lippold’s botanical collecting and dispersal of herbarium specimens

The data gleaned from nine herbaria in five countries on three continents suggest that it is doubtful that Lippold maintained a herbarium of his own. This impression is reinforced by knowledge of the sources of Lippold’s and Lemann’s Madeiran specimens at **CGE** (Gilmour and Tutin 1933, p. 22), which indicates that whilst Lemann had a private herbarium, Lippold’s specimens passed through C. C. Babington’s herbarium. The multifarious sources of Lippold’s 143 specimens found during the present study have already been alluded to. Their provenances, inferred from autograph or printed labels, manuscript annotations and herbarium stamps on their sheets, supported by published information, have been traced in some detail. They are summarized, with examples of specimens, below.

Table 3. Information from labels of Madeiran specimens<sup>1</sup> collected by J. F. Lippold or C. M. Lemann in nine herbaria

Herbarium	Lippold's specimens			Lemann's specimens		
	Number	Dates	Provenance labels (printed or ms.)	Number	Dates	Provenance labels (printed or ms.)
<b>BM</b>	27	24 May 1837 to September 1838	N. B. Ward, R. T. Lowe (bequest)	35	October 1836 to 2 April 1838	N. B. Ward
<b>CGE</b>	No data	No data	C. C. Babington (see Gilmour and Tutin 1933)	No data	No data	C. M. Lemann, C. C. Babington (see Gilmour and Tutin 1933)
<b>DBN</b>	2	May 1837	J. T. Boswell	No data	No data	No specimens found
<b>E</b>	6	May to August 1837	Edinburgh University Herbarium	2	November 1836 and May 1838	"Herbarium Benthamianum 1854" and "From the Herbarium, Royal Gardens, Kew. Presented"
<b>G</b>	1	July 1837	R. T. Lowe and "Herbier R. F. [= T.] Lowe. Plantes de Madère. W. Barbey com. décembre 1895"	24	22 April to July 1837	C. M. Lemann, R. T. Lowe and "Madère Mr. Leman [ <i>sic</i> ] 1839"
<b>GH</b>	2	July 1837	J. F. Lippold, both mis-attributed to N. B. Ward	1	Undated	C. M. Lemann and "Ex Herb. Hort. Bot. Reg. Kew.", remounted by "Herbarium of Oakes Ames"
<b>K</b>	6	June to July 1837	"Herbarium Hookerianum 1867" and R. T. Lowe (bequest)	27	15 March 1837 to May 1838	"Herbarium Benthamianum 1854" (also one "Herbarium Hookerianum 1867; R. T. Lowe (bequest)
<b>MEL</b>	2	June 1837	J. F. Lippold, one mis-attributed to R. T. Lowe	3	Undated	H. F. Hance
<b>OXF</b>	96	April 1837 to March 1838	N. B. Ward, H. E. Fox, W. Wilson Saunders, T. Moore	No data	No data	No data; no specimens digitized
Aggregated data	142	April 1837 to September 1838	—	92	October 1836 to May 1838	—

<sup>1</sup>An additional specimen at Edinburgh (**E**), collected by Lippold, the only one not from the Madeiran Archipelago, came from Surrey, England, and bears W. Christy's printed label (Fig. 43).

**BM**

- a. Lippold to Lowe; Lowe to **BM** (bequest 28 May 1875; e.g., BM000056011).
- b. Lippold to N. B. Ward; Ward to **BM** (purchased 1869; e.g., BM013713366).

**CGE**

- a. Lippold to C. C. Babington; Babington to **CGE** (Gilmour and Tutin 1933, p. 22).
- b. Lippold to R. Graham; Graham to **CGE** (Maiden 1902, p. 550).

**DBN**

- a. Lippold to J. T. I. Boswell-Syme; Boswell-Syme to **DBN** (pre-1888; e.g., DBN0008957).

**E**

- a. Lippold to W. Christy, junior (1836); Christy to **EBH** (1838); **EBH** to **EGH** (pre-1840); **EGH** to **E** (1863; e.g., E00316616).
- b. Lippold to H. B. Fielding; Fielding to **EGH** (pre-1840); **EGH** to **E** (1863; e.g., E00718957).
- c. Lippold to R. K. Greville; Greville to **EBH** (pre-1840); **EBH** to **E** (1852) (Anonymous 1852b; 1852c, p. 521).

**G**

- a. Lippold to R. T. Lowe (e.g., G00442729); Lowe to Edmond Boissier (pre-1885); Boissier to W. Barbey (1895); Barbey family to **G** (1918).

**GH**

- a. Lippold to N. B. Ward (e.g., GH01871689); Ward to **GH**, possibly presented to Asa Gray.

**K**

- a. Lippold to Lowe; Lowe to **K** (bequest April 1875; e.g., K000251938).
- b. Lippold to W. J. Hooker (pre-1841); Hooker to **K** (purchased 1866; e.g., K000414058).

**MEL**

- a. No reliable provenance trail of specimens from Lippold to **MEL**

(MEL2497744 and MEL2497513) has been established.

**OXF**

- a. Lippold to H. B. Fielding; Fielding to **OXF** (1852; e.g., 00119876).
- b. Lippold to H. B. Fielding; Fielding to W. W. Saunders (?); Saunders to **OXF** (bequest 1879; e.g., 00148710).
- c. Lippold to W. W. Saunders (?); Saunders to **OXF** (bequest 1879; e.g., 00148704).
- d. Lippold to T. Moore (?); Moore to **OXF** (purchased January 1887; e.g., 00148720).
- e. Lippold to N. B. Ward; Ward to H. E. Fox; Fox to **OXF** (post-1924; e.g., 00148724).

The collection dates of Lippold's Madeiran specimens traced in nine herbaria are listed below and summarized in Table 3, where they are compared with Lemann's collections. However, the earliest of his specimens so far known is E00316616, collected in England in August 1836. The other 142 emanated from the Madeiran Archipelago (Madeira or Ilhas Desertas) and were collected during April 1837 to September 1838. Lippold's peak of activity was apparently from May to August 1837, during which 121 (85%) of his specimens were collected.

**BM**

24 May 1837–September 1838, 27 specimens; during May–August 1837, 12/27 (44%).

**CGE**

No data available.

**DBN**

May 1837, 2 specimens.

**E**

May–August 1837, 6 specimens.

**G**

July 1837, 1 specimen.

**GH**

July 1837, 2 specimens.



**K**

June–July 1837, 6 specimens.

**MEL**

June 1837, 2 specimens.

**OXF**

April 1837–March 1838, 96 specimens;  
during May–August 1837, 90/96 (94%).

### Appendix 5. Lippold's legacy as a plant-collector

It is difficult to decide whether Lippold should be termed a botanist or a horticulturist, since his plant-hunting activities fell somewhere between the two avocations, leaning towards one or the other at various times, and probably determined by his current financial circumstances. At different times in his life, Lippold certainly found it necessary to be flexible in his occupations in order to maintain a competency for life's basic requirements. Thus I have employed the terms appropriate to the context. His botanical activities may conveniently be divided into three phases: Europe (1821–1837), Madeira (1837–1840) and Brazil (1840–ca.1846). Within these regions and time spans, he focussed variously on authorship, horticulture, specimen collecting and transplantation and acclimatization of plants.

#### Europe

During his incumbencies as a pastor in the Rhine Valley from 1815, Lippold's botanical studies were apparently but a pastime, and although he accumulated a small *hortus siccus* from his local collecting, it had to be abandoned and sold when he fled Germany in 1821. Following this notorious scandal, he was compelled to make a living by expanding his horticultural knowledge, supported by the Baumann brothers, nurserymen in Bollwiller, Alsace. In 1824 he published his first book

(Lippold 1824), after which he spent about four months botanizing in Switzerland, then gaining regular employment as the head gardener at the Château de Baye, near Rheims, France (1825–1832). There he must have been a major influence on the maintenance and development of the château gardens, and during these seven years he also published his second book (Lippold 1831).

Lippold's books were valued by continental gardeners and, furthermore, brought him to the attention of horticulturists in England. Even as late as 1847, his *Neues Handbuch* was still judged to be “nothing less than a good work; it is in the hands of many gardeners and has contributed much to making the Bon Jardinier and French gardening methods known to the German public” (Dietrich 1847). While in London during 1834–1837, he naturally took the opportunity to botanize in the countryside, evidenced by his only known English herbarium specimen (see previously), probably encouraged by William Christy, junior (see Note 15).

Clearly, Lippold's most important contributions to botany during his European phase were his books. From 1815 to about 1834, however, his work gradually transitioned from amateur field-collecting to commercial horticulture, probably because of the need to make a living after he lost his benefice. His only journal article from England (Lippold 1836), concerned the cultivation of chicory (*Cichorium intybus* L.), of which he had learned during his travels through Belgium *en route* to England. The variety *Chicorée de Bruges* is believed to have first been grown in Brussels and has been a Belgian speciality ever since (Carter 1988, p. 56). As Gibault (1912) explained,

Around the years 1850 and 1851, the head gardener of the Jardin Botanique de Bruxelles, Monsieur Bresiers, employed the mushroom farms there to blanch some vegetables and to

produce, among other things, the winter salad of whitened, tender, long and thin leaves of the wild chicory [*Barbe de Capucin*]. One day, M. Bresiers noticed that his chicory, instead of forming the usual long leaves, had assumed a shape [*Chicorée de Bruges*] reminiscent of the hardened and white middle of a Roman lettuce. [Translated from the French]

However, Lippold had already, in 1836, distinguished two varieties of *Chicorée de Bruges*. It would appear that provincial Belgian horticulturists, from whom Lippold had received instructions for their cultivation, must have anticipated Bresiers' discovery of some fourteen years later. Nevertheless, Lippold can be credited with introducing to English producers the knowledge of the production method for *Chicorée de Bruges*.

#### Madeira

In Madeira between 1837 and 1840 Lippold returned for a short time to strictly botanical field-collecting, funded by subscribers. The most detailed published botanical information about his sojourn in Madeira appears mainly in Lowe's records of the plants that he found there. Lippold could claim to have been the first to find the extremely rare (Lowe's “rrr”) *Inula viscosa* L. (Lowe 1868, p. 479) in Madeira. During July 1837 he also found the very rare (Lowe's “rr”) *Nyctarium triphyllum* Lowe (see Lowe 1872, p. 87) and was again able to claim the first record (Fig. 46). In the same month but independently, Lemann also found a *Nyctarium* sp. (Fig. 47). The species was later published by



Figure 55. J. F. Lippold's unsigned autograph label of *Erodium bipinnatum* ? Lowe, “planta rarissima” (00148726) at **OXF** (courtesy of Oxford University Herbaria<sup>®</sup>, Department of Biology, Oxford, UK).

Lowe as *Normania triphylla* (Lowe), the type-species of a new genus, in honour of Francis Martin Norman (Williams 2016). Lippold also observed the specific distinction of what Lowe later named in his memory as *Melilotus lippoldiana* (or correctly, *Melilotus lippoldianus*, now regarded as a junior synonym of *Melilotus elegans* Salzm. ex Ser.).

Oddly enough, a specimen of “*Erodium bipinnatum* ? Lowe Mai 1837” (**OXF**, 00148726), triumphantly annotated by Lippold as “*Planta rarissima!*” (Fig. 55), was not included among Lowe's descriptions of *Erodium* species (Lowe 1857, pp. 89–94), in none of which did he record names of any of their collectors. However, Lippold's specimen of “*Erodium bipinnatum*” does appear in Lowe's discussion of *E. cicutarium* (L.), referred to a form that Lowe considered to be rather common.

This was the phase of Lippold's career during which he contributed significantly to his British subscribers' herbaria, much material from which has fortunately survived, though now widely dispersed. It was then that four brief horticultural notes, based on his letters from Madeira to Loudon, were published. Again, this suggests that he was finding it necessary to move from botanical collecting into a more commercial environment, as subscribers apparently fell away. Regrettably, William Wilde's (1840) comment that “Dr. L. will be long remembered in Funchal” apparently alluded more to his notable eccentricities, rather than to any startling botanical achievements!

## Brazil

Lippold's only publication from Brazil was his letter to Loudon describing his excitement on arrival there (Lippold 1841). It may be noted that were it not for Prince Adalbert's account, nothing would be known of Lippold's expeditions to the Rio Doce and the Rio Xingú (Adalbert 1849). Although he was actively collecting during those ventures, I have found no record of any botanical discoveries, and it therefore cannot be said that he made any tangible contribution to Brazilian taxonomic botany. None of his or Adalbert's specimens from Brazil seems to exist in any herbarium or museum. If Adalbert took any back to Berlin, they would not have survived the Second World War, and any deposited in the National Museum in Rio de Janeiro would have been destroyed in the disastrous fire of 2018 (Araujo 2019).

Although Lippold's Brazilian work was initially of a more scholarly botanical nature, his financial support by subscribers again began to wane, resulting in another urgent switch back to horticulture. Hence his latest avowed intention was to discover Brazilian plants that might enhance the gardens of Europe, and it is known that some were indeed raised in Europe from seeds that he supplied from Brazil, for instance those of *Hibiscus jerroldianus* in England (see previously).

In addition, Lippold supplied plant materials to the Ajuda Botanical Garden in Lisbon, Portugal, but whether as plants or seeds, is not known. Friedrich Welwitsch (1806–1872), who was briefly the garden's curator, produced a catalogue of sowings between 1840 and 1844, entitled “Manes Broteroani... edita auctore Frederico Welwitsch”, in which Lippold appears among the donors, including “from the Portuguese overseas territories, mostly from Brazil” (Mesquita et al. 2024, p. 73). It may therefore be inferred from these facts and

the 1840–1844 date of Welwitsch's catalogue that Lippold certainly provided specimens from Brazil to the Ajuda garden.

It may be that there, or in some other long-established European garden, the progeny of Lippold's Brazilian plants still exists, though it would be impossible to establish beyond doubt. What is indisputable, however, is that Lippold facilitated transplantation of Brazilian plants to Madeira, where, after two or three years, they became acclimatized to the climatic conditions there, afterwards enabling their seeds and cuttings to be successfully imported into England (Ouseley 1852). This, might be considered to be his most important contribution to European horticulture while he was in Brazil, perhaps second only in importance to the success of Ward's cases for the long-distance transport of plants. Unfortunately though, with the exception of *Hibiscus jerroldianus*, it is not possible to say what exotic species Lippold was instrumental in introducing to European gardens, unless some might be revealed in Welwitsch's “Manes Broteroani”.

It was in Brazil that Lippold finally retired from botany and horticulture, when in 1846 he became the first Lutheran pastor of Petrópolis, which almost certainly would have left him no free time to indulge in his life's passion for plants. At least, however, this appointment provided him with a stable income for the first time in his life, though he unfortunately did not live very long to benefit from it.

## Appendix 6. Identification of Lippold's handwriting

Lippold's specimen labels not only reveal information of potential importance to taxonomic and geographical botany but also precisely establish some of his collecting stations in Madeira, often with dates. Furthermore, with regard to the mystery of his use of the

title “Dr.”, they contribute to investigation of the approximate date when he began to refer to himself as “Dr. Lippold”.

Whilst there are many authentic letters from Lippold in various archives, some may be rather difficult to read, most being in his rapid correspondent's hand (see Fig. 27). In the collection at Deutsches Literaturarchiv Marbach, however, there is for comparison an example of his more careful formal hand on a visiting-card (Fig. 28). Recognition of this formal hand, which he used also on herbarium labels, is important for discriminating between those written by Lippold or others, particularly R. T. Lowe and C. M. Lemann. For comparison, examples of Lowe's autograph labels are shown in Figures 21 and 39A (BM001042522), 37 (K000975586) and 44 (E00030326). Lemann's are shown in Figures 37 and 54 (K000975584), and 47 (K000414060), whilst a more extensive example of his handwriting is provided by Williams et al. (2019, fig. 8).

Using the style “Dr. Lippold” in his own hand, Lippold may be identified as the collector on herbarium labels BM000641870, K000414058 and K000414059, dated 1837. The authenticity of his autograph script is corroborated by his note “NB Mihi primum detectum” on those labels (Fig. 46), and by “Dr. Lippold detexit.” on the label of K000975585 (Fig. 45). Labels that were genuinely signed by him may be recognized by comparing his name written thereon with that on his visiting-card (Fig. 28).

To aid in identifying his script when not signed, the following characteristics are consistent, or at least very frequent.

1. A capital “L” sweeps forward and downward from its upper limit to produce a short vertical stroke close to the ascender, as seen in “Lippold”, “Lowe” and “Linum” (Figs. 28, 37, 38, 45, 46, 52A–C, 54, 55). This extension may be fairly bold or sometimes rather faint and may be detached (or

almost) from the downwardly sweeping upper stroke of the character. It is distinctly different from the appearance of the upper loop typical of many others' hands.

2. A capital “N” is very distinctive, having the appearance of a bold letter “V” with an anterior stroke sweeping upwards from below the line, joining the initial downward stroke of the “V” about two-thirds up, as in “N~~u~~cterium” and “NB”, in the latter example running into the following letter (Fig. 46).
3. Some capitals may have a small hook at the top of the character. Examples include “C”, as in “C~~aj~~anus” and “DC” (Fig. 40), “C~~ra~~mbe” (Fig. 51) and “C~~er~~astium” (Fig. 52C); “D”, as in “D~~r~~.” (Figs. 24, 37, 45, 46, 54), “D~~C~~” (Fig. 40) and “D~~es~~ertas” (Fig. 51); “E”, as in “E~~ro~~dium” (Fig. 55); “G”, as in “G~~or~~gulho” (Figs. 37, 45, 54); and “S”, as in “S~~er~~ra”, “S~~i~~lene” and “S~~t~~uttgart” (Figs. 28, 38, 46).
4. A small “c” in the middle of a word may have a similar hook and is often almost closed, giving the appearance of an “o”, as in “bi~~c~~olor” (Fig. 40). It may be particularly difficult to discern when followed by a “k”, as in “ro~~c~~ks” (when it might appear as if the “k” is preceded by “oo”; Fig. 52B, 52C); or by a “t”, as in “Ny~~c~~terium” and “de~~t~~ectum” (Fig. 46); or by an “h”, as in “Ro~~c~~ha” (Fig. 46).
5. A small “d” at the beginning or in the middle of a word usually has an exaggerated, backwardly looped ascender, as in “me~~d~~ium” and “de~~t~~exit” (Fig. 45); in “de~~t~~ectum”, “fo~~r~~ada” and “de” (Fig. 46); in “le~~v~~ada” (Fig. 52B); and in “Ero~~d~~ium” (Fig. 55). When at the end of a word, this loop tends to be even more pronounced, as in “rou~~n~~d” (Figs. 38, 52C). In “Lippol~~d~~” it typically intertwines with the looped ascender of the preceding letter “l” (Figs. 24, 28, 37, 45, 46, 54).



6. A small “s”, wherever it may occur in a word, is formed from angular forwardly leaning strokes with an upper hook, giving an appearance rather similar to the numeral “5”, as in “Praşium” (Figs. 37, 45, 54); in “Cajanuş”, “flavuş” and “Maravilhaş” (Fig. 40); and in “strigoşa” and “Deşertaş” (Fig. 51). An initial capital “S”, as in “S.”, “Serra” (Fig. 46) or “St” (Fig. 55), has a similar form with the additional small hook (see paragraph 3. above).
7. In writing dates Lippold usually employed the continental style “7” of the numeral “7” (Figs. 37, 38, 40, 45, 46, 51, 52A–C, 54, 55), which Lowe and Lemann seemingly never did.
8. Lippold used the French “Mai” for the month of May (Figs. 52B, 52C, 55) but used English for other months (Figs. 28, 37, 38, 40, 45, 46, 51, 52A, 54). His idiosyncratic mixing of languages in speech has already been noted (Burney 1926, pp. 204–205).

## Appendix 7. Biographical lacunae

Important lacunae inevitably remain in this account of Lippold. The following list provides guidance for future research.

1. The botanical works stated in the Lutheran Church records in the Landesarchiv Baden-Württemberg to have been published by Lippold before 1821 have eluded me. Neither have these alleged publications, subsequently mentioned (but apparently not seen) by the ecclesiastical historians Wiemer (1954) and Spliesgart (2006), been noted by botanical bibliographers such as Pritzel (1872) or Stafleu and Cowan (1976–1988).
2. No photograph or portrait of Lippold has been traced in the repositories investigated, namely: the Arquivo Histórico, Museu Imperial, Petrópolis, Brazil; the Igreja Luterana em Petrópolis, Brazil; the National Portrait Gallery, London; and the Burney

Centre at McGill University, Toronto, Canada (which holds a collection of Fanny Anne Burney’s artworks created in Madeira). This is disappointing, since Fanny confessed to being much struck by Lippold’s remarkable physiognomy, and it would be surprising if she had not sketched him. She was certainly active with her pencil in Madeira, and Lippold was well aware of her artistic talent (see Burney 1926, pp. 216, 282).

3. Despite much effort, no justification for Lippold’s adoption of the title “Doctor” has been found.
4. No personal herbarium of Lippold’s has been discovered.
5. Although Madeiran plants collected by Lippold for his subscribers occur in herbaria worldwide, no Brazilian plant specimens have been traced, even in Rio de Janeiro herbaria (Clarice Ribeiro, pers. comm., 10 April 2024). However, he apparently supplied live Brazilian plant materials to the Ajuda Botanical Garden in Lisbon (Mesquita et al. 2024).
6. Nothing is known for certain about Lippold’s life between his commencement of theological studies at Jena in 1808 and his ordination in Karlsruhe in 1815, particularly with regard to his teachers and the disciplines studied.
7. In view of Lippold’s dismissal in 1821 from the Evangelical Lutheran Church in Germany, it is very surprising that the authorities in Karlsruhe sanctioned his reinstatement in Brazil in 1848. No relevant documentation has been traced.
8. The exact final resting place of Lippold’s bones is still unresolved.

## Notes

1. The initial “I” represents “J” in the style of roman capitals in common use in Germany at that time. It is not a misreading of a manuscript “J”.

2. In the catalogues of some academic libraries the two books known without doubt to have been authored by Julius Friedrich Lippold are incorrectly attributed to Johann Friedrich Lippold, a name also wrongly associated with specimens in some herbaria. However, the Johann Friedrich Lippold (1736–1799) born in Jessen, Germany, was a deacon in Wittenberg, Germany, the author of at least four theological books, and who in any case may be eliminated from this investigation, since he lived and died too early. Compounding this error, the library of the Deutschen LiteraturArchivs, Marbach, appends this other author’s dates of 1736–1799 to Julius Friedrich Lippold’s name. However, elsewhere on the website of the same library, J. F. Lippold is referred to as “Hochschullehrer, Botaniker, Pfarrer, Philologe” [University lecturer, botanist, pastor, philologist], which certainly must apply to Julius Friedrich Lippold, and not to Johann Friedrich Lippold.
3. Frances (Fanny) Anne Burney (1816–1860) was a well-known diarist, the eldest of the six children of the Rev. Charles Parr Burney and his wife, Frances Bentley Young. Fanny Anne was a great-granddaughter of the eminent musician Dr. Charles Burney (1726–1814), and a great-niece of the famous novelist Frances “Fanny” Burney (1752–1840). According to Margaret S. Rolt, editor of the younger Fanny’s journals, “Fanny Anne Burney was an inveterate collector of shells and geological specimens, being also well versed in the science of them” (Burney 1926, p. xiv). Fanny resided in Madeira from September 1838 to July 1839 with her husband, Major James Wood (1797–1874), her baby daughter Frances, and her nieces Margaret and Jane Wood, on account of Jane’s tuberculosis, of which she died in Funchal in 1839. Jane was attended by the physician Dr. A. H. Renton (Burney 1926, pp. 231–237) and the Rev. R. T. Lowe (Burney 1926, p. 235).
4. I have been unable to discover any authenticated portrait of Henry Gordon Veitch (1781–1857), sometime British consul-general of Madeira. Although multiple copies of a portrait purported to be of him may be found on the internet, the appearance of the subject’s jacket with its high collar, braided fastenings and epaulettes suggests that the image might perhaps be that of the consul’s son, a Royal Navy officer of the same name (1814–1863). The identification remains uncertain, and the artist or photographer and original source of this image are unknown.
5. The following vital records of Julius Friedrich Lippold’s family are recorded from: “Deutschland,

- ausgewählte evangelische Kirchenbücher 1500–1971 database, FamilySearch.” His parents, both Evangelical Lutheran Protestants, were Christian Friedrich Lippold (1753–1803), a pastor, and Johanna Magdalena (née Fischer; 1769–1844), who were married on 5 May 1789 (<https://familysearch.org/ark:/61903/1:1:QPKM-WNGM>). Julius Friedrich was their first-born, followed between 1793 and 1802 by apparently seven more children, some of whom had tragically short lives. His parents both died in Altenburg; his father on 9 January 1803, and his mother on 10 August 1844 (<https://www.familysearch.org/tree/person/details/K69M-JNX>).
6. Universitätsarchiv, Friedrich-Schiller-Universität Jena: *Academiae Jenensis* for 8 February to 8 August 1807, folios 31 and 32.
7. Further information (<https://www.familysearch.org/tree/person/details/K69M-JNX>) shows that on 1 March 1815, he was aged 25 years and 9 months, corroborating his authenticated date of birth on 22 June 1790. Following his ordination, he apparently resided briefly in Mannheim (digitized original manuscripts in residence records of “Mannheim, Germany, Family Registers, 1760–1900”; Ancestry.com).
8. Landesarchiv Baden-Württemberg, Generallandesarchiv Karlsruhe, Parish Services Files: 229, nos. 9197, 8063, 8076 and 33982 (Fabian Beller, pers. comm., 11 May 2022).
9. Landesarchiv Baden-Württemberg, Generallandesarchiv Karlsruhe, Baden State Ministry Files: 233, nos. 23480 and 23255 (Fabian Beller, pers. comm., 11 May 2022).
10. Heinrich Löber (pers. comm., 25 April 2022). See also Walther (2013, pp. 52, 1177) and Neu (1939, p. 376).
11. Wiemer’s (1954) somewhat selective account is published in Portuguese and German in parallel. However, the more revealing and rather shocking detailed account of Lippold’s pastoral years is to be found only among the unpublished manuscript records of the Evangelical Lutheran Church archive: Landesarchiv Baden-Württemberg, Generallandesarchiv Karlsruhe 435, no. 187 (Evangelischen Oberkirchenrats, Pfarrdienst in Bischoffingen 1796–1858 [Evangelical Higher Church Council, Pastoral Ministry in Bischoffingen 1796–1858]; Fabian Beller, pers. comm., 11 May 2022).
12. In 1787 Johann Friedrich Cotta had taken charge of his family’s long-established publishing house of J. G. Cotta’schen Buchhandlung and was therefore responsible for publishing Lippold’s

books. Biographical details of J. F. Cotta and a bibliography of the productions of his firm are provided by Fischer (2003).

13. I have been unable to identify J. Ritter, a “Garden Director in Austria and Hungary”; he does not appear in the International Plant Names Index (IPNI), neither is he noted by Pritzel (1872), Jackson (1881) or Stafleu and Cowan (1976–1988, 4).
14. This celebrated firm of Swiss nurserymen and landscape gardeners was founded in Bollwiller, Alsace, by Jean Baumann in about 1735 and continued under the proprietorship of six generations of the same family. According to Modanese (2021),

they developed their business from scientific botany into capitalistic botany ... The Baummanns were part of a European network of botanical exchanges and training, facilitating the dazzling progress of horticulture in the nineteenth century. Their personal contacts with botanists such as Gmelin in Karlsruhe, Candolle in Geneva and *Loudon in England* [my italics] were crucial. They achieved major international importance in the nineteenth century before declining in the twentieth, finally fading into oblivion. [Translated from the French]

Lippold would have learnt much, therefore, from the Baumann brothers, who may have introduced him to Loudon and other important horticulturists.

15. William Christy, junior (1805–1839), was the first son of a wealthy Quaker family with commercial interests in textiles, hat-making and banking (see Milligan 2007, pp. 103–104). His date of birth, stated by Desmond (1977) and Hansen (1980) to have been ca.1807, was actually 29 September 1805 (England and Wales Non-Conformist Record Indexes (RG4-8), 1588–1977; National Archives, Kew). His father, William Miller Christy (1778–1858), married Ann Fell (1783–1871) in 1805, and they had eight sons and three daughters, several of whom had wide interests in natural history. The first two sons, William and his younger brother Henry, were particularly supportive of scientific research.

William was a friend of a number of eminent naturalists (see T. P. Newman 1876), who may have become known thereby to Lippold, although no correspondence between him and any of them has yet been found. They included the botanists, John Hutton Balfour (1808–1884), Francis

Boott (1792–1863), James Scott Bowerbank (1797–1877), W. J. and J. D. Hooker, John Torrey (1796–1873), Edward Newman (1801–1876) and N. B. Ward. With his entomologist associates (see T. P. Newman 1876, pp. 13–14), William was also an original member of the Entomological Society and a fellow of the Zoological Society of London. Henry was a member of the Geological Society, and both brothers were fellows of the Linnean Society of London. True to their Quaker principles, the family employed their wealth in philanthropy. Henry, a banker, left his ethnology collection to the British Museum. William, who had already begun to support Lippold prior to his arrival in London in 1834, continued to do so after his protégé left England for Madeira in 1837. When William died in 1839, his patronage of Lippold appears to have been taken over by Henry, at least up to 1842, when Lippold was in Brazil (see under “Botanizing in paradise”). It is not known exactly when and how William and Lippold first came to know each other, but it was perhaps through William’s having read Lippold’s books. Unfortunately, however, no evidence for that possibility could be found among the books that William donated to the Botanical Society of Edinburgh (now in the library of the Royal Botanic Gardens of Edinburgh), since none of Lippold’s works was included (see Anonymous 1841). William reported in 1838 his suffering a “long and serious illness” (Christy 1838b, p. 432), which, apparently having been recognized as likely to be terminal, must have been the reason that he presented his herbarium and library to the Botanical Society of Edinburgh before his death (Loudon 1839b). Christy’s chronic disease had apparently manifested itself even earlier, because on 15 September 1836 he had already presented almost the whole of his British and exotic insect collection and entomological books to the Entomological Club (Anonymous 1836b, p. 187), followed on 16 November by his entire collection of British Lepidoptera (Anonymous 1837b, p. 278). By 8 August 1838 Francis Boott informed W. J. Hooker that their friend Christy was “doomed” to die (Royal Botanic Gardens, Kew, Directors’ Correspondence, DC/62/43).

16. Nathaniel B. Ward’s classic book on “closely glazed cases” (N. B. Ward 1842), followed by a second edition (N. B. Ward 1852) and supplemented by his son, Stephen Henry Ward (1819–1880), with an explanation of their applications (S. H. Ward 1854), is so well known as to need no description here. However, it is sometimes overlooked that the use of Wardian

cases for transporting living plants on protracted sea voyages was tested well before Ward’s 1842 book appeared, as in this instance in 1837. Such a long time passed between Ward’s serendipitous observation in 1829 (N. B. Ward 1842, p. 25) and the publication of his first book that speculation and imperceptions about glazed cases were rife during the 1830s. Apparently at the instigation of the Irish algologist William Henry Harvey (1811–1866) in a letter of 8 July 1835 to W. J. Hooker (Royal Botanic Gardens, Kew, Directors’ Correspondence, DC/58/42), Ward published a letter in Hooker’s *Companion to the Botanical Magazine* to clarify the origin, design and testing of his contrivance, which was thereby first generally made known (N. B. Ward 1836). The present example of transporting plants from England to Madeira in 1837 exemplifies the practical support for Ward’s experiments provided by Messrs. Loddiges, the nurserymen of Hackney, which he warmly acknowledged (N. B. Ward 1842, p. vi).

17. Francis Boott (1792–1863) was born in Boston, Massachusetts, of a Scottish mother and an English father, Kirk Boott (Gage and Stearn 1988, p. 42); he graduated from Harvard College, and his correspondence with Asa Gray (1810–1888) is now kept in the Harvard University Herbarium. In 1820 he married and took up permanent residence in England; he qualified as a physician in 1824 at the University of Edinburgh and practised for seven years before retiring to devote himself to the cultivation of his literary, classical and scientific interests. He was elected F.L.S. in 1819 and served at various times between 1832 and 1861 as secretary, treasurer or vice-president of the Linnean Society (Gage and Stearn 1988, pp. 42, 53, 59, 220). His botanical reputation rests largely upon his studies of the genus *Carex* (Gray 1864). He retained his interest in medicine, however, and the first use of ether as an anaesthetic in Britain (for a tooth extraction by James Robinson) was made in his house at 24 Gower Street on 19 December 1846 (Ellis 1985).
18. Lippold was not the only botanist to benefit from Renton’s hospitality, since Lowe had already made paintings of plants in his gardens (see Lowe and Hooker 1833a, 1833b), as had his friends Francis Hyde (see Hooker and Lowe 1830) and Mary Young (see Hooker 1834). Another visitor to Renton’s gardens was Lippold’s principal patron, William Christy, junior, who offered advice on protecting Renton’s pine-apple plants from rain (Lippold 1838a, p. 455). Renton and Lowe also welcomed the botanist Julius Rudolph

Theodor Vogel (1812–1841) and introduced him to the Madeiran flora when his ship HMS *Wilberforce* of the Niger Expedition, paused briefly at Funchal on 21–25 May 1841 (Vogel 1846, pp. 622–624). During Vogel’s visit, “Dr. Renton showed me some fine *Coffee trees*, covered with fruit, of which the quality is said to be good. He regretted, that instead of *Festuca Donax*, the *Bamboo* was not more generally grown, as it succeeds so well” (Vogel 1846, p. 624). Vogel’s Madeira collection, gathered with assistance by Lowe, was catalogued by Lemann (1847). Another visitor, the Irish surgeon Dr. William Robert Wills Wilde (1815–1876; father of the controversial author and literary critic Oscar Wilde) became briefly acquainted with Lippold, Lowe and Renton. He and Renton shared common interests in infectious diseases and the medical aspects of climate.

19. J. D. Hooker’s “unceasing interest in the practical side of economic botany” made him anxious to learn more of Veitch’s scheme to break the tea monopoly of the East India Company, although “Mr. Muir informed us that it was execrable, and pronounced so by every one that had tasted it” (Huxley 1918, 1:89). However, the aforementioned Dr. William Wilde, visiting in 1837, had been rather more appreciative, declaring that “though hardly strong enough, it was of a fine flavour, and had not that coppery taste perceived at times on the tea at home. Mr. V. is in the habit of mixing with it the flower of the *olea fragrans*, which adds considerably to its quality, and he keeps it a year before using” (Wilde 1840, 1:104).
20. Exact sources of Madeiran plant specimens now in herbaria can be ambiguous in some cases when the locality has a name that may be shared by a quinta and a local village or a nearby topographical feature. However, such alternative localities are usually close together, and if the name is preceded just by “the”, a quinta is almost certainly indicated. There can be no doubt, however, that Lippold’s specimens (BM013713365 and BM013713366) respectively labelled simply “Maravillas [sic]” or “Maravilhas” (see Fig. 39), were collected from Caroline Norton’s Quinta das Maravilhas, since that name is applicable to no other place.
21. During November and December 1837, Lippold’s patron William Christy spent six weeks in Funchal from where he toured on horseback the botanical sites of Madeira among a group of ten persons, “including two ladies” (Christy 1838a), quite probably also including Lippold,



who had been in Madeira since March that year. Christy then left Madeira on 31 January 1838 on the brig *Vernon*, bound for Teneriffe [sic], where he botanized and geologized there for twelve days with another party (Christy 1838b). Whilst it seems very unlikely that Lippold was not invited to join Christy on his Teneriffe visit, this unfortunately cannot be confirmed because no names of his companions, including two clergymen and “a lady under my care”, were mentioned. I have been unable to establish whether Lippold ever visited Teneriffe, nor have I discovered any specimens of his from there.

22. Both of the spellings *Courrier* and *Courier* appear in *Lloyd's List* between 1837 and 1853, but refer to the same sailing ship, a brig, under Johann Havighorst as master (<https://www.immigrantships.net/v13/1800v13/courier18370909.html>). Lippold's arrival in Rio from Madeira was officially recorded in *Lloyd's List* (Anonymous 1840b), confirmed by his letter of 11 July 1840 to Hooker, written in Funchal (Royal Botanic Gardens, Kew, Directors' Correspondence, 11 July 1840, DC/58/157). This is further corroborated by his letter to Loudon, before embarkation (Hunt Institute Archives General Autograph Collection (GAC), collection no. 370, Lippold, Julius Friedrich, 1), informing him that he would join “a German vessel”, the *Courrier*, sailing from “Hambourgh” under “Captain Habichthorst” at Funchal (Fig. 20A). Lippold's strange misspelling of his countryman Havighorst's name is inexplicable. “Hambourgh”, however, is identifiable as Hamburg (another current alternative English name was “Hambro”). Havighorst's ship was clearly not the *Courier* stated by Kellenbenz (1987, p. 151) to have been built in 1840 at the Apenrade shipyard, since Havighorst is recorded as master of the *Courier* on transatlantic voyages as early as 1837 (Anonymous 1837c).
23. The Corcovado range, close to Rio de Janeiro and essential to the public water supply, became much affected by deforestation in the 18th century and by 1840 retained little of its native forest. The present Tijuca Forest Park, which abuts Corcovado, was established in the late 19th century, half of it constituting the anthropogenic Tijuca Forest, containing about 75% native tree species, while the remaining area consists of disturbed original native forest and secondary growth stands (Carreiro and Zipperer 2011). Now Corcovado Mountain is within the extended city limits and is surmounted by the massive statue of Christ the Redeemer.

Much attention is now focussed on the devastating deforestation of Amazonia, but such despoliation had in fact begun long ago. Adalbert (1849, p. 301) observed that:

When a piece of land has to be brought into cultivation, the first thing is to cut down the forest-trees and burn their stumps; the earth is then brought under tillage... It is afterwards generally left for awhile fallow... and during this time of rest a young copsewood springs up,—the “Capueira,” or young forest, as contrasted with the virgin forest, the “Mato virgem.” The same process is afterwards repeated, and thus all around Rio is seen this kind of underwood, which has been burnt down once or oftener. Only the forests of the Tijuca and a part of those of the Corcovado have escaped the fire, and retain their original character. The Government watches over their preservation, because these high-stemmed impenetrable forests draw down the clouds upon the mountain-tops, where arise the springs that supply Rio with water for drink.

The destruction of forest for agriculture, gold and diamond mining, and the extraction and smelting of iron-ore, fuelled by charcoal, was also mentioned repeatedly by Gardner (1849) in his *Travels in the Interior of Brazil*, for instance:

Near the summit of the Pedra Bonita, there is a small Fazenda, or farm, the proprietor of which was clearing away the forest which covers it, converting the larger trees into charcoal... We only saw enough to convince us that the vegetation of the top of this mountain had a very different character from those of any others we had visited near Rio: resembling more, as I have since ascertained, that of the mountains of the interior... The following year, on my return from the Organ Mountains, I again visited this spot, and found that a great change had taken place. The forest, which formerly covered a considerable portion of the summit, was now cut down and converted into charcoal; and the small shrubs and *Vellozias* which grew in the exposed portion, had been destroyed by fire. The progress of cultivation is proceeding so rapidly for twenty miles around Rio, that many of the species which still exist, will in the course of a few years, be completely annihilated, and the botanists of future times who visit the country, will look in vain for the plants collected by their predecessors (pp. 24–26).

In riding along I could not help feeling deep regret, that in these regions many square leagues of such forests were being cut down and burned, in order to make room for plantations of coffee (p. 409).

Most striking, in the context of modern climate changes, however, are Gardner's comments on the influence of deforestation on the local rainfall:

The climate of Rio has been very much modified by the clearing away of the forests in the neighbourhood. Previous to this, the seasons could scarcely be divided into wet and dry as they are at present. Then rains fell nearly all the year round, and thunderstorms were not only more frequent, but more violent. So much has the moisture been reduced, that the supply of water for the city has been considerably diminished, and the government has, in consequence, forbidden the further destruction of the forests on the Corcovado range, towards the sources of the aqueduct.

24. William Pamplin (1806–1899) was one of many publishers-cum-booksellers who also acted as agents for authors and naturalists, taking charge of letters and parcels to be forwarded to, or collected by, the addressees. Substantive evidence of his assistance to Lippold is provided by a letter that was to be forwarded to J. C. Loudon (see Note 22). Curiously, although the letter is in Lippold's hand, the covering address to Pamplin is in another's (Fig. 20B). The Post Office's inked franking confirms that the appropriate fees had been charged (<https://www.postalmuseum.org/collections/highlights/philatelic-collection/british-postal-markings/uniform-penny-postage/>). They show that the letter was in transit on a packet-ship to England for about 36 days, so clearly not by a direct route. Lippold had written from Funchal shortly before he embarked on Monday, 13 July 1840 for Rio. The letter was received by Pamplin in London, the red franking (Fig. 20B) confirming his payment of fourpence on its receipt on 18 August. On then being forwarded to Loudon in Bayswater, the black franking indicates his additional payment of twopence to receive it. Pamplin also acted as an agent for George Gardner's Brazil expedition (Harris 2018) and for Charles Lemann's Gibraltarian and Spanish collections (Royal Botanic Gardens, Kew, Directors' Correspondence, DC/16/228). Other examples of Pamplin's assistance to naturalists occur in the

Directors' Correspondence at Kew and among the Hunt Institute Archives General Autograph Collection (GAC).

25. One might wonder how Lippold could have been so sure of his identifications, considering his very recent arrival in Brazil. Many early naturalists in unfamiliar lands must have experienced the difficulties of isolation and lack of access to literature. For instance, when in Madeira, Dr. Christian Heineken remarked that “A sojourner in a foreign country has necessarily but few books of reference of his own to have recourse to... and it has been my lot to spend several years in a land luxuriant in the gifts of nature, but barren in the works of art” (Heineken 1829). Lippold may, however, have had access to publications, such as those by Wied-Neuwied et al. (1823, 1824), Faldermann (1831, 1832) and others about earlier explorations of Brazil. Such works could well have been left in Dom Pedro's library by his mother, who was an avid botanist.
26. The original image, the frontispiece of *Aus meinem Tagebuche, 1842–1843* by Prince Adalbert of Prussia (1847), has no caption. It presumably depicts Prince Adalbert and Counts Bismarck and Oriolla on their Rio Xingú expedition. However, the foreground images of cactuses and the vegetation in the background must be due to artistic licence, since no such plants exist in that biogeographical region (Dr Daniela Cristina Zappi, pers. comm., 14 January 2024).
27. This first iron steamer of the Rio Doce Company, built at the Northam shipyard in Southampton, England, received much publicity in British newspapers (Anonymous 1840e). After her maiden voyage, she arrived at the mouth of the Rio Doce on 15 August 1840 (Anonymous 1840f). In 1841 Henry Christy, younger brother of the late William Christy, junior, wrote to W. J. Hooker asking for advice on a plan to send Lippold to the Rio Doce, a botanically unexplored area of Brazil, suggesting that he might go out from Rio de Janeiro under the protection of the Rio Doce Company, which had steamers and settlements on the river. Nathaniel B. Ward favoured the plan, and the horticulturists Loddiges and Rollisson accordingly gave Lippold a commission, which Christy suggested might be financed by a dozen subscribers at £5 each. The resulting expedition was unfortunately halted by the wreck alluded to by Adalbert (1849), which was reported from Rio de Janeiro as having occurred on 13 July 1842: “The Rio Doce (steamer) hence to Rio Doce, got aground inside the bar, and is expected to become a

- wreck” (Anonymous 1842c). Unless the report of the wreck’s occurring on 13 July was actually long after the event, Lippold’s alleged sojourn of six months with the Botocudo tribe seems unfeasible, since he was certainly back in Rio by 5 September 1842 when he met Prince Adalbert; perhaps six weeks was really meant. I have found no record of any plants having been collected there by Lippold. Incidentally, Prince Adalbert’s allusion to Lippold’s culinary arts having been “acquired in the domestic circles of the Botocudo cannibals” (Adalbert 1849, 2:169) appears to be a somewhat sensationalist claim, though the tribe’s alleged consumption of this dietary delicacy was widely believed at the time. In fact, however, according to Morel (2018, p. 184), anthropophagy by the Botocudo tribe was never proven or recorded in direct testimony.
28. Protestants of German descent in Brazil were seemingly not reluctant to hold slaves; indeed, even the Lutheran pastor Carl Leopold Voges (1801–1893) of Três Forquilhas kept slaves (Müller 2001). It may also be noted that, in the southern states of America, holding of slaves by professed Christians was common enough among those who accepted the Mississippian Rev. James Smylie’s opinion that “Leviticus, clearly, and unequivocally, establishes the fact, that slavery, or bondage, was sanctioned by God himself; and, that ‘buying, selling, holding, and bequeathing’ slaves, as property, are regulations which were established by himself” (Smylie 1836, p. 21). Indeed, another Lutheran pastor, the naturalist John Bachman (1790–1874) of Charleston, South Carolina, was descended from a slave-holding family in the state of New York (Bachman 1888, pp. 17, 356), and came to hold four slaves himself (Stephens 2000, p. 166). Bachman, in condoning slavery, explained that, for a number of reasons, the slave is “incapable of self-government” and “is thrown on our protection” and, moreover, “that our defense of slavery is contained in the Holy Scriptures”, which “teach the rights and duties of masters to rule their servants with justice and kindness, and enjoin the obedience of servants” (Anonymous 1854, p. 643). It seems, therefore, that Lippold’s view, in opposing slavery in the 1840s, was rather an exception to that of his co-religionists in the Americas. However, slavery was not abolished in Brazil until 1888, the last nation in the Americas to do so, after nearly 5 million Africans had been brought in to complement the indigenous slaves (Araujo 2019).
  29. The Gamboa burial plot Sect-2, Grave# 954, recorded for “S. F. Leppald” in the cemetery’s

- database, has no grave marker for Lippold but currently has a headstone for Reginald Leigh Ibbs (1880–1934). Such a situation is quite common in this cemetery, due to its restricted area; after a few years bones may be disinterred and placed in ossuary boxes, allowing the cemetery authority to lease the plot to another party (Tony Martin, pers. comm., 28 January 2024). Lippold’s grave (if that it is) has received two more occupants since he was apparently disinterred. Unsurprisingly, he is not recorded in the register of the Anglican Christ Church Rio at Botafogo, Rio de Janeiro, since his burial was most probably conducted from the Evangelical Lutheran Church in Rio. If so, his ossuary is possibly stored there, but my enquiries have not elicited any response.
30. The influential Lutheran pastor, the Rev. Dr. John Bachman (1790–1874), was so addressed because he had been awarded three honorary doctorates (Bachman 1888; Stephens 2000).
  31. Lippold’s formal handwriting does not seem to conform with any standard contemporary style of German script and accordingly is highly distinctive. I have, therefore, described the characteristics of his writing in Appendix 6.
  32. Friedrich Gottlieb Klopstock (1724–1803), a German theology graduate and poet, was famed for his religious epic *Der Messias* (1748–1773) and for his odes. His unrhymed classically structured works greatly influenced von Goethe and the development of German literature (Paulin 2021).
  33. This was Frances Renton (née Wallace; 1800–1845), an “amiable woman”, the wife of Dr. Renton of the Quinta do Valle, Funchal. They had married on 17 April 1836 on the brig HMS *Goldfinch*, while it was anchored in Funchal Bay (Anonymous 1836c). In October 1844 Frances became severely mentally deranged and “several times attempted her life by strangulation”; returning to England for urgent treatment, she arrived with her husband in London on Christmas day. She was attended by, among others, Sir James Clark (1788–1870), an acquaintance since at least 1835 of her husband, and of other physicians resident in or visiting Madeira, including Charles M. Lemann (Royal College of Physicians, London; archive ref. ALS/C114B; letter from Sir James Clark to Octavian Blunett in Madeira). Sadly however, between 2 and 10 January at least 49 national newspapers were to carry the tragic account of the “Suicide of the lady of Dr. Alexander Home Renton” on 1 January 1845 (Anonymous 1845): “The deceased destroyed herself by cutting her throat while in a state of insanity”. Renton never returned to Madeira

- but settled in Sandford House near Woodstock, Oxfordshire (see Anonymous 1847; 1848a). His death on 6 March 1848 in Shanklin, Isle of Wight, England, was widely reported: “Alexander Home Renton, M.D. of Sandford House, near Woodstock” (Anonymous 1848a); and “Alexander Home Renton, M.D., late of Madeira” (Anonymous 1848b). Cossart (1984, p. 180) appears to have conflated these tragic events, erroneously stating that Renton lived at the Quinta do Valle only between 1830 and 1839 and that he committed suicide there.
34. Abraham a Sancta Clara (1644–1709) was an Austrian Augustinian monk, who having gained a great reputation for his pulpit oratory, was appointed court preacher at Vienna in 1669. People flocked to hear him, attracted by his forceful yet homely oratory, the quiriness of his humour, and his impartial and severe criticism of the follies of all classes of society, the court in particular. He was essentially a man of the people, his satirical oratorical style founded on an ebullient and sometimes coarse wit. In sermons addressing loftier thoughts, however, he employed somewhat more refined language (Anonymous 1875, 1:55).
  35. No publications by Lippold in periodicals are traceable in standard scientific bibliographies and catalogues, namely *Bibliographia Zoologiae et Geologiae* (Agassiz and Strickland 1848–1854); *Catalogue of Scientific Papers* (Royal Society of London 1867–1872); *Thesaurus Literaturae Botanicae* (Pritzel 1872); *Guide to the Literature of Botany* (Jackson 1881); *Taxonomic Literature* (Stafleu and Cowan 1976–1988). Nor are there any records in current online library catalogues, such as those of the Royal Horticultural Society; the Wellcome Library; Rothamsted Research; the Linnean Society of London; The Natural History Museum, London; or the Royal Society of London. More general sources consulted, also without success, were the Main Catalogue of the British Library; Library Hub Discover; and Library of Congress. In addition, volumes from 1820 to 1852 of *Hooker’s Journal of Botany and Kew Garden Miscellany*; *Curtis’s Botanical Magazine*; *Paxton’s Magazine of Botany*; *Loudon’s Gardener’s Magazine*; *Horticultural Register and Gardener’s Magazine*; *Annals of Natural History*; *American Gardener’s Magazine*; *Magazine of Natural History*; *Flora oder allgemeine botanische Zeitung*; and *Annals and Magazine of Natural History* were searched individually. Only seven original articles or translations by Lippold were discovered, all in *Loudon’s Gardener’s Magazine*, but some of

- them were reprinted in other journals, and a few articles mentioning him were found elsewhere.
36. Lejeune (2012) has provided a publishing history of *L’almanach du Bon Jardinier*, pointing out that the names of the authors printed on the title-pages of annual volumes are not always reliable, since influential names were sometimes retained for many years after they had ceased contributing (in some cases, after they had died!).
  37. This donation in 1838 to the Botanical Society of Edinburgh is particularly significant since it apparently confirms Christy’s awareness of his deteriorating health since 1836.
  38. The spelling “Rollisson” is the correct one, as employed in sources such as J. C. Loudon’s *The Gardener’s Magazine* (Anonymous 1827b, p. 256) and the Veitch nurseries (see J. H. Veitch 1906) and confirmed by Desmond (1977, p. 529), but the erroneous spellings “Rollison” or “Rollinson” occur in several other sources.
  39. According to Boase (1892–1921, 4:458), Boswell adopted the surname of Boswell-Syme in 1868 but discontinued using the Syme element in 1875. It therefore appears fairly likely that his herbarium labels showing “J. T. Boswell” date from before 1868, particularly because in 1850 he was curator of the Botanical Society of Edinburgh, whence he may somehow have acquired Lippold specimens from Christy’s 1838 donation to that society.
  40. At **BM**, 343 Boswell specimens are databased with images. Haphazard sampling of 25 of these specimens revealed that 21 of them, with printed labels, were presented by Frederick Janson Hanbury (1851–1938), a sometime director of the Quaker family pharmaceutical business of Allen & Hanburys (see Desmond 1977; Milligan 2007, pp. 226–227). Most specimens were collected by Boswell, but some by others—three came to **BM** from the Botanical Society of London and one early specimen (1838) apparently directly (with no printed label, only a “HERB. MUS. BRIT.” stamp). None collected by Lippold was found.
  41. This expedition involved much walking and various diversions, such as a ball and a visit to a “vapour bath” (sauna), which, surprisingly, must have taken place after Christy had learnt of his chronic and ultimately fatal illness. He and his young friends nevertheless seem to have enjoyed their energetic Norwegian experiences, his companions quite possibly being unaware of Christy’s fortitude in the face of his bleak future. He even observed (Christy 1837, p. 468), “The ladies ... would not have discredited the ball-rooms of more favoured countries. Some of them were distinguished for personal beauty,



and I could not help agreeing with a remark which my friend Forbes made ... that ‘the ladies of Norway are decidedly well worthy the attention of the naturalist’.” More precisely, what Edward Forbes (1815–1854) actually wrote after his 1833 Norwegian expedition was “Without joking, the ladies of Norway are exceeding pretty, and well worthy the attention of the naturalist” (Forbes 1835, p. 250). Forbes’s proviso “Without joking” reveals his self-awareness, being widely known as a leading light of distinctly un-Victorian informality among his brother naturalists, frequently reflected in his humorous style of writing (e.g., Williams 2014, p. 12).

42. At least 28 specimens at **GH** are attributed to R. T. Lowe, his autograph labels confirmed on those that are digitized, but no Lippold specimens were detected among them. Unfortunately, the records here of Lowe’s collecting include several errors in localities. For instance, some samples are recorded from Spain (implying mainland Spain, since others are stated to have been from the Canary Islands, a Spanish territory). However, careful examination of the database (and images if available) revealed that some “Spanish” specimens (00971945, 01655213, 01871698) were in fact from Teneriffe in the Canary Islands (between December 1857 and July 1858). Moreover, a purported “Spanish” specimen (01871694, the locality written with Portuguese diacritics rather than Spanish) in fact came from the Cape Verde Islands (February 1864). These observations are in accord with the known dates and localities of Lowe’s whereabouts during voyages around the Macaronesian islands with his friend John Gray on his yachts, the *Miranda* or the *Garland* (Williams 2017b, p. 63). However, in view of Lowe’s death in 1874, the stated collection date of 1875 for the two specimens from Gomera, Canary Islands, on sheet 00247595 must be incorrect; it seems likely that there has been confusion with the date of Wollaston’s execution of Lowe’s bequest to **K** or **BM**.
43. During Hooker’s directorship, his library, accumulated letters from botanists and his herbarium brought from Glasgow remained his private property, although they were always made available to researchers. Before he died, he informed the British Government that his son, J. D. Hooker, would receive his herbarium of over 1 million specimens; a library of 4,000 volumes; his scientific correspondence containing about 29,000 letters from over 4,400 correspondents, arranged and bound in 76 volumes; and the collection of botanical portraits assembled by

Dawson Turner, with later additions, all of which had thitherto been freely accessible to botanists visiting Kew. However, since his son would not inherit any other competency to maintain his young family, he desired that these unique assets be bought for a fair price by the Government from his son. When he died in 1865, his wish was acceded to, and in 1866, his son received £7,000 for the collections (Allan 1967, p. 217).

44. Since the genus *Nycterium* Vent. had been subsequently abandoned, Lowe designated his *Nycterium triphyllum* as the type-species of *Normania* Lowe (Lowe 1872, pp. 87–89), in honour of Francis Martin Norman (see Williams 2016). The successive generic reassignments of *Nycterium triphyllum* through *Solanum* to *Normania triphylla* are explained by Lowe (1872, p. 89). For further details of taxonomy and nomenclature, see S. Knapp (20 November 2013; <https://solanaceasource.myspecies.info/taxonomy/term/110072/descriptions>, accessed 21 February 2023).
45. These specimens are from the herbarium of Henry Fletcher Hance (1827–1886), who was an amateur field-collector of plants in eastern Asia but who also became a cabinet-collector of plants from all parts of the world (Forbes 1887, p. 8). His herbarium was purchased in 1887 by **BM** (Forbes 1887, p. 7; Murray and Britten 1904, p. 114; Desmond 1977). Hence, his specimens from Macaronesia, and others from Brazil, China, England, France, Germany, Hong Kong, India, Italy, Macao, Nepal, Singapore, Scotland and Spain in the **MEL** herbarium are unexpected.
46. Thomas Moore (1821–1887) was a gardener at Regent’s Park, London (1844–1847), and a prolific botanical author, who in 1848 became the curator of the Chelsea Physic Garden (Desmond 1977).
47. William Wilson Saunders (1809–1879) was an insurance underwriter with Lloyds of London and an amateur entomologist and botanist (Woodward 1897). His succinct will, written the day before he died, states very little more than “Every thing that I possess is the property of my Wife Sarah ... As to my collections they may be sold or in any other way made away with” (National Archives, Kew, England: COW1678035142747W). One of his four executors was James Cholmeley Russell (1841–1912), a barrister, financier, property developer and railway entrepreneur with an interest in botany; he arranged for Saunders’s large herbarium to be presented to Oxford University in 1879. The numerous forms of ink-stamped and manuscript identifications of this

material in the **OXF** herbarium (see Fig. 51A–D) suggest that its subsequent sorting may have been rather protracted. The acquisition of Saunders’s collection of drawings and engravings of plants by the Botanical Department Library of the British Museum (now the Natural History Museum, London) in 1880 (Woodward 1904, pp. 12, 47) was probably also arranged by Russell. Saunders’s appointment of Russell (32 years younger than him) as an executor may have resulted, apart from their common interest in botany, from some business connection, but explicit evidence is lacking.

48. Henry Elliot Fox (1841–1926), according to Desmond (1977), “gave his vast herb[arium]. of British plants to G[eorge]. C[laridge]. Druce [1850–1932] (*J. Bot.* 1876, 47)”. However, no such information occurs in the citation provided, which refers to a paper by Hemsley (1876) that only briefly mentions West Sussex (British) plant records from the Rev. H. E. Fox; no other mention of him, nor any at all of Druce occurs in the volume cited. In fact, it was in Druce’s obituary of Fox, that he stated that Fox had “a considerable and well-arranged Herbarium. This before his death he was good enough to give me”; it certainly contained at least British and European, and perhaps Japanese, specimens (Druce 1927). Since the precise date of Fox’s gift to Druce was not stated, the dates 1860–1926 on the **OXF** herbarium label are puzzling, unless they indicate when his herbarium was assembled. If that is correct, Fox’s collecting must have begun by the time he was 19 years old. Certainly, however, when 27 years old in 1868, he made an expedition to Skye, Scotland, with Professors Marmaduke Alexander Lawson (1840–1896; University of Oxford) and Daniel Oliver (1830–1916; University College, London; Lawson 1869; Druce 1927).
49. C. B. Clarke was very knowledgeable about the Madeiran flora, having worked on a proposed “cauda” to Lowe’s *A Manual Flora of Madeira*; however, it was unfortunately still unfinished when he died (Williams et al. 2019, Appendix 2, pp. 130–132).

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