

**Ferdinand Hochstetter's Australian *Novara* expedition diary
and voyage to New Zealand
6 November to 22 December 1858**

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Introduction

Ferdinand Hochstetter (1829-1884) was the geologist and physicist on the Austrian *Novara* expedition of 1857-1859 (Fig.1). Throughout the expedition he kept a series of diaries, and the ninth volume is the last one he wrote during his voyage on the *Novara*. By the end of this volume he reached Auckland where he took leave from the expedition to complete research and fieldwork in New Zealand (Nolden 2007).



Fig.1. *Ferdinand Hochstetter 1856. (Österreichische Nationalbibliothek/Austrian National Library, Handschriftensammlung, Sammlung August Miller-Aichholz, Autogr. 461/22, Beilage 2).*

The Australian diary is held in the collections of the Austrian Academy of Sciences and represents an important historical record of both the visit to Sydney and the subsequent voyage to New Zealand.¹ Arriving in Sydney after an arduous sea voyage with inclement weather and only brief visits at two pacific islands for the replenishment of provisions, the entire team was relieved to reach the civilised and hospitable port at Sydney, for some welcome respite and an opportunity to have the frigate refurbished in the newly completed dry dock.

Hochstetter's Australian travel accounts

Hochstetter did not find an opportunity to publish the results of his Australian researches, but he did write a travel account of the *Novara* voyage for the *Wiener Zeitung* in serialised form, which concluded with his experiences in Australia. Sydney and the arrival in Auckland as covered in the diary, were also to form the final instalment in the travel accounts submitted to the *Wiener Zeitung* (Hochstetter 1859). His diary, published here for the first time, would have served as the basis for his newspaper accounts. The newspaper accounts were compiled by Hochstetter's widow Georgiana von Hochstetter (1842-1905) after her husband's death, and introduced and edited by Vinzenz von Haardt (1843-1914) (Fig. 2). The references to the Australian travel accounts in the annotations of the present edition are to the Haardt edition (Haardt 1885: 300-333). In Auckland Hochstetter took leave from the expedition, and invited his new acquaintance Julius Haast (1822-1887) to take on the task of writing the accounts for the *Wiener Zeitung* describing their sojourn in New Zealand, and these were published under the pseudonym Julius Hanf (Hanf 1859).



Fig.2. Title page of the collected travel accounts of the 'Novara' expedition by Hochstetter originally published in the 'Wiener Zeitung' (Haardt 1885)

The official narrative account of the Novara expedition under the command of Bernhard von Wüllerstorff (1816-1883), was originally published in three volumes prepared by Karl von Scherzer, including an English edition (Scherzer 1862, 1863). Volume 3 opens with the visit to Sydney (Fig. 3).

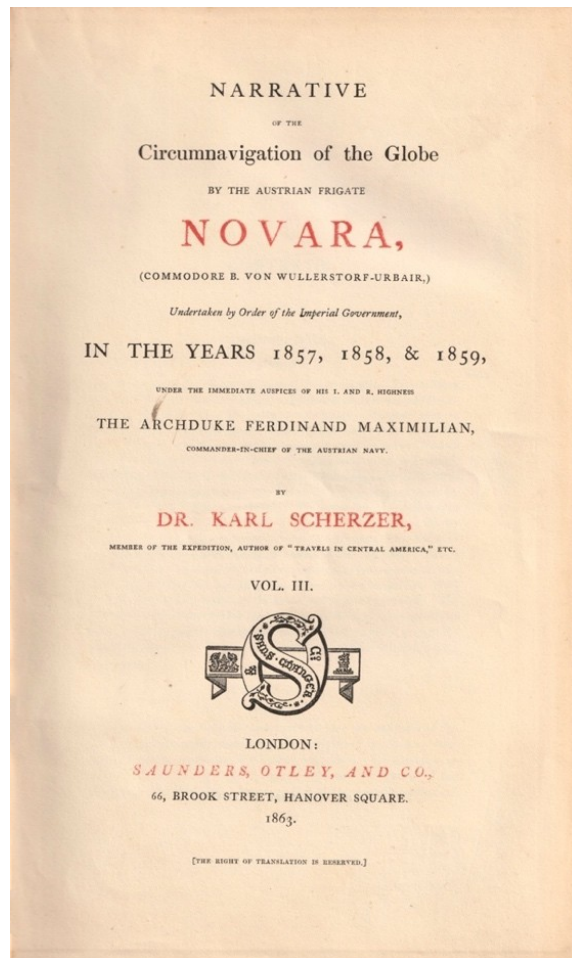


Fig. 3. Title page of the official account of the 'Novara' expedition by Karl Scherzer. Volume 3 opens with the visit to Sydney (Scherzer 1863).

Hochstetter's second visit to Australia

The diary documents Hochstetter's first visit to Australia. This was a formal visit as a member of a high profile expedition. When not attending to the formalities and ceremonies, Hochstetter devoted his time to becoming acquainted with Sydney and surroundings. He also acquired collections to send back to Vienna. As this was an official visit the details were well documented and published (See Fletcher 1988; Organ 1998, 2012).

Once Hochstetter had completed his visit to New Zealand he travelled back to Europe independently on commercial steamer services. The return journey included a sojourn in Australia, and this time the record of his movements and activities is largely limited to his personal diary, as no contemporary accounts were published. The diary from his second visit to Australia is held in the private collection of Dr Albert Schedl of Vienna and was published as a scholarly annotated English translation by Thomas Darragh in 2001 (Darragh 2001).

Newspaper clippings

Hochstetter used his diaries to collect relevant, related, and interesting local newspaper clippings. These complement the text of the diary, and were sometimes cited in the travel accounts Hochstetter published in the *Wiener Zeitung*. The newspaper clippings represent an important record of the media coverage of the voyage, providing evidence of the reception and public perceptions of the visit.

Official results of the *Novara* expedition

The official results of the expedition were published by the dedicated commission at the Viennese Academy of Sciences, of which Hochstetter was a member. The monumental undertaking was completed over an extended period, and some planned volumes remained unfinished and unpublished. Australia and specimens collected and acquired in Australia featured in a number of volumes. For an overview of the complete published results see Spitzka (1877).

Editorial conventions

In preparing this annotated edition, the initial step was to transcribe the manuscript German language source document, and then to translate the resulting text to create the English language target document. The aim was to preserve as much of the original as possible. The target text tends to aim for fidelity to the original, rather than trying to present the most polished possible English narrative. Thus the reader will be obliged to follow along with what is partly in note form and at other times a narrative text that jumps from one encounter to the next without always presenting a logical link – with these gaps being the periods when the author was prevented from recording his thoughts and experiences more fully at the time or trying to record a series of events in hindsight.

The German text is representative of the time when it was written with numerous now obsolete words and archaic spellings, but at the same time displaying all the features of the writing of a well educated individual who has already written a great deal of both popular and scientific copy.

For this edition the front matter comprising lists of names of contacts and various miscellaneous notes have been moved to the end, following the main diary entries. The original page numbering of the source manuscript is indicated in square brackets.

The diary

The diary is written in ink on paper and includes some small sketches to illustrate relevant points as needed, and these have all been included in the edition here. This composite intellectual and archival entity comprises Hochstetter's diary entries and notes, illustrated by six small sketches (Sketches 1-6), and the mounted newspaper clippings. There is also a related hotel bill (Fig. 5).

Many members of the expedition kept diaries and these were potentially open to scrutiny by the naval administration; with communications and publications of reports and accounts of the expedition likely subject to some degree of censorship. The *Novara* expedition was a navy exercise with a range of official objectives, while also potentially executing some less publicised orders and

objectives on special instruction, to which the civilian scientific contingent, who were guests of the navy, – welcome at times and tolerated at others –, would not have necessarily been privy (Basch-Ritter 2008; Weiss and Schilddorffer 2010; Weiss 2012a, b).

Hochstetter's diary may be seen as forming part of his personal records, while he also maintained a parallel series of notebooks in which he recorded the official observations and collected data. Although his primary task was as a geologist during the expedition, when on board it was his second role of physicist that kept him busy, taking regular readings using a range of instruments, and instructing and supervising naval cadets to assist with these tasks, relating mostly to meteorology and magnetism. Hochstetter's cabin on the *Novara* also served as his study and laboratory (Fig. 8). During the various visits to ports of call, Hochstetter took every opportunity to complete fieldwork and gather geological information and specimens, however some visits were short and provided little opportunity to get out into less well known and previously unexplored remoter areas. The visits to Australia and New Zealand were therefore something of a natural highlight as few geologists had visited prior to this time and there was still a great deal to be explored and discovered for science.

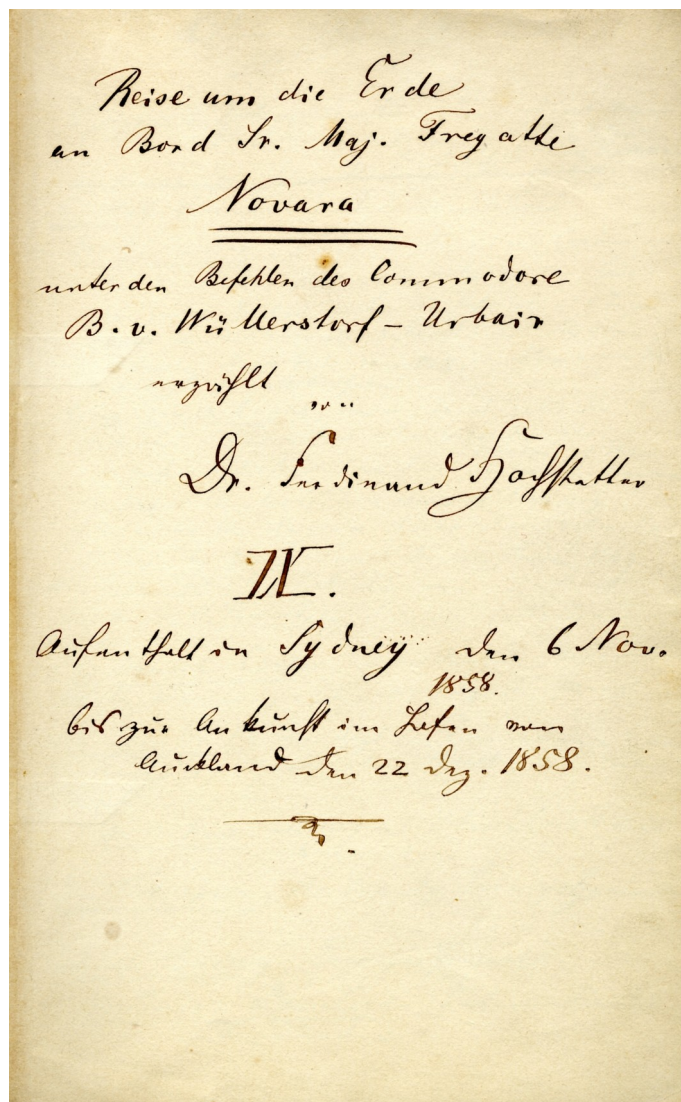


Fig. 4. Title page of Hochstetter's Australian 'Novara' expedition diary (Österreichische Akademie der Wissenschaften/Austrian Academy of Sciences).

[Title page, (Fig.4)]

**Circumnavigation of the globe
on board His Majesty's Frigate
Novara
under the command of Commodore
B. v. Wüllerstorff-Urbair
by
Dr Ferdinand Hochstetter
IX
Stay in Sydney from 6 November 1858
to the arrival in the harbour at
Auckland on 22 December 1858.**

[page 9]

Sydney Diary

6th November

At 8 am salute was answered from Fort Macquarie. The hopeful and yet hopeless Austrian Consul Müller² who had already met us at Singapore and Hong Kong, again appeared on board. At 10 am by boat to land, stepped ashore at Sydney Cove. Found no vacancy at Pohlmann's Hotel, I am therefore staying at the Royal Hotel together with Frauenfeld,³ Zelebor,⁴ Jelinek,⁵ the two convalescents, the ship's lieutenant and Jakobi⁶ are also staying here. Scherzer, Selleny⁷ and Schwarz⁸ however are staying at St Kilda House, a boarding house in the suburb of Woolloomooloo, which would be far too distant and remote for me.

In Sydney one is suddenly shifted away from the wild Solomon islanders back to Europe, in an entirely English city, with cabs, buses, marching bands, food, fruit and meat markets, a real little London.

At table we meet Mr A W Scott,⁹ a very kindly man, by whom Selleny and I allow ourselves to be persuaded to leave that very evening to travel with him at 11 pm by steamer to Newcastle, to spend the Sunday at his country estate. With him we visit Dr Bennett¹⁰ (compare notes), and from there to the museum. All these are just brief visits to make the acquaintances. Then to booksellers, where I find a map of Sydney, but no adequate map of New South Wales.

At the Royal Hotel I also met Mr Hofmann from London, who knows the Duke Paul von Württemberg,¹¹ and tells us about him. Duke Paul appears, as it would seem, to have made quite an impression, as we hear people speak about him everywhere. – Pohlmann's inn appears to be the general assembly locality of the Germans, and that is where I still drink champagne with the editor of the German newspaper late in the evening.

[page 10]

We stuck to our decision to accompany Mr Scott to his residence at Ash Island. Thus today, before I had even slept a night on shore in Australia, it was off again out to sea, through the same hole, through which we had entered yesterday. At our arrival I would never have thought that I would be

leaving Port Jackson again so soon.

There is a regular steamer connection between Sydney and Newcastle (distance about 60 nautical miles). The steamers leave Sydney at 11 o'clock at night and travelling north along the coast they reach Newcastle or Port Hunter at 5 or 6 o'clock in the morning, or sometimes 7 o'clock. From there the journey goes on for another 33 miles up the Hunter River to Morpeth. The steamers leave Morpeth again at 7 o'clock in the morning, are at Port Hunter by 10 or 11 and reach Sydney between 4 and 6 o'clock in the evening. Twice a week there is also a daytime steamer that leaves Sydney, which then returns to Sydney during the night. The route is serviced by the steamers *Collaroy*, *Illalong*, *Prince William*, *Paterson* etc. of the New Steam Navigation Company, good English-built steamers, which make 10 miles per hour.

Unfortunately tonight, due to repairs being made to the actual steamer, a small poor substitute steamer *Fenella* went, which was completely overcrowded with passengers, so there was no room in the cabin and a bed was quite out of the question.

The very friendly Captain H. Creer was so kind as to let Selleny and myself use his own cabin, and the first lieutenant, a terribly obese busy man in shirt sleeves, gave up his cabin for Mr Scott. Thus we were accommodated. As we left Port Jackson, there was strong lightning along the horizon, but in between the clouds there was a clear starry sky, with the air and sea as calm as one could only wish for on behalf of the small weak steamer. Nonetheless the steamer [*page 11*] worked terribly hard, when we emerged on the open sea, and as the captain's cabin lies directly behind the paddle box, we had the least quiet spot. There was such a tumult of water and coals, such a vibrating, that as we were used to the calm nights on the frigate, we were unable to sleep. I was feeling quite literally uneasy in my mind. Besides this, the lying down next to each other – one with their head forward, the other backwards – on the narrow bunk, was far from comfortable. We were therefore much relieved when dawn broke, and the captain assured us we were already close to our destination. Soon the area of Port Hunter came in sight, the lighthouse,¹² the signal station,¹³ a sheer vertical sea coast, revealing very fine geological sections through the Newcastle coal formation, one could distinctly make out the black lines of the coal measures, and when we were at Nobby Island,¹⁴ on which the lighthouse stands, the extraordinarily marked vein that was vertically penetrating the beds of the coal formation caught my attention.

7th November. Sunday

The entrance to Port Hunter poses no problems for steamers, however for sailing ships there are the rocky reefs on the portside, which lie beneath the water, but clearly discernible due to the heavy surf, while on the starboard side there are sandbanks, which makes the whole very restricted. The mast of a sunken ship sticking out of the water on the one side, and the ribs of a ship on the other side, bear witness to the perils. However in the harbour the ships lie safe, and are able to anchor quite close to the land. Almost only coal ships visit this harbour, the coals from here are taken to all parts of Australia. It was exactly 7 o'clock when the steamer berthed at Newcastle. How surprising the sight of the small town, that after being only recently founded, already had steamers, railways, and rail tracks to the coal mines – Newcastle in New South Wales will soon live up to its name.

We were not at our destination yet, for we still had to travel 10 miles further up river to Ash Island. [page 12] The river valley far and wide a low swampy plain, and where dry, a very fertile alluvial soil, like the islands Mosquito and Ash Island. The river has brackish water for more than 30 miles upstream, but today as a result of heavy rains inland was very freshened and murky. Many sand banks, which the steamers must avoid. Mangroves on the banks, highly interesting views of the native vegetation: *Melaleuca*, *Casuarina*, cormorants flying over the river, then there are farms to the left and right, grazing stock, cassowaries are apparently still quite common here, and formerly also kangaroos, but now only wallabies and opossums remain

At 8 o'clock we had reached Ash Island. A white fence, marvellous Norfolk Pines and behind that Mr Scott's residence, and to the side the workers' accommodations. We were picked up in a boat. Mr Scott has a whole lot of German workers. The boatman himself was a German, in fact a fellow countryman of mine from Heilbronn in Wurttemberg. Scott said to me that the farmers prefer German workers, as they don't drink as much as the English, and don't run away, as they are more stable and loyal. At Ash Island I found mainly people from Hessen and Wurttemberg in Mr Scott's employment.

Ash Island is a real treasure, a marvellous fertile alluvial soil in a region, which lies immediately adjacent to a major traffic route, along the arm of the river on the left bank the railway from Newcastle to Maitland passes by and on the river the twice daily Morpeth steamer. The land area of the island is about 3000 acres. Every imaginable variety of fruit grows well here: wheat, corn, millet, vegetables and fruit of all kinds are cultivated to a considerable extent. Mr Scott's garden contains 1100 wonderful orange trees, whose fruit are amongst the best that I have ever tasted, also pear, apple and plum trees, apricots, peaches, and along with these there are [page 13] lemons, bananas, date palms (have not yielded any fruit so far), guava, mulberry, and grapevines. I also saw a field planted in New Zealand flax, *Phormium tenax*, here for the first time; this was just in bloom, with tall flower shafts of large orange red flowers.

Drilling has proven that the coal formation of Newcastle has coal seams extending under the level of the Hunter River. Besides the marvellous cultivations, Ash Island also offers fine grazing for stock and some bush in which one may study the nature of the Australian rainforest. I saw Australian *Melaleuca* trees here for the first time, which annually shed their white paper-like bark. *Corypha australis*, a native palm, from which the young fronds are used to weave hats.

Exocarpos and *Podocarpus* species

Macroura with mulberry-like fruit

*Cassine australis*¹⁵

Aegiceras fragrans und a large number of wonderful ferns.

Broadly speaking, this is what I observed on a walk across the island which we undertook after breakfast, but the weather was not favourable. In the morning it had remained almost completely calm, but by 10 o'clock the so called "hot wind" began to blow from the north west, at first only gently, and later more strongly, until by about 3 o'clock a severe thunderstorm moved in from the same NW direction.



Sketch 1: Weg des Gewitters = Path of the thunderstorm

Thunderstorm with thunder and lightning and awful rain. After the thunderstorm there was a completely silent calm, when all of a sudden it broke out again from the south west, [page 14] more threatening than the first time, a stormy wind at the start of the thunderstorm, which shook the oranges off the trees, then there was some calm, before a terrible hailstorm broke out accompanied by thunder and lightning, which apparently caused considerable damage in other areas; on Ash Island itself, where only small hailstones fell, there was little damage. When the thunderstorm had passed, there was suddenly a violent stormy wind from the west that created high waves on the river, which lasted for 10 minutes, then there was stillness again, a grand rainbow on the thunderstorm retreating towards the north east, calm and towards evening a light pleasant breeze from north east – the normal coastal breeze at this time of year.

The circular track of this thunderstorm seemed most remarkable to me, but as Clarke¹⁶ and later the astronomer Smyth¹⁷ explained, this is apparently a completely normal phenomenon on the coast of New South Wales. Almost without exception two thunderstorms follow each other, one from the north and one from the south, or the thunderstorm is formed in the north and moves south, and then breaks out drawing across from the south. Thunderstorms and rain are very normal for this season on the coast of Australia, as we were able to see for ourselves often enough during our stay; we experienced several severe thunderstorms in Sydney.

The Hunter River, which apparently normally has clear brackish water at Ash Island, was murky and turbid and almost completely freshened, from the heavy rain showers, which must have fallen in the interior.¹⁸

[page 15]

The inclement weather forced us to remain indoors all afternoon. But there was also plenty to see in the house, especially for a naturalist. The two adorable daughters of the house, Harriet and Helena Scott,¹⁹ who approached us as openly and sincerely as if we were brothers, have most outstanding insect collections. I was astonished to hear that these two highly educated girls were born and raised in Australia. Such colonial education puts the best European education to shame. Ash Island is infinitely rich in insects and butterflies – and at certain times, like now, also the blood-thirsty mosquitoes which reminded me of Shanghai; it is a rich treasure trove for collectors. The two girls have exploited this treasure trove under the guidance of their father, and own very valuable collections, especially butterfly collections. Some are completely specific to Ash Island, for example a green cicada-like insect, a *Cystosoma*.²⁰ All the trees are full of them and these creatures make an equally unbearable din on Ash Island as the millions of large green cicadas in the gardens of Sydney. At the same time these two girls have developed their drawing and painting abilities to the level of accomplished artists, and depicted the mostly new specimens of their collections, such

as caterpillar, pupae/cocoon, butterfly with the plant it feeds on and microscopic analyses, in the most accomplished manner with brush and paint. The 104 large quarto plates have been completed in this way ready for publication, and are soon to be published with accompanying text. Selleny created a very pretty title page for the book, which also incorporated a view of Ash Island. Judging by the plates, which the girls intend to lithograph on stone themselves, this will become one of the finest butterfly books we have.

Miss Harriet was kind enough to give me some things from her collection for my father.²¹

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I enriched this gift for my father with some plants, which I collected during a walk on Ash Island. The evening was spent in the company of the dear family in the most pleasant manner, and how strange – the first night I slept on Australian soil, was in the home of one of the most adorable and respectable families of the colony. I can say that I have hardly ever gone to sleep so satisfied, and slept so soundly and well, as on this first night on solid ground after almost 90 days at sea.

8th November

I was really very sorry to have to leave the lovely Ash Island and its amiable residents again so soon and so quickly. But geologically the alluvium of the river island offered nothing, and I still wanted to see the coal mines in Newcastle, and would have to be back in Sydney by the 11th at the latest, to post my mail. Thus despite wishing to stay longer, I had to say farewell at 9 o'clock in the morning, – the ladies promised to come to Sydney – Mr Scott accompanied me in a boat to the railway station at Hexham only ½ mile distant. Here I saw for the first time the remarkable Australian swallow²² with its peculiar bottle-shaped nests on the station building.



Sketch 2: Nests

Hundreds of nests closely bunched together, a most surprising sight. By 10 o'clock I was already in Newcastle. A railway cutting halfway provides an interesting cross-section through the coal formation. The area itself has nothing other than gum tree forests, which do not stand up to comparison with the beauty of the European forests. Mr Scott had given me a letter to his brother the town magistrate, that is the highest police authority of Newcastle, and Mr Scott²³ in Newcastle was so obliging as to introduce me to the gentlemen [page 17] of importance for my purposes, and wrote to Mr Keene,²⁴ the government geologist, who was then absent, to return to Newcastle if possible. Newcastle is lit with gas lighting.²⁵ My lodgings were at the Caledonia Hotel, a very decent hotel for such a small town that was just being founded. Newcastle actually only has two sealed roads, a church, and the so-called barracks are on top of the hill, the remainder are the public houses and shops; all life is concentrated on the shores of the harbour, where the railways from the coal mines merge, and the coals are loaded. I counted about 20 ships in the harbour, the quays are

already partially completed, partially still under construction, but the ships can already anchor close to the land now, and the coals are loaded directly from the railway trucks onto the ships. I devoted the morning to a small excursion to the heights of Newcastle, from which one has a fine view over the city, the Hunter River, the harbour, Nobby Island with the lighthouse and Telegraph Hill. One stands on the approximately 400 feet high elevation, which falls vertically straight down into the sea, from which the thundering of surf emanates. I then looked at Mr Keene's collection, which was shown to me in his absence by his servant. The specimens are displayed on tables in a spacious room, and well labelled with exact localities recorded, however with little accuracy in the identification of the fossils. At midday I visited the Victoria adit together with Mr Donaldson,²⁶ one of the mines of the Newcastle Coal & Copper Company. We travelled on the private railway with a small engine to the adit. Interesting sight, the settlement of the miners, Burwood, peculiar style of basic huts. Compare with the description under geological notes. I brought back a fine collection of plant fossils that occur there, [page 18] and spent a very pleasant evening at Mr Scott's place.

9th November

Excursion in the morning to Nobby Island, and at this remarkable and often described rock, with its perpendicular vein-stone, I geologised during the middle of the day along the strand south of Newcastle. Then at Reverend Wilton's²⁷ to see his private collection, and received numerous duplicates. While I was here, Mr Keene arrived, and I then spent the entire remainder of the evening with him, and went over his collection again, but of especial interest to me were the geological sections he has prepared. Mr Keene was extraordinarily courteous, he not only gave me numerous duplicates from his collections to take, but also promised me copies of his sections, which [promise] he readily kept. I had only one regret, and that was not having time to visit the localities with him myself.

10th November

In the morning just a flying visit with Mr Whyte²⁸ to the shafts of the Agricultural Company²⁹ by locomotive, then on to the steamer. This time the *Paterson*, 120 horse power, 326 tonnes, a better steamer, than the one I had come on, but so full of horses and sheep, that we still took just as long to get to Sydney in the finest weather, as during poor weather on the old *Fenella* on the way here. We departed at 11 o'clock and arrived at 6.30 pm. I met Selleny on board on his return from Ash Island. Even though the seas were not very high, only two passengers besides us ate with the captain for lunch. The evening at Pohlmann's.

11th November

Finished my mail, and as it was too late for the official parcel, sent everything off privately addressed to Haidinger.³⁰

[page 19]

12th November

Finished my mail in the morning; at 10 o'clock to the Governor General Sir William Denison³¹ together with Scherzer and Zelebor, to hand to him as the president of the Philosophical Society, the letter from Haidinger. He presented me with the first volume of the *Sydney Magazine*.³² The governor is an extremely upright, friendly and obliging man; he showed us his excellent shell collection and offered us duplicates from it in exchange. The matter of the investigation of the coal

in New Zealand was discussed, and the official documents relative to this are now in Scherzer's possession, but will be handed over to me. Exquisitely beautiful garden around the governor's house (of stone, in a style which reminds one of Windsor, splendidly built), the brother of the governor, at the same time his private secretary has a small menagerie in the garden, especially birds, including the *Columba coronata* from the Fiji Islands, the remarkable Bowerbirds, which build large nests, and a most remarkable large black cockatoo from Australia. Moved out of the Royal Hotel and into the German Club House.³³

Then visited Mr Kirchner,³⁴ the Austrian Consul, then to the museum with Zelebor, later to the natural history specimen dealer Palmer,³⁵ where Zelebor purchased 100 beautiful bird specimens for £25 Sterling. I also was inveigled into making a small purchase. Handed my mail over at Kirchners and paid. The evening in the *Turnverein*.

13th November

Visit to Mr Macleay³⁶ in the morning. He appears to be a misanthropist. At the entrance to his garden is a sign with a warning "beware of the blood hounds" and yet there is no sign of one anywhere. Towards us he was extremely friendly and showed us around in his botanically most remarkable garden. We asked for his permission to be allowed to come again, which was cordially granted. Scherzer, Schwarz and Zelebor were with me. At 2 o'clock meeting with [page 20] Reverend Mr Clarke, a nice friendly, very intelligent looking man, at present really the only geologist in Australia.³⁷ First we looked at the geological collections of the museum together, then he introduced me to the Australian Library, and finally I went to the North Shore with him to his home in St Leonards. A fairly long way. It looks truly geological at his place. Large interesting collection, which I only glanced through fleetingly today. Sir Roderick Murchison³⁸ has, as I could see from the letter [of introduction] he gave me, recommended me most warmly, writing "Dr Hochstetter was well liked by us all in London; he is an intelligent scientific man". Clarke insisted he wanted to have me the following Tuesday at the wedding of his youngest daughter, however I declined due to a lack of time, and promised to come to him on Wednesday to see his collection in more detail. I returned in pouring rain.

The evening in the German club. I note that there are many Jews here, and get into a discussion with the two principal Jews, which lasts until 12 o'clock at night. It is mainly about how the Jews have equal rights in England, but not in Germany, which the two German Jews highlighted in a big way.

14th November, Sunday

Storm and rain from the south, therefore the planned excursion to Botany Bay, which was arranged for today (the commodore with the Austrian Consul, Scherzer, Selleny, Zelebor and myself) had to be cancelled. This suited me and I remained at home, and finally got around to arranging my things a little and to update my notes. At midday it cleared up, but the wind kept blowing strongly. To the Royal Hotel in the evening, here the commodore has stomach ache, Jakobi and the ship's lieutenant are unwell again, then to Pohlmann, where we again meet many Germans, whom I did not know yet. Pohlmann's in George Street is the German pub in Sydney.

[page 21]

15th November

Mr Lippmann,³⁹ whom I met yesterday evening, picked me up, for the purposes of going to various shops to look at gold and minerals, and for Australian gemstones; but we did not find anything special. Then I handed in the memorandum that Mr Keene sent me from Newcastle, at Mr Robertson's, the Minister of Public Works.⁴⁰ After this we went together to the police. The Stock Exchange is architecturally the finest building in Sydney, grand hall, reading room with numerous newspapers, telegraph office. Then on to the German immigration office, Mr Hamburger is the agent here. From there to Cockatoo Island to see the frigate in the dry dock. As the island is simultaneously a penal institution, I had to procure a ticket for myself from the water police office beforehand. A magnificent stone dock with steam engines to pump the water out. The frigate was already lying almost dry – an interesting sight for me. But on the frigate things looked awful, hammering and banging, carpentry in every corner and at every end. At the prow one could clearly see the joints that had opened up, allowing water to run in, here also several of the copper plates were torn away. The spars were in some cases rotten. I found the commander in the best of spirits, completely in his element. He reckoned that he would not go out again now until everything has been put right, then the frigate would be capable of completing another two circumnavigations of the globe. In the French coffee house I met Mr Rawack,⁴¹ who took me to a mining engineer⁴² Mr Samuel, who has a few copper ores. I dined at the Royal Hotel. Jacobi is unwell again. I come home so tired that I go straight to bed.

16th November

In the museum, where I selected the mineralogical and geological duplicates, but found little that was good, then to the Department of Land and Public Works where I received all the geological surveys of New South Wales, purchased some very fine minerals and fossils from Palmer [page 22] for £4 Sterling. In the evening drafted letter to the governor with the help of Mr Bi[e]ber.⁴³

17th November

At 10 o'clock to the North Shore to see Reverend Mr Clarke in St Leonards. A very warm day. I spent the whole day most pleasantly there, partly with inspecting the collection, and partly with going for walks. Clarke's youngest daughter has only just married; the eldest a most adorable pretty simple girl, who plays the piano and sings. Clarke wants to prepare duplicates from his collection for me and to furnish me with notes on the discovery of gold in Australia; he was involved in it himself.

Of interest to me was a walk about two miles from Clarke's home. This walk led us right into the original Australian wilderness, a gully with steep sandstone rocks, thickly wooded, marvellous ferns, marvellous *Banksias*, and here I also saw for the first time the peculiar Australian grass tree⁴⁴ with a four to five foot high trunk and tall flower shafts.



Sketch 3: [grass tree]

If I had been born here then I believe I would have become a botanist, not a geologist, this strange and remarkable flora has such a great appeal. On the way back we had an interesting view of two fairly severe thunderstorms, one coming in a curve from north west towards the south east, then east and finally north east, while the other came from south west towards the north east, the lightning of the former had a noticeably violet colour. Clarke remarked to me that this was a peculiarity of Australian lightning, and seemed inclined to connect this peculiar colour with the Australian sandstone. Clarke also spoke of the peculiar movement of thunderstorms, which he has often noticed.



Sketch 4: [movement of thunder storms]

Clarke also has a few manuscripts by Dr Leichhardt.⁴⁵ I only get back home from the North Shore late in the evening.

18th November

Today I sent the cases and letter to the governor, before going to see Mr Thompson⁴⁶ in the Survey Office [*page 23*] about the maps and geological sections, which were all most graciously placed at my disposal. At midday Reverend Mr Clarke was with me, I had asked him to kindly do me the favour of paying me a visit, in order that I might show him what I had accumulated so far by way of collections. Evening in the theatre.

19th November

Morning and during the day busy copying at the survey office. Evening with the commander and Basso⁴⁷ for dinner at Mr Kirchner's. Mrs Kirchner,⁴⁸ née Scott, stepsister of the two young ladies from Ash Island, a very pretty and pleasant lady, who speaks very good German, and has repeatedly spent time in Germany with her husband, mainly in Frankfurt am Main. Kirchner's excellent horses quickly bring us back to the city late at night.

20th November

While all my colleagues had left, Dr Scherzer, Selleny, Zelebor with the commodore to Campbelltown and Wollongong, Frauenfeld and Jelinek to Kiama, Wollongong and Campbelltown in the opposite direction, I had remained alone in Sydney. Initially I was too busy with official matters, the exchange of publications and minerals for the things sent by the Imperial Geological

Survey, to be able to go away, my plan was to first complete all these official matters, and then, if possible, to go on one major excursion all the way to the gold districts of Bathurst. So I had remained behind from all these excursions. Tonight, all those who had been away were expected back, for a dinner invitation at Mr Stuart Donaldson's, which the commodore had accepted. Donaldson⁴⁹ is one of the first names here, formerly merchant, then prime minister, now private gentleman and member of parliament. I had also received an invitation to the dinner on the basis of a recommendation from La Trobe,⁵⁰ the former governor of Victoria, [page 24] and then found on the night that together with Consul Kirchner, I was the sole representative of the *Novara*, – the commodore only returned the following day, and only Zelebor had still arrived by steamer at 2 o'clock that night, and was once more unwell. A small but fine company of ladies and gentlemen came together at Donaldson's, the dinner was the exquisite, Donaldson a fine man with a great oratory gift, his wife a beautiful woman.⁵¹ It was very interesting for me to make the acquaintance of one of the leading families of Sydney.

21st November, Sunday

Spent the morning at home sorting the collections, then walk to Lady Macquarie's Chair, one of the main promenades from Sydney. Close to this is the anchorage of the *Novara*, so that the people of Sydney can look at the *Novara* with enjoyment from here and hear the music from the band of the *Novara*. Two swimming pools nearby, seawater baths, midday excursion out to South Head along the one road and came back on the new road. The old king of Botany Bay. The beggar with the grey hair and beard in front of the grand villa at the fence of the magnificent gardens of the richest man of the colony, Sir David Cooper.⁵² A popular outing for the people of Sydney, and also interesting in terms of natural history. We also see the spot, where four months ago in a stormy night the ship *Dunbar*⁵³ was wrecked, a horrendous event, in which only one sailor managed to miraculously save himself.⁵⁴ He was found on the perpendicular rock face stuck in a hole in the cliff. On the return journey we encountered a fanatic, who raised his finger in a threatening gesture to the heavens, and announced the punishment which awaits us for daring to drive out on a Sunday.

22nd November, Monday

Mail from Europe. A letter from home with good news. Haidinger sends me Humboldt's *Kosmos* and the reports of the Imperial geological survey. I then made my private orders. Invited for tea with Mr Thompson, Deputy General Surveyor in the evening, an adorable family, two pleasant young girls, who sing and play the piano. The son has a fine shell collection.

Also visited Selleny and Dr Schwarz.

Warm pleasant day.

[page 25]

23rd November

I received copies of all official papers relative to the colony of New South Wales at the Government Printing Office as far as they have been published. Then on to the museum and at Mr Bennett's; finest private library that I have ever encountered. In the evening at 9 o'clock the "Return Fancy Dress Ball to the Right Worshipful the Major John Williams Esq." begins at the "Prince of Wales

Theatre". As I received a complimentary ticket sent to me by the committee, I allowed myself to be persuaded to attend the ball. The commodore with several officers also made an appearance. Two awfully bad English bands played; the band of the *Novara* which would have celebrated great triumphs in comparison to these bands was unfortunately unable to play as announced due to the clarinet player having become ill. The ball was well attended, the company very mixed, and the finer society in fact not at all represented. Many colourful costumes amongst the ladies and gentlemen, but not a single gorgeous costume, and not a single really beautiful face. I also met Mrs Rawack⁵⁵ here, the only Viennese lady in Sydney, who however feels quite unhappy here, Mr Rawack was formerly one of the wealthiest and most reputable merchants, but has lost his entire fortune, his wife who was trained as an artist in Vienna, now occasionally gives piano concerts. One costume was that of a *Novara* sailor. Despite the terrible heat in the theatre, which is lacking all ventilation, there was a great deal of dancing going on, but not by me. I was already home again by 12 o'clock.

A very warm cloudless day with wind from the north east. Mr Scott from Ash Island arrived tonight together with his two daughters.

24th November

Drive to Botany Bay, a hansom cab takes me there on a 1½ hour journey, almost bare dune-like sand hills interspersed with swampy areas, on which there are fresh water basins. The track is fairly bad. At the bay there is a hotel with a garden and menagerie, one of the main places of entertainment in Sydney. The owner is a Mr Beaumont.⁵⁶ In the menagerie a few very fine specimens, including two dingoes, which however look no different from wild dogs, six emus, three very beautiful bears and magnificent Australian parrots.⁵⁷ [page [24a] unnumbered page] The vibrant colours of the Australian birds even exceed those of the spectacular colours of the Brazilian birds. I met up with Frauenfeld, who has already been here since yesterday. I was only able to see La Perouse's memorial at the northern entrance to the bay from a distance, the memorial plaque which immortalises the name of Cook is mounted on a rock on the southern side of the entrance. How incredibly things have changed here since the time of these great men. One only sees small boats sailing backwards and forwards in the bay, ships do not visit. The coast, apart from the small rocks at the entrance, is shallow and sandy. We were already back by 4 o'clock. The day was oppressively hot, like in the tropics, yet a very dry heat, but the thermometer in the attic room in which I reside in the German Club, registered 38 degrees Celsius in the shade with the doors and windows open. It was like in a stove. The result of this heat was a sudden change in weather toward evening. Hardly had the sun set, when instead of the northerly and northwesterly winds, there came up in gusts, a southerly or southeasterly, known as a Brickfielder that carried up the awful red dust of the roads. It is named after Brickfield, a hill south of Sydney, from where this wind swirls up great masses of dust and drops it on the city of Sydney, so that one is often unable to see from one side of the street to the other. Usually this brickfielder is followed by rain, and that is how it was on this occasion too. The morning of the 25th broke with a darkly clouded rainy sky, and the temperature was once again pleasantly cool. To a degree the Brickfielder disrupted the fine festivity which the Germans in Sydney had planned for us in the form of a "Novara-serenade". Compare with the newspaper articles attached, which contain everything of relevance. I just have to mention one coincidence: A transparency with the Austrian eagle was mounted on the bridge of the party

steamer. When the steamer lay anchored alongside the frigate [page [25a] unnumbered page] the wind tore away the eagle and tossed it into the water, and it floated towards the *Novara*. Germans told me about this characteristic coincidence. I had come on the steamer myself and travelled back to the shore together with the commodore. The commodore was highly satisfied with the performance, which was definitely the most nationalist and patriotic declaration, which we had experienced on the entire journey to date.

This *Novara* festival ended with drinking and dancing at Parker's Family Hotel. The German Jews had excluded themselves from the festive-serenade.

25th November

A pleasantly cool day after the heat of yesterday, I am preoccupied all day with the packing of my cases. At 6 o'clock in the evening dinner in the German Club, the commodore with several officers, Scherzer, Frauenfeld and I. Kirchner presides. The whole thing is beautifully arranged and decorated in the hall with the Prussian, Hamburg, Bremen, English and Austrian flags of course.

The president of the German Club proposes a toast to the Queen of England, then to the Emperor, Empress, Crown Prince, Archduke Maximilian, then Mr Frerichs⁵⁸ to the Commodore, his officers and the Austrian navy, the commodore responds, then Mr Michaelis⁵⁹ to the scientists on board, Dr Scherzer replies and speaks of the German merits of Austria, and closes with a toast to the unity of Germany that might emerge, Frauenfeld proposes a toast to German science, to which I add a few words about Dr Leichhardt, and ask the gathering to rise to honour the memory of our unfortunate countryman Dr Leichhardt. Mr Zöllner⁶⁰ finally proposes a toast to Australia. The gathering became quite animated about 10 o'clock with all the champagne that had flowed, and dispersed towards 11 o'clock. Some heading off one way, and others in another direction. One will long remember the Austrians in Sydney who bring enough tidings of themselves in the city.

26th November

Packed in the morning, then on board, Hetzer⁶¹ takes a photograph of me, or in fact of my uniform. Official visit to the theatre in the evening, as the performance is put on under the patronage of the commodore and the officers of the imperial frigate *Novara*. Nowhere so far has so much humbug been made of the *Novara*⁶² [page [24b] unnumbered page] as here, I am surprised that they have not long since also made *Novara*-cake, *Novara*-sausages and so on. Kirchner with his adorable sisters-in-law at the theatre. Until 12 o'clock at night in the Royal Hotel with Mr Scott.

27th November

On board there is a festive *Te Deum* for the newborn Austrian Crown Prince "Archduke Rudolf",⁶³ the *Novara* spends all day in the most radiant flag display, the same for the English frigate *Iris*. In the morning, at 8 o'clock, then at 12 o'clock and 7 o'clock in the afternoon there are 21-shot cannon salutes, but as this celebration was not officially communicated to me, I did not find myself inclined to take part. I joined Frauenfeld on a fishing expedition to which we had been invited by Captain Lovell⁶⁴ and the officers of the Royal Artillery. A small steamer took the small party of about 20 gentlemen at 9 o'clock from the Royal Artillery Barracks to Manly Beach, one of the main entertainment areas in Port Jackson. From there the fishing was done with a net on the sandy beach,

first in the North Harbour, where the quarantine station is, then in the Middle Harbour. A number of things of interest to Frauenfeld were caught. New to me were the fish with parasites in the mouth, crustaceans, and this phenomenon is so common among certain species, that every specimen has a crab in its mouth. Then there was the brightly coloured fish which is similar to the flying fish, with metallic shiny green fins with blue spots, reddish golden body. By 7 o'clock in the evening we were back. I then went to the *Turnverein*, to read the latest German newspapers. I hear that there is quite a commotion on board about Frauenfeld and I not making an appearance for the Te Deum, however we are the ones who have the grounds to complain, not the gentlemen on board. It would have been fitting for an official celebration for the naturalists to have received an official invitation and to have been picked up on the shore by a boat. [page [25b] unnumbered page] I for one do not see it as befitting the occasion to travel in full uniform to an official party on board in a private boat.

28th November, Sunday

I was busy all morning at home packing. In the afternoon to Kirchner's at Darling Point. I happen to just arrive at dinner time and meet the commander, commissar and von Rath⁶⁵ there, and also Frauenfeld, who also just happened to have dropped in like me. The commander did not mention a single syllable about yesterday, and I did not feel at all obliged to make any remark. I had a great conversation with the amiable Helena Scott. Towards evening strong northeasterly wind with rain, therefore everyone rather worried about the grand soirée and dance arranged on board for tomorrow. The weather became so bad, that the commander was not able to get away on his boat, when Frauenfeld and I set off on our long journey home. We arrived at the German Club at 12 o'clock at night.

29th November

The ugliest and stormiest rainy weather imaginable, fine prospects for the evening. The ball announced for the evening on board the *Novara* has to be postponed. This ball is all the talk in Sydney, everyone wishes to be invited, everyone feels they have a claim to an invitation, even if they have only so much as seen an Austrian officer from a distance. Subsequently several gentlemen came to me today wanting invitations to the ball. It was rainy and stormy all day long, and the streets of Sydney were soon so dirty, that one could only go out wearing jackboots. That is how one sees all gentlemen walking here in bad weather. In the evening I saw the tragedy of Macbeth in the theatre.⁶⁶

30th November, Tuesday. Ball day.

A fine day with a fresh northeasterly wind, following the awful weather of yesterday, a day of celebration with a regatta etc which is not celebrated like a Sunday however, the shops are open and the civil servants are in their offices. Together with Mr Schrader⁶⁷ [page 26] I visited the Observatory at Fort Philipp in the morning. Mr Scott⁶⁸ is employed here as the astronomer, but by himself and without the necessary instruments was able to achieve very little of note to date. The observatory has a far better position overlooking the city, than the former Fort Philipp, whose cannons only threatened the houses of the city, without being able to protect the harbour, it [the observatory] is completely newly built at the expense of the government of New South Wales, and just completed. The astronomical instruments consist of the old, mostly unusable remains of the former observatory at Parramatta – an old poor transit instrument, the same for the meridian circle

and some old telescopes and the remains of magnetic instruments. Currently the observations are restricted to three daily readings of the barometer, psychrometer⁶⁹ and wind direction at 9 am, 12 o'clock and 3 pm, the results of which Mr Scott publishes in a special monthly table and weekly in the *Sydney Morning Herald*. Mr Scott has also begun ozonometer observations, however without having any results so far. The building is completely designed to become a respectable astronomical observatory. In the south a tower with a platform on which there is a time ball, in the central part of the building two meridian openings in the roof, for a transit instrument on the one hand, and the other for a meridian instrument. In the north a movable dome. A most splendid view over Port Jackson from the platform of the tower. A regatta just taking place in the harbour.

From the Observatory to Mr Thompson one more time, where I receive very interesting fossils. In the evening the great ball festivity on board. A fairly violent thunderstorm towards 7 o'clock in the evening rising from the southern skies looks very threatening for the many guests who wish to attend. I go across in a small boat at 8 o'clock, and just manage to get through without rain. At 8.45 the first steamer with guests arrives, I was no less surprised by the grandeur and taste of the whole arrangement than the guests. I had never taken part in a similar festivity on board a ship. Even though the second party of guests, who were brought across by the steamer had been exposed to a bit of rain, the mood was still most cheerful and animated, on the deck, marvellously arranged as a large ball room on the frigate. The greatest beauty on board was Mrs Valentin, a Jewish girl, born in England, who later spent several years in Hamburg and had now been in Australia for six weeks. A second beauty, who had almost been importunate towards me during the quadrille, was Miss Watson Macley of Darlinghurst. Apart from these two my dancing was restricted to the two Scotts and Thompsons.⁷⁰ It was already full dawn when under loud hurrahs the steamer brought home the last guests from on board. I arrived back at the club at 5 o'clock in the morning when it was already broad daylight.

[page 27]

1st December

Not much to be done after a rapturously indulgent night. I visited the ill Zelebor who is now suffering under liver disease as a result of the quinine treatments. Home by midday. A very violent thunderstorm towards 4 o'clock. Spent the evening at home too working on writing the report for the *Wiener Zeitung*.⁷¹

2nd December

Early in the morning to Reverend Mr Clarke on the North Shore in order to settle all necessary business with him. As I hear the case of duplicates from his collection is already on board, and I now receive notes and publications. We then go to the city together. At midday together with Frauenfeld to a Mr Wise⁷² in Newtown, a wealthy respectable lawyer, who was at the *Novara* ball, and had now invited some of us. We found a small gathering, partook of an excellent lunch with champagne and took our leave towards evening when the gathering grew bigger and the dancing began.

A fine warm day.

3rd December

Excursion to Parramatta. Off at 9 o'clock in the steamer as far as Kissing Point, about halfway, to visit Reverend Mr Turner⁷³ here, a botanist in the colony⁷⁴ [page 28] as Clarke is a geologist. Unfortunately I did not find him at home and so was only able to get a fleeting glimpse of his garden, botanically one of the most beautiful and remarkable in the colony. I had to wait in a small pub for four full hours, until I was able to continue my journey on a second steamer to Parramatta. I utilised the time to write letters. At 2 o'clock on to Parramatta. The so called Parramatta River is nothing other than a marine inlet, which ends up becoming so narrow, that the steamer takes up the entire width of the channel, and a sudden bend in the river is used as a turning bay. An omnibus drives from the landing place of the steamer through the town of Parramatta to the railway. The day was so terribly hot that I could not see much in Parramatta either, if there was anything to see there at all. There is a very good hotel. Back to Sydney in the evening by railway.

WILLIAMS' FAMILY HOTEL,		
LATE		
WOOLPACK INN,		
PARRAMATTA.		
<i>December 3rd 1858</i>		
Dr. to J. WILLIAMS.		
Breakfast.....		
Lunch.....	3.	"
Dinner.....		
Tea.....		
Supper.....		
Wine <i>Port Sherry</i>	3-	6
Ale.....	1-	6
Porter <i>Sherry & Champagne</i>	1-	"
Brandy.....		
Hollands.....		
Whiskey.....		
Cigars.....		
Apartment.....		
Horses.....		
Servants.....		
<i>United Assurance</i>		£ 9 8
<i>M. A. Williams</i>		

Fig. 5. Hochstetter's hotel bill from his visit to Parramatta on 3rd December 1858.

4th December

On board the English frigate *Iris* in the morning, where I meet Clarke, then together with Clarke on board the *Novara*, I show him geological material, and introduce him to the commodore who happens to be on board at the time. At 12 o'clock the governor comes on board, the band plays "God Save the King" and when he leaves there is a salute. Organised a few things at midday, namely in the museum. In the evening I am the only one at Dr Berncastle's⁷⁵ dinner, from an invitation list of what he says were 20 to 30 people! Band was ordered, and they played for me alone, as the company was in no way very pleasant or large, I was back at home by 9 o'clock. Towards 10.30 pm a violent thunderstorm over Sydney with particularly abundant lightning.

5th December, Sunday.

I spent the entire morning at home and compiled my report for the *Wiener Zeitung* from the various newspaper articles found on pages 31-42, [page 29] and I wrote other letters for the mail. After lunch I travel together with a number of Germans from the German club, and take them on board the *Novara*, and continue by myself from there to Kirchner's at Darling Point, and took my leave from them and the Scott ladies. I meet the commander there, and he is all in the mood for dancing, and wants to still have a dance in Sydney on the last evening, and therefore asks Kirchner to arrange a ball for tomorrow evening, to which he will send the band. I leave from there in good time and return home to finish my mail.

6th December

Finally, things seem to get serious for the departure, I therefore pack all my things in the morning, and hand over five cases of collections at Kirchner's for the academy,⁷⁶ one with publications for the Imperial Geological Survey, and then a few more quick visits to say goodbye, and after lunch I go on board at 2 o'clock. I use the last few hours for magnetic observations with the Fox apparatus on Garden Island, and allow myself to agree to a request that reaches me there from five ladies, to return once more to land after all. In the evening the dance entertainment at Kirchner's, the beautiful Miss Valentin is also there again. However I devote the greatest part of the evening to my merriment all evening, much champagne, towards morning we go on board and a few hours later we are at sea.

Keene from Newcastle had brought a roll of geological cross⁷⁷ sections to Kirchner's for me in the evening.

[page 30 blank; page 31]

Various *Novara*-related articles from the *Australische Deutsche Zeitung*, published during our stay in Sydney.⁷⁸

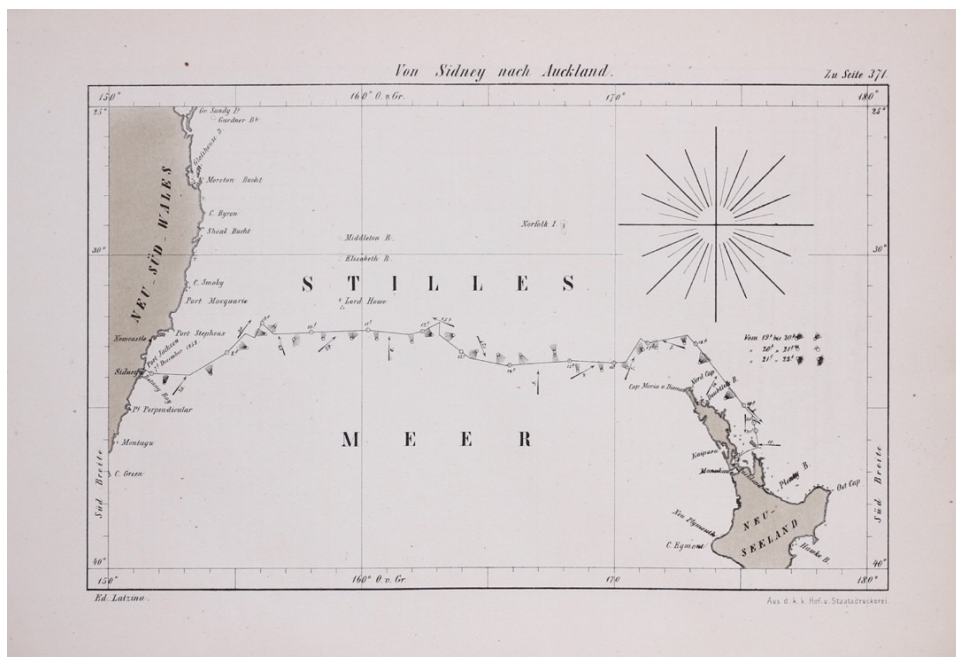


Fig. 6. Chart of the voyage of the 'Novara' from Sydney to Auckland in 1858 (Wüllerstorf-Urbair 1862-1865).

[page 45]

18th [leg of the] sea voyage

From Sydney to Auckland

7th December, Tuesday

Our farewell from Sydney was quick. At 3 o'clock in the morning after happily dancing away the night, the beauties of Sydney held my hand for a final goodbye.

Helena Scott seemed somewhat affected by my departure, she was the one who told me, that we seem to her like brothers, and that she absolutely could not imagine, that we are never going to see each other again, and yet that is how it will be, for what fate would ever bring me back to Port Jackson again. When after two completely calm days a southerly breeze suddenly picked up at 7 o'clock in the morning, which grew into a storm from the south as we were leaving, at 9 am we safely passed the Heads and are rocking on the rising waves of the New Zealand ocean whipped up by the storm. It was a quick change in circumstances, faster than we have hitherto experienced on this voyage. The Germans in Sydney, who wanted to accompany the *Novara* on a specially hired steamer, will be wondering at how we were bold enough to sail out of Port Jackson in a storm. The quick change in circumstances resulted in the consequence that the unseaworthy comrades Frauenfeld and Scherzer were soon laid up seasick again and the others were overcome with lethargy. It was certainly not pleasant to be so suddenly exposed to the impetuosity of the ocean again, without having first put one's cabin in order.

8th December

However today the wind and the sea already calmed down again somewhat and I was completely occupied with turning my cabin, which was in complete disarray, back into a liveable space.

9th December

In the night and in the morning there was a violent thunderstorm, followed by fine weather. At 5 o'clock in the evening the funeral of a member of the artillery who had died of Shanghai dysentery.

10th December

A very beautiful fine day, wind from south west, we [page 46] have a good calm voyage just the way that it is pleasant, and have already covered a quarter of the distance to New Zealand. In the morning there was a ship in sight, but apart from that the sea quite lifeless, with no birds and no fish.

11th December

A fine day with a calm, admittedly not overly quick journey, but all the more pleasant; like a day in the monsoon regions. Breeze from south west and south. A few more birds near the ship again today.

12th December, Sunday

An equally fine day as yesterday, but the wind shifts from south east to east, so that we have to change tack at 8 o'clock at night and go off course.

13th December

Fine beautiful day, but sluggish breeze, almost becalmed by evening, the sky is completely overcast. The weather appears certain to want to change.

14th December

It rains a little towards morning, but clears up and we move on as calmly as if we were at anchor, and yet we make over 100 miles each day. But certainly nothing of interest or particularly noteworthy.

15th December

Fine day, calm voyage, by evening the whole sky is overcast, glowing red sunset. The barometer drops down to 29.7 during the night, and after the many calm days a heavy sea from south and south west that emerges in the night, makes its presence felt all the more. However we only have the sea – and not the weather, for on

16th December

in the morning the sky is clear again and the barometer rises. Drops again alarmingly at midday, and in the evening a terribly threatening looking weather from south east, in response to which the sails are taken down, the top gallant yards are brought down onto the deck, as one justifiably anticipates bad weather after the high seas that have made themselves felt all day. [page 47] However nothing turns up apart from a bit of rain.

17th December

The day today is also mostly dark and cloudy, with wind from the south east, which is now directly contrary to us.

18th December

Fine, with brief squalls, which are now obviously already due to the influence of the land. Very fresh wind from the south west, which is however quite favourable for us, as we have passed the north cape of New Zealand, and are therefore able to steer towards the southeast now. In the morning an American clipper passes us heading east. In the evening it is so severely cold, as if snow air was coming across to us from the permanently snowy peaks of New Zealand, Mt Egmont etc.

19th December, Sunday.

The night was stormy; the frigate was battling hard as the sea was coming on intermittently choppy. The stormy wind was from the south west. At the break of day, as we came near the land, the sea suddenly became calmer. From this alone it would have been evident that the wind is coming off land. At the same time it also came in sight, in fact Cape Brett at the Bay of Islands. At midday we were still approximately 120 miles from Auckland, the wind however, which remained from south west all day, was less favourable, thus we were unable to steer directly towards the harbour. After lunch the cadet announced “an incredibly large fish in sight”, indeed a small type of whale, but large enough, to amaze us, for it was the first whale we had seen on the entire voyage. At intervals of two and two, and sometimes even six minutes the huge creature would come up to breathe at the surface, and even though the commodore tried to put a bullet in it each time, which must have hit

several times, the animal remained swimming with the frigate that was travelling at up to 5 miles, for almost a whole hour. It was a real Sunday theatre, for the staff as well as the sailors. [page 48] At the same time there were numerous albatross near the ship and after the whale had disappeared, the commodore together with Frauenfeld took a jolly boat to go hunting and after half an hour they had shot three large albatross and six smaller storm petrels. The breeze had diminished towards evening and had turned to a slightly more favourable westerly. The air was cool for the whole day, so much so that we felt quite cold.

20th December

Just as we have experienced so often, here the same all over again. We are standing in front of the harbour and are unable to get in. In the morning we were completely becalmed, and the finest weather one could possibly wish for, steadfastly remained all day. In this region, where a complete calm must surely be exceptionally rare, we must once again be the ones encountering this exception to the rule. We were lying all day approximately 30 miles northeast of the lofty Aotea⁷⁹ Island or Cook's Barrier Island with the 2130 feet high, pointed peak Mt Hobson, and to the right of this the Little Barrier Island or Hauturu⁸⁰ with the 2383 foot high Mt Mary was also visible. We have to pass between the two islands to enter the Hauraki Gulf, in order to get from there to the harbour of Auckland. The distance to the anchorage is approximately another 80 miles.

The maps:

Shouraka Gulf by Captain Stokes 1849 and Auckland Harbour by Captain Stokes 1848 are our guides.

Depot Point opposite Auckland is given as

Latitude 36° 50' 5" South

Longitude 170° 49' 10" East of Greenwich.

Low and high tide 7-11 feet.

[page 49]

Today I received the order from the Commodore regarding the coal affair in Auckland.

21st December

In the night a bit of a breeze, but this helps us very little, towards morning once again complete calm. The finest most beautiful weather one could ever imagine. The sea is calm and glassy smooth, as if we were lying in the best harbour. Only towards midday at 2 o'clock a weak breeze picks up from north west, obviously a sea breeze, which later freshens up a little. We steer towards the south, along the eastern coast of the Barrier Island, as the commodore has decided to enter the Hauraki Gulf through the southern passage, which at 10 miles wide provides free passage as it leads between the Coromandel Peninsula and Great Barrier Island. The look of Great Barrier, which is about 25 miles long, very much reminded me of Tillangchong⁸¹ in the Nicobar Islands. A steeply rising mountain range with many peaks and sharp crags, the highest point approximately in the middle of the island, is marked on the English maps as 2130 feet.⁸² On the east side as on the western side there are deeply indented bays which provide good anchorage. At the northern point of the island are remarkable pointed crags,



Sketch 5: [Needles Point]

according to the map these are named, Aiguilles, real rocky teeth, the southern point is formed by a rounded rocky summit. On the eastern side in the middle of the island in front of a bay is Cook's Arid Island,⁸³ well justified as the island is really nothing other than a bare rock with perpendicular cliff faces, which appears, at least from the eastern side, to be absolutely inaccessible. The flat ridge is covered in some shrubby vegetation. Seen from the East the island almost has the profile of an Egyptian sarcophagus.



Sketch 6: [Rakitu Island (Arid Island)]

[page 50]

As far as one was able to make out from a distance of 6 miles, the rocks consist of a white or yellowish-white sandy stone, thinly layered and in horizontal beds, crossed by more or less steep vertical clefts. The southern point, the sharply marked head of the sarcophagus, is decidedly another rock, it appears to be a massive intensely fissured gray-brown igneous rock.

Towards 7.30 in the evening, as it was growing dark, we had just reached the southern point. There was Cuvier Island outside the entrance on the eastern horizon, which was completely light, a good survey reference point that remained visible, the entrance clear and broad, 10 miles wide, so the commodore decided to continue even in the night, even more so as the western sky was looking dark and cloudy, and gave rise to fears, that tomorrow we would have a westerly against us again. Once we are in the extensive Hauraki Golf, then at least we can anchor, and will not lose by night all that we have gained during the day. Graf Kielmannsegge,⁸⁴ who visited me last night, on occasion of the matter of the coalfield examination for the government of New Zealand, requested by the Governor General of Australia which the commodore officially put to me yesterday, awoke in me the idea of remaining behind in New Zealand, to split from the expedition and from the *Novara*, in order to carry out a geological exploration of this geologically so classical yet scientifically never before explored area, on a more all encompassing scale.

[page 51]

Assuming that the English government of New Zealand would provide me with the means for this; the latter does not seem so impossible, as the letter from the governor of New Zealand to the Governor General of Australia, wherein the request for a geologist for the investigation of the coal measures near Auckland is made, it was mentioned that in the first instance there are £500 available for this purpose. The government saves itself these £500 if I carry out the investigation. But precisely these £500 would be sufficient, if the government were to place them at my disposal for the purposes of a more comprehensive geological investigation. The matter has by no means matured in me to a point of a decision being made, as it will be hard to leave the *Novara*, however I

presented the whole affair to the commodore, to hear what he had to say to such a plan. The commodore had some reservations, as he was not sure if his authority extended so far, that he could leave me behind here without first enquiring with the Naval Command Office or the Academy, however he thought the matter was certainly worth thinking about and one could discuss this further in Auckland. An initial decision needs to be made on whether I wish to remain in the Antipodes or not. I will wait for the mail from home, which awaits us in Auckland; perhaps the letters from home and from friends will have a determining influence on me.

22nd December

The breeze had died completely for some hours in the night, but after midnight we had passed Cape Barrier and at 5 o'clock in the morning when a breeze picked up again we were inside the gulf. The breeze was very favourably from the north east. We steered before the wind towards south west. All the mountains were shrouded in mist and the entire horizon was misty and overcast, [page 52] so much so that one could hardly see the outline of the nearest islands. The land ahead of us, towards which we were steering, was not even visible yet at 8 o'clock. It was drizzling. Towards 10 o'clock it suddenly became brighter, the land before us and on either side of us came in sight, to starboard Tiritiri Matangi Island and Whangaparaoa Peninsula, with the adjoining land, on the port side Otata Island, a whole group of islands, then Rakino, Motutapu and the tall Rangitoto Island. With that we had reached the entrance to Auckland Harbour. A signal was sent from Flagstaff Hill, the people of Auckland now knew, that the *Novara* was there and we could already see the houses of the city and behind them the countless small volcanic cones. But all of a sudden the wind turned, from the hitherto northerly so favourable to us, to a southwesterly, directly contrary to our course, so that we had to go about towards Whangaparaoa, in order to be able to at least reach an anchorage between Rangitoto Island and Flagstaff Hill, Victoria Hill,⁸⁵ on a second tack in the south easterly direction if possible.

Geologically one could make out that the completely bush clad Rangitoto is about 900 feet, exactly 920 feet,⁸⁶ and the North Head opposite, and the Flagstaff Hill are all extinct volcanic cones, just like the numerous cones behind the town itself, all rising very regularly with a flattened top, which all most likely bear very clearly pronounced craters. With Rangitoto one can even see this from the indentation in its upper surface. Rangitoto is covered in lush forest nearly up to the peak. Rangitoto is completely and totally volcanic, black lava blocks down to sea level, although the nearby island shows no trace of being volcanic.⁸⁷ All the other islands and the land round about is low rolling hill country without forest, individual sandy [page 53] bays, but mostly vertical steep coastline, in which a formation of very regular beds of a brown rock is clearly revealed. Some beds are horizontal and others flat and then again steeply dipping, in fact in the most varied directions. The area does not look great, but interesting and pleasant. At 2 o'clock the pilot came on board in a cutter. He told us, that yesterday evening a bark from Sydney had arrived, which had left Sydney three days after us, and brought the news, that the mail with dates up to 17th October had arrived on 9th December in Melbourne, and therefore the mail was expected here in Auckland at any moment now.

We had a hard task in coming through the narrow channel into the harbour of Auckland, tacking against the contrary wind. The shipping channel is only three quarters of a mile wide. However after

a laborious journey, which was really nothing other than a constant tacking, we safely reached our anchorage before the city at 5.30 in the evening. Five merchant ships were lying in port, and now beside them the frigate, surely the largest warship that has ever visited New Zealand. We had long been expected here, having been announced from Sydney, and that we were attracting attention was evident from the crowds of people, who were gathered on the shore and at the fort, the many boats, which came sailing along to see the frigate.

Auckland very much reminded us of Sydney. A Sydney on a small scale. In this way Commercial Bay corresponds to Sydney Cove, Mechanics Bay to the suburb of Woolloomooloo. In both bays there are wooden piers extending far out to sea [page 54] known as Wynyard Pier at Mechanics Bay. Between the two bays, similar to Sydney, there is a battery and above this the governor's house.

Our anchorage is half a mile from land. At 6.30 pm we saluted and the fort responded. The governor sent his private secretary on board, to greet the commodore, and at the same time presented dinner invitations for tomorrow evening. The commodore declared that this was the most courteous of all the governors. I also heard that the examination of the coal could only begin next Monday, that is after the festive public holiday season, and also that Walter Mantell⁸⁸ in Wellington, to whom the British Museum owes a complete skeleton of *Dinornis* = moa, has returned to England. I had a letter of introduction from Sir Charles Lyell⁸⁹ with me. This morning we already saw some indigenous people in their peculiar canoes in the harbour, and fishing in the adjoining channels.

The city of Auckland apparently has only 4500 inhabitants and the entire province 16,000.

[end of diary entries]

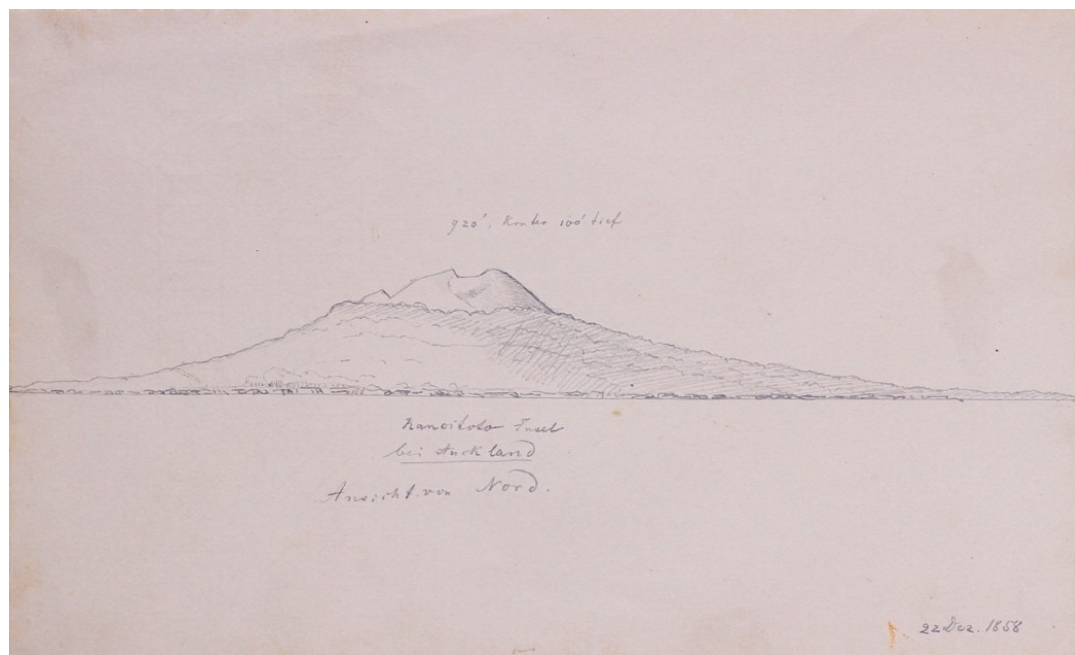


Fig. 7. Hochstetter's first New Zealand sketch portraying Rangitoto Island as seen from the 'Novara' on the day of arrival in Auckland, 22 December 1858 (Nolden and Nolden 2013; Hochstetter Collection Basel, HCB 3.2.24).

Front matter from preliminary pages of diary

XVI⁹⁰ Sydney

Personalities [with whom I became acquainted]

A W Scott, Member of Parliament, met at Royal Hotel⁹¹ on 6 November. Address: A W Scott Esq. MP Ash Island, Hunter River (New South Wales).

Mr Wall,⁹² Curator of Sydney Museum.

Dr G Bennett, owner of a pair of *Casuarium Bennetti*⁹³ – Mooruk⁹⁴ from New Britain,⁹⁵ destined for the Zoological Gardens in London, brought over from New Britain 5 days ago (6 November).

Compare with *London Illustrated News*, 24 July 1858.⁹⁶ Owner of one of the most magnificent private libraries.

George French Angas,⁹⁷ painter, author of the illustrated Kaffirs, Aborigines, New Zealanders etc. In large folio format by him: *The Kaffirs Illustrated: in a series of drawings taken among the Amazulu, Amaponda and Amakosa tribes* by George French Angas, London, 1849.⁹⁸ Secretary of the Australian Museum.

Mr Fitzpatrick,⁹⁹ secretary to The Honourable J Robertson, Minister of Lands and Public Works.

Sir Daniel Cooper, richest man in Australia.

Hill,¹⁰⁰ his brother-in-law,¹⁰¹ a distinguished person.

Dr Eichler (German doctor I met at the *Turnverein*), 89 Harrington Street,¹⁰² wants to give me letters for:

Dr Böhme,¹⁰³ resident at Stony Creek, near Bathurst.

Mr Thompson, Deputy Surveyor General.

Colonel Barney,¹⁰⁴ Surveyor General.

Mr Stuart Donaldson, Member of Parliament, former minister and merchant.

[page 2]

Germans in the German Club

Henry F A Wagner, merchant.

Carl Foell, the charming German companion of Wagner, also very respectable.

B Frerichs, owns a station in New South Wales and is considered the best informed German in the colony.

Ludwig Michaelis, a quarrelsome Jew, director of one of the leading German firms.

Boesen,¹⁰⁵ (is familiar with Bathurst area).

Schinsky,¹⁰⁶ a likeable man.

Blau,¹⁰⁷ Hungarian.

Beaber, German Bieber, Jew.

Frank¹⁰⁸

Kummerer, wool merchant.

Wolf

Dr Jonasson¹⁰⁹, a Jew.

H L Schrader, watchmaker, of excellent character.

W. Hetzer, 314 George Street, German photographer, stereoscopic album of Sydney, life-size portraits, the leading German in Sydney.

Degotardi,¹¹⁰ publisher of the Australian newspaper, printer.

Georg Linck, editor of the *Australische Deutsche Zeitung*,¹¹¹ from Frankfurt, teaching graduate, former tutor to the Kirchner family.

Julius Lippmann, engaged to proceed to Germany for the importation of railway labourers for Melbourne. His son the oldest Australian of European parentage in the colony. The great-great-grandson of a woman, daughter of a soldier, who came from England in 1795. The great-granddaughter of this woman is Mrs¹¹² Lippmann.

Rawack, 45 William Street, Woolloomooloo, a German married to a Viennese lady, née Mauthner (presented beautiful copper minerals to Scherzer¹¹³ for me, which later proved that there was nothing to them).

E Beckmann,¹¹⁴ watchmaker, respectable citizen, who presented me with ethnological objects.

G. Heath, anglicised German pharmacist.

Parrot brothers,¹¹⁵ German merchants of men's apparel.

Henry Hofmann from London, currently present in Sydney.

[page 3]

Notes, personalities

Dealers in minerals and curiosities:

Brown, Hutchinson Street.¹¹⁶

J S Palmer, principal dealer in natural history specimens.

Dr Berncastle, 20 Wynyard Square, was in India and China and has published a poor travel account about it.¹¹⁷ Someone who takes himself too seriously, very pushy presumptuous person, who wanted to host a dinner for the Novara, which understandably nobody attended.

Georg Mitchell, ship chandler, has a very fine conchological collection, and would like to exchange for live specimens.

Arthur Hodgson¹¹⁸ (Australian Agricultural Company Office).

Mr Macleay, wealthy private gentleman with an exceptionally fine natural history collection: plants, insects, crustaceans, arachnids, and a few minerals, considered a miserly famous naturalist.

Larnach, a mining project manager, friend of Rawack, both promise a great deal and keep very few of their promises.

Mr John Thompson, Deputy Surveyor General, 110 William Street, very respectable senior.

Surveyor General is Colonel Barney.

Mr Halloran,¹¹⁹ in the office of the above.

Thomas Holt,¹²⁰ wealthy man in Newtown, former minister, now Member of Parliament, speaks some German.

Newcastle

James Donaldson in Woodford near Hexham, Newcastle, New South Wales. I met him on the train to Newcastle; he is well acquainted with Mr Scott of Ash Island, and promised to send geological collections to me in Vienna sometime.

Rev. C P N Wilton M.A. Parsonage, Newcastle, owner of a very fine geological collection from New South Wales, but very poorly arranged, would like to publish something on the geology of New South Wales, but does not get around to doing so.

The brother of Mr Scott of Ash Island is the magistrate in Newcastle, a very obliging old gentleman, who also gave me some calcareous pseudomorph crystals.

[page 4]

James T. Donaldson, manager of the Newcastle Coal & Copper Company, New South Wales, accompanied me to the Victoria Adit.

Robert Whyte, manager of the Agricultural Company, Newcastle, accompanied me for a tour of the company's works.

Mr Keene, Government Examiner of Coal Fields and Mines, Newcastle, N.S.W.

James Elliott Blake, wine merchant in Newcastle.

Rev. W B Clarke, MA, FGS, FRGS, Corresponding Member of the New Zealand Society, FRS Tasmania, Fellow of St Pauls College Sydney, and Elective Trustee of the Australian Museum, first-rate man, famous as a geologist. St Leonards, North Shore, Sydney.

Mr Mordaunt W S Clarke,¹²¹ son of the reverend.

Strebinger¹²² (son of the Viennese *Kapellmeister* [conductor]),¹²³ is now apparently doing well in Melbourne, after struggling in Sydney. His wife dances in the theatre, while he is a musician and tobacconist.

[page 5]

Notes

Apparently the best colonial wine is Mr MacArthur's Wine, available from Mr Hutchinson, Bridge Street, Sydney (Colonial Sherry & Port).

A W Scott: "On *Cystosoma Saundersii*" in the zoological reports of London (with drawings by the ladies Scott).¹²⁴

Australian Library in Bent Street, main library in Sydney, large range of newspapers available.

In Mr Macleay's garden I saw the following trees:

Telopea speciosissima, a very beautiful red bush flower on a tree.

Hibiscus splendens

Araucaria brasiliensis

Acmenia liptica (a fern)¹²⁵

*Ficus ferruginea*¹²⁶ (a splendid large fig tree, truly Australian)

Adiantum hispidulum

*Grevillea arborea*¹²⁷

Castanospermum

Macrozamia, an Australian cycad, male and female plant.

Araucaria bidwillii

Chinese in Australia, there are approximately 500 Chinese in Sydney and 12,000-15,000 in the whole of New South Wales, while in the Colony of Victoria there are about 40,000 working as charcoal-burners, fishermen, carpenters and gold diggers, but only about six or seven Chinese women!! However many Chinese are apparently married to Irish women, and in the area of Moreton Bay there has apparently been a recent case of a German girl marrying a Chinese man. I saw several Chinese in Parramatta, namely Chinese from Canton wearing their national costume. In Sydney only Europeanised Chinese gentlemen.

Melbourne 77,000-100,000 inhabitants. Sydney 67,000-70,000. Melbourne is seen as the *non plus ultra* of Australia.

At Botany Bay lives the old king of Botany Bay, living off alms. Seeing an Aborigine in Sydney is a rare incidence.

Aborigines: It is a universally shared belief amongst the colonists of New South Wales that an Aborigine woman, after having a relationship with a European, and having a child with a European, becomes infertile, and will never conceive again with an Aborigine.

[page 6]

There are apparently quite a number of half-caste European Aborigines, and especially the females of the race are considerably improved by this. I was told that the Aborigines kill the male half-caste progeny and only let the females live. The best opportunity to see Aborigines in Sydney itself is offered on the Queen of England's birthday and at Christmas. They come to town at this time, where they receive gifts from the government.

Progeny of Europeans in Australia: The women apparently thrive better than the men. While the men already become flat-chested and weak in the third generation, the females are marked by beauty. Notable difference between the city and country population. The men in the country far stronger and more robust.

Missions: There were two German missionaries¹²⁸ at Moreton Bay a few years ago, who requested financial assistance from the British government. This was pledged to them, if the Governor could be convinced of the results and effectiveness during his visit.

In order to secure the success, Kirchner soon sent the missionaries food and drink, to use to lure the Aborigines to the church. At the governor's visit they even succeeded in luring about 100 Aborigines to the church, but the sermons of the two missionaries were too long and when one of the chiefs remarked: "too much talk – nothing to eat and drink", they all left the church. One of these two missionaries is now apparently in the Pacific, while the other is a swineherd.

German associations in Sydney

1853 founding of the first German club, whose members are young merchants, including many Jews, craftsmen etc., and many English people were introduced and accepted for membership by the merchants; finally a Germany of various classes, and more English than German. As a result there were tensions. The merchants acted the part of the aristocrats and people such as Degotardi the printer, the woodturner Hagen, and the watchmaker Beckmann felt disadvantaged and resigned, the English members left as they realised that it was nonsense for them to be members of a German club, and of 120 members [page 7] only about 40 remained, businessmen, and mainly Jews, as the German merchant class in Sydney consists mainly of Jews, or at least the Jews have the most say in the German club. Dr Jonasson and the merchant Michaelis, the two principal quarrellers. Schrader, watchmaker, and Wagner, merchant, besides the president Kirchner, are actually the only agreeable people. "German Club" – yes, but not *Deutscher* Club. It is all just an imitation of English customs, even the statutes are printed in English; in the reading room the Sydney newspapers, *Punch* and *Illustrated London News*, but not a single German newspaper!!!

Far more genuine German elements may be found in the *Turnverein*¹²⁹ founded in 1855, which is made up of mainly young craftsmen and keeps the *Leipziger Illustrierte*, *Augsburger Allgemeine* and the *Frankfurter Journal*.

But in 1857 divisions took place here too. Degotardi wanted to found a German association of New South Wales, which did in fact happen and counted amongst its members especially the established middle class, Degotardi, Hagen, Hofmann, Beckmann etc. But this association only lasted for six months, English people joined, the English element soon predominated. In 1858 an American was elected president, and the association, perhaps understandably, folded.

Apart from that, there are two German *Krankenvereine*,¹³⁰ the result of the division of one, and they are both not very viable.¹³¹

Dr Gygax,¹³² my brother Carl's¹³³ former travelling companion in the Azores, now lives in Mudgee, 100 miles from Sydney as an old bachelor, is regarded as a mineralogist and just gets by as a practicing medical doctor, after he formerly lived in quite good circumstances in Calcutta and in Colombo.

[page 8]

Australian minerals in Sydney Museum

Zircon

Ruby

Spinel

Sapphire

Chrysolite

Euchroite

Pseudomalachite

Chrysocolla

Topaz from the Turon Diggings¹³⁴ and also an island in the Bass Strait.¹³⁵

The desert in the interior of Australia likely the largest in the world, the only river, which carries all the water off the coastal ranges, is the Darling River which meets the sea at Adelaide.

Survey Office, the whole colony of New South Wales consists of 300 million acres, divided into 300 counties, of which 80 have been named and 3 surveyed in maps that I have received.

Two main predators

Thylacinus cynocephalus, marsupial dog, like a hyena.¹³⁶

Dasyurus macrourus, marsupial cat.¹³⁷

Phascolarctos fuscus, koala – native bear, like a sloth or bear.¹³⁸

Phascolomys wombat, closest to the pachyderms.¹³⁹



Fig.8. *Josef Selleny's portrayal of Ferdinand Hochstetter in his cabin on the 'Novara'. The frame was made in 1899 from timber salvaged from the 'Novara'. (Hochstetter Collection Basel).*

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Fig. 9. Plate to accompany: A W Scott, "On *Cystosoma Saundersii*", *Proceedings of the Zoological Society of London*, part XX, 1852, p. 14-16 (Scott 1852).

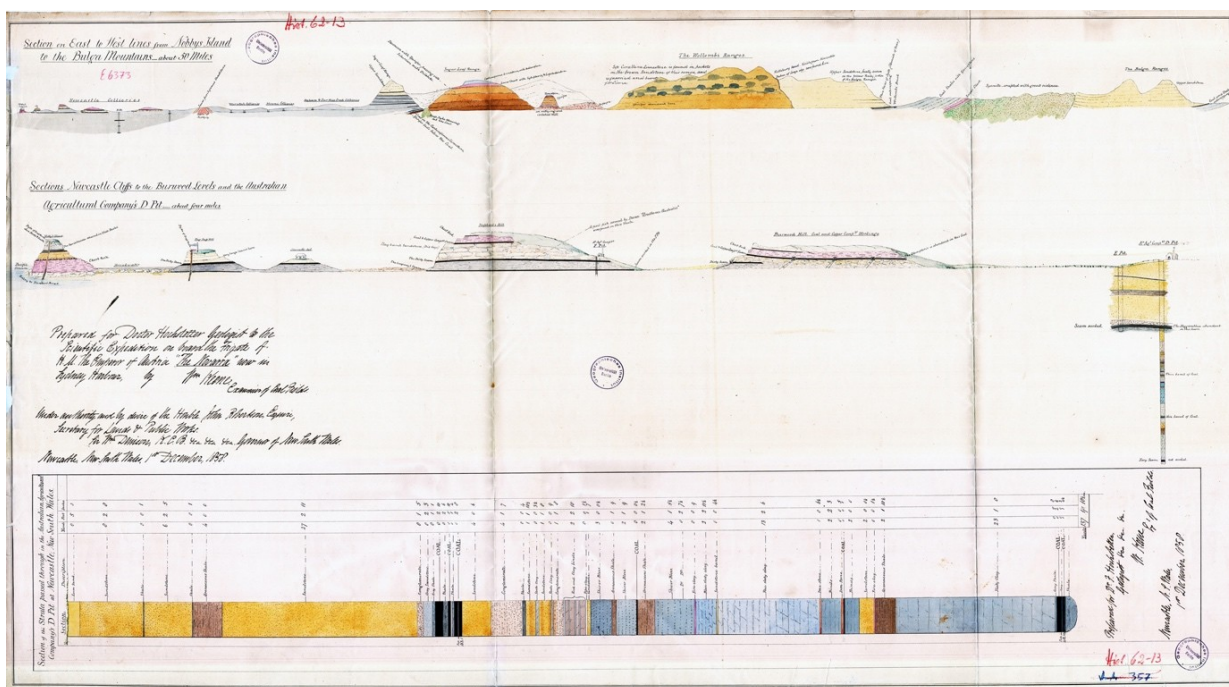
Endnotes

- ¹The authors would like to acknowledge the Austrian Academy of Sciences, especially Gerhard Holzer and Stefan Sienell, for making available the digitised copies of the diary, and extend their special thanks to Johannes Feichtinger for his support and encouragement. The Australian diary was one of a group of six *Novara* expedition diaries purchased by the Austrian Academy of Sciences in 2008. The digital surrogate copies were made available to Sascha Nolden in early 2009, when the initial draft of this manuscript was first prepared by the editors. The provenance of the diary has not been fully documented and there are some gaps in the chain of custody, however it may be assumed that it formed part of the estate of Ferdinand von Hochstetter held by the family, which after many generations and numerous relocations was last located in the Schönbrunnerstraße in Vienna. In the early 1990s part of this estate made its way onto the Viennese antiquarian bookdealer market. While some Hochstetter archival material was sold to institutions, including the Handschriftensammlung of the Austrian National Library, and private collectors by an unidentified vendor in circa 1992, other material was moved from one dealer to another several times before being acquired by Antiquariat Ronald Schleifer in Vienna, and finally on-sold to Hans Lugmair of Antiquariat Informatio in Vienna.
- ² Carl or Karl Julius Müller was appointed consul for Hannover, Saxony and Oldenburg in New South Wales.
- ³ Georg von Frauenfeld (1807-1873), a zoologist on the *Novara* expedition.
- ⁴ Johann Zelebor (1819-1869), zoologist and taxidermist on the *Novara* expedition.
- ⁵ Anton Jelinek (1820-1897), botanical gardener on the *Novara* expedition.
- ⁶ Ernst Ritter von Jacobi (1830-1917), officer on the *Novara* expedition who kept a regular diary which is held in the Austrian State Archives (Österreichisches Staatsarchiv, AT-OeStA/KA NL 1038 (B) Jacobi von, Familie).
- ⁷ Josef Selleny (1824-1875), was the official artist of the *Novara* expedition.
- ⁸ Eduard von Schwarz (1831-1862), was a medical officer, botanist and ethnologist on the *Novara* expedition.
- ⁹ Alexander Walker Scott (1800-1883), entomologist and Member of Parliament.
- ¹⁰ Dr George Bennett (1804-1893), physician and naturalist who was appointed the first curator of the Australian Museum in 1835 and was the first person to catalogue the museum's collections.
- ¹¹ Paul Wilhelm von Württemberg (1797-1860) was a German naturalist and explorer who travelled extensively in North America, North Africa and Australia.
- ¹² Nobbys Head Lighthouse
- ¹³ Signal Head
- ¹⁴ Nobbys Head
- ¹⁵ A little uncertainty in the transcription here, however it would appear that the original reads 'Cassia' which would be in reference to *Cassine australis*, a synonym for what is now known as *Elaeodendron australis*.
- ¹⁶ William Branwhite Clarke (1798-1878), pioneering geologist and Anglican clergyman in Sydney.

- ¹⁷ This may be a reference to Robert Brough Smyth (1830-1889), who was responsible for meteorological observations at the time, before being appointed secretary to the Department of Mines in Victoria in 1860.
- ¹⁸ Newspaper clippings mounted in margins of page 14.
- ¹⁹ Harriet Scott (1830-1907) and Helena Scott (1832-1910) were the daughters of Alexander Walker Scott of Ash Island. They collaborated closely with their father in preparing the publication *Australian Lepidoptera and their transformations, drawn from the life by Harriet and Helena Scott* (London: John van Voorst, 1864).
- ²⁰ Described in A W Scott, "On *Cystosoma Saundersii*", *Proceedings of the Zoological Society of London*, part XX, 1852, p. 14-16 (see Fig. 9).
- ²¹ Hochstetter's father Christian Hochstetter (1787-1860), was a German naturalist and theologian.
- ²² Based on the description of the nests this may be a reference to the fairy martin (*Petrochelidon ariel*).
- ²³ Helenus Scott (1802-1879), resided in Newcastle.
- ²⁴ William Keene (1798-1872), was the Examiner of Coal Fields in New South Wales.
- ²⁵ This sentence appears as a marginal note in the manuscript.
- ²⁶ James Thomson Donaldson (1832-1908), was born in Stirling, Scotland. Manager of the Newcastle Coal & Copper Company, he later went to Otago where he established Ravenswood Farm at Hampden. See obituary, *Otago Witness*, issue 2837, 29 July 1908, p. 29.
- ²⁷ Reverend Charles Pleydell Neale Wilton (1795-1859).
- ²⁸ Robert Whyte was Superintendent of Collieries of the Australian Agricultural Company at this time but was dismissed in 1860.
- ²⁹ The Australian Agricultural Company established in London in 1824, was primarily involved in coal mining operations.
- ³⁰ Wilhelm Haidinger (1795-1871), founding director of the Imperial Austrian Geological Survey in Vienna.
- ³¹ Sir William Thomas Denison (1804-1871), Governor of New South Wales 1855-1861.
- ³² *Sydney Magazine of Science and Art*, vols 1-2 (1857-9).
- ³³ This sentence appears as a marginal note in the source manuscript.
- ³⁴ Wilhelm Kirchner (1814-1893), was the Consul for Hamburg in Sydney.
- ³⁵ James Samuel Palmer was a taxidermist and dealer in natural history specimens in Sydney.
- ³⁶ William Sharp Macleay (1792-1865), naturalist and trustee of the Australian Museum.
- ³⁷ Hochstetter should have stated here New South Wales, rather than Australia, as there were other geologists in other colonies such as Victoria, but he was perhaps not aware of this at the time.
- ³⁸ Sir Roderick Impey Murchison (1792-1871), Scottish geologist and director-general of the British Geological Survey.
- ³⁹ Julius Lippmann (1820-1872).
- ⁴⁰ John Robertson (1816-1891) joined the Charles Cowper ministry as Secretary of Lands and Works in January 1858 and became Premier of New South Wales in March 1860.
- ⁴¹ Leopold Rawack (1820-1873), a Sydney merchant.

- ⁴² The original German term used here is ‘Bergbauunternehmer’ which does not necessarily imply Mr Samuel was a technical person or engineer, but could also be used for someone who was a mining entrepreneur or mine owner.
- ⁴³ Emil Bieber (ca 1834-1859), a merchant resident at the German Club in Sydney, who died on 11 February 1859.
- ⁴⁴ Australian grass trees belong to the genus *Xanthorrhoea*, comprising a group of species including *Xanthorrhoea australis*.
- ⁴⁵ Ludwig Leichhardt (1813-1848?), German explorer in Australia.
- ⁴⁶ John Thompson (1800-1861), deputy surveyor general of New South Wales.
- ⁴⁷ Anton Basso (d. 1860), member of the *Novara* expedition.
- ⁴⁸ Frances Murdoch Kirchner (1824-1884), née Stirling, known as Fanny, was the wife of Wilhelm Kirchner, and the daughter of Robert Stirling and his wife Harriet Scott.
- ⁴⁹ Sir Stuart Alexander Donaldson (1812-1867) was the first Premier of New South Wales.
- ⁵⁰ Charles La Trobe (1801-1875), served as Lieutenant-Governor of Victoria.
- ⁵¹ Amelia Donaldson (1832-1910), née Cowper, married Sir Stuart Alexander Donaldson on 4 March 1854.
- ⁵² This sentence is inserted as a marginal note in the source manuscript. Sir Daniel Cooper (1821-1902), was the first speaker of the Legislative Assembly of New South Wales 1856-1860.
- ⁵³ From what one is able to decipher in the manuscript, it would appear that Hochstetter was mistaken regarding the time of the event, as the *Dunbar* went down on 20 August 1857, so 15 months before the time of Hochstetter’s visit.
- ⁵⁴ The name of the sole survivor of the *Dunbar* was James Johnson.
- ⁵⁵ Amalia Rawack, née Mauthner (1832-1915), Viennese pianist in Sydney.
- ⁵⁶ William Beaumont was the proprietor of the Sir Joseph Banks Hotel and Pleasure Gardens.
- ⁵⁷ Newspaper clipping mounted in margin of this page.
- ⁵⁸ Burchard Frerichs (1813-1876), was a merchant from Bremen who was appointed Consul to the Free Hanseatic City of Bremen at Sydney in 1862. His residence in Balmain was known as Bremer Villa.
- ⁵⁹ Ludwig Michaelis (b. 1819?), from Detmold, Germany, arrived in Sydney in 1853 and was naturalised on 17 July 1858.
- ⁶⁰ Simon Zöllner (1821-1880), Prussian-born Australian iron and steel manufacturer in Sydney.
- ⁶¹ Wilhelm Hetzer (1822?-1891), photographer from Frankfurt am Main, who arrived in Sydney in 1850 and opened a photographic business.
- ⁶² Newspaper clipping mounted in margin of this page.
- ⁶³ Rudolf, Crown Prince of Austria (1858-1889), was born on 21 August, the only son of Emperor Franz Joseph I of Austria. Hochstetter was later appointed as one of the tutors to Crown Prince Rudolf.
- ⁶⁴ Captain Charles Neville Lovell (1825-1882) of the Royal Artillery in Sydney.
- ⁶⁵ Baron Joseph von Rath (b. 1831), Lieutenant in the Austrian navy on board the *Novara*.
- ⁶⁶ Prince of Wales Theatre in Sydney. The performance featured George Herbert Rogers (1820-1872) as Macbeth and Sara Elizabeth Flower (1820-1865) as Lady Macbeth.

- 67 Possibly a reference to Heinrich Ludwig Schrader (1832-1880), a musician, and described by Hochstetter as a watchmaker of excellent character.
- 68 Reverend William Scott (1825-1917), founding director of the Sydney Observatory.
- 69 A wet and dry bulb thermometer, which measures relative humidity.
- 70 There are entries dated 30 November 1858 in Hochstetter's autograph album by Edith Windeyer Thompson (1834-1917) and Gertrude Windeyer Thompson (1835-1902), also undated entries on the same page by the younger sisters, Nina Windeyer Thompson (1843-1868) and Bertha Windeyer Thompson (1846-1927).
- 71 Hochstetter's account of the visit to Sydney was published in the *Wiener Zeitung* in serialised form (Hochstetter 1859) and later posthumously republished in book form (Haardt 1885).
- 72 Edward Wise (1818-1865), solicitor and judge, resided at Enmore Lodge, Newtown.
- 73 Reverend George Edward Turner (1810-1869) botanist.
- 74 Newspaper clippings mounted in margins of this page.
- 75 Julius Berncastle (1819-1870), formerly Assistant Colonial Surgeon in Tasmania, practiced in Sydney from 1854 to 1867.
- 76 This is in reference to the *Akademie der Wissenschaften* in Vienna.
- 77 Keene provided Hochstetter with a copy of his sections dated 1 December 1858, now held in Humboldt University in Berlin:



- 78 Newspaper articles and clippings pasted on pages 31 to 42; page 43 blank; page 44 newspaper article "Feejee Islands".
- 79 This is given as 'Otea' in the manuscript, a phonetic rendering of the Aotea found in early maps.
- 80 This is given as Houturou in the manuscript.
- 81 Tillangchong is an uninhabited 16.84 km² island in the Central Group of the Nicobar Islands.

- ⁸² The highest point on Great Barrier Island is Mount Hobson or Hirakimata and is 621 metres above sea level.
- ⁸³ Arid or Rakitu Island.
- ⁸⁴ Graf Alexander von Kielmannsegge (1833-1914) went on to become an Austrian Admiral.
- ⁸⁵ The name Victoria Hill has been added as a marginal note in the original manuscript.
- ⁸⁶ This more precise measurement has been added as a note in the margin of the original manuscript.
- ⁸⁷ This sentence appears as a marginal note in the original manuscript.
- ⁸⁸ Walter Baldock Durrant Mantell (1820-1895), New Zealand scientist and politician who founded the New Zealand Institute and was an early collector of moa remains.
- ⁸⁹ Sir Charles Lyell (1797-1875) was one of the foremost British geologists of his day.
- ⁹⁰ This numeral indicates that Sydney was the 16th port of call during the *Novara* expedition.
- ⁹¹ In the diary of Robert Müller of the *Novara*, an engraved image of the facade of the “Wm Hudson. Royal Hotel George Street Sydney.” is inserted, which includes the following wording: “Cheap as any Hotel in Sydney. Good accommodation for Families”.
- ⁹² William Sheridan Wall (1815-1876), a collector and taxidermist with the Australian Museum, succeeded William Branwhite Clarke in 1843 as curator and held the post until 1859.
- ⁹³ *Casuarius bennetti*, Dwarf Cassowary or Bennett’s Cassowary, found in New Britain, is one of three extant species of cassowary.
- ⁹⁴ See George Bennett, “Notes on the Mooruk (*Casuarius bennettii*)”, *Proceedings of the Zoological Society of London*, part 27, 1859, p. 32.
- ⁹⁵ New Britain is the largest island in the Bismarck Archipelago of Papua New Guinea.
- ⁹⁶ Engraving based on drawing by Harrison William Weir (1824-1906), captioned: “The Mooruk, in the Gardens of the Zoological Society, Regents Park”, *The Illustrated London News*, vol. 33, no. 928, 24 July 1858.
- ⁹⁷ George French Angas (1822-1886), explorer, naturalist, painter, who was appointed secretary and accountant of the Australian Museum in 1853, and later director.
- ⁹⁸ George French Angas, *South Australia Illustrated*, London, Thomas M’Lean, 1847; *The New Zealanders Illustrated*, London, Thomas M’Lean, 1847; *The Kafirs illustrated in a series of drawings taken among the Amazulu, Amaponda and Amakosa tribes*, London, J. Hogarth, 1849.
- ⁹⁹ Michael Fitzpatrick (1816-1881) was the Under Secretary for Lands and Public Works in New South Wales.
- ¹⁰⁰ William Hill was Sir Daniel Cooper’s father-in-law, since the marriage of his daughter Elizabeth Hill in 1846. The reference may be to Elizabeth’s brother Edward Smith Hill (1819-1880), who was formally acknowledged for his support of the *Novara* expedition. Edward Hill was subsequently Cooper’s brother-in-law and had an interest in geology and authored papers on flora and fauna. The other brother was George Hill (1802-1883) who was the mayor of Sydney in the 1850s. Hochstetter was likely confused here.
- ¹⁰¹ Hochstetter wrote ‘son-in-law’ in the manuscript diary, when he presumably meant ‘brother-in-law’.
- ¹⁰² Dr Carl or Charles Ferdinand Eichler (1821-1902), medical practitioner in Sydney.

- ¹⁰³ Dr Böhme was described as a German political refugee working in the goldfields and residing in a tent at the mouth of German Gully in 1857. See "The Western Gold Fields", 'Empire', 23 May 1857, page 4.
- ¹⁰⁴ Lieutenant-Colonel George Barney (1792-1862), was appointed to the position of Surveyor-General on 11 October 1855, succeeding Sir Thomas Mitchell.
- ¹⁰⁵ Theodor August Boesen (1827-1904), later appointed Danish Consul General to Australia.
- ¹⁰⁶ Henry Schilsky (ca 1829-1917), a Prussian-born merchant who arrived in Sydney in 1852 and was naturalised on 11 November 1858.
- ¹⁰⁷ Adolphus Blau (ca 1825-?), Hungarian jeweller, arrived in Sydney on the *Prince of Wales* in February 1850 and naturalised on 26 December 1850.
- ¹⁰⁸ Siegfried Franck (1823-1884), merchant from Brandenburg and Consul for Hamburg in Sydney.
- ¹⁰⁹ Hermann Jonasson (1823-1895) was born in Hamburg and died in Melbourne.
- ¹¹⁰ Johann Nepomuk Degotardi (1823-1882), printer, publisher, photographer. Degotardi was the proprietor and publisher of the *Australische Deutsche Zeitung*.
- ¹¹¹ "Australian German Newspaper", published by Degotardi in Sydney from 1856 to 1860.
- ¹¹² Hochstetter has mistakenly written 'Mr' in the original manuscript.
- ¹¹³ Karl von Scherzer (1821-1903), Austrian ethnologist and historiographer on the *Novara* expedition.
- ¹¹⁴ Edwin Beckmann (1816-1880), born in Itzehoe, Germany, arrived in Sydney on the *John Melhuish* in 1852 and was naturalised 9 October 1858.
- ¹¹⁵ The brothers Johann August Parrot (1823-1908) and Johann Christoph Parrot (1822-1884) were born in Frankfurt am Main. John Augustus Parrot arrived in Sydney on the *Waterloo* in 1857, and was naturalised on 5 October 1865. John Christopher Parrot arrived in Sydney on the *Harmony* in 1849, and was naturalised on 11 October 1852.
- ¹¹⁶ Hochstetter uses a phonetic rendition of this street name when he writes 'Hudgenson Street' in the original.
- ¹¹⁷ Dr Julius Berncastle, *A Voyage to China; including a visit to the Bombay Presidency; the Mahratta Country; the Cave Temples of Western India, Singapore, the Straits of Malacca and Sunda, and the Cape of Good Hope*, 2 volumes, London: William Shoberl, 1850.
- ¹¹⁸ Sir Arthur Hodgson (1818-1902). Spelling rendered as 'Wudson' in the original.
- ¹¹⁹ Henry Halloran (1811-1893) was chief clerk in the Survey Department in Sydney at the time of Hochstetter's visit. Halloran went on to serve as under-secretary in the Colonial Secretary's Department and was appointed a justice of the peace.
- ¹²⁰ Thomas Holt (1811-1888) was an Australian pastoralist, company director and politician. He was the first Colonial Treasurer and a member of the New South Wales Legislative Assembly between 1856 and 1857.
- ¹²¹ Mordaunt William Shipley Clarke (1833-1918), was the first child of the Reverend William Branwhite Clarke (1798-1878) and his wife Maria Moreton Clarke, née Stather (1811-1888), whom he had married in London on 3 January 1832.
- ¹²² Friedrich or Frederick or Frederic Strebinger (1830-1911) was a Viennese violinist and music teacher in Melbourne and later New York.

- ¹²³ Josef Strebing (1819-1885) was *K.k Hofoperkapellmeister*, Royal and Imperial conductor of the court opera, in Vienna.
- ¹²⁴ A W Scott, “On *Cystosoma Saundersii*”, *Proceedings of the Zoological Society of London*, part XX, 1852, pp. 14-16. [includes Plate 21 on page 14] The paper was originally read at a meeting of the London Zoological Society on 10 February 1852. It is dated: “Ash Island, Hunter River, New South Wales, Nov. 6. 1851.”
- ¹²⁵ This supposed fern species has not been identified. It would seem possible that Hochstetter was making reference to *Acmena* however the note about this being a fern in round brackets of the original would contradict this.
- ¹²⁶ Synonym for *F. rubiginosa*.
- ¹²⁷ Hochstetter may be simply referring to a *Grevillea* tree here rather than to a specific species, as there is no binomial ‘*Grevillea arborea*’.
- ¹²⁸ This is in reference to the Gossner Mission.
- ¹²⁹ German association of gymnasts.
- ¹³⁰ German health clubs.
- ¹³¹ Newspaper clipping mounted in margin of this page.
- ¹³² Dr Johann or John Rudolph Gyax (ca 1809-1859), was born in Bern, Switzerland, arrived in Sydney on the *Surinam* in 1852, and was naturalised on 19 August 1856. He was appointed to organise the mineralogical collection of the Australian Museum in 1859 shortly before his death. Hochstetter uses the spelling ‘Gigax’ in the manuscript.
- ¹³³ Hochstetter is referring to his oldest brother Carl Christian Friedrich Hochstetter (1818-1880), who visited the Azores on a botanical collecting trip under the auspices of his father’s *Unio Itineraria* in 1838.
- ¹³⁴ Turon Diggings, also known as Turon Gold Diggings, was at the Turon River, near Sofala, north of Bathurst.
- ¹³⁵ From Killiekrankie on Flinders Island. They are Killiecrankie Diamonds.
- ¹³⁶ Tasmanian tiger.
- ¹³⁷ *Dasyurus maculatus* tiger quoll.
- ¹³⁸ *Phascolarctos cinereus*, Koala.
- ¹³⁹ *Vombatus ursinus*, Wombat.