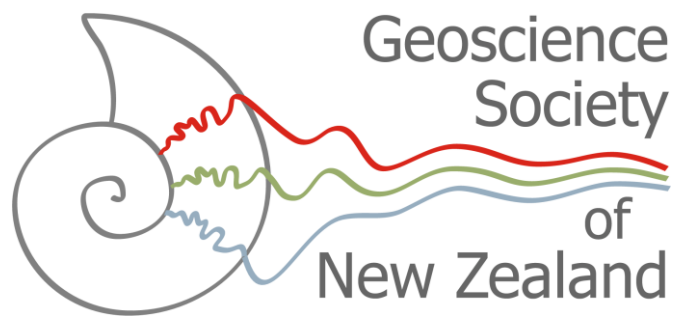


The Letters of Ferdinand von Hochstetter to Julius von Haast

Sascha Nolden



Geoscience Society of New Zealand Miscellaneous Publication 133K

December 2013

To
Professor James Bade

Published by the Geoscience Society of New Zealand Inc, 2013

Information on the Society and its publications is given at www.gsnz.org.nz

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Geoscience Society of New Zealand Miscellaneous Publication 133K

ISBN 978-1-877480-37-9
ISSN 2230-4495 (Online)
ISSN 2230-4487 (Print)

Acknowledgement is made to the Alexander Turnbull Library for permission to publish the material from the photographic and manuscript collections

This document is available as a PDF file that can be downloaded from the Geoscience Society website at: <http://www.gsnz.org.nz/information/misc-series-i-49.html>

Bibliographic Reference

Nolden, S. 2013: The Letters of Ferdinand von Hochstetter to Julius von Haast, 1859-1887. *Geoscience Society of New Zealand Miscellaneous Publication 133K*, 233 pages.

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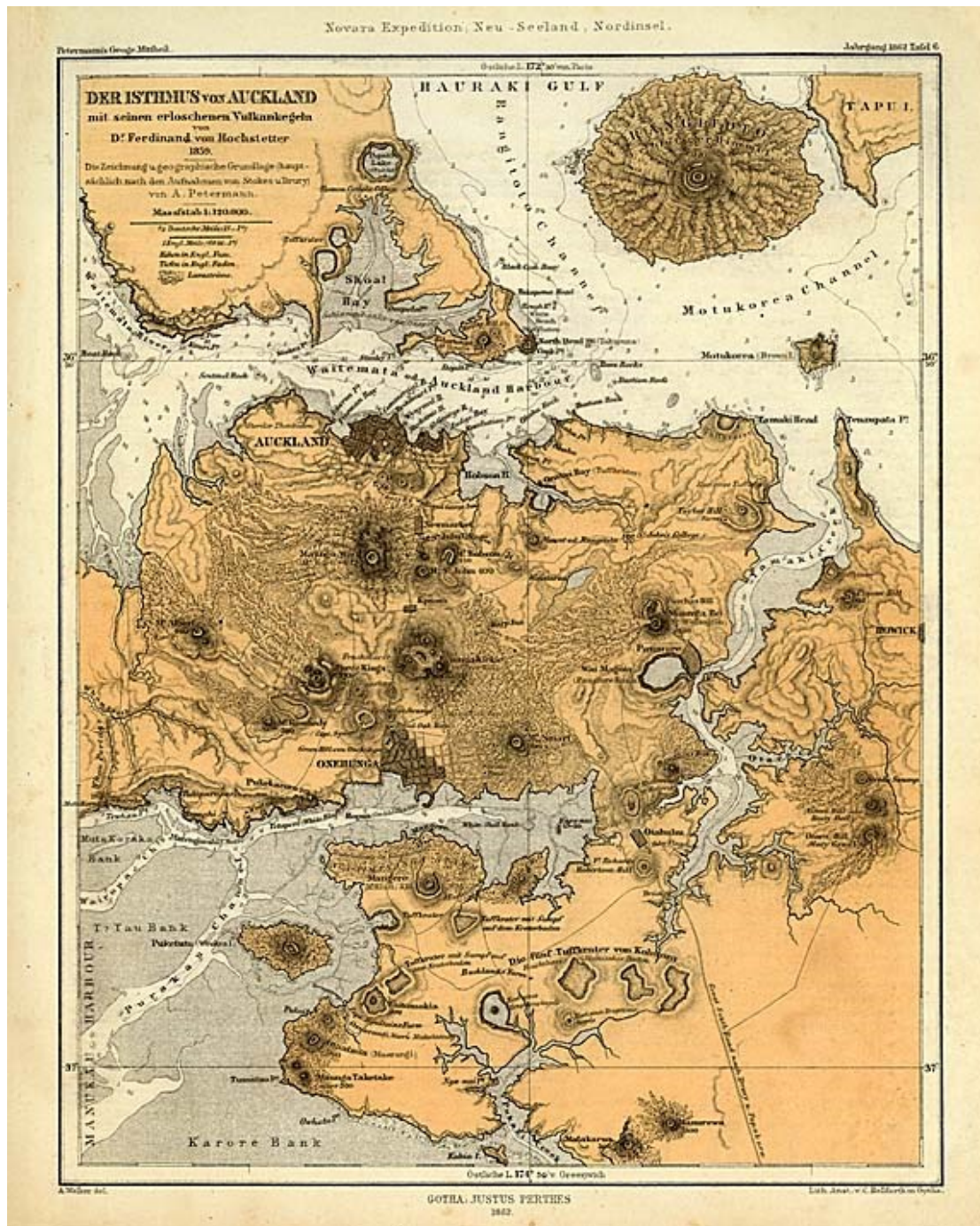


1. Ferdinand Hochstetter sketching on the roof of a hut, by Julius Haast, 1859.
(MS-0921-059, Alexander Turnbull Library).

ABSTRACT

This publication presents 133 letters written to Julius von Haast (1822-1887) by Ferdinand von Hochstetter (1829-1884) and his wife Georgiana, in the years 1859 to 1887 as annotated English translations of the original German manuscript letters held in the collections of the Alexander Turnbull Library, Wellington. As examples of communications between scientists in New Zealand and German-speaking Europe in the nineteenth century, they provide a detailed first-hand account of the historical development of science in New Zealand and the growing awareness of New Zealand in Imperial Austria. New Zealand, having offered a great opportunity for the geologist to contribute to its exploration, and having thoroughly benefitted from the able work of Hochstetter, was later introduced to the German-speaking world through the monumental work *Neu-Seeland*, published in 1863. Through the letters one can follow the development of Hochstetter's work relating to New Zealand, his constant interest in all developments in the colony and the continued efforts of a man devoted to science. On another level these letters also provide an insight into the close personal relationship between two leading scientists working at opposite ends of the globe with many biographical parallels. Both Haast and Hochstetter moved from being surveying field geologists to working as museum founders and directors and engaging in intense programmes of exchanges of specimens and letters with other scientists around the world. By taking a closer look at Hochstetter's letters it is possible to gain an insight into the destiny and fortunes of someone who was actively interested or involved in almost all areas of scientific endeavour, and always preserved a special fondness for New Zealand.

Ferdinand von Hochstetter is one of the foremost scientists of the nineteenth century to have visited New Zealand, where he completed important pioneering field work, leading to the publication of some of the first geological maps of parts of New Zealand, monumental German and English illustrated monographs on New Zealand, and an important geological work based on his research as part of the circumnavigation of the globe on the *Novara*, 1857-1859. After spending the years of his childhood and study in Germany, a relocation to Vienna provided him with the opportunity to work for the Geological Survey of Austria, before he became a member of the *Novara* expedition. His subsequent appointment as Professor at the Technical University of Vienna marked the beginning of an academic teaching career that later culminated in the special role of tutor in natural sciences to the Crown Prince of Austria. His interests continued to expand and later included prehistoric anthropology and ethnological research, while his influence as president of the Geographical Society of Vienna, and his appointment as director of the new Natural History Museum in Vienna allowed for the forging of a solid legacy in the tradition of the great universal scholars.



2. Hochstetter, "Der Isthmus von Auckland mit seinen erloschenen Vulkankegeln", 1862.
Plate 6: *Petermann's Geographische Mittheilungen*, vol. 8 no. 3, 1862.

PREFACE

This publication presents an annotated edition of translations of 133 letters written to Julius von Haast by Ferdinand von Hochstetter (and a few from his wife Georgiana) between 1859-1887. It is based on a revised and condensed version of my PhD thesis¹ originally completed with the support of a Bright Future Top Achiever Doctoral Scholarship under the supervision of Professor James Bade at the University of Auckland.

During the early years when I researched the Germanic connections with New Zealand under the expert guidance of Professor James Bade, Head of the School of European Languages and Literature and Director of the Research Centre for Germanic Connections with New Zealand and the Pacific at the University of Auckland, I already developed some degree of intimacy with Haast and Hochstetter in writing my MA thesis on German and Austrian naturalist-scientists,² so it was a natural progression for me to follow this broader research with a more detailed analysis of one specific relationship very representative of the links between German-speaking Europe and New Zealand in the nineteenth century. Thus it was that having become aware of German manuscript material in New Zealand archives that had largely been left untouched by scholars looking at the history of New Zealand science, due to a certain language barrier and the inherent difficulties of working with German archival sources in the old handwriting, I found myself destined to be the person to complete this task.

After transcribing and translating the 133 letters written by Hochstetter and his wife Georgiana to Julius von Haast, which spanned the period from Hochstetter's visit to Nelson, New Zealand, in 1859 to his death in 1884, and continued by Hochstetter's widow to the year of Haast's death in 1887, I was left with no doubt that this was a very important source of information on both the scientific careers and personal biographies of Hochstetter and Haast, which would provide material of an almost unlimited scope for further research. The compiling of detailed annotations on the context of the issues raised in the letters and notes on the topics discussed, expanded and diversified the project. I was only hindered by the unfortunate lack of extant letters from Haast to Hochstetter. But nonetheless, in most cases the thread of the narrative can be followed uninterruptedly, as one has the advantage of being able to make comparisons in hindsight, while Haast as the recipient always had to count on his letters arriving several months after dispatch and then would have to wait another few months before the arrival of a reply. The letters are very vivid in their narrative form, with only the occasional sojourn into a more cryptic scientist's 'shorthand' with inferred subject matter not always spelt out. But most importantly they proved to be not only scientific communications, but also one half of a personal correspondence, giving a new insight into the lives of two great personalities and their relationship.

I was fortunate in already having had the opportunity to present three papers and a lecture stemming from this project, while I was working on my PhD, which enabled me to share some of the research that I had completed. The first of these papers was on the genesis and history of Hochstetter's *Neu-Seeland* and *New Zealand*, in which I drew on Hochstetter's manuscript letters in order to follow the preparatory and production processes of his two monumental monographs on New Zealand.³ The second paper dealt with Hochstetter and his visit to Nelson in 1859 and the impact this had on the pioneering community and mining projects in the area, as well as the

¹ Sascha Nolden, *The Letters of Ferdinand von Hochstetter to Julius von Haast: An annotated scholarly edition*, PhD thesis, University of Auckland, 2007.

² Sascha Nolden, *German and Austrian Naturalists and the Avifauna of New Zealand: The Lives and Ornithological Work of Johann Reinhold Forster, Georg Forster, Ernst Dieffenbach, Julius von Haast, Ferdinand von Hochstetter, Andreas Reischek and Otto Finsch*, MA thesis, University of Auckland, 2002.

³ Sascha Nolden, "Aspects of the Genesis and History of Ferdinand von Hochstetter's *Neu-Seeland* (1863) and *New Zealand* (1867)", paper presented at the *SELL Postgraduate Symposium: European Perspectives*, University of Auckland, 8 October 2004.

way the Nelson pioneers welcomed the young German scientist from Austria.⁴ The third paper was on Hochstetter's New Zealand maps and his correspondence with the German geographer and cartographer August Heinrich Petermann of the Justus Perthes Verlag in Gotha.⁵ I also gave a lecture in German on Hochstetter in New Zealand at the kind invitation of the Geological Survey of Austria in Vienna, and jointly hosted by the Geological Survey of Austria, the Austrian Geological Society and the Austrian Society for the History of Science.⁶ On this occasion I was given the opportunity to share in depth the results of my research into the biography and correspondence of Hochstetter.

Since completing my doctoral studies I have continued to disseminate the results of my ongoing research into Hochstetter through various avenues of communication, including exhibitions, papers and publications.

To mark the sesquicentennial of Hochstetter's arrival in New Zealand in 2008, I was given the opportunity to act as guest curator for a special exhibition hosted by Auckland Central Library, featuring archives and manuscript material from the Sir George Grey Special Collections and items loaned from Viennese institutional and private collections.⁷ This project also involved a programme of public lectures,⁸ a catalogue⁹ and a virtual exhibition.¹⁰ The Geological Society of New Zealand also invited me to present a paper at their annual conference in Wellington.¹¹ To commemorate Hochstetter's survey in the Nelson region a completely reconceived exhibition with an appropriate regional shift in focus was hosted by Nelson Provincial Museum in 2009.¹²

The most rewarding task to date has been working with Dr Mike Johnston of Nelson on an illustrated monograph on the travels Hochstetter and Haast in New Zealand, published by Nikau Press in 2011.¹³ I was also a co-author in preparing the translation of a manuscript diary of Hochstetter's visit to Nelson for an annotated scholarly edition published in 2012.¹⁴

Articles published in the German language include one looking at the New Zealand visit of Hochstetter and the *Novara* expedition, published in the journal of Viennese Anthropological

⁴ Sascha Nolden, "Ferdinand von Hochstetter's visit to Nelson in 1859", paper presented at the *SELL Postgraduate Symposium: (re)Vision and (re)Place(ments)*, University of Auckland, 21 October 2005.

⁵ Sascha Nolden, "Ferdinand von Hochstetter's New Zealand Maps", paper presented at the *School of European Languages and Literatures Graduate Conference 2006: Florilegium: A Collection of SELL Graduate Student Research*, University of Auckland, 20 October 2006.

⁶ Sascha Nolden, "Ferdinand Hochstetter in Neuseeland (1858-1859): Neues aus seiner Biographie und wissenschaftshistorische Entdeckungen", lecture presented at the Geologische Bundesanstalt (Austrian Geological Survey) in Vienna, 13 December 2005.

⁷ *Ferdinand von Hochstetter: Father of New Zealand Geology (An exhibition commemorating the sesquicentennial of the visit of Ferdinand von Hochstetter and the Austrian Novara Exhibition 1858-2008)*, Auckland Central Library, Special Collections Exhibition Gallery, 1 September – 23 November 2008.

⁸ The series of lectures included: Sascha Nolden, "Ferdinand von Hochstetter and the Novara Expedition in Auckland," Public lecture series in conjunction with Ferdinand von Hochstetter exhibition, Central City Library, 17 September 2008.

⁹ Sascha Nolden, *Ferdinand von Hochstetter: Father of New Zealand Geology* (Exhibition Catalogue), Auckland, Auckland City Libraries, 2008.

¹⁰ The virtual exhibition features a selection of 98 items from the original exhibition: <http://www.aucklandcity.govt.nz/dbtw-wpd/virt-exhib/hochstetter/index.html>

¹¹ Sascha Nolden, "Ferdinand von Hochstetter – Father of New Zealand Geology – Commemorating the sesquicentennial of his visit," *Geosciences '08*, Geological Society of New Zealand annual conference, Wellington, 26 November 2008.

¹² *Ferdinand von Hochstetter: Father of New Zealand Geology: 150th Anniversary of his survey of the Nelson Region*, The Nelson Provincial Museum, 9 May – 18 September 2009.

¹³ Mike Johnston & Sascha Nolden, *Travels of Hochstetter and Haast in New Zealand 1858-1860*, Nelson, Nikau Press, 2011.

¹⁴ Mike Johnston, Sascha Nolden & Leonore Hoke, *Hochstetter's Nelson Diary: 6 September – 2 October 1859 and Dun Mountain Report*, Geoscience Society of New Zealand, 2012.

Society in 2007;¹⁵ and another giving an overview of the life and work of Hochstetter, published in a volume of articles devoted to Austrians in the Pacific.¹⁶

Since 2010 I have been working on the documentation of a private collection of important material from the estate of Hochstetter held in Basel, resulting in an ongoing cataloguing project, while two papers resulting from this research have been presented at symposia at the University of Auckland.¹⁷ More specifically in relation to the present volume, a public lecture was hosted by the Friends of the Turnbull Library, in which I was able to present a range of findings from my research into the relationship of Hochstetter and Haast based on their correspondence.¹⁸

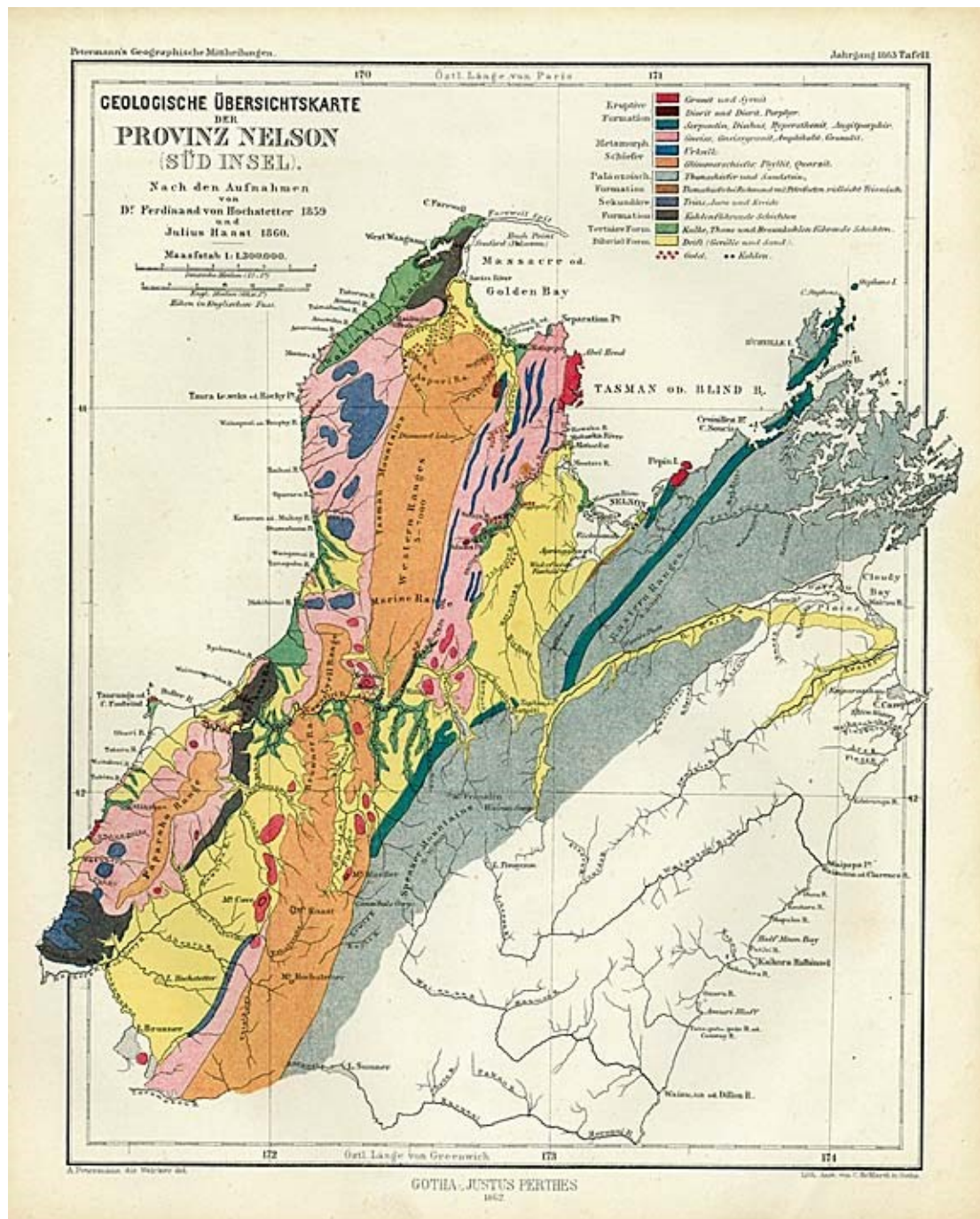
The present publication aims to commemorate the 150th anniversary of the publication of *Neuseeland*, Hochstetter's monumental illustrated German language monograph on New Zealand published by the renowned publishing house J. G. Cotta of Stuttgart in 1863.

¹⁵ Sascha Nolden, "Ferdinand Hochstetter (1829-1884) und die Novara Expedition in Neuseeland", *Mitteilungen der Anthropologischen Gesellschaft in Wien*, vol. 136/137, 2006-2007, p. 15-30.

¹⁶ Sascha Nolden, "Ferdinand Hochstetter: Allein bei den Antipoden!", in: Hermann Mückler, ed., *Österreicher in der Südsee: Forscher, Reisende, Auswanderer*, Wien, Lit Verlag, 2012, pp. 127-147.

¹⁷ Sascha Nolden, "Illustrating New Zealand: Image Sources and Engravings of Ferdinand von Hochstetter's Publications on New Zealand," *Austria in the Pacific*, symposium, University of Auckland, 20 June 2011; and Sascha Nolden, "The Basel Hochstetter Collection: Cataloguing a Viennese explorer's accumulation of archival documentary evidence of 19th Century New Zealand," *Austrian Visitors to Oceania: Their Activities and Legacies*, symposium, University of Auckland, 12 July 2013.

¹⁸ Sascha Nolden, *Viennese Connections: Julius von Haast & Ferdinand von Hochstetter*, public lecture, The Friends of the Turnbull Library, Wellington, 17 October 2012.



3. Hochstetter and Haast, "Geologische Übersichtskarte der Provinz Nelson (Süd Insel)", 1862.
 (Plate 1: *Petermann's Geographische Mittheilungen*, vol. 9 no. 1, 1863).

ACKNOWLEDGEMENTS

The task of preparing the present edition and piecing together the numerous sources of information for the annotations has been a most interesting one, made all the more memorable through the many fine people, particularly in Austria, Australia, Germany, New Zealand and Switzerland, who assisted me in my research for this project and to whom I am indebted for its completion in the present form.

First and foremost my thanks go to Simon Nathan of Wellington for his support and encouragement in bringing this publication to fruition. I also wish to express my sincere thanks to the Geoscience Society of New Zealand for agreeing to publish my manuscript and for their ongoing support.

As this annotated edition of letters consists of a revised version of my PhD thesis presented at the University of Auckland in 2007, I would like to take this opportunity to once again acknowledge and thank the many individuals and institutions who have supported this project, both then and now, including the Foundation for Research Science and Technology / Tertiary Education Commission for the Bright Future Top Achiever Doctoral Scholarship; Professor James Bade, my supervisor at the University of Auckland; and also Associate Professor Ruth Barton and Associate Professor Friedrich Voit.

At the University of Vienna I would like to most sincerely thank Professor Mag. Dr Hermann Mückler, Department of Social Anthropology; Professor Dr Ingrid Schütz-Müller, Department of Political Science; and Dr Johannes Seidl, archivist. At the Technische Universität Wien my thanks go to Dr Juliane Mikoletzky, archivist; and Professor Dr Andreas Rohatsch, Institut für Ingenieurgeologie.

At the Geologische Bundesanstalt in Wien I would like to most sincerely thank the now retired Direktor HR Professor Dr Hans Peter Schönlaub; OR Dr Albert Schedl, Department of Mineral Resources; Bibliotheksdirektor HR Dr Tilfried Cernajsek, former Director of Library and Archives; and his successor Mag. Thomas Hofmann. Furthermore I would like to thank the Österreichische Gesellschaft für Wissenschaftsgeschichte – Arbeitsgruppe Geschichte der Geowissenschaften; the Verband der Wissenschaftlichen Gesellschaften Österreichs; and the Österreichische Geologische Gesellschaft – Arbeitsgruppe Geschichte der Erdwissenschaften for their invitation to present a lecture on Hochstetter and their generous support on this occasion.

At the Naturhistorisches Museum Wien I would like to thank HR Dr Ernst Bauernfeind, formerly Leiter der Vogelsammlung; Hans-Martin Berg, librarian; HR Dr Heinz Kollmann, Geologisch-Paläontologische Abteilung; Oberrätin Dr Angelika Heinrich, Leitung Sammlung Frühmittelalter und Kaukasus – Fundaktenarchiv; the late HR Dr Oliver E. Paget, former Director; Professor Dr Maria Teschler-Nicola, Department of Archaeological Biology and Anthropology; Professor Mag. Christa Riedl-Dorn and Robert Pils, Department of Archives and History of Science.

Other Viennese institutions and their respective members of staff that I wish to thank include the Österreichische Akademie der Wissenschaften: Mag. Gerhard Holzer, librarian and archivist; and Mag. Dr. Stefan Sienell, Director of Library and Archives. At the Österreichische Nationalbibliothek: HR Professor Dr Ernst Gamillscheg, Director of Handschriften-, Autographen- und Nachlass-Sammlung; Rene Rainer, Handschriftensammlung. At the Haus- Hof und Staatsarchiv: Dr Elisabeth Springer, Hausarchiv. At the former Museum für Völkerkunde in Vienna: Dr Margit Krpata, archivist; and Heinz Gratzer, librarian.

In Vienna I am also indebted for their help to Gerhard and Karin Strassgschwandtner; Professor Diplomdolmetsch Dr Hanns Hermann Bühler; Mag. Dr Georg Schifko; and Hugo Wetscherek and Mag. Christopher Frey at Antiquariat Inlibris.

In Austria I also wish to thank the Oberösterreichisches Landesmuseum, Biologiezentrum in Linz: Director HR Dr Gerhard Aubrecht; Jürgen Plass, Wirbeltiersammlung; Heidi and Adi Pingitzer in Eferding; Mag. Maria Watzer-Susani in Hainfeld; and Mag. Thomas Csanady, Universitätsbibliothek Nachlass-Sammlung, Graz.

In Germany I would like to thank Irmela Bauer-Klödern and Archiv Direktor Dr. Michael Wischnath, Universitätsarchiv, Eberhard Karls Universität Tübingen; Dr Marcus Sporn, archivist, Universitätsarchiv der Julius-Maximilians-Universität Würzburg; Dr. Evelyn Ernst, Forschungsbibliothek Gotha; Gabriele Stefanski and Birgit Bucher, Staatsbibliothek zu Berlin; Dr Gregor Wolff, Ibero-Amerikanisches Institut, Berlin; and Gisela Biel, Cotta-Archiv, Deutsches Literaturarchiv, Marbach am Neckar.

My most heartfelt gratitude is expressed to Dr Oscar Baldomero in Basel; Inge von Hochstetter in Basel; Dr Christiane Thetter in Munich; Dr Arthur von Hochstetter in Zurich; and the late Dr Andrea von Pein of Düsseldorf. I wish to also acknowledge Peter Daerden, Stanley Archive, Africa Museum, Belgium; and Professor Dr Marcel Guentert, Director of the Natural History Museum in Bern, Switzerland. In the United States my thanks go to James A. Steed, Associate Archivist, Smithsonian Institution Archives.

In Australia my gratitude goes to Michael Organ, archivist, University of Wollongong; and Dr Thomas A. Darragh, Museum of Victoria, Melbourne, for having been particularly supportive of my efforts.

New Zealand institutions and individuals I wish to especially thank include Dr Mike Johnston of Nelson; Dr Leonore Hoke of Wellington; Dr Hugh Grenfell; and Alan Mason. At Te Papa National Museum of New Zealand: Jennifer Twist, archivist; Alexander Turnbull Library: Jocelyn Chalmers, archivist; Auckland Central Library – Sir George Grey Special Collections: Dr Keith Giles, Kate de Courcy and Georgia Prince; Nelson Provincial Museum: Peter Millwood, Chief Executive; and former archivist Anna Wilkinson; and at the University of Auckland Library: Natalie Mahony, Jillian Irwin and Christine Jackson.

Finally I would like to thank my brother Sandy B Nolden of Wellington for technical and research assistance, while my most heartfelt thanks and sincere gratitude go to my dear wife Carol Ann and our beautiful children Johannes, Emanuel, Christian, Susanne and Maximilian, who have very patiently supported my efforts over many years.

EDITORIAL CONVENTIONS

The manuscript letters of Ferdinand and Georgiana von Hochstetter to Julius von Haast are all held in the Haast family papers collection in the Alexander Turnbull Library, Wellington, and are published by kind permission.¹⁹ The 133 letters are spread over 12 folders, MS 37 folders 180 to 191, with the exception of number 1 in this edition, which is in folder 238 of the collection. In some instances pages belonging to one letter are to be found in two separate folders as they are not entirely chronologically sorted, which has sometimes led scholars to assume that some of the letters were fragments.²⁰ After careful comparison of content and paper types I have come to the conclusion that all the letters are complete and that there are no fragments of letters in the extant collection. I have given only one folder number for each letter to avoid confusion and this is where the first part of a letter is to be located. Thus letter number 1 is in folder 238; 2 to 19 in folder 180; 20 to 27 and 29 to 30 in folder 181; 31 to 39 in folder 182; 40 to 53 in folder 183; 54 to 69 in folder 184; 70 to 79 in folder 185; 80 to 87 in folder 186; 88 to 102 in folder 187; 103 to 109 and 111 to 113 in folder 188; 114 to 125 in folder 189; 110, 126 and 127 in folder 190; 28 and 128 to 133 in folder 191.

The letters are mostly written on sheets of paper folded in half to create four pages, while some are written on half sheets of paper and when written on both sides create two pages. Generally the letters are written using both sides of the paper. Where the last page is left blank this is indicated in the physical description of the manuscript letters. Ferdinand and Georgiana von Hochstetter used a large variety of paper when writing letters to Julius von Haast over a period of more than 25 years. The earlier letterheads are all embossed while later ones are printed or stamped. They also used plain paper, of the sort which in some cases may have been a page torn from a notebook and are therefore without letterhead. In later letters Hochstetter used stationery which was less personal, such as society and museum letterhead. The type number allocations and descriptions are the author's.

The different letterheads and other letter writing paper used are as follows:

Type 1: Embossed monogram "Dr. F. H", no full stop after the "H".

Type 2: Embossed emblem logotype "Paris" with sailing ship emblem.

Type 3: Embossed emblem logotype "Bath", in ornate frame design.

Type 4: Embossed emblem logotype "Bath" | "Fine" and crown in circular frame design.

Type 5: Embossed monogram "F. v. H".

Type 6: Embossed emblem logotype "Bath" | "Fine" and crown in ornate frame design with scroll effect within circle.

Type 7: Embossed monogram "F v H", without full stops.

Type 8: Embossed monogram "G H", without full stops.

Type 9: Embossed emblem logotype "Bath" and crown in frame design.

Type 10: Embossed monogram "G. H.", with full stops.

Type 11: Embossed monogram "G H", in ornate design.

Type 12: Stamped:

D^r FERD. v. HOCHSTETTER
WIEN
OB. DÖBLING

¹⁹ Jocelyn Chalmers, Alexander Turnbull Library, letter to the author dated 9 July 2004, regarding "Permission to reproduce Ferdinand von Hochstetter letters", File Ref. S.AR.002.001.002-V06.

²⁰ Thomas Darragh notes for example, "[the letter] dated 16 November 1859, consists of four pages without signature indicating that one or more pages are missing.", Thomas A. Darragh, "Ferdinand Hochstetter's Notes of a Visit to Australia and a Tour of the Victorian Goldfields in 1859", *Historical Records of Australian Science*, vol. 13, no. 4, December 2001, p. 426 note 95.

Type 13: Printed letterhead:

DEUTSCHE ZEITUNG.

Type 14: Printed letterhead:

K. K.
GEOGRAPHISCHE GESELLSCHAFT
IN WIEN.

Type 15: Printed letterhead:

K. K.
GEOGRAPHISCHE GESELLSCHAFT
IN WIEN
1., Universitätsplatz 2.

Type 16: Printed letterhead:

DER INTENDANT
des k.k. naturhistorischen
Hof-Museums.

Type 17: Printed letterhead:

DIE INTENDANZ
des k.k. naturhistorischen
Hof-Museums.

Type 18: Printed letterhead:

K. K. NATURHISTORISCHES HOFMUSEUM.
Anthropologisch-Ethnographische
Abtheilung.

Type 19: Printed letterhead:

K. K. NATURHISTORISCHES HOFMUSEUM.
ANTHROPOLOGISCH-ETHNOGRAPHISCHE ABTHEILUNG.

Type 20: Printed letterhead:

K. K. NATURHISTORISCHES HOFMUSEUM.
ANTHROPOLOGISCH-ETHNOGRAPHISCHE
ABTHEILUNG.

Type 21: Embossed monogram “GH” ornate diagonal design.

Type 22: Embossed monogram “GH” ornate vertical design.

Type 23: Printed monogram “GH” in black, ornate diagonal design on black bordered mourning paper

Type 24: Printed monogram “GH” in black, bold lettering monogram design on black bordered mourning paper.

Watermarked paper: “LACROIX FRERES”, used for the letter from Paris.

The name of the addressee, which sometimes appears at the base of the first page, has been moved to the end of the letter. For the letters from Georgiana von Hochstetter to Haast the idiosyncratic use of slash and colon to indicate brackets “/:” has been transcribed in this present edition as round brackets “()”. A vertical bar [|] is used for transcriptions of letters in the footnotes to mark the beginning of a new line or paragraph.

In the translations the major difficulty has been trying to strike the right balance between creating a readable English language translation whilst still retaining as much of the style of the original as possible. The aim was therefore not to create a polished translation but to retain and preserve as much of both the spirit and meaning of the original as possible. In 1959 Sir Charles Fleming (1916-1987) in his translation of Hochstetter’s *Geology of New Zealand*, wrote:

My translation can be criticised for retaining certain complex sentences that may impede the casual reader’s progress. I hope, however, that it will provide a ‘crib’ for students who will undoubtedly refer back to the original and that I may have preserved, as much as is possible in a translation, something of the spirit and literary style of the century and of the tongue in which Hochstetter wrote.²¹

Following in his footsteps, I have likewise attempted to retain something of the original style in the letters of Hochstetter. The main exception to this is the format of the date and address. The other major difficulty in translating personal correspondence of this kind lies in appropriately dealing with the idiomatic language and the words and phrases that stem from Imperial Austria and have long since disappeared from the dictionary. For example “Glückauf” – a German miner’s greeting – is not translatable. All translations of German source material quoted in English are also the author’s, with all exceptions clearly referenced acknowledging the translator. Furthermore, the use of abbreviations has also been avoided. This includes the rendering of the signature in its various forms, i.e. “F. H.”, “F. Hochstetter”, “Ferd. Hochstetter” and “Hochstetter”, as either “Ferdinand Hochstetter” or “Hochstetter” where applicable.

The figures reproduce all the sketches and diagrams in the manuscript letters and have been inserted as near to their original position in the manuscript letters as possible. There are a total of twelve such figures. They are all in ink, i.e. the same medium used in writing the letter, with the exception of Figure 2, which is sketched in red pencil. The size of the original has not been retained. The figures are as follows:

- Figure 1: Case for shipment of live plants
- Figure 2: Geological section of the South Island from Mt Cook to Banks Peninsula
- Figure 3: Glass bottle symbol to indicate fragile contents of case
- Figure 4: Geological section
- Figure 5: Thermometer in wooden case
- Figure 6: Coal deposits
- Figure 7: Geological strata in drift formations
- Figure 8: Protective sheath
- Figure 9: Wood grain
- Figure 10: Ink sketch by Georgiana Julie von Hochstetter
- Figure 11: Three meteoric rock specimens
- Figure 12: Cutting long wooden spears for transportation.

²¹ Charles Alexander Fleming, ed. and transl., Ferdinand von Hochstetter, *Geology of New Zealand: Contributions to the Geology of the Provinces of Auckland and Nelson*, Wellington, R. E. Owen, Government Printer, 1959, p. xiii.

[illegible]

4. Letter by Ferdinand von Hochstetter to Julius von Haast, dated London 11 June 1860.
(MS-0037-180-07, Alexander Turnbull Library).

INTRODUCTION

Hochstetter's prominent historical position in New Zealand is not only due to his publications or his brief visit in 1858-59, but also due largely to two of his loyal German friends in New Zealand, Julius von Haast and Carl Frank Fischer. While the former is always linked with Hochstetter, the latter deserves greater recognition for his contribution to Hochstetter's success and reputation in New Zealand. In this way he was second only to Haast, as can be seen from Hochstetter's extant letters to Fischer²² and when one realises that it was Fischer who translated and published Hochstetter's atlas of New Zealand²³ and the accompanying notes together with Hochstetter's Auckland and Nelson lectures as *The Geology of New Zealand*.²⁴ Fischer also played an important role in the lead-up to the English translation of Hochstetter's *New Zealand*,²⁵ especially in relation to the government subsidy for the printing costs in the form of a subscription for 500 copies. One can therefore conclude that both Haast and Fischer were undoubtedly Hochstetter's most important ambassadors in New Zealand.

In New Zealand Ferdinand von Hochstetter has primarily been celebrated by scholars connected with the earth sciences. In 1959 a special issue of *The New Zealand Journal of Geology and Geophysics* was sub-titled "Hochstetter Centenary Issue".²⁶ This issue includes a number of articles looking at historical and scientific aspects of Hochstetter and New Zealand earth sciences.

Hochstetter research has been undertaken by a number of important New Zealand scholars including John Asher,²⁷ Charles Fleming, Les Kermode and Alan Mason,²⁸ and Mike Johnston²⁹ who have all published on the geological, historical and biographical aspects of Hochstetter's work in New Zealand. Fleming stands out for his translation of Hochstetter's *Geology of New Zealand*,³⁰ which was undoubtedly the most important contribution to Hochstetter scholarship in New Zealand, while Kermode reawakened an awareness of Hochstetter's contribution to New Zealand geology through numerous talks and articles.³¹ Between them they helped to place Hochstetter in the pre-eminent position that he holds today in the history of science in New Zealand as the "Father of New Zealand geology".

²² There are eleven extant letters by Hochstetter to Fischer from the period 1859-1881 in the "Nachlass Sammlung Luschan", Staatsbibliothek zu Berlin – Preussischer Kulturbesitz, Handschriftenabteilung, Berlin.

²³ Ferdinand von Hochstetter and August Heinrich Petermann, *Geological and Topographical Atlas of New Zealand: Six Maps of the Provinces of Auckland and Nelson*, Auckland, Delattre, 1864.

²⁴ Carl Frank Fischer, transl., *Geology of New Zealand in Explanation of the Geographical and Topographical Atlas of New Zealand by Dr. F. Hochstetter and Dr. A. Petermann. From the Scientific Publications of the Novara Expedition. Translated by Dr. C. F. Fischer. Also Lectures by Dr. F. Hochstetter delivered in New Zealand*, Auckland, T. Delattre, 1864.

²⁵ Ferdinand von Hochstetter, *New Zealand: its Physical Geography, Geology and Natural History with special reference to the Results of Government Expeditions in the Provinces of Auckland and Nelson*, Stuttgart, Cotta, 1867.

²⁶ Mabel Rice, ed., *New Zealand Journal of Geology and Geophysics: Hochstetter Centenary Issue*, Wellington, Department of Scientific and Industrial Research, vol. 2, no. 5, November 1959.

²⁷ John Alexander Asher, "Hochstetter – Father of New Zealand Geology", *New Zealand's Heritage: The Making of a Nation*, vol. 2 part 26, Auckland, Hamlyn, 1971, pp. 707-711.

²⁸ See for example Alan Mason, "The Hochstetter – Heaphy Controversy Or Whose Map Was It?", *Geological Society of New Zealand: Historical Studies Group Newsletter*, no. 25, September 2002, pp. 31-40; Alan Mason "The Hochstetter – Heaphy Controversy: Some further information", *Geological Society of New Zealand: Historical Studies Group Newsletter*, no. 27, September 2003, pp. 33-40.

²⁹ See for example the section on "Hochstetter's visit", pp. 32-34, in: Mike Johnston, *High Hopes: A History of the Nelson Mineral Belt and New Zealand's first railway*, Nelson, Nikau, 1987.

³⁰ Charles Alexander Fleming, transl. and ed., Ferdinand von Hochstetter, *Geology of New Zealand: Contributions to the Geology of the Provinces of Auckland and Nelson*, Wellington, R. E. Owen, Government Printer, 1959.

³¹ See for example Leslie Owen Kermode, "Ferdinand von Hochstetter", in: James N. Bade, ed., *The German Connection: New Zealand and German-speaking Europe in the Nineteenth Century*, Auckland, Oxford University Press, 1993, pp. 152-161; and Kermode, "Ferdinand Hochstetter in New Zealand", *Geological Society of New Zealand: Historical Studies Group Newsletter*, no. 5, September 1992, pp. 1-16.

The letters of Ferdinand and Georgiana von Hochstetter to Julius von Haast were carefully kept by the recipient and after Hochstetter's death in 1884 he re-read them when compiling an obituary on Hochstetter.³² After Haast's death his son Heinrich Ferdinand von Haast (1864-1853), Hochstetter's godson, was the keeper of the family papers. Heinrich von Haast made good use of his father's correspondence in writing the monumental biography which he published in 1948 as *The Life and Times of Sir Julius von Haast: Explorer, Geologist, Museum Builder*.³³ In this work he makes numerous references to the relationship between Haast and Hochstetter and to the letters from Hochstetter, with some excerpts published in translation. But the first instance of an excerpt being published was in 1865, when an article in the Christchurch newspaper *The Press* states:

We have persuaded Dr. Haast – in justice to that gentleman we are bound to say somewhat against his will – to permit us to publish the following extract of a letter which he has recently received from Dr. Hochstetter, on the subject of his Report on the Canterbury Plains.³⁴

Heinrich von Haast faced the same difficulty as the present author in that the correspondence is one-sided, as Haast's letters to Hochstetter are not extant.³⁵ This was true of almost all of Haast's other correspondence as well. For example, in reference to the Hooker correspondence we read:

Unfortunately the correspondence is one-sided, as there are no copies of Haast's own letters, which would have been interesting, covering as they did, the latter's explorations in Canterbury and Westland, and seeking from the great botanist, not only scientific assistance, but counsel and advice in personal matters.³⁶

These remarks still largely apply to the Hochstetter correspondence, while the letters from Haast to Hooker have since been found and published.³⁷ In the preface Heinrich von Haast laments the fact that the letters from Haast are not extant and comments on the difficulty of putting together the biography of his father:

But nearly all Haast's colleagues and friends had disappeared. The handful left gave me but scanty information. Nor were there letters of Haast's extant, save a few to his young children and a series written to me from England in 1886 and 1887, mostly concerned with Museum and private business. There were some thousands of letters from other scientists to be perused, but practically none of Haast's letters to them. It is evident from replies of Hooker and Hochstetter to his letters that he unburdened himself fully to them, and that those letters of his would have revealed the inner man.³⁸

Heinrich von Haast then donated the Haast family papers to the Alexander Turnbull Library between 1948 and 1953, where they have been carefully archived, catalogued and microfilmed. For the next fifty years the letters of Hochstetter to Haast received relatively little scholarly attention, although Michael King had sections of the letters regarding the appointment of Andreas Reischek at Canterbury Museum translated for his book *The Collector*,³⁹ and Thomas

³² Julius von Haast, "In Memoriam: Ferdinand Ritter von Hochstetter", *The New Zealand Journal of Science*, vol. 2, no. 5, September 1884, pp. 202-220.

³³ Heinrich Ferdinand von Haast, *The Life and Times of Sir Julius von Haast: Explorer, Geologist, Museum Builder*, Wellington, H. F. von Haast, 1948.

³⁴ An excerpt in translation of Hochstetter letter to Haast no. 49 dated 20 March 1865, published in *The Press*, 22 July 1865.

³⁵ The present author was able to locate only very few letters by Haast, one to Ferdinand von Hochstetter dated Christchurch, 31 December 1879, and another to Georgiana von Hochstetter dated Christchurch 24 July 1884, which are included in the footnotes in their chronological position in this edition.

³⁶ Heinrich Ferdinand von Haast, *The Life and Times of Sir Julius von Haast*, p. 247.

³⁷ Initially a selection was published by David Galloway, "Julius von Haast's botanical explorations", *New Zealand Alpine Journal* 1976, vol. 29, pp. 88-108; this has recently been followed up with a comprehensive annotated edition: Sascha Nolden, Simon Nathan and Esme Mildenhall, *The Correspondence of Julius Haast and Joseph Dalton Hooker, 1861-1886*, Geoscience Society of New Zealand Miscellaneous Publication 133H, 2013.

³⁸ Heinrich Ferdinand von Haast, *The Life and Times of Sir Julius von Haast*, p. xii.

³⁹ Michael King, *The Collector: Andreas Reischek – A Biography*, Auckland, Hodder and Stoughton, 1981.

Darragh looked at the Australian letters in the collection for his publication of the Australian section of Hochstetter's diary of 1859.⁴⁰

The illustrations selected for this publication include a small pencil and watercolour sketch from Haast's field notebook from his journeys with Hochstetter in 1859 shows Hochstetter sketching Mt Pirongia while perched on the roof of a hut at Whatawhata.⁴¹ The notebook is held in the Alexander Turnbull Library. Two maps, which are representative of the cartographic work of Hochstetter and Haast in New Zealand. The 1862 map of the isthmus of Auckland, published by August Heinrich Petermann (1822-1878) in the *Mittheilungen aus Justus Perthes Geographischer Anstalt*, is the first published New Zealand map by Hochstetter. This is the earliest form of the map and differs from the later versions in that it lacks the geological colouring, and is therefore primarily a topographical map. The geological map of Nelson Province of 1862, represents the combined efforts of Hochstetter and Haast, and is also the earliest published version of this map which was later printed with the date 1863 and also appeared in English. Both maps were subsequently included in Hochstetter and Petermann's New Zealand atlas,⁴² before being appended as plates in Hochstetter's *Geologie von Neu-Seeland*,⁴³ which formed part of the official reports of the *Novara* expedition, but neither map was included in Hochstetter's *Neu-Seeland*⁴⁴ of 1863 or *New Zealand*⁴⁵ of 1867.

Also included as an illustration is the first page of a Hochstetter letter addressed to Haast from London, dated 11 June 1860. This is one of the finer specimens of Hochstetter's handwriting and shows the older German style in which the letters were written. This letter is of particular interest as it mentions the two New Zealand Maori who went to Vienna on the *Novara*, and the London shipping firm Willis Gann & Co. that had employed Haast to come to New Zealand, while Hochstetter is reflecting on the time he and Haast spent together in New Zealand a year before the date of this letter.

The other illustrations are all photographs of Hochstetter and the Hochstetter family, which were sent to Haast over the years with the letters and were presumably originally kept in the Haast family album. All the Hochstetter family photographs are mentioned in the letters and have therefore been placed immediately following the letter with which they would have been enclosed. The family photographs of Georgiana with an ever increasing number of children were taken each year on Hochstetter's birthday on 30 April, as a gift from Georgiana to her husband. Heinrich von Haast writes that these photographs reflect the progress of their marriage: "His marital progress is testified by a succession of photographs in Haast's album; Hochstetter playing a lone hand, Hochstetter and wife, Hochstetter and one child, and so on right up to spouse and seven children."⁴⁶ Today the photographs are kept in the photographic collection of the Alexander Turnbull Library.

Reflecting on the dissemination of the correspondence of Hochstetter and Haast, one may conclude that not only does Hochstetter deserve the title of "Father of New Zealand Geology" as first applied by a number of New Zealand scholars more than fifty years ago at the time of the

⁴⁰ Thomas A. Darragh, "Ferdinand Hochstetter's Notes of a Visit to Australia and a Tour of the Victorian Goldfields in 1859", *Historical Records of Australian Science*, vol. 13, no. 4, December 2001, pp. 383-437.

⁴¹ The manuscript caption records: "Dr Hochstetter in Whata Whata das Pirongia Gebirge zeichnend."

⁴² Ferdinand von Hochstetter and August Heinrich Petermann, *Geologisch-Topographischer Atlas von Neu-Seeland: Sechs Karten hauptsächlich Gebiete der Provinzen Auckland und Nelson umfassend, mit kurzen Erläuterungen. Aus den wissenschaftlichen Publicationen der Novara-Expedition*, Gotha, Justus Perthes, 1863.

⁴³ Ferdinand von Hochstetter, *Reise der Österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859, unter den Befehlen des Commodore B. von Wüllerstorff-Urbair: Geologischer Theil: Geologie von Neu-Seeland: Beiträge zur Geologie der Provinzen Auckland und Nelson*, Wien, Staatsdruckerei, 1864.

⁴⁴ Ferdinand von Hochstetter, *Neu-Seeland*, Stuttgart, Cotta, 1863.

⁴⁵ Ferdinand von Hochstetter, *New Zealand*, Stuttgart, Cotta, 1867.

⁴⁶ Heinrich Ferdinand von Haast, *The Life and Times of Sir Julius von Haast*, p. 255.

centennial of Hochstetter's visit to New Zealand, but furthermore his work had a profound influence on the way New Zealand was perceived in Europe. One might also conclude that he was certainly one of the most important scientists to visit New Zealand in the nineteenth century, and that his personal commitment and indefatigable energy was very instrumental in assisting the emerging New Zealand scientific community in many ways, for example in his efforts to support the provincial museums, to facilitate exchanges with some of the world's most important museums and his many other services to New Zealand. Moreover, in the letters one is able to see the reciprocal nature of the relationship between two important scientists working in full support of each other at opposite ends of the globe and always working to serve the furtherance of science. One might conclude that without these two men working together as they did the development of science, especially in Canterbury, would not have progressed as rapidly as it did. Today the two museums built up and directed by Haast and Hochstetter both still hold on to their heritage with deserved pride and dignity.

One may also conclude that as this correspondence is just one such exchange representative of the communications between scientists in the nineteenth century, archival manuscript materials should be seen as a major source of evidence for the history of science and will undoubtedly become an increasingly important source of information as interest in the history of science in New Zealand continues to develop.

By looking at manuscript sources one gains a far better impression of Hochstetter's character and personality, as well as an insight into his private life, including his home and family. The warmth of his personality comes through very clearly in these letters, especially the love for his wife and family, and not least the affection he felt for New Zealand. As such they offer a completely new perspective on Hochstetter which is of necessity never expressed in his published primary literature. Through incorporating the letters of his wife and later widow, one gains a very valuable witness for the last weeks of Hochstetter's life and the posthumous period.

The letters also enable a deeper understanding of the life and work of Julius von Haast, which has hitherto been best known through the work of his son, in which frequent reference is made to the correspondence, but with the present edition making the entire correspondence available, it is now possible to follow up many points of interest in far more detail.

Hochstetter's achievements and direction in life were largely due to the many people he related to and had contact with, coupled with the numerous places he encountered during his travels, enabling him to build a vast library of life and personal experiences, and allowing him to contribute to so many fields, taking the spectrum of his contributions and achievements well beyond the scope of the geologist.

The index of people and places mentioned in the letters enables researchers to locate those letters which may be of particular relevance to further research of a given topic, without having to read the letters in their entirety.

By providing an English translation of the complete texts of the letters, with a leaning towards the source texts, giving a comparatively literal translation, a certain degree of the character and style of the original has been retained, which should assist the scholar in gaining a feel for the nuances and register of the communications between the friends Haast and Hochstetter, while at the same time allowing one to witness them going about their serious matters of business – the exchange of ideas, observations, conclusions and advice, as well as books and specimens of natural history of every description.

CALENDAR OF LETTERS

1. [c. 14 August 1859, Nelson]
2. 10 October 1859, Sydney
3. 25 October 1859, Melbourne
4. 16 November 1859, Melbourne
5. 7 December 1859, Mauritius
6. 7 March 1860, Esslingen
7. 13 March 1860, Wien
8. 7 April 1860, Wien
9. 11 June 1860, London
10. 20 October 1860, Wien
11. 1 March 1861, Wien
12. 4 May 1861, Wien
13. 23 May 1861, Wien
14. 16 June 1861, Wien
15. 18 August 1861, Wien
16. 20 September 1861, Wien
17. 25 October 1861, Wien
18. 19 November 1861, Wien
19. 18 December 1861, Wien
20. 18 January 1862, Wien
21. 21 February 1862, Wien
22. 20 March 1862, Wien
23. 18 April 1862, Wien
24. 16 May 1862, Wien
25. [17 June 1862] undated
26. 12 July 1862, Wien
27. 18 August 1862, Wien
28. 18 September 1862, Hruschau
29. 16 October 1862, Wien
30. 17 November 1862, Wien
31. 14 January 1863, Wien
32. 16 February 1863, Wien
33. 15 March 1863, Wien
34. 26 April 1863, Wien
35. 19 June 1863, Wien
36. 17 July 1863, Wien
37. 16 August 1863, Wien
38. 18 October 1863, Wien
39. 20 December 1863, Wien
40. 9 February 1864, Wien
41. 16 March 1864, Wien
42. 13 May 1864, Wien
43. 12 June 1864, Wien
44. 16 July 1864, Wien
45. 21 September 1864, Wien
46. 21 October 1864, Wien
47. 20 November 1864, Wien
48. 19 January 1865, Wien
49. 20 March 1865, Wien
50. 20 May 1865, Wien
51. 16 August 1865, Wien
52. 20 September 1865, Wien
53. 16 November 1865, Wien
54. 20 January 1866, Wien
55. 14 February 1866, Wien
56. 19 February 1866, Wien
57. 17 May 1866, Wien
58. 19 July 1866, Wien
59. 22 August 1866, Wien
60. 22 October 1866, Wien
61. 20 November 1866, Wien
62. 21 December 1866, Wien
63. 20 February 1867, Wien
64. 16 March 1867, Wien
65. 27 April 1867, Paris
66. 3 July 1867, Wien
67. 18 August 1867, Wien
68. 24 September 1867, Wien
69. 14 December 1867, Wien
70. 17 February 1868, Wien
71. 10 April 1868, Wien
72. 20 May [1868]
73. 4 July 1868, Wien
74. 30 October 1868, Wien
75. 27 December 1868, Wien
76. 3 May 1869, Wien
77. 29 July 1869, Constantinopel
78. 25 March 1870, Wien
79. October 1870, Wien
80. 25 May 1871, Wien
81. 8 August 1871, Wien
82. 25 February 1872, Wien
83. 30 November 1872, Wien
84. 26 June 1873, Wien
85. 29 August 1873, Ischl
86. 22 June 1874, Wien
87. 10 November 1874, Wien
88. 12 January 1875, Wien
89. 31 January 1875, Wien
90. 21 March 1875, Wien
91. 25 July 1875, Wien
92. 12 January 1876, Wien
93. 15 May 1876, Wien
94. 24 August 1876, Wien
95. 27 October 1876, Wien
96. 3 November 1876, Wien
97. 20 December 1876, Wien
98. 24 January 1877, Wien

- | | |
|------------------------------------|------------------------------------|
| 99. 5 February 1877, Wien | 117. 4 April 1882, Wien |
| 100. 10 May 1877, Wien | 118. 7 July 1882, Wien |
| 101. 28 July 1877, Wien | 119. 10 August 1882, Wien |
| 102. 19 October 1877, Wien | 120. 13 October 1882, Wien |
| 103. 4 January 1878, Wien | 121. 11 February 1883, Oberdöbling |
| 104. 10 April 1878, Wien | 122. 3 April 1883, Wien |
| 105. 21 April 1878, Wien | 123. 19 June 1883, Kaltenleutgeben |
| 106. 24 November 1878, Wien | 124. 16 September 1883, Döbling |
| 107. 4 May 1879, Wien | 125. 2 November 1883, Wien |
| 108. 1 December 1879, Wien | 126. 4 April 1884, Döbling |
| 109. 24 February 1880, Wien | 127. 10 June 1884, Döbling |
| 110. 10 May 1880, Wien | 128. 11 October 1884, Döbling |
| 111. 25 July 1880, Wien | 129. 27 November 1884, Döbling |
| 112. 3 October 1880, Wien | 130. 8 October 1885, Döbling |
| 113. 25 November 1880, Oberdöbling | 131. 1 December 1886, Döbling |
| 114. 18 April 1881, Wien | 132. 8 March 1887, Döbling |
| 115. 28 August 1881, Gallenegg | 133. 10 May 1887, Döbling |
| 116. 31 January 1882, Wien | |

THE LETTERS OF FERDINAND VON HOCHSTETTER TO JULIUS VON HAAST

From the collections of the
Alexander Turnbull Library
Wellington

1. Ferdinand Hochstetter to Julius Haast, Nelson, c. 14 August 1859, MS 37 folder 238.

7 O'clock at night.⁴⁷

Dear friend

I am sending cigars, paper, your travel bag and clothes, the tin case to fill with the bones that you have already found and two men who have agreed to leave tonight in order to join you in your efforts tomorrow.⁴⁸

I am expecting you here in good time on Monday.⁴⁹ Be here by around 3 o'clock at the latest.

I am eagerly anticipating your success and have no doubt that it will be most splendid. I dream of it – just be careful with the pickaxe, and when a bone is exposed take care while removing and packing it, in order that everything that belongs together stays together.

Good luck!⁵⁰

Yours,

Ferdinand Hochstetter⁵¹

2. Ferdinand Hochstetter to Julius Haast, Sydney, 10 October 1859, MS 37 folder 180.

Sydney, 10 October 1859

Esteemed friend

I arrived here early last Saturday, after a successful and pleasant seven-day voyage.⁵² What I had been waiting for in vain for so long was here – a large number of letters, and all with

⁴⁷ Julius Haast, later Sir Julius Ritter von Haast (1822-1887), carried out excavations in the Aorere Valley caves system, Nelson, from 12 to 14 August 1859. See Julius Haast, "Excavations of Moa Remains in the Bone Caves of the Aorere Valley", in: Ferdinand von Hochstetter, translated by Charles Fleming, *Geology of New Zealand: Contributions to the Geology of the Provinces of Auckland and Nelson*, Wellington, R. E. Owen, Government Printer, 1959, pp. 258-265.

⁴⁸ Haast was assisted by the surveyor Christopher Maling (1843-1917), Donald McGregor (1824-1905) and two unidentified field hands. After having himself inspected the caves Hochstetter writes: "I at once ordered a thorough excavation and allotted three men from my party to the digging. Unfortunately I could not spare the time myself to have the pleasure of remaining to see the work completed since I had to carry out further investigations in the goldfields and coalfields. I therefore left in charge of the excavations my friend and fellow traveller J. Haast and a young English surveyor Mr Ch. Maling, who carried them out with all circumspections and with splendid results." Hochstetter, translated by Fleming, *Geology of New Zealand*, p. 257.

⁴⁹ Hochstetter mentions this meeting when he writes: "In the town of Collingwood, we had appointed a rendezvous after three days; at the expiration of which my friends came in triumphant, conducting oxen, decked with flowers and heavily laden with Moa bones, amid the concourse [sic] of the whole population of Collingwood." Hochstetter, *New Zealand: its Physical Geography, Geology and Natural History with special reference to the results of Government Expeditions in the Provinces of Auckland and Nelson*, Stuttgart, Cotta, 1867, p. 185.

⁵⁰ "Glückauf" in the original is a German miner's greeting. As there is no English equivalent it has sometimes been translated as "good luck" or "congratulations" as applicable for the translations in this edition.

⁵¹ Original signed with only the initials F. H. = Ferdinand Hochstetter; Hochstetter sometimes used just his initials, "F.H.", when signing informal correspondence. This letter was first identified by the author in the file entitled "Indecipherable and fragmentary letters", MS papers 37 folder 238, Alexander Turnbull Library.

⁵² Hochstetter left Nelson on the Sydney-bound *Prince Alfred* on Sunday, 2 October 1859.

good news, albeit full of enthusiasm for the war against the French.⁵³ Two of my brothers,⁵⁴ full of patriotism, have also joined the Württemberg army, one as a lieutenant and one as army pharmacist. How can the peace have suddenly cooled these enthusiastic German minds so terribly? The Novara, without having been to Lima, left Valparaiso on 10 May headed straight back for Gibraltar, and from there on home, and must long since have arrived.⁵⁵ This news, in conjunction with other circumstances, has made me decide to completely give up my plan to travel via Panama, the United States and England and instead to take the Overland Mail Route Steamer *Benares*⁵⁶ on 16 November from Melbourne directly to Europe via Trieste to Vienna. This way I will be able to arrive in mid January. I think this is best, and from Vienna I will then travel to England in order to sort out various matters in my own time.

You are now alone in New Zealand; you will probably miss me very much sometimes, just as it feels strange to me not to have my trusty travel companion around me anymore. The parting became hard for both you and I. You remain behind in that remarkable place New Zealand, while I am already beginning to taste European city air. I beg you to write to me now with every mail, even if only very briefly, and from now on directly to Vienna, care of the Imperial Geological Survey of Austria.⁵⁷ Collect and observe everything diligently. I have written to Haidinger⁵⁸ to ask for a corresponding member's diploma for you.⁵⁹ Direct your next letter to me by the mail in early November from New Zealand to Dr Ferdinand Müller⁶⁰ in Melbourne, and then I will receive it before my departure.

Here I found letters from Stuttgart urgently asking me to bring a New Zealand present for the King of Württemberg,⁶¹ which places me in a difficult predicament, as he wishes for live plants and seeds. What can be done? Do ask our friend Dr Monro⁶² if he could possibly send me some pretty New Zealand seeds, perhaps by the post after next. His live plants for Mr McDonald⁶³ arrived here in good order, and I would be happy to deposit the amount required to cover all costs with any nominated company in England if you could have a case built.

⁵³ The Franco-Austrian War of 1859 was originally declared between Austria and Sardinia, together with its ally France, but after the Austrian army was defeated at Magenta on 4 June 1859, the Prussian prince-regent Wilhelm, later King Wilhelm I of Prussia (1797-1888), agreed to send in six army corps to oppose the French on the Rhine, before the peace treaty was signed at Villafranca on 11 July 1859. See *Meyers Lexikon*, 7th edition, Leipzig, Bibliographisches Institut, 1928, vol. 9, column 1263.

⁵⁴ Hochstetter's brothers who were in Württemberg at this time, were his younger brother Christian Albert Hochstetter (1832-1895), who was a pharmacist in Esslingen, and the younger of the two older brothers, Wilhelm Christian Hochstetter (1825-1881), botanist and university gardener at Tübingen.

⁵⁵ The plans of the *Novara* expedition were altered as a consequence of the outbreak of war in Europe, causing the frigate to arrive back in Trieste on 28 August 1859.

⁵⁶ Hochstetter booked his passage as far as Alexandria on the Overland Mail Route steamer *Benares*. See Thomas A. Darragh, "Ferdinand Hochstetter's Notes of a Visit to Australia and a Tour of the Victorian Goldfields in 1859", *Historical Records of Australian Science*, vol. 13, no. 4, December 2001, p. 384.

⁵⁷ Kaiserlich-Königliche Geologische Reichsanstalt, (Imperial Geological Survey of Austria). Hochstetter had been approached by the founder, Wilhelm Karl von Haidinger (1795-1871), to join in 1853, which resulted in his being appointed "Hilfsgeologe" in 1854 and "Chefgeologe" in 1856. Hochstetter left the Geologische Reichsanstalt at the end of March 1860. "Hochstetter zeigte mit seinem Schreiben vom 30.3.1860 (Amtsarchiv Prot. No. 264/1860) der Direktion der Geologischen Reichsanstalt seine mit Unterschrift des k.k. Ministeriums für Cultur und Unterricht vom 27. März erfolgte Ernennung zum o. Professor am k.k. polytechnischen Institut und damit seinen Austritt aus dem Stand der k.k. Geologischen Reichsanstalt an. Da nach Haidinger die Besoldung Hochstetter für April nicht mehr angefordert wurde, ist anzunehmen, dass Hochstetter mit Ende März (31.3.1860) nicht mehr im Dienststand der Geologischen Reichsanstalt geführt wurde." Pers. comm. dated 2 March 2005, OR Dr. Albert Schedl, Geologische Bundesanstalt in Wien, to the author.

⁵⁸ Wilhelm Karl von Haidinger (1795-1871), Austrian geologist, founder and first director of the geological survey in Vienna.

⁵⁹ The "Correspondenten Diplom", recognising Haast as a corresponding member of the "Geologische Reichsanstalt", was signed by Haidinger on the 20 March 1862. See Heinrich Ferdinand von Haast, *The Life and Times of Sir Julius von Haast K.C.M.G., P.H.D., D.S.C., F.R.S., Explorer, Geologist, Museum Builder*, Wellington, 1948, p. 270 note.

⁶⁰ Ferdinand Jakob Heinrich Müller, later Baron von Mueller (1825-1896), German botanist and director of the Botanical Gardens in Melbourne.

⁶¹ Wilhelm I, King of Württemberg (1781-1864), reigned from 1816 to 1864.

⁶² Sir David Monro (1813-1877), medical doctor and politician in Nelson.

⁶³ Alexander Cameron Macdonald (1828-1917), settled in Geelong, Victoria, in 1850. He was a prominent member of the Geelong and Western District Agricultural Society and the Geographical Society of Australasia.



Figure 1: Case for shipment of live plants⁶⁴

Perhaps Mrs Renwick⁶⁵ will be so kind as to assist with the letter to His Majesty the King. Dr Monro or Dr Sinclair,⁶⁶ if he is there, are very good at this.

And fill it with pretty New Zealand plants, shrubs, trees and ferns, selected items, and then send the same either to Kirchner⁶⁷ or with the German ship in Wellington directly around Cape Horn.

I'm full of requests. Having hardly left New Zealand, there are all sorts of things that I want from New Zealand. Do make sure you write to Petermann⁶⁸ and the *Allgemeine Zeitung*⁶⁹ by the next mail about our time in Nelson, and later send to me privately whatever you can spare by way of collections, so that I can publish on them. Your articles have appeared in the *Wiener Zeitung*⁷⁰ – as Haidinger writes to me – and were well received. Don't you want to send the *Wiener Zeitung* a note about my departure from Nelson?⁷¹

Scherzer⁷² disembarked from the Novara at Valparaiso; he was afraid of going around Cape Horn and was infected by the Tahitian women. *Sic transit gloria mundi* – Thus the glory of the world passeth away. All the others are well.

*Strigops*⁷³ (Kakapo), *Apteryx*⁷⁴ skins and skeletons are ongoing requirements; you now have time and leisure. Have a good time in New Zealand, make yourself at home there, I wish you luck and all the best of success. You are headed in the right direction, and don't forget your friend,

Ferdinand Hochstetter

Give my sincere regards to all the gentlemen in Nelson; always send me your address. A thousand greetings to Mrs Renwick and tell her about my royal business concerning the live New Zealand plants.

⁶⁴ Diagram showing suggested design of a wood and glass case for transporting live plants.

⁶⁵ Adeline Renwick, nee Absolon (c. 1819-1870), was the wife of Dr Thomas Renwick (1818-1879), who practised medicine in Nelson. See Elisabeth Airey, *Renwick: The Story of a Pioneer Family*, Wellington, 1979.

⁶⁶ Dr Andrew Sinclair (1794-1861), medical doctor and naturalist explorer.

⁶⁷ Wilhelm Kirchner (1814-1893), was the Consul for Hamburg in Sydney, where he arrived in 1839 and played a major role in encouraging German emigration to New South Wales. See Darragh, "Ferdinand Hochstetter's Notes of a Visit to Australia and a Tour of the Victorian Goldfields in 1859", p. 422 note. Kirchner was made a corresponding member of the "Geologische Reichsanstalt" in recognition of his services in 1859, and was also appointed Imperial Austrian Consul for Sydney. See *Jahrbuch der kaiserlich-königlichen Geologischen Reichsanstalt*, vol. 10, 1859, p. XV.

⁶⁸ August Heinrich Petermann (1822-1878), German cartographer, geographer and editor of the *Mittheilungen aus Justus Perthes' Geographischer Anstalt über wichtige neue Erforschungen auf dem Gesamtgebiete der Geographie*, Gotha, Justus Perthes. Haast did not write to Petermann at this time, the first letter from Haast to Petermann being dated 10 August 1861, in which he writes: "Wenn ich Ihnen bisher nicht schrieb, so lag der Grund in dem Umstande, daß mich meine Berufsgeschäfte nicht dazu kommen liessen, längere Mittheilungen über meine Forschungen zu machen; zudem wusste ich daß unser gemeinschaftlicher Freund Prof. v. Hochstetter Ihnen aus meinen Briefen alles Wichtige mittheilen würde." Briefsammlung Haast, Sammlung Perthes, Schriftleitung Petermanns Geographische Mittheilungen, Forschungsbibliothek Gotha, Germany.

⁶⁹ *Allgemeine Zeitung*, published by the Cotta publishing house in Augsburg.

⁷⁰ *Oesterreich- Kaiserliche Wiener Zeitung*, Viennese official daily newspaper.

⁷¹ Haast wrote a serialised article under his pseudonym „Julius Hanf“ for the *Abendblatt der Oesterreichisch- Kaiserlichen Wiener Zeitung* on the departure of Hochstetter from Nelson. See Julius Hanf [Haast], "Streifzüge in Neuseeland: Land und Leute in der Provinz Nelson", *Wiener Zeitung*, no. 58, 6 March 1860, pp. 973-974; no. 60, 8 March 1860, pp. 1008-1009; no. 61, 9 March 1860, p. 1029; no. 62, 10 March 1860, p. 1041; no. 64, 13 March 1860, p. 1081; no. 65, 14 March 1860, p. 1103.

⁷² Karl von Scherzer (1821-1903), took part in the *Novara* expedition 1857-59, but left the expedition in Chile and rejoined it in Gibraltar. See Ernst Bruckmüller, ed., *Personenlexikon Österreich*, Vienna, Verlagsgemeinschaft Österreich-Lexikon, 2001, p. 425.

⁷³ *Strigops habroptila* (G R Gray 1845). The kakapo is a New Zealand native nocturnal flightless parrot.

⁷⁴ *Apteryx*, kiwi, a genus of native nocturnal flightless New Zealand birds.

Herewith I send you some German newspapers; the *Leipziger Illustrierte Zeitung* is filled with fields of dead Austrian soldiers – all in vain!

3. Ferdinand Hochstetter to Julius Haast, Melbourne 25 October 1859, MS 37 folder 180.

Melbourne, 25 October 1859

Dear friend

I am going to the goldfields today⁷⁵ and cannot find the time to write to you in more detail, but just wanted to let you know that I have arrived in Melbourne,⁷⁶ where I am staying with Dr Müller at the Botanical Gardens,⁷⁷ and that if I had the time to stay here, golden prospects would open up in all directions.

I will definitely depart by the next steamer on 16 November⁷⁸ and don't know if I will find time to write again, but will write on my return to Europe. My address is now "Vienna". Make sure you write every month. In March I will probably be in London.⁷⁹

*Notornis mantelli*⁸⁰ is a bird like a Pukeko,⁸¹ except twice the size, with shorter legs, shiny green and blue plumage, a red beak and red feet; I saw an illustration of it. See that you get hold of it, the secretary of the Wellington Museum apparently has several skins, a certain Mr 'Burner',⁸² or similar name, I can't quite remember.

Be sure to send me your essay on the moa caves⁸³ and your observations on the Wairau,⁸⁴ as I notice I have nothing on hand as yet.

A thousand greetings to Dr Monro, Dr Sinclair, the Superintendent⁸⁵ and the fine men and women of Nelson.

⁷⁵ Hochstetter started a tour of the goldfields on 25 October 1859, going first to Castlemaine, then to Maldon, Bendigo, Ballarat and Geelong before returning to Melbourne on 7 November 1859. See Darragh, "Ferdinand Hochstetter's Notes of a Visit to Australia and a Tour of the Victorian Goldfields in 1859", p. 384.

⁷⁶ Hochstetter travelled from Sydney to Melbourne on the *Wonga Wonga* steamer. He left Sydney on the 15 October 1859 and arrived in Melbourne on 18 October 1859.

⁷⁷ Hochstetter arrived in Melbourne on 18 October 1859 and stayed with Ferdinand Mueller at the Botanical Gardens. See Darragh, "Ferdinand Hochstetter's Notes of a Visit to Australia and a Tour of the Victorian Goldfields in 1859", p. 384.

⁷⁸ Hochstetter left Melbourne on 18 November 1859 on the *Benares* of the Peninsula and Oriental Company. See Hochstetter's manuscript diary of 1859, OR Dr. A. Schedl Collection, Vienna, p. 131.

⁷⁹ Hochstetter went to London in June 1860 to accompany the two Maori, Wiremu Toetoe and Hemara Te Rerehau, who embarked on the *Caduceus* on 22 June 1860, left Gravesend on 23 June 1860 and arrived in Auckland on 12 October 1860. See Georg Sauer, *Der Aufenthalt zweier Maoris aus Neuseeland in Wien in den Jahren 1859-1860: Eine ethnohistorische Darstellung*, PhD thesis, University of Vienna, 2002, p. 242.

⁸⁰ *Notornis mantelli* (Owen, 1848), Takahe. This was based on fossil material from the North Island. The South Island bird was subsequently found to differ from the fossil species and named after Hochstetter. The binomial name is *Porphyria hochstetteri* (A. B. Meyer, 1883). *Notornis* is a synonym for *Porphyria*.

⁸¹ Pukeko, *Porphyria porphyria* (Linnaeus, 1758).

⁸² Hochstetter is referring to Sir Walter Lawry Buller (1838-1906), secretary of the Wellington Institute. See Darragh, "Ferdinand Hochstetter's Notes of a Visit to Australia and a Tour of the Victorian Goldfields in 1859", p. 389 and note no. 35.

⁸³ The manuscript by Haast has numerous corrections and amendments in Hochstetter's hand and the title has also been completely changed by the latter. The original title by Haast was "Nachricht über Ausgrabungen in den Kalksteinhöhlen auf dem rechten Aorere Ufer, in der Provinz Nelson (Neuseeland)", while Hochstetter wrote "Ueber Ausgrabungen von Moa-Resten in den Kalksteinhöhlen des Aorere-Thales". This was published as, Julius Haast "Ausgrabungen von Moa-Resten in den Knochenhöhlen des Aorere-Thales", in: Ferdinand von Hochstetter, *Geologie von Neu-Seeland: Beiträge zur Geologie der Provinzen Auckland und Nelson*, Vienna, Hof- und Staatsdruckerei, 1864, pp. 242-248; and as, Julius Haast, "Excavations of Moa Remains in the Bone Caves of the Aorere Valley", in: Hochstetter, translated by Fleming, *Geology of New Zealand*, pp. 258-265. The Haast manuscript is in the OR Dr. A. Schedl Collection, Vienna.

⁸⁴ Although no extant manuscript notes on the Wairau have been found, there are a number of MS maps of this and other areas surveyed by Haast in the Nelson Province amongst the Hochstetter papers in Vienna. One of these covers the area from the Hurunui River in the South to the Wairau River in the North, while another with the title "Geological Sketch Map of the South west part of the Province of Nelson, by Julius Haast Esq. 1861," has a dedication to his friend Hochstetter inscribed, "Seinem lieben Freund Prof. Ferd. von Hochstetter, Julius Haast, Christchurch 3 October 1861 Neu-Seeland". Manuscript sketch maps in OR Dr. A. Schedl Collection, Vienna.

⁸⁵ In 1859 the Superintendent of the Province of Nelson was John Perry Robinson (1809-1865), elected as Superintendent of Nelson Province in 1856. Robinson is acknowledged for his assistance to Hochstetter and the *Novara* expedition. See, Karl von Scherzer, *Reise der Oesterreichischen Fregatte Novara um die Erde, in den Jahren 1857, 1858, 1859, unter den Befehlen des Commodore B. von Wüllerstorff-Urbair: Beschreibender Theil*, (Volksausgabe), Wien, Carl Gerold's Sohn, 1866, vol. 2, Beilage IV, p. 5.

Melbourne is an American New York and I am glad to get out a bit.
Is Schmitt⁸⁶ in Auckland already married?
A thousand greetings from your loyal
Ferdinand Hochstetter

4. Ferdinand Hochstetter to Julius Haast, Melbourne 16 November 1859, MS 37 folder 180.

Melbourne, 16 November 1859

Esteemed friend

Yesterday I received your letter of the 21st of October with the essay on the Moa Caves – a thousand thanks. I was extraordinarily pleased to get your friendly and informative letter. Do continue in this way with your correspondence. You know how attached I am to New Zealand and how very interested I am in your ongoing experiences there. The newspapers of which you write have not yet reached me. I still hope to get them.⁸⁷ Do continue to send me clippings and notices from the papers that may be of interest to me. Thank you for your efforts in relation to the plants. Send greetings to Mrs Renwick for me and express my thanks in the most glowing words to her for her efforts; she is really an outstanding lady, who deserves full recognition for the friendship shown towards a foreign naturalist. Be so good as to write to me by the next mail by which ship and to where, whether London or Liverpool, the plants were dispatched and to which company, in order that I may make the necessary arrangements as soon as the ship arrives.

Your geological notes were very interesting; make sure you get some of the fossils from Palliser Bay.⁸⁸ I see from the newspapers that Maling's excavations⁸⁹ were very successful; if you write to Owen⁹⁰ about moas, I ask you to be careful, so that the material does not get into his hands, in order that the Germans may retain the honour of having been the first to describe a complete skeleton. Do let him send you his latest publication on the Moa,⁹¹ in which there is a lithograph and articulation of a complete skeleton; I saw the brochure in Sydney. In your next letter do write in more detail about Maling's successes, so that I may add the results to my essay.

Curtis⁹² and his Current Basin⁹³ is strange, and I thank you for replying to him.⁹⁴ Greet the Superintendent most sincerely, I would be very grateful for a few more copies of my lecture⁹⁵ sent to Vienna via Trieste, as I only have one single copy left, and I would ask him to do me the favour of sending a few copies to Melbourne under the following addresses:

Sir Henry Barkly,⁹⁶ Governor, Melbourne
Public Library, Melbourne⁹⁷

⁸⁶ Karl Gustav Schmitt (1834-1900), German violinist, conductor and music lecturer at Auckland University College. A newspaper account from the time of Hochstetter's visit reports: "The musical portion of the evening's proceedings was under the direction of Herr Schmitt, Conductor of the Auckland Philharmonic Society [...]. [T]he concerted music was arranged by Mr. Schmitt, who in the course of the evening, played 'Home, sweet Home!' with a feeling that made every one think of the childhood's home he had left [...]", Anon., "Presentation of the Testimonial to Dr. Hochstetter", *The New Zealander*, 27 July 1859.

⁸⁷ This sentence appears as a footnote in the manuscript letter.

⁸⁸ Palliser Bay, Wellington, New Zealand.

⁸⁹ Christopher Maling (1843-1917), a surveyor who had worked on Moa excavations with Haast.

⁹⁰ Sir Richard Owen (1804-1892), British comparative anatomist and superintendent of the Natural History Departments of the British Museum, was the first person to identify and describe the *Dinornis*, moa, based on a single piece of bone from New Zealand. For more information see Richard Wolfe, *Moa: The Dramatic Story of the Discovery of a Giant Bird*, Auckland, Penguin Books, 2003.

⁹¹ Owen published more than 600 scientific papers, of which 50 dealt with the osteology of New Zealand birds and a majority of moa species bear his name. See Trevor H. Worthy and Richard N. Holdaway, *Prehistoric Life of New Zealand: The Lost World of the Moa*, Bloomington, Indiana University Press, 2002, p. 12.

⁹² Herbert Evelyn Curtis (1818-1890), Nelson pioneer and trustee of Nelson Provincial Museum.

⁹³ See Herbert Evelyn Curtis, "[To the Editor of the 'Nelson Examiner']", letter dated Nelson 4 October [1859], *The Nelson Examiner*, 5 October 1859.

⁹⁴ See Julius Haast, "[To the Editor of the 'Nelson Examiner']", letter dated Nelson 6 October [1859], *The Nelson Examiner*, 8 October 1859.

⁹⁵ Ferdinand von Hochstetter, "Lecture on the Geology of the Province of Nelson", *The New Zealand Government Gazette (Province of Nelson)*, vol. 7, no. 20, 1859, pp. 90-102.

⁹⁶ Sir Henry Barkly (1815-1898), Governor of Victoria 1856-1863.

Selwyn Esq.,⁹⁸ Government Geologist, Melbourne

Sir William Denison,⁹⁹ Governor, Sydney

Sir Roderick Murchison,¹⁰⁰ president of the Royal Geographical Society, London.

I have not yet received the letter from Travers;¹⁰¹ give him my best regards, and he must not to forget to write to me.

I have written on gold matters to Dr Monro, but only very hurriedly, and I wish, should any of it be published, that my hurried writing might be trimmed into shape a bit. I did not claim that no gold would or could be found on the left bank of the Aorere River, but only mentioned the fact that as yet little had been found.

As, according to Travers, the phyllite formation is also to be found in the limestone on the left Aorere, it then comes as no surprise that gold should also be found there.

The expedition to the West Coast¹⁰² will be a very interesting one, and I would be very happy if you take part in it. The expedition will be very useful to you.

In answering your letter I now come to the part with the affairs of the heart. The nameless tales – why don't you mention any names? Who is the young woman who loves me, who wanted to send me violets? Is she pretty, is she lovely? Why did the poor heart not reveal herself, when there was still time, to provide the embers with pleasant relief! Kiss her in my name and thank her; in your next letter write me her name or let her write herself.¹⁰³

Regards also to Mrs Sharp,¹⁰⁴ but I warn you as a friend about this dangerous woman. I cannot think of who the other Potiphar¹⁰⁵ might be, again don't create nameless tales!

My stay in Melbourne has come to an end; I am very satisfied, from what I have seen and the collections that I have received. Tomorrow I will be at sea headed for home. The *Novara*, escorted by a whole fleet, arrived in Trieste on the 24th August. I did not send you the photo of the *Novara* expedition,¹⁰⁶ and I did not get a print for myself either, as the whole thing was too atrociously bad, I will get you something better and send it to you from Vienna.

Dr Mueller,¹⁰⁷ a very likeable German scholar, with whom I am staying here in the Botanical Gardens, sends his regards. There are many fine Germans here; the day before yesterday they put on a dinner for me at the Criterion Hotel, which was a very merry occasion.

⁹⁷ Melbourne Public Library; Hochstetter describes this library, which he first visited on the 18 October 1859, as, "Der Stolz von Melbourne, der Stolz der Colonie u.[nd] der Stadt." Hochstetter's manuscript diary of 1859, OR Dr. A. Schedl Collection, Vienna, p. 125. Translated as: "The pride of Melbourne, the pride of the Colony and the city", Darragh, "Ferdinand Hochstetter's Notes of a Visit to Australia and a Tour of the Victorian Goldfields in 1859", p. 414. Hochstetter also spoke on the Melbourne Public Library at the meeting of the Viennese Geographical Society on 1 May 1860. See *Mittheilungen der kaiserlich-königlichen Geographischen Gesellschaft*, vol. 4, 1860, pp. 115-118.

⁹⁸ Alfred Richard Cecil Selwyn (1824-1902), Government geologist in Melbourne.

⁹⁹ Sir William Thomas Denison (1804-1871), Governor of New South Wales 1855-1861. In 1859 Denison was made a corresponding member of the "Geologische Reichsanstalt" in Vienna for his support. See *Jahrbuch der kaiserlich-königlichen Geologischen Reichsanstalt*, vol. 10, 1859, p. XIV.

¹⁰⁰ Sir Roderick Impey Murchison (1792-1871), president of the London Geographical Society.

¹⁰¹ William Thomas Locke Travers (1819-1903), Nelson lawyer and politician, later in Christchurch.

¹⁰² For an account of Haast's expedition to the West Coast, see H. F. von Haast, *The Life and Times of Sir Julius von Haast*, pp. 89ff.

¹⁰³ The unnamed admirer is named in a later letter as Anna Stedall. See Hochstetter letter to Haast no. 7 dated 13 March 1860.

¹⁰⁴ Emma Bonnington Sharp (d. 1886) was the first wife of John Sharp (1828-1919), they were married in Nelson in May 1853.

¹⁰⁵ Potiphar is a biblical character from the Old Testament.

¹⁰⁶ Photographs of the members of the *Novara* expedition were taken by the German photographer Wilhelm Hetzer in Sydney as Hochstetter writes: "Ein deutscher Photograph, Herr Hetzer, hat ein photographisches Tableau der Mitglieder der 'Novara Expedition' zusammengestellt, und man erzählt sich, dass Abdrücke gewisser Porträts bei den Damen in Sydney guten Abgang finden." Vinzenz von Haardt, ed., *Ferdinand v. Hochstetter's Gesammelte Reise-Berichte von der Erdumsegelung der Fregatte 'Novara' 1857-1859*, Wien, Eduard Hölzel, 1885, p. 321. Wilhelm (William) Hetzer (c. 1822-1891) arrived in Sydney on 3 February 1850 on the *Balmoral* together with his wife Thekla, who was a pianist and piano teacher, but also assisted her husband in the photographic studio which they established in Hunter Street soon after their arrival. They spent 17 years in Sydney before leaving in 1867. Hetzer died in Frankfurt am Main on 12 August 1891 at the age of 69. See *Sydney Morning Herald*, 29 September 1891.

¹⁰⁷ Mueller, see also Müller.

Yesterday I spent the evening with the governor, today I will talk about New Zealand at the Philosophical Institute¹⁰⁸ and tomorrow off to sea!

Farewell dear friend, give my sincere regards to my friends in Nelson and be sure to write to Vienna.

Regards from your loyal
Ferdinand Hochstetter

Postscript.

Kirchner & Co in Sydney have just written to say that they have received 3 cases through Curtis Bros., please do enquire with Curtis about the fourth case. (You remember that 3 cases were at the Trafalgar Hotel,¹⁰⁹ the fourth in the 'Moa Room' at the Land Office). Do enquire to see if the fourth case was sent, and if only 3, then make sure that the next steamer brings the fourth to Sydney. But perhaps Kirchner miscalculated, I will write to Kirchner about it as well.

5. Ferdinand Hochstetter to Julius Haast, Mauritius 7 December 1859, MS 37 folder 180.

200 miles from Mauritius, 7 December 1859

Esteemed friend

You will receive this letter from Mauritius – Paul and Virginia¹¹⁰ – which we hope to reach in good time by tomorrow morning. So far the trip from Melbourne has been one of the most beautiful and comfortable that one could have; continuously fine weather and calm seas, as if we were in a harbour. Half the homeward distance has already been covered and in another month I will be at home.

Your second letter from Nelson dated 3rd November with details of Maling's excavations, together with copies of my Nelson lecture, reached me on board the steamer when we took on board the mail from Sydney at Port Philipp Head.¹¹¹ I already answered your earlier letters in Melbourne. Thank you very much for your interesting notes, including those in your last letter.

You write that you approached the Nelson Government to send me the newly discovered bones.¹¹² It is very understandable that the government did not accede to this and that instead these collections should be reserved for the Nelson museum,¹¹³ after they have so generously sent me everything collected earlier. It is better not to appear to be too immodest. I will always be happy when a newly discovered curiosity of natural history is sent to me for identification and description, but would not expect, nor request, that any of the newly discovered bones should be sent to me, all the more so as there does not seem to be anything positively new amongst them. Only the land snail¹¹⁴ would be of interest to me, or at least a good coloured drawing of it.

I almost assume that these lines will reach you in Otago or Canterbury. News from these southern regions, which I unfortunately did not get to visit, will be of great interest to me. I will write to Mrs Renwick from Vienna. I have very little to write to you about our trip, as there was no incident of any kind that would be worth mentioning. The company on board is small; there

¹⁰⁸ Philosophical Institute of Victoria, now Royal Society of Victoria.

¹⁰⁹ Trafalgar Hotel, Nelson, formerly situated in Trafalgar Street, now demolished.

¹¹⁰ This is a reference to the book by the French writer Jacques Henri Bernardin de Saint Pierre (1737-1814), entitled *Paul et Virginie*, first published in German as, *Paul und Virginie*, 1787.

¹¹¹ Port Philipp Head, promontory at Port Philipp Bay, Melbourne.

¹¹² After Hochstetter had left New Zealand the Nelson Provincial Government sent Christopher Maling back to the Aorere Valley caves system to continue searching for moa bones, it is these successful later excavations that Hochstetter is referring to here. See Hochstetter, *Neu-Seeland*, Stuttgart, Cotta, 1863, p. 451 note.

¹¹³ Nelson Provincial Museum. Hochstetter laid the Foundation stone inscribed "PRO BONO PUBLICO" on 26 August 1859 for the Nelson Institute Building. See Cyprian Bridge Brereton, *History of the Nelson Institute*, Wellington, Reed, 1948, p. 36.

¹¹⁴ *Helix Hochstetteri* (Pfeiffer, 1862), now *Paryphanta (Powelliphanta) hochstetteri hochstetteri* (Pfeiffer, 1862). See Charles Alexander Fleming, Les Owen Kermode, James Northcote-Bade and Klaus Bernhard Spörli, translators, *Carlé's Biography of Ferdinand von Hochstetter*, Geological Society of New Zealand Miscellaneous Publication No. 40, 1988, p. 24. See also illustration and note in Hochstetter, *Neu-Seeland*, p. 434.

are only 26 passengers, nice people, with whom I am not becoming intimate though. The two hours on land at King George's Sound¹¹⁵ at the South Western corner of Australia were very entertaining; there was a wealth of rare flowers like I have never seen anywhere else in the world. I completely filled my flower press. There were also many Australian Aborigines, whom I saw here in their original natural state for the first time.

We are back in the tropics and feeling the heat under the vertical sun. At night after 10 o'clock I sit on deck in the wonderful cool moonlit night and smoke my cigars. My thoughts usually revert back to New Zealand or look forward to home.

When I get home I hope to find articles by you in the *Allgemeine Zeitung*, *Petermann's Mittheilungen* and in the *Fremdenblatt* from time to time.

Greet all our friends most sincerely from me and remember your
Ferdinand Hochstetter

Unfortunately I did not receive the newspapers you mentioned in your second-to-last letter.

P.S. I would like you to enquire how much my stay in Nelson cost the Provincial Government in total and write to me about it.

6. Ferdinand Hochstetter to Julius Haast, Esslingen 7 March 1860, MS 37 folder 180.

Esslingen, 7 March 1860

My esteemed friend

I am writing to you from Esslingen, my home town. You have been without letters from me for the last two mails, sorry; I missed the first mail through my arrival in Vienna after a successful journey, where I was welcomed by all my friends who met me at the railway station. I arrived on 13 January and that was the last day for the foreign mail. Then there followed a myriad of visits and things to take part in and get done. On 12 February¹¹⁶ I travelled to my home town, Esslingen; there was a big family celebration, all the siblings together, my esteemed parents, the grand children and great grand children; my younger brother's¹¹⁷ wedding; and there, amidst all the indescribable happiness my dear father¹¹⁸ suddenly died of a heart attack in the middle of the happiest of conversations in the intimate circle of his family at my brother's wedding celebration¹¹⁹ in Reutlingen. The enormous happiness killed him!

You can imagine how disconcerting and terribly shocking this was for us all. Since then I have been working together with my brothers to sort out all the various matters for my equally aged mother.¹²⁰ I am writing to you on the eve of my departure for Vienna, in all the hustle and bustle, only in order that you will not be without mail from me again. Apart from this deeply tragic event I also have to share with you the official attestations of friendship:

- 1) Order of the iron crown with hereditary knighthood from the Emperor.¹²¹
- 2) Order of the Crown of Württemberg with personal ennoblement from the King.¹²²

¹¹⁵ King George Sound, southernmost part of Western Australia.

¹¹⁶ Hochstetter left Vienna on the 12 February 1860 to travel to Esslingen.

¹¹⁷ Hochstetter's younger brother, Christian Albert Hochstetter (1832-1895), was a pharmacist in Esslingen and Stuttgart.

¹¹⁸ Hochstetter's father was the theologian and naturalist Christian Ferdinand Hochstetter, (1787-1860).

¹¹⁹ Hochstetter's father died at the wedding of Christian Albert Hochstetter (1832-1895) and Mathilde Knapp (1833-1874) on the 20 February 1860.

¹²⁰ Hochstetter's mother was Frederike Sophie Hochstetter, nee Orth (1795-1861).

¹²¹ The Austrian Emperor awarded Hochstetter the Order of the Iron Crown, Third Class, on 22 November 1859. See Darragh, 2001, p. 385. This was already recorded by Haidinger at a meeting of the "Geologische Reichsanstalt" on 13 December 1859. Haidinger expresses his thanks for "die hohe Auszeichnung, welche einem unserer Mitglieder in der Verleihung des Oesterreichisch-Kaiserlichen Ordens der Eisernen Krone dritter Classe für 'unermüdliches Streben und erfolgreiches Wirken im Bereiche der Naturwissenschaften' zu theil geworden ist." See "Verhandlungen der k.k. Geologischen Reichsanstalt", Sitzung 13 December 1859, p. 186.

¹²² On 19 February 1860 King Wilhelm of Württemberg ennobled Hochstetter with the award of the "Ritterkreuz des Ordens der Württembergischen Krone" (the Knight's Cross of the Württemberg Crown), and this entitled him to place the "von" before his surname. See Constant von Wurzbach, *Biographisches Lexikon des Kaiserthums Oesterreich, enthaltend die Lebensskizzen des*

My New Zealand friends may be interested in this and more than anything else I put it down to their friendship, as the English government made the unusual move of officially thanking the Austrian Government.¹²³

You can imagine how strongly I am still attached to New Zealand in my memories. Give my regards to all my friends; the next mail will bring more, and more detailed, letters, but today I am not up to it. Your articles for the *Wiener Zeitung*¹²⁴ were received with joy, but appeared during my absence from Vienna.

Forgive me, dear friend, for closing here today, but after I have spent all day looking through my precious father's collections, I cannot go on, and only once I am back in Vienna will I find the time and leisure to write to you in more detail.

Farewell, dearest friend and remember your
Ferdinand Hochstetter

Vienna, Krugerstrasse 1013.

7. Ferdinand Hochstetter to Julius Haast, Vienna 13 March 1860, MS 37 folder 180.

Vienna, 13 March 1860

Esteemed friend

Your two letters, the first dated 25 November and the second dated 22 December 1859, with the postscript from New Year's Eve, both reached me at the same time strangely enough, together with a very kind letter from Travers, which I will also be replying to today, and letters from Auckland. This was the first New Zealand mail that I have received since returning home, as in February I only received the short note accompanying your articles for the "*Wiener Zeitung*". You can imagine what a celebration this has been for me today. I already wrote to you briefly from Esslingen eight days ago,¹²⁵ but will write this letter to you and hope that with a bit of luck it might still go by the March mail and reach you somewhere on the West Coast, and if not, then on your return.

First of all, my sincere thanks for all the dear, good, beautiful, amusing and interesting things contained in your letters, and then good luck for your expedition to the West Coast, where you are now tucked away in some corner of the New Zealand Alps.

I am answering your letters by subjects as they come, in order that I do not miss anything; therefore:

1) Regarding the sending of minerals, fossils and collections: I will be able to write something more definite on this in my next letter. Before making some enquiries I cannot say who will pay the cost of transport, and therefore what the address in Vienna will be, but for London it will be best if the address always remains Willis, Gann & Co.,¹²⁶ whom I will visit in May or at the latest June and will then instruct for the future.

2) I will take the liberty to use the details that you send me of the expedition and other items of interest from your letters in notes for publication under your name in appropriate places. Where I can get off-prints of the published item, and that should be possible in most cases, I will

denkwürdigen Personen, welche seit 1750 in den österreichischen Kronländern geboren wurden oder darin gelebt und gewirkt haben, vol. 9, Vienna, Hof- und Staatsdruckerei, 1863, p. 78.

¹²³ The letter by Thomas Gore Browne to Bernhard von Wüllerstorff-Urbair, dated 4 January 1859, was published in both Hochstetter, *New Zealand*, p. 28 and Karl von Scherzer, *Narrative of the Circumnavigation of the Globe by the Austrian Frigate Novara (Commodore B. von Wüllerstorff-Urbair,) Undertaken by the Order of the Imperial Government, in the Years 1857, 1858, & 1859, under the immediate auspices of His I. and R. Highness The Archduke Ferdinand Maximilian, Commander-in-Chief of the Austrian Navy*, vol. 3, London, Saunders and Otley, 1863, Appendix III, p. 508.

¹²⁴ Haast wrote under the pseudonym, Julius Hanf: "Streifzüge in Neuseeland. Land und Leute in der Provinz Nelson", *Wiener Zeitung*, no. 58, 6 March 1860, pp. 973-4; no. 60, 8 March 1860, pp. 1008-9; no. 61, 9 March 1860, p. 1029; p. 62, 10 March 1860, p. 1041; no. 64, 13 March 1860, p. 1081; no. 65, 14 March 1860, p. 1103. See also, H. F. von Haast, *Life and Times of Sir Julius von Haast*, p. 33.

¹²⁵ Hochstetter letter to Haast no. 6 dated Esslingen 7 March 1860.

¹²⁶ Willis, Gann & Co., the London shipping company that had formerly employed Haast.

send you these. For the first of your letters, now in my hands, I won't wait for your permission, which I anticipate will be forthcoming.

Your articles on "the land and people of Nelson"¹²⁷ have appeared in the *Wiener Zeitung* and have given much pleasure. You will receive copies by the next mail. The *Petermann's* issue no. III for 1860¹²⁸ includes your notes on our Auckland expedition, although a little late.

3) Give my regards to Mackay,¹²⁹ Rochfort¹³⁰ and Burnett,¹³¹ I yearn to be with you, but now it is no longer possible. I am already stuck in a professorial position in the old world and thinking about another half.¹³²

4) I found the story of the Lady Hochstetter most amusing, may she be a good omen, and may my race in New Zealand proliferate, and as it is not to be in human form then may it be in horse form. Give my best regards to Mr Ward¹³³ and tell him from me that I hope his young Hochstetters will become good mountaineers.

5) Tonight I drank your health with a glass of real Liesinger in the hope that the time will come when we may drink it together.

6) For new mountains, rivers, valleys and caves I would recommend the following names to you: Haidinger¹³⁴ and Wüllerstorff,¹³⁵ and Ferdinand Maximilian,¹³⁶ for example Maxburg etc. or something decent, worthy of an archduke. I have not even seen Jelinek¹³⁷ yet, he stayed in the archduke's gardens in Trieste.¹³⁸ For new snails and animals Frauenfeldii¹³⁹ and Zeleborii,¹⁴⁰ who both send you their best regards.

7) You wish to know what honours the members of the *Novara* received and what prospects there are for me; here there is both happy and sad news to report. The commodore received the Order of the iron crown second class with ennoblement. The commander,¹⁴¹ Frauenfeld, Scherzer and I received the Order of the iron crown third class with hereditary knighthood. Zelebor, Jelinek and our pilot officer Müller¹⁴² received the Order of Merit. Everyone else missed out, for now anyhow. The king of Württemberg¹⁴³ honoured me with the Order of the Württemberg crown raising me to nobility: Mr von Hochstetter! What prospects!

You know or you must hear that Austria is rotting away in the living flesh, unless the right doctor can be found soon! Where Feldzeugmeister like Egnaten, who embezzled 1½ million in the last war and let the peasant soldiers starve, turn into traitors – he hanged himself in prison the other day. Where a lieutenant colonel sells plans to the enemy for a million francs – the bad fellow was hung the day before yesterday. Where the director of a loan bank, a man with an

¹²⁷ Julius Hanf [Haast], "Streifzüge in Neuseeland. Land und Leute in der Provinz Nelson", *Wiener Zeitung*. See above for details.

¹²⁸ Julius von Haast, "Dr. Ferdinand Hochstetter's Reise durch die nördliche Insel Neu-Seelands, 5. März bis 24. Mai 1859", *Mittheilungen aus Justus Perthes Geographischer Anstalt über Wichtige Neue Erforschungen auf dem Gesamtgebiete der Geographie von Dr A. Petermann*, no. 3, 1860, pp. 107-111.

¹²⁹ James Mackay (1831-1912), New Zealand explorer in Nelson, Assistant Native Secretary and Land Purchase Commissioner. In 1859 he was resident magistrate at Collingwood and warden of the goldfield.

¹³⁰ John Rochfort (1832-1893), New Zealand pioneering surveyor and civil engineer in Nelson.

¹³¹ James Burnett (1826-1872), New Zealand surveyor and Nelson Provincial Engineer.

¹³² Hochstetter married Georgiana Bengough on 2 April 1861, just over a year after the date of this letter.

¹³³ Joseph Ward (1817-1892), member of the Nelson Provincial Council 1853-57 and 1860-75.

¹³⁴ Mount Haidinger in Mount Cook National Park was named by Haast after Wilhelm von Haidinger, director of the Austrian Imperial Geological Institute. Haast also gave Haidinger's name to a peak in the Humboldt Range in Nelson. See Alexander Wyclif Reed, *The Reed Dictionary of New Zealand Place Names*, Auckland, Reed, 2002, p. 183.

¹³⁵ Bernard Freiherr von Wüllerstorff-Urbair (1816-1883), Austrian naval commodore and commander of the *Novara* expedition.

¹³⁶ Archduke Ferdinand Maximilian (1832-1867), Commander of the Austrian navy, patron of the *Novara* Expedition and later Emperor of Mexico.

¹³⁷ Anton Jelinek (1820-1897), botanist on the *Novara* Expedition.

¹³⁸ This sentence appears in the left margin of the manuscript letter.

¹³⁹ After Georg Ritter von Frauenfeld (1807-1873), Austrian zoologist and member of the *Novara* expedition.

¹⁴⁰ After Johannes Zelebor (1819-1869), Austrian zoologist and member of the *Novara* expedition.

¹⁴¹ Friedrich Freiherr Baron von Pöck (1825-1884), Austrian Admiral. He was the commander of the Austrian frigate *Novara*, under Commodore Wüllerstorff-Urbair, during the expedition of 1857-1859. At the time of the expedition he held the rank of "Corvettenkapitän", and was promoted during the voyage to the rank of "Fregattenkapitän" on 2 December 1857. See *Österreichisches Biographisches Lexikon 1815-1950*, vol. 8, Wien, Akademie der Wissenschaften, 1983.

¹⁴² Robert Müller was the pilot of the *Novara*, a "Schiffsfähnrich", promoted to "Fregattenleutnant" on 1 November 1857.

¹⁴³ Wilhelm I, King of Württemberg, (1781-1864).

income of 40,000 guildens, is taken into custody on similar grounds. Where one finds the names of men of the highest ranks mixed up in fraud and villainy. Where such damages are eating away, what prospects can there be, for the moment anyhow? Vienna and unfortunately Austria are in a terrible state of depression both physically and morally. But fortunately the power of the law is upheld, and the worse the present is, the more hope there is for the future. I was received with all honours and recognition, but the only thing that was done for me was the professorship at the Polytechnic Institute,¹⁴⁴ which I have definitely accepted and will take up next winter. You will therefore meet me again as a well-endowed professor with a Mrs Professor. Everything would be fine, but there is no money, and here that is something that every pilferer has, but the state is poor to the point of bankruptcy! And our archduke, who could get us something, is in Brazil.¹⁴⁵ Yet in no way do I look bleakly into the future, I hope for the best. In Wurttemberg I was honoured and received awards like no pastor's son in his thirties has ever done before, and the same support goes for all of Germany.

8) Give my sincerest regards to all my friends.

9) I will only be able to start next winter with the actual publications. You will of course receive copies of everything. I will probably spend May and June in England.

10) You should definitely send any new plants to Dr Hooker,¹⁴⁶ but duplicates to me here.

11) The Renwick scandal surprised me; I really would not have expected this from that woman.

12) My best thanks therefore for your efforts in regard to the plants. They will be all the more useful since the king of Wurttemberg has honoured me in this way. I am writing at the same time to Mr Travers, who really is noble-hearted, but in return I will do him a favour, as much and as far as I am able.

13) The copies of the Nelson lecture reached me; both the Nelson and the one from Auckland from the *Government Gazette*.¹⁴⁷ Also accept my best thanks for the newspaper clippings¹⁴⁸ which gave me great pleasure.

14) Do be sure to send plants to Dr Mueller; that is the closest and best address.

15) To Miss Anna Stedall, even if she is not pretty, my best regards, as I feel sorry for her.

16) I will write to the Dun Mountain Company¹⁴⁹ this week.

17) A copy of my map is coming, but with the next, or the one after the next mail, as I am only now getting to work on it. You will also receive the book by Naumann.¹⁵⁰

18) I was pleased to hear about Koch's appointment.¹⁵¹

19) What I can get for you by way of diplomas is also coming, and Frauenfeld will write to you by the next mail.¹⁵²

¹⁴⁴ On 29 February 1860 Hochstetter was appointed as professor of geology and mineralogy at the "k.k. Polytechnisches Institut", later "Technische Universität", in Vienna.

¹⁴⁵ Ferdinand Maximilian travelled to Brazil in the winter of 1859-1860 on the steamer *Elisabeth* to visit his cousin Pedro II of Brazil. The expedition arrived back in Trieste towards the end March 1860. See Elisabeth Zeilinger, "Die zweite Hälfte des 19. Jahrhunderts: Österreichische Forschungen in Amerika", in: Franz Wawrik, Elisabeth Zeilinger, Jan Mokre and Helga Hühnel, eds., *Die Neue Welt: Österreich und die Erforschung Amerikas*, Wien, Brandstätter, 1992, pp. 127-128.

¹⁴⁶ Dr Joseph Dalton Hooker (1817-1911), English botanist who visited New Zealand from August to November 1841, when he was based in the Bay of Islands. See W. H. Oliver, ed., *The Dictionary of New Zealand Biography: Volume One*, Wellington, Allen & Unwin and Department of Internal Affairs, 1990, pp. 202-203.

¹⁴⁷ Ferdinand von Hochstetter, "Lecture on the Geology of the Province of Auckland, New Zealand", *The New Zealand Gazette*, no. 23, 14 July 1859, pp. 162-174.

¹⁴⁸ Hochstetter's collection of newspaper clippings from New Zealand is held in the OR Dr. A. Schedl Collection, Vienna.

¹⁴⁹ Dun Mountain Copper Mining Company, formed in London in 1856. Hochstetter was called on to inspect the Dun Mountain area, as there was some dispute as to the feasibility of the mining enterprise. See H. F. von Haast, *The Life and Times of Sir Julius von Haast*, pp. 38, 29 and 42. See also Mike Johnston, *High Hopes: The history of the Nelson Mineral Belt and New Zealand's first railway*, Nelson, Nikau Press, 1987, pp. 32-33.

¹⁵⁰ Carl Friedrich Naumann (1797-1873), German geologist, professor of geology at Leipzig and Freiberg.

¹⁵¹ Augustus Carl Ferdinand Koch (1834-1901), German artist and lithographer who accompanied Hochstetter on his expedition in the Auckland province in 1859. Koch was appointed as draughtsman at the Crown Lands and Survey Office in Napier.

¹⁵² Heinrich von Haast writes that Frauenfeld wrote to Haast on Christmas day 1861 and in 1867 he became godfather to Haast's second son. See H. F. von Haast, *Life and Times of Sir Julius von Haast*, p. 15 note.

20) I am very excited about the news and results of your expedition.

21) Do send any fossils in good condition through Willis Gann & Co. under my address: "Professor at the Royal Imperial Polytechnic Institute in Vienna."

Your name shall be mentioned a hundred times in my work.¹⁵³ Also send what you can spare by way of moas, as they are being worked on and will be set up as plaster casts by my friend Dr Jaeger,¹⁵⁴ an outstanding young German comparative anatomist.

22) Your geological notes would be of great interest to me. I will write to you more on this later, as first I have to read and follow on the map at leisure. What you write about the kitchen middens sounds almost mythical, yet might be correct. Enclosed you will find some newspaper clippings. The city of Vienna gave a great Novara dinner¹⁵⁵ and was noble enough to wait for my return. I have already written to you about what a painfully sad end my trip home to my parents took. My precious father – 73 years old – could not stand the huge amount of happiness, and died suddenly of a heart attack. But thank God we still saw each other, and the reunion was an extremely happy one.

Goodbye for now, dear friend, be happy, become happy and stick to your original plans, as the straight path is always the best way to the goal.

Good luck!

Your sincere friend,

Ferdinand Hochstetter

8. Ferdinand Hochstetter to Julius Haast, Vienna 7 April 1860, MS 37 folder 180.

Vienna, 7 April 1860

Krugerstrasse 1013

My esteemed friend

My last mail, which left in mid-March, will presumably have reached you. I think I can now congratulate you already on your successful return from the West Coast expedition with strange and interesting results, coal, gold, sheep pastures, moa, kiwi, kakapo etc. and strange snails. In the meantime, hindered in a thousand ways, I have not progressed as much as I wished. The day before yesterday I sent off my Dun Mountain report¹⁵⁶ to London. I finished this off first so that at least this matter does not linger on too terribly long, and now I am working on the Nelson map and hope to have a copy finished in time for the mail in May. Another thing that held me up was the fact that the last eight cases from New Zealand, which contain my complete Nelson collections, have not arrived. Before sending off the map I would have liked to have been able to compare some things. But now I am not letting anything hold me up in my work anymore.

¹⁵³ Hochstetter acknowledges Haast in the introduction to his book when he writes: „In reichstem Maasse aber hat mein Freund und früherer Reisebegleiter Dr. Julius Haast, jetzt Regierungs-Geologe der Provinz Canterbury, zur Vervollständigung dieses Werkes beigetragen durch die höchst wichtigen und anziehenden Resultate seiner in den Jahren 1860 bis 1862 so muthvoll ausgeführten Forschungsreisen in den Alpen-Gebirgen der Südinsel." Hochstetter, *New-Seeland*, p. ix.

¹⁵⁴ Dr Gustav Jäger (1832-1917), author of *Bericht über ein fast vollständiges Skelet [sic] von Palapteryx ingens über dessen Restauration und die davon angefertigten Gypsabgüsse; mit einigen Bemerkungen über die Aufstellung der Vogelskelete [sic] überhaupt*, Wien, Braumüller, 1863. He also contributed a section on the skull of a moa entitled "Bericht über einen fast vollständigen Schädel von Palapteryx", in: Ferdinand von Hochstetter, et al., eds., *Reise der Oesterreichischen Fregatte Novara um die Erde: Geologischer Theil, 1. Band, 2. Abtheilung: Paläontologie*, Wien, Staatsdruckerei, 1864, pp. 306-318.

¹⁵⁵ A dinner in honour of the members of the *Novara* expedition was held on the 9 February 1860, after Hochstetter had returned to Vienna on 13 January 1860. The proceedings of this dinner are reported under the heading: "Festmahl zu Ehren der Rückkehr der k. k. Fregatte 'Novara'", in three issues of the *Wiener Zeitung*, no. 38, 11 February 1860, p. 607; no. 39, 12 February 1860, p. 621-622; no. 40, 14 February 1860, p. 646.

¹⁵⁶ The "Dun Mountain Report", was a confidential report Hochstetter sent to the directors of the Dun Mountain Copper Mining Company in London. Hochstetter's manuscript draft in German is in the OR Dr. A. Schedl Collection, Vienna. For an English translation see: Mike Johnston, Sascha Nolden & Leonore Hoke, *Hochstetter's Nelson Diary: 6 September – 2 October 1859 and Dun Mountain Report*, Geoscience Society of New Zealand, 2012, pp. 57-68.

With regard to the geological publications, I have looked into this for you; the Naumann¹⁵⁷ is unfortunately out of print and is not available second-hand here either, and so far only the atlas and the first volume are available from the second edition. I have purchased these for you as well as a book on mining, mineralogy and geology; these were dispatched 14 days ago to Willis, Gann and Co.¹⁵⁸ in London, and from there either by post or ship. It is impossible to send these things from here directly, as one encounters a thousand obstacles and one never knows when they will be dispatched.

I have to pay between 60 kreutzer and 1 shilling and 80 kreutzer for fully-franked letters addressed to me from Australia and New Zealand if they arrive via Trieste; I ask you therefore to send them via Marseille in future. I do not know where the confusion lies.

Your letter regarding the German “Home News” only reached Cotta¹⁵⁹ in Stuttgart in March, and I had already discussed it with him by then. The matter made him very enthusiastic, and he writes to me the following: “If I was not 64 years old, then I would have to say that the idea has made me most youthfully enthusiastic and not only myself, but also my eldest son. I will immediately spread the word in all directions and have a programme made. I am sending my son to Augsburg to discuss the matter with the editorial board of the *Allgemeine Zeitung*. In this way I hope to gain a clear picture and get an idea on the feasibility of the project. I thank you for the fact that you and Mr Haast in New Zealand thought of me, you have thereby honoured me and done me a favour.” No doubt he has also written to you.

I have not heard anything further on the matter since. It is fair enough that you should expect to receive off-prints of your articles in the *Wiener Zeitung*. I have written repeatedly to the editor, Dr Schweitzer, about them, but have not even received a reply. I do ask you not to send him anything anymore. It is a miserable situation here, quite indescribable. I requested my fee from Dr Schweitzer¹⁶⁰ for the travel reports, as per the written agreement with the Ministry of Internal Affairs, but since January, and despite repeated urging I have not received a single kreutzer, not even a reply. Now I hear that Dr Schweitzer does not want to pay the fee as I stayed behind in New Zealand and therefore did not describe the entire journey. Isn’t that mean? The *Wiener Zeitung* still owes me 500 Shillings, and now he is excusing himself by saying that he paid you for your New Zealand articles. I would like to know how much of this is true.

I am still not sure what address I should give you for posting things to. Although I am now appointed as a professor at the Polytechnic Institute,¹⁶¹ I doubt whether I will take up the position, as I realise more and more, that it is not compatible with my *Novara* work – 13 hours per week playing the school master in four different subjects.¹⁶² It will have to be either the one or the other. I hope the archduke,¹⁶³ who will be here tomorrow, will help me get out of the dilemma. Despite all the honours and recognition, I am quite disgusted with many things here, so much so, that if things do not change very soon, I will seriously think of leaving. If you have something to send then I ask you to send it to Willis, Gann and Co. for now, under my address, I will then further instruct the company.

I will probably be accompanying the two New Zealanders,¹⁶⁴ who came here on the *Novara*, to London in May from where they will embark on their homeward journey.

¹⁵⁷ Haast owned the following works by Naumann: Carl Friedrich Naumann *Lehrbuch der Geognosie*, 3 volumes, Leipzig, Engelmann, 1858-1862; *Paläontologischer Atlas*, Leipzig, Engelmann, c. 1854; and *Elemente der Mineralogie*, Leipzig, Engelmann, 1852. See Heinrich Ferdinand von Haast, *Catalogue of the Books belonging to the Late Sir Julius von Haast, K.C.M.G., F.R.S., &c.*, Christchurch, The Press Printing House, 1887, p. 7.

¹⁵⁸ Willis, Gann & Co, the London shipping company that had employed Haast to visit New Zealand.

¹⁵⁹ Baron Georg Freiherr Cotta von Cottendorf (1796-1863), director of the J. G. Cotta Verlag in Stuttgart.

¹⁶⁰ Dr Leopold Albrecht Schweitzer (1815-1896), editor of the *Wiener Zeitung*.

¹⁶¹ Hochstetter was appointed professor at the Technical University in Vienna on 29 February 1860. See “Personalakte Hochstetter”, Archiv Technische Universität Wien.

¹⁶² See Hochstetter letter to Haast no. 11 dated 1 March 1861 where Hochstetter lists the four subjects as mineralogy, geology, botany and zoology.

¹⁶³ Erzherzog Ferdinand Maximilian (1832-1867), later Emperor of Mexico.

¹⁶⁴ The two Maori who went to Vienna on board the *Novara*. See Georg Sauer, *Der Aufenthalt zweier Maoris aus Neuseeland in Wien in den Jahren 1859-1860: Eine ethnohistorische Darstellung*.

Only once I have all my maps will I be able to get a clear idea in regard to the Cook Strait dislocation.

Give my sincere regards to all our friends; you can imagine how excited I am in anticipation of the results of your expedition.

Farewell for now and please excuse the fact that I am unable to send you everything you wished for. Perhaps I may still be able to send copies of the articles, if it does not, due to the meanness of the editor, require me to go into open strife with the paper.

Sincere greetings

Your loyal and honest,

Ferdinand Hochstetter

J. Haast, Esq.

9. Ferdinand Hochstetter to Julius Haast, London 11 June 1860, MS 37 folder 180.

London, 11 June 1860

Dearest friend

I have now been in London for a few days. The long anticipated visit has taken until now to happen. I accompanied the two Maori, who were taken on board the *Novara* in Auckland; they spent the winter partly by making themselves useful and partly by keeping themselves entertained in Vienna. From here they will leave on Willis, Gann and Co.'s *Caduceus*¹⁶⁵ on the 20th for Auckland. I am again so close to New Zealand that it would only take one step from land onto the ship and off I would go. Yet, I stay here; I am staying once again in old Europe. Mr Gann gave me the latest news from you, that you are now on the West Coast – and sitting in a rain-drenched tent. Just think, dear friend – a year ago today that was still our shared destiny. *Tempora mutantur* – times are changed.

I am here mainly because of New Zealand, to make comparisons in the New Zealand collections of the British Museum, and at the end of June I will attend the meeting at Oxford of the British Association for the Advancement of Science.¹⁶⁶ Then I will travel to Germany and after a small tour of Lake Constance and Switzerland, return to Vienna. Only now, in early June, have my last eight cases from New Zealand arrived, about which I had been greatly worried. My friend Dr Jäger, a young and very talented comparative anatomist, has been commissioned to work on the moa remains. Only in the coming winter will I be able to start working on the actual publications themselves. While I am here I will also make the necessary arrangements for an English edition. I am extraordinarily excited in anticipation of your news. I expect that letters from you are lying in Vienna for me, but I will not get these before September. How are our friends in Nelson doing? One of these days I will be seeing Mr David Graham,¹⁶⁷ who is travelling here from Auckland.

If I come across anything interesting by way of geological literature, I will send it to you by the *Caduceus*.

¹⁶⁵ The *Caduceus*, a wooden barque built in 1854, was chartered to Shaw Savill & Co when Toetoe and Te Rerehau travelled on her. See Helen M. Hogan, *Bravo Neu Zealand: Two Maori in Vienna 1859-1860*, Christchurch, Clerestory Press, 2003, p. 84-85.

¹⁶⁶ Hochstetter attended the thirtieth meeting of the British Association for the Advancement of Science, held at Oxford in June and July 1860. He presented three papers: "Remarks on the Geology of New Zealand, illustrated by Geological Maps, Drawings, and Photographs"; "Some Observations upon the Geological Features of the Volcanic Island of St. Paul, in the South Indian Ocean, illustrated by a Model in Relief of the Island, made by Capt. Cybulz, of the Austrian Artillery"; and "A New Map of the Interior of the Northern Island of New Zealand, constructed during an Inland Journey in 1859". See *Report of the Thirtieth Meeting of the British Association for the Advancement of Science: Held at Oxford in June and July 1860*, London, John Murray, 1861, pp. 81 and 162.

¹⁶⁷ David Graham was the brother of Robert Graham (1820-1885), Superintendent of the Province of Auckland 1862-1865, with whom he had been in partnership as a general merchant in Queen Street, Auckland. David Graham was listed as a "Draper" living in Shortland Street, Auckland, on the electoral role of 1859.

The live plants from Mr Travers have not arrived yet, but a parcel of seeds has arrived and most of them came up. Thank Mr Travers most sincerely in my name.

Dear friend, I close for today and will write to you again by next mail.

Hold in good remembrance your loyal

Ferdinand Hochstetter

10. Ferdinand Hochstetter to Julius Haast, Vienna 20 October 1860, MS 37 folder180.

Vienna, 20 October 1860

My esteemed friend

You can imagine with how much interest I read your latest letter dated Greymouth, 20th March. By the way, it only reached me at the end of September, as I was absent from Vienna for the whole of the summer. Therefore I am only replying to it with this mail. I also received letters from Dr Monro and Mr Travers, which gave me much pleasure, but despite my best intentions I cannot reply to them yet, and will have to postpone doing so until the next mail. Travers was kind enough to again send me seeds, for which I would like him to receive my best thanks. Most of the seeds sent earlier grew well, and I would gladly continue to receive such consignments in future. Please give my best regards to Dr Monro and Mr Travers in the meantime. I expect you have long since returned to Nelson and the slimmer stature you brought back from the Alpine wilderness has returned to its usual fuller and stronger self. I am also quite certain that both you and others are very satisfied with the results of the expedition, and congratulate you most sincerely. I am, as you may imagine, greatly looking forward to more details.

And briefly my experiences to date: in May I travelled to London with the two Maori from the *Novara* and shipped them on board the *Caduceus*, with which they will have arrived in Auckland by about this time. Both have left young New Zealanders behind here!¹⁶⁸ But only over the next few days will I have time to ferret out the details of the pranks the two got up to. I spent June and July in London, and while there was mainly busy in the collections. The British Association for the Advancement of Science¹⁶⁹ has appointed Mr Sclater,¹⁷⁰ secretary of the London Zoological Society, and myself to work together as a committee and put together everything that is known about the genus *Apteryx*, and if possible to bring live specimens of the different species to London. You will therefore gain great credit for yourself if you were to communicate your knowledge, namely of the possibly still living larger species, so that I may incorporate these facts into my report to Mr Sclater.¹⁷¹

From London I went to Switzerland to make further comparative researches in the Alps and then spent some time at home with my elderly mother. So I only arrived back here at the end of September, where I then had to immediately take up my professorship. I have to lecture in

¹⁶⁸ Hochstetter is more explicit in a letter to Fischer where he writes: "Was macht Toetoe u. Rerehau. Toetoe hat hier ein Kind hinterlassen, einen Knaben, die Mutter ist die Tochter eines armen Offiziers, die als Nähterin für sich lebte. Toetoe lebte ganz mit ihr, ohne daß ich auch nur eine Ahnung hatte. Er hat ihr Geld versprochen, u. wenn Du Gelegenheit hast, so könntest Du den Schlingel wohl an sein Versprechen erinnern, denn die Mutter ist Blutarm, u. in großer Noth, das Kind wurde nach Croatien aufs Land gegeben." Hochstetter to Fischer, dated Wien 10 May 1861, Nachlass Sammlung Luschan, Handschriftenabteilung, Staatsbibliothek zu Berlin – Preussischer Kulturbesitz. In his publications Hochstetter only vaguely refers to this when he writes: "Ja manche Dame von Wien besitzt in Ihrem Album sogar ein Blatt mit einem kurzen, sinnigen Spruch von diesen 'Wilden'. [...] Wie weit sie auch galante Eigenschaften entwickelten davon mag die Vorstadt Ottakring erzählen, wo sie wohnten und auf den Faschingsbällen gesuchte und renommierte Tänzer waren." Hochstetter, *Neu-Seeland*, p. 527.

¹⁶⁹ British Association for the Advancement of Science. Hochstetter was a corresponding member. See *Report of the Thirtieth Meeting of the British Association for the Advancement of Science*, p. xxx.

¹⁷⁰ Philipp Lutley Sclater (1829-1913), British zoologist and co-author with Hochstetter in, "Report on the present state of our knowledge of the species of *Apteryx*", *Report of the British Association for the Advancement of Science*, 1861, pp. 176-178; also published in New Zealand as, "Report on *Apteryx* in New Zealand", *The New Zealand Gazette*, no. 21, 22 May 1862, pp. 189-190.

¹⁷¹ "That Mr. Sclater and Dr. F. Hochstetter be a Committee for the purpose of drawing up a Report on the Present State of our Knowledge of the Species of *Apteryx* living in New Zealand. That Mr Sclater be the Secretary; and that the sum of £50 be placed at their disposal for the purpose." *Report of the Thirtieth Meeting of the British Association for the Advancement of Science*, p. xlv.

mineralogy and geognosy, each at three hours per week, and am unhappy about the fact that these lectures – that is their preparation, as I have never lectured before in my life – take up so much time that up until now I have not been able to start on the scientific works. Therefore things are not looking good so far with regard to my scientific publications. The Austrian state has no money and is not even thinking of the scientific publications of the *Novara*. Only a popular travel account, edited by Scherzer, is now in the press.¹⁷² In the end, in order to give birth to something at least, I have privately made a contract with Cotta in Stuttgart for my travels in Australia and New Zealand. The illustrations are already being prepared, and similarly I have just had work begun on the maps, but of the text there is as yet not a single page; this should now happen this winter. The work is intended to follow the newer English travel accounts and be kept in popular style, but still contain all the scientific results, and at the same time as the German edition it is intended to also have an English one.

Anything geological you can supply me with will still be incorporated in both the maps and text under your name.

Now we get to the best part – after I spent 3 years in the world and after spending almost a year here and there back in Europe, and only after becoming a well-appointed professor, I said to myself: “It is not well for the professor to be alone”: Therefore first of all, I am finally engaged.¹⁷³ If you could see her, the lovely creature, you would have great pleasure therein.

My little darling – of course she is not as tall as me – as I call her, is called Georgiana Bengough,¹⁷⁴ and as there had to be something English in it, know therefore: the father,¹⁷⁵ director of the gas works here, is English; the mother,¹⁷⁶ a French lady from Lille; and my fiancée naturally combines the virtues of both nations. I can assure you, dear friend, that I am exceedingly happy; the matter is still quite new, as I have only been engaged for eight days; my Georgiana also sends her sincere regards to my trusty New Zealand friend and hopes to see him here some day. Dear friend I have not made a wealthy match, but won a heart that is worth more to me than a £1000 pension. I hope the day may come when you may see for yourself our happiness, if you don’t in fact stay in New Zealand for ever.

From Auckland I also came across kind letters on my arrival here, from Fischer,¹⁷⁷ Heaphy¹⁷⁸ etc. I am very much looking forward to news about the Maori uprising.¹⁷⁹ You hopefully brought back alive the trusty Beckmann¹⁸⁰ to Nelson from your expedition.

The first part of the second volume by Naumann has been published; I will not send this for now, until it is complete and I know where to send it to.

Give my sincere regards to the people in Nelson; I will always be grateful for detailed news. Good luck, dear friend, go well in New Zealand and keep in fond memory.

Your loyal,

¹⁷² Karl von Scherzer, *Reise der Oesterreichischen Fregatte Novara um die Erde, in den Jahren 1857, 1858, 1859, unter den Befehlen des Commodore B. von Wüllerstorff-Urbair*, 3 volumes, Wien, Staatsdruckerei, 1861-1862.

¹⁷³ Hochstetter and his future wife were engaged on 12 October 1860.

¹⁷⁴ Georgiana Bengough, later von Hochstetter, (1842-1905).

¹⁷⁵ John Egbert Bengough (1808-1888), director of the Gasworks in Vienna.

¹⁷⁶ Justine Julie Lescoche (1812-1893).

¹⁷⁷ Dr Carl Frank Fischer (died 1893), German homeopathic doctor who lived in Auckland and made the members of the *Novara* expedition welcome in his home. See L. K. Gluckman, “Dr Carl Frank Fischer M.D.: an early Auckland physician, botanist and viticulturalist”, *Historical Journal*, vol. 37, 1980, pp. 18-20. Dr Fischer was made a corresponding member of the “Geologische Reichsanstalt” in Vienna in 1859. See *Jahrbuch der kaiserlich-königlichen Geologischen Reichsanstalt*, vol. 10, 1859, p. XIV.

¹⁷⁸ Charles Heaphy (1822-1881), New Zealand artist and surveyor. Heaphy was made a corresponding member of the “Geologische Reichsanstalt” in 1859. See *Jahrbuch der kaiserlich-königlichen Geologischen Reichsanstalt*, vol. 10, 1859, p. XIV.

¹⁷⁹ Hochstetter is referring here to the early land wars in New Zealand. “[I]n 1860-61 there was a more serious confrontation between Maori and British troops in Taranaki where government attempts to force a purchase of land at Waitara provoked Maori anger.” Lynne Richardson, ed., *Bateman New Zealand Encyclopedia*, 5th edition, Auckland, David Bateman, 2000, p. 683.

¹⁸⁰ Johann Heinrich Franz (Frederick) Beckmann (c. 1833-1902) was a German cabinetmaker, who arrived in Nelson on the *St Pauli*. He had accompanied Hochstetter on one of his Nelson expeditions on 8 September 1859. See Hochstetter’s manuscript diary of 1859, OR Dr. A. Schedl Collection, Vienna, p. 7. Heinrich von Haast writes that Beckman[n] became ill with lumbago on Haast’s expedition, but recovered after having had a proper meal. See *The Life and Times of Sir Julius von Haast*, p. 81 and 87.

Ferdinand Hochstetter

11. Ferdinand Hochstetter to Julius Haast, Vienna 1 March 1861, MS 37 folder 180.

Vienna, 1 March 1861

Most esteemed friend

First of all my sincerest congratulations on the ever increasingly glowing development of your career,¹⁸¹ while I in the old, might I say aged Europe, am working my way into a philistine way of life, in which one does one's duty towards wife, child and fellow human being, but where things no longer happen at a glowing pace, the way it was possible on the other side of the globe. I have two of your letters lying in front of me, one dated 10th November and one dated 7th December, and you are right to complain in the latter that you have not received any letters from me in the past 3 months. In the meantime you must have received my letter of October in the mail in January, which will have sufficiently explained the cause of my lack of communication and in which I enclosed for you a photograph of my fiancée to excuse the lazy letter writer, who in the meantime has been busy as a wooer. Since then I have written to you three times and in the latest letter in January I gave account of your 50 gulden fee from Cotta. Unfortunately nothing geological that might interest you has been published since then, although I can tell you about other things that I hope might interest you.

I am probably fully justified in beginning with the subject of my love. The good times of my being a fiancé are now nearly over; my wedding will be on the 2nd of April,¹⁸² and then, as I imagine, the even better times of married life will begin with the awakening of spring. I will not be going on a big honeymoon, as my official position prevents me, but will instead spend a few days in Linz on the Danube River,¹⁸³ and I have consoled my darling by saying that perhaps we might go on a little trip to New Zealand for our silver wedding.¹⁸⁴ What a pity it is that you cannot be at our wedding, I would so much have liked to have drunk a toast with you to "All that we love and praise" and to hear a humorous song from you again. By the way, my future little wife is an accomplished singer, you would enjoy yourself. Now that you cannot be with us, at least drink to our health and when you come to Europe you will find me a married man, most likely with a pile of children, but only the gods will know that.

The second matter is in relation to my position. I don't have to write at length to you on this; I give my daily lectures on mineralogy and geology, talk as much as possible about New Zealand, and by giving accounts of some of the things that happened to us together, I often arouse mirthful laughter. Attentiveness is the main object, and in order to keep the attention of my listeners I sometimes amuse them.

Unfortunately my business is not progressing the way I would like it to be. The Polish Count,¹⁸⁵ whom I found as the almighty minister on my return, and who did not want to know anything about science but instead slapped his pocket and said: "So much for science, money is what we need", is now a matter of the past and Vienna breathes more freely since the 26th of February, the day when the long awaited constitution was announced and Vienna was illuminated as the metropolis of a constitutional monarchy – so free, that even I am wondering at what is talked about at public gatherings, and what one reads in the press. The new justice and science minister, Schmerling¹⁸⁶ – when he took on the post, made the public statement: "Science is Power", and made endless promises for a better future for Austria. But despite all that, money is

¹⁸¹ Haast had taken up the position of Provincial Geologist in Canterbury on 15 February 1861. See H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 123.

¹⁸² Ferdinand von Hochstetter married Georgiana Bengough on 2 April 1861.

¹⁸³ Hochstetter's actual honeymoon, a five-day excursion to Gmunden "an das herrliche Thor das in's Salzkammergut führt" is described in letter no 12, dated 4 May 1861.

¹⁸⁴ Neither Hochstetter nor his wife visited New Zealand during their married life and Hochstetter did not live to celebrate his silver wedding anniversary.

¹⁸⁵ Graf Agenor Goluchowski (1812-1875), Austrian politician. See *Personenlexikon Österreich*, p. 159.

¹⁸⁶ Anton von Schmerling (1805-1893), Austrian lawyer and liberal politician. See *Personenlexikon Österreich*, p. 431.

lacking; Hungary, to add to the misery, refuses to pay tax, and from day to day causes more difficulties. First this high-spirited nation, which is fighting for its 1000-year old constitution and fights for freedom and rights for the whole world, drove out the ‘German dogs’ and is now beating the Jews to death and instead of law and order has instituted a rule of a Hungarian Chief Count and vehmic judge, a servant to absolutism in Hungarian dress, and the fundamental problem is that no one knows where this nationalistic madness, which is threatening to break out in Bohemia as well, is going to end. From all sides they want to demolish and destroy Austria – our currency is almost worth only half its legal tender! In brief, things are looking bad, quite bad, despite a constitution and free-spiritedness. Yet I don’t lose courage, it is a sign of the times that full-blooded democrats are the most fervent supporters of Austria, while the nobles and their entourage utter the hideous phrase “Austria is lost anyway” and turn their coats to the wind.

Now I have talked of politics instead of my business, but unfortunately however the two are linked. To date not a single kreutzer has been approved for the publications of the Novara expedition, and therefore nothing has been done yet. The only thing that could still be realised was a popular travel account, of which Scherzer has now completed the first volume, which will be published in the next two months.¹⁸⁷ Of course we will be thanking all our friends and you are long since on the list of people who will receive a complimentary copy.¹⁸⁸ Very little pertaining to New Zealand and the visit of the Novara will be found therein.¹⁸⁹ I did not want to let myself be committed to contributing a chapter on my travels, on the one hand because the work is so badly written that I did not want to associate my name with it, and on the other because I have agreed to write my own work for Cotta.¹⁹⁰ But unfortunately my position, and a useless correspondence that I cannot ward off despite my best efforts, take up so much of my time that until now I have been entirely occupied with preliminary drafts, and not a single sheet is in print. The moa bones are being worked on; a plaster cast of *Palapteryx ingens*, the specimen gifted by the Nelson Museum,¹⁹¹ is already completely finished and makes a magnificent impression. I hope to be able to send you a photograph¹⁹² of it with my next letter. But you can’t imagine how things are going for us. Originally state funding had been approved for this; my friend Dr Jäger took on and completed the task. The costs amounted to 3000 gulden, for which 30 completely set-up plaster casts of *Palapteryx ingens* were produced.¹⁹³ Shortly after work began the government withdrew the funding, due to the pressure of the times, and only after much pleading and urging was the funding provided as an advance, and now that the skeletons are finished, we

¹⁸⁷ Karl von Scherzer, *Reise der Oesterreichischen Fregatte Novara um die Erde, in den Jahren 1857, 1858, 1859, unter den Befehlen des Commodore B. von Wüllerstorff-Urbair*, vol. 1, Wien, 1861.

¹⁸⁸ A list of persons who assisted the *Novara* expedition at various points along the journey is published as a “Beilage” (supplement) at the end of the last volume of both the original edition and the “Volksausgabe”. It is likely that the people on the list here referred to by Hochstetter are the same as those that appear on the published list. See “Verzeichniß derjenigen Personen, welche in den verschiedenen Theilen der Erde zur Forderung der wissenschaftlichen Zwecke der Expedition wesentlich beigetragen haben”, *Reise der Oesterreichischen Fregatte Novara um die Erde*, vol. 3, Wien, 1862, Beilage IX. Also: *Reise der Oesterreichischen Fregatte Novara*, Volksausgabe, vol. 2, Wien, 1866, Beilage IV, pp. 3-5. The list includes 35 names for Auckland and 19 for Nelson.

¹⁸⁹ The Austrian frigate *Novara* visited Auckland from 22 December 1858 to 9 January 1859.

¹⁹⁰ This is in reference to Hochstetter, *Neu-Seeland*, Stuttgart, Cotta, 1863.

¹⁹¹ The skeleton of a moa discovered in a cave near Nelson was presented by the Nelson Museum to Hochstetter for the Imperial Geological Survey of Austria during his visit in 1859. Hochstetter wrote: “Dazu kam noch ein fast vollständiges Skelett von *Palapteryx ingens* Owen als ein außerordentlich werthvolles Geschenk von Seiten des Nelson-Museums”, Hochstetter, *Neu-Seeland*, p. 25, and Brereton, *History of the Nelson Institute*, p. 37. Initially the skeleton was displayed in the “Novara Museum” and then handed over to the “Geologische Reichsanstalt” in 1864. See “[Sitzung 1 März 1864]”, *Jahrbuch der kaiserlich-königlichen Geologischen Reichsanstalt*, vol. 14, 1864, pp. 35-37.

¹⁹² Gustav Jäger, *Bericht über ein fast vollständiges Skelet von *Palapteryx ingens* über dessen Restauration und die davon angefertigten Gypsabgüsse; mit einigen Bemerkungen über die Aufstellung der Vogelskelete überhaupt*, Wien, Braumüller, 1863, includes 2 photographs: one of the Moa bones presented to Hochstetter by the trustees of the Nelson Provincial Museum and the other of the articulated plaster cast moa skeleton.

¹⁹³ Canterbury Museum received one of these plaster casts. Haast writes: “On 12th August of the same year (1862) the cast of the skeleton of *Palapteryx ingens* arrived from Europe, which I also presented to the Museum. It was constructed and purchased from Dr. Jaeger, of Vienna, an eminent German palaeontologist, from bones dug out in a cave in Nelson.” See Julius von Haast, “On the Early History of the Canterbury Museum: being the Annual Address”, *Transactions and Proceedings of the New Zealand Institute* 1881, 14, May 1882, p. 505. See also H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 220.

are called on to repay the money. Therefore the 30 plaster casts have to be sold at 100 gulden each. We have written to all the museums and so far have received 18 orders. Obviously, I am aiming for the Nelson Museum and Auckland to receive one of these plaster casts,¹⁹⁴ naturally at no cost, and I am now going to try everything in order for the government to write-off at least one example, that these might then be sent to New Zealand. I recently held a fairly long public lecture¹⁹⁵ on this – and you were obviously given all due acknowledgement – and mentioned all the circumstances and hope that this has helped somewhat.

At the moment I am sorting the fossils, so that even if I don't get to fully describe them, I can at least include something about them in my book. But don't expect it before Easter of next year. Just imagine yourself in my situation: next autumn I have to lecture in four subjects, Mineralogy, Geology, Botany and Zoology,¹⁹⁶ how is one supposed have any desire and energy left for scientific work? I assure you, if I had known what things would be like today, I would have stayed in New Zealand, and would have worked everything up faster and better than it is possible for me here. The Novara collections are on display in the Augarten,¹⁹⁷ mounting the exhibition cost 20,000 gulden, and it sounds like in the end the exhibits are to be sold to cover the costs. *Sic finit gloria mundi* – Thus ends the glory of this world. Sold to museums here, obviously. Luckily, the greater part of my New Zealand collection, which arrived after the exhibition was already set up, has been saved from this miserable fate and is at the Polytechnic Institute under my care, and thus at least I have what I need at my disposal.¹⁹⁸

Thank you for the Nelson newspaper you sent. It was of great interest to me, as I am very preoccupied with the Maori land wars. Our two New Zealanders have safely returned home as they write,¹⁹⁹ Toetoe²⁰⁰ has sent a letter from Auckland addressed "To the Emperor of Austria in Vienna". But now I am most excited in anticipation of your report with maps. You will very soon receive the diploma of the Geographical Society here for it. I have already discussed it with the committee of which I am a member, but the gentlemen wish me to table some of your work, in order to justify it before the general assembly meeting. So as soon as your report arrives, the necessary steps will be taken, and if you like I can also communicate the most pertinent details to Petermann, namely the maps, as Petermann is currently working on my maps and I hope to be able to send you something soon.

Congratulations also on the species *Haastii*²⁰¹, my *Haastii* are still coming.

With regard to "elevation craters" of Banks Peninsula, I, like Lyell²⁰² and most other geologists, have completely given up on the idea of elevation craters. I spoke about this at

¹⁹⁴ Nelson and Auckland Museums were two of the oldest provincial Museums in New Zealand, while later Canterbury Museum was founded by Julius von Haast when he was employed as curator and first director.

¹⁹⁵ Ferdinand von Hochstetter, "Die ausgestorbenen Riesenvögel von Neuseeland", *Schriften des Vereines zur Verbreitung naturwissenschaftlicher Kenntnisse in Wien*, vol. 1, 1862, pp. 213-246.

¹⁹⁶ In a manuscript curriculum vitae of 1878 Hochstetter wrote: "Professor der Mineralogie, Geognosie u. Palaeontologie sammt Zoologie u. Botanik" for the period in question here. See Personalakte Hochstetter, Archiv der Technischen Universität, Vienna.

¹⁹⁷ The Novara Museum at the Augarten in Vienna was officially opened on 1st May 1860. See Günter Treffer, *Die Weltumseglung der 'Novara'*, Vienna, Molden, 1973, p. 213. The official guide to the museum was: Anon., *Wegweiser für die im sogenannten Neugebäude im k. k. Augarten aufgestellten naturhistorischen Sammlungen erworben während der Weltfahrt Sr. Majestät Kriegsfregatte Novara unter dem Commando des Commodore Freiherrn Bernhard v. Wüllerstorff-Urbair*, Wien, Carl Ueberreuter, 1860.

¹⁹⁸ Geological specimens from the *Novara* expedition were held in the collections at the "Technische Universität Wien" until fairly recently, when most of the collection was handed over to the "Naturhistorisches Museum Wien", according to personal communication of Prof. Dr. Andreas Rohatsch, Abteilung Ingenieur Geologie, Technische Universität in Wien, to the author.

¹⁹⁹ This letter has not been found, but the "Archiv für Wissenschaftsgeschichte" of the Naturhistorisches Museum in Vienna, holds a copy of a letter to the Emperor of Austria from Rerehau dated 30 October 1864, which is in the collection of Hochstetter manuscript letters, Department of Archives and History of Science, Natural History Museum Vienna, Schachtel 7, Inventar Nummer 98.01-02.

²⁰⁰ Wiremu Toetoe Tumohe (c. 1826 - 21 February 1881).

²⁰¹ For a list of botanical names with which the name Haast is associated see H. F. von Haast, *The Life and Times of Sir Julius von Haast*, pp. 187-188.

²⁰² Charles Lyell (1797-1875), English scientist and geologist.

Oxford;²⁰³ they are all simply eruptive craters of older and younger periods, no volcanic creation of craters by elevation, but only through piling up of erupted matter.²⁰⁴

I am receiving letters from New Zealand with nearly every mail: Purchas,²⁰⁵ Fischer etc., but how am I to reply to them all?

What you wrote to me once about chalk formations is becoming more and more plausible with the examination of the fossils.

This was my original viewpoint in relation to the layers at the mouth of the Waikato, but I will only be able to write more specific details on this later.

Good night for now, dear friend, and don't be too hard on me, I will surely write to you as often as I can.

Your loyal,
Ferdinand Hochstetter.

12. Ferdinand Hochstetter to Julius Haast, Vienna 4 May 1861, MS 37 folder180.

Vienna, 4 May 1861

Most esteemed friend

You can hardly imagine how delighted I was when your letter dated 26 January arrived in mid April and with it your report and some newspapers, especially notable being the *Taranaki Punch*.²⁰⁶ I received the consignment on Sunday morning and read and read all day, and even my dear wife was unable to awaken me from my New Zealand memories. The following Tuesday was the general meeting of the Geographical Society. I gave a report on your explorations, tabled your report, and nominated you as a corresponding member – Haidinger did the same for Müller, who named an Australian range of mountains Haidinger Range.²⁰⁷ Both nominations were unanimously accepted by the committee, where I spoke strongly for the recognition of your diligence, efforts and success. The nominations for foreign members have to go to the Ministry of Foreign Affairs for approval, and only then will the diploma, for which I offer you my congratulations, be sent to you.²⁰⁸ And now I want to express my best thanks for the way in which you, in true friendship, perpetuated the memory of me in New Zealand through lake and river Hochstetter.²⁰⁹ Honestly, dear friend, I want to be with you in the fresh and free New Zealand. My heart has two objects that I sincerely love, the first is my wife and the second is

²⁰³ Hochstetter addressed the British Association for the Advancement of Science, at the thirtieth meeting held at Oxford in 1860.

²⁰⁴ This paragraph is given in translation by Heinrich von Haast in, *The Life and Times of Sir Julius von Haast*, p. 1073.

²⁰⁵ Reverend Arthur Guyon Purchas (1821-1906), the vicar of St. Peter's church in Onehunga, who had arrived in Auckland in 1846. He was made a corresponding member of the "Geologische Reichsanstalt" in 1859. See *Jahrbuch der kaiserlich-königlichen Geologischen Reichsanstalt*, vol. 10, 1859, p. XVII. On their departure from Auckland, Hochstetter and Haast dedicated portraits of themselves to Purchas and his wife Olivia. Hochstetter inscribed his photographic portrait: "Seiner verehrten Freundin Mrs Purchas zur Erinnerung. Auckland 1859. Ferdinand Hochstetter"; and Haast inscribed his: "Seinem verehrten Freunde G. A. Purchas zur Erinnerung. Julius Haast, Auckland 26 Juli 1859", photograph 881-1 and 881-2, Auckland Central Library.

²⁰⁶ The *Taranaki Punch* was published 16 times between 31 October 1860 and 7 August 1861 by Garland William Woon, editor of the *Taranaki Herald*. Hochstetter writes, "Der 'Taranaki Punch', ein nach dem Vorbild seines Londoner Namensvetters im englischen Feldlager zu Taranaki erschienenes Witzblatt", Hochstetter, *Neu-Seeland*, p. 494.

²⁰⁷ Mueller named the Haidinger Range, near the head of the Macallister River in Gippsland, Australia, in 1861 but the name does not appear on modern maps. Eduard Fenzl proposed Mueller for the "Franz Joseph Orden" on 10 June 1863 in a letter to the Lord High Chamberlain's Office in Vienna. See Roderick Weir Home et al., eds., *The Life and Letters of Ferdinand von Mueller: Regardfully Yours: Selected Correspondence of Ferdinand von Mueller*, Bern, Peter Lang, 2002, vol. 2, pp. 219-224 note 5 and 19.

²⁰⁸ The diploma from the Geographical Society in Vienna states: "Die Kaiserliche-Königliche | Geographische Gesellschaft | hat | gemäss den unter dem 21. September 1856 | Allerhöchst genehmigten Statuten | in der Versammlung | am 14. Jänner 1862 | Den Hochwohlgebornen Herrn | Julius Haast | Regierungsgeologen der Provinz Canterbury in Neu-Seeland | zu ihrem | Correspondirenden Mitgliede | gewählt. | Wien, am 15. Jänner 1862. [signed] Bachmann k.k. Oberst | Vice-Präsident | [signed] Franz Foetterle | Erster Secretär." Alexander Turnbull Library.

²⁰⁹ Lake Hochstetter, on the West Coast of the South Island of New Zealand was named by Haast. See Reed, *The Reed Dictionary of New Zealand Place Names*, p. 206. The name Hochstetter River was applied by Haast to what is now known as the Robinson River. See Fleming et al., *Carlé's Biography of Ferdinand von Hochstetter*, p. 12.

New Zealand,²¹⁰ the way it lives in my memory in a rosy light. I have already long acquired the name of ‘New Zealand sympathiser’, and it is a real consolation that through you I continue to stay in immediate contact with my love. Only one thought oppresses me and makes me unhappy: that I cannot offer all my time and energy to this ‘my love’, for through my position, all sorts of circumstances, and unfortunately also largely due to my illness I am lacking in pleasure, so that I am still not able to announce the forthcoming publications that I wanted to work on with all my passion and energy. The way things stand I will initially work on a popular account of my journey and the results from New Zealand with numerous illustrations. If all goes well this will appear by Easter 1862 in the Cotta publishing house in Stuttgart,²¹¹ and will form a supplementary volume to the official travel account by Scherzer that will appear in the government printing office here. Then, as is hoped, after the Reichstag, which was grandly opened on the 1 May, has approved the necessary means in this years first session, work will then be able to start on the scientific results of the Novara expedition.²¹² In the geological section that I will be working on, New Zealand will then be covered completely, if I still have time and energy left. My position absorbs my best hours, and to sit down to such important work when one is tired from lecturing is very difficult. On top of this is the fact that for a whole year now, since I caught a bad cold during my visit to London, I have been suffering from chest problems, a cough and chest pain, which does not only affect my mood, but unfortunately, I feel, also my energy levels. I am now hoping for the warm season and my holidays. Now – just two days ago, on 2 May, we still had everything white with fresh snow – it is noticeably cold, but every day I yearn, not just infrequently, for the wonderful climate of New Zealand. But to my horror I realise that instead of writing blissfully, overly happily as a young married man, I have almost written a lament, dear friend. Yet in this regard, thank God, I can write that there is nothing amiss. I have a good dear wife, who makes my life sweet, and also in my work is faithfully at my side, and sends her sincere regards to the trusty friend in New Zealand and joins me in sending the enclosed photograph.²¹³ My wedding was on 2 April; I spent 5 days going on a trip to Gmunden,²¹⁴ which leads to the wonderful gate to the Salzkammergut, and as I was passing the foot of Mt Traunstein while crossing Lake Traun, I thought of the beautiful Lake Rotoiti, which as I noticed also thrilled you. My position and obligations soon led me back to Vienna, where I am now leading what I might describe as a retired, happy, peaceful life, not worried about the bigger politics that are going on, not worried about favours, and even less so about the jealousy and disfavour of so many learned gentlemen.

But now, in answer to your questions, or more so your letter. First of all, sincere thanks from my wife and I for your kind congratulations. Your detailed letter from various points on the West Coast has arrived, and I have long since replied and sent an excerpt from it to Petermann, which he has already published.²¹⁵ Certainly I have feelings of guilt for not writing to you with every mail, but forgive me for a time in which I was not master over my own head and heart. You are never forgotten, your portrait hangs above my desk and I have you in front of my eyes

²¹⁰ This passage is cited in translation as: “I have two real loves, my wife and New Zealand”, in H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 255.

²¹¹ Hochstetter, *Neu-Seeland*, Stuttgart, Cotta, was finally published in 1863.

²¹² The official publications of the *Novara* expedition were published from 1861 to 1877 and comprise 21 volumes. See, Johann Spitzka, *Übersichtliche Darstellung der unter dem Titel: ‘Reise der Österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859 unter den Befehlen des Commodore B. von Wüllerstorff-Urbair’ erschienenen Publikationen*, Wien, 1877.

²¹³ Photograph, “Ferdinand and Georgiana von Hochstetter”, 1861, photograph by Ludwig Angerer (1827-1879), PA2-0169, Alexander Turnbull Library. One may also presume that although not specifically referred to, the two other photographs of Hochstetter by Angerer from 1861 were also sent with this letter. See “Ferdinand von Hochstetter”, 1861, photographs by Ludwig Angerer.

²¹⁴ This actual Honeymoon destination is different from that originally planned.

²¹⁵ There are two notices relative to Haast’s expedition, although it is most likely that Hochstetter is referring to the later of the two: “Neue Expedition in Neu Seeland”, *Mittheilungen aus Justus Perthes Geographischer Anstalt*, vol. 6, no.5, 1860, p. 199; “Expedition in den Alpen-Regionen Neu-Seelands”, *Mittheilungen aus Justus Perthes Geographischer Anstalt*, 1861, pp. 77-78.

every day. Your report²¹⁶ gave me great satisfaction, and I can only congratulate you on your successful advancement and serious ambition that is now already so nicely rewarded. My sincere congratulations on the position of Government Geologist with £1000²¹⁷ like a minister in old Europe. If you should happen to be in a position to recommend a geologist for another province, Otago or Wellington for example, then I could suggest to you a most splendid and at the same time likeable young man, Dr Stache,²¹⁸ currently geologist at the Imperial Geological Survey, a very good friend of mine, who is also assisting me with my New Zealand work and is showing a great inclination towards a change in terrain from Slovakian and Karpathian Mountains to New Zealand.

I will only be able to critically study your report when I have the maps on hand that you have promised, and for which I thank you in anticipation. You will surely allow me to use for my work material that I owe to you and you can be assured that I will consider it my honour to also commemorate you in my works and to pay you back in some way for Lake and River Hochstetter.

I find it very annoying that you did not receive the consignment of books. When I was in London, Trübner,²¹⁹ the bookseller, had already dispatched them to Willis, Gann and Co., and when I enquired with Gann, I heard that they had left by sailing ship. So they should have arrived by now. I will fulfil your next assignment differently, just write to me what you wish for, it will always be my pleasure to assist you as best as I can in your fine and honourable endeavours. In my next mail I will put together various newspapers etc. for you, moa photographs and things that might interest you generally.

The Nelson museum²²⁰ has in no way been forgotten, the reason why no consignment in return has been received from the Geological Survey is because, shortly after my return, the Polish ex-minister Goluchowski²²¹ had, by withdrawing the Geological Survey's endowment, virtually dissolved it, and a fight for survival ensued that has only been resolved in favour of the Geological Survey a few weeks ago. In the interim period all business was disrupted. But now, as Haidinger has assured me, a complete collection of all the publications and a fine geological collection will soon go to the Nelson museum.²²² And I also have something special on hand for the Nelson museum, namely a specimen of *Palapteryx ingens* completely mounted as a plaster cast, so that the Museum gets its bones back, only in plaster, but restored and in the form of an imposing giant bird skeleton, the sight of which will also give you pleasure. The mounting in plaster, completed by Dr Jäger, came out grandly, but the other moa bones are unfortunately still waiting to be worked on. But these are all questions of money and we are always short of money.

8 May

You ask me about the moa genera and species. I will only be able to fully answer this when the work is finished. The museum bones are as follows: the mounted skeleton is *Palapteryx ingens*,²²³ the large skeleton from the cave is *Dinornis elephantopus*,²²⁴ the species that is on

²¹⁶ Julius Haast, *Report of a Topographical and Geological Exploration of the Western Districts of the Nelson Province, New Zealand*, Nelson, printed by C. & J. Elliott, 1861.

²¹⁷ See earlier note for Haast's appointment as Canterbury Provincial Geologist.

²¹⁸ Dr Guido Stache (1833-1921), worked for and later became director of the "Geologische Reichsanstalt", Imperial Geological Survey of Austria, in Vienna. See letter Stache to Haast dated Breslau 8 October 1862, MS papers 37, Alexander Turnbull Library.

²¹⁹ Nicolaus Trübner (1817-1885), a London bookseller and publisher, who founded the London publishing house Trübner & Co.

²²⁰ For details on the founding and history of the Nelson Provincial Museum, see Brereton, *History of the Nelson Institute*, Wellington, Reed, 1948.

²²¹ Graf Agenor Goluchowski (1812-1875), 1859/60 Innenminister, 1860 Staatsminister, of Austria, created the "Grundlage für das Oktoberdiplom" 1860. See also *Die Geologische Bundesanstalt in Wien*, p. 87.

²²² The Nelson Museum received a collection of about 50 publications and 1500 mineral specimens. See Brereton, *History of the Nelson Institute*, pp. 37-38.

²²³ *Palapteryx ingens*, synonym for *Dinornis ingens* (Owen 1844), more recently attributed to *Dinornis novaezealandiae* (Owen 1843). See table of "Nomenclatural history of moa" in: Trevor H. Worth and Richard N. Holdaway, *Prehistoric Life of New Zealand: The lost world of the Moa*, Bloomington, Indiana University Press, 2002, pp. 70-73.

²²⁴ *Dinornis elephantopus* (Owen 1856), more recently attributed to *Pachyornis elephantopus* (Owen 1856).

display as a skeleton in the British Museum, my specimen is too incomplete to be mounted. The smaller part skeletons belong to *Dinornis didiformis*,²²⁵ *dromioides*²²⁶ etc. The large bone that I bought for £4 in the end is *Dinornis robustus*²²⁷ – *Dinornis giganteus*²²⁸ has so far only occurred in the North Island. There will be many new results once the work is taken on as a whole. And I hope that the Nelson museum will still get its mounted plaster cast of the moa skeleton this year. The complete skull belongs to *Palapteryx ingens* und was used as the original for the mount.

In regard to the interpretation of the doubtful New Zealand formations, I have hardly come any further since being in New Zealand, and prior to the definitive work being completed it will not be possible to come up with a definitive answer.

The ammonites and belemnite strata are undoubtedly Neocomian, Lower Cretaceous, the Richmond Sandstone according to my table contains: *Monotis* (the common communal shell) *Inoceramus* (mytilus), *Carpentaria* rarely, *Cyrena* rarely, *Spiriferina*, *Turbo* rare. The *Spiriferina* looks very Devonian, but is not characteristic enough, everything else speaks for Triassic and Limestone, the way I initially interpreted it. In the more recent layers, the way I took it in Auckland, chalk layers have to be separated from tertiary layers. But as I said, certainty can only result from the definitive analysis.

Dr Fitzinger²²⁹ has recently published a list of new vertebrates brought back by the *Novara*; figured from New Zealand are *Dactylocnemis Wüllerstorffii* Fitz.,²³⁰ being a house gecko and *Leiopelma Hochstetterii* Fitz. an amphibious frog!²³¹ A bat and nine reptiles were the complete yield, not including birds.

The first item of mine on New Zealand that may be published is a New Zealand atlas of topographical and geological maps.²³²

In the next few days I will be facing a pleasant move; I am moving near to my parents-in-law, who have a garden, where at least in summer I can be in the fresh air.

Political interest is currently suppressing all else in Vienna. We have become constitutional; on 1 May was the opening of the chambers with an enthusiastically received speech from the throne, illumination of the city etc. In Pest the leader of an extremist party, Count Teleki,²³³ a full-blooded Kossuthian,²³⁴ shot himself! Terrible calamity throughout Hungary.

And now farewell, dear friend, if I don't send the letter today, then it will lie here again and unfortunately I don't know the mailing dates, a parcel of newspapers and more news will come by the next mail.

From myself and my wife sincerest greetings, and also give my regards to all our friends!
Your faithful,
Ferdinand Hochstetter

²²⁵ *Dinornis didiformis* (Owen 1844), more recently attributed to *Anomalopteryx didiformis* (Owen 1844).

²²⁶ *Dinornis dromioides* (Owen 1846), more recently attributed to *Anomalopteryx didiformis* (Owen 1844).

²²⁷ *Dinornis robustus* synonym for *Dinornis ingens* var. *robustus*, (Owen 1846), more recently attributed to *Dinornis novaezealandiae*, (Owen 1843).

²²⁸ *Dinornis giganteus* (Owen 1844).

²²⁹ Leopold Josef Fitzinger (1802-1884), Viennese zoologist.

²³⁰ Synonym for *Dactylocnemis pacificus* (Gray 1842).

²³¹ Fitzinger, "Die Ausbeute der österreichischen Naturforscher an Säugethieren und Reptilien während der Weltumsegelung Sr. Majestät Fregatte Novara", *Sitzungsberichte der mathematisch-naturwissenschaftlichen Classe der kaiserlichen Akademie der Wissenschaften*, vol. 42, no. 25, 1860, pp. 383-416; for *Wüllerstorffii* see p. 400 and for *Hochstetteri* see p. 414. See also Hochstetter, *Neu-Seeland*, 1863, p. 429 note.

²³² Ferdinand von Hochstetter and August Petermann, *Geologisch-Topographischer Atlas von Neu-Seeland: Sechs Karten hauptsächlich Gebiete der Provinzen Auckland und Nelson umfassend, mit kurzen Erläuterungen. Aus den wissenschaftlichen Publicationen der Novara-Expedition*, Perthes, Gotha, 1863.

²³³ Graf Laszlo (Ladislaus) Teleki (Teleki-Szék) (1811-May 1861). Teleki: "Der Führer dieser 'Beschlusspartei' war der erst im Dezember 1860 von Sachsen an Österreich ausgelieferte und nach kurzer Haft begnadigte Laszlo Teleki. Teleki war sich wohl der Konsequenzen einer Fortsetzung des Kampfes gegen Wien bewusst. Einige Wochen nach Eröffnung des Landtages im Mai 1861 setzte er seinem Leben durch Selbstmord ein Ende." Helmut Rumpel, *Österreichische Geschichte 1804-1914: Eine Chance für Mitteleuropa: Bürgerliche Emanzipation und Staatsverfall in der Habsburgermonarchie*, Wien, Ueberreuter, 1997, p. 381.

²³⁴ After Ludwig Lajos Kossuth (1802-1894), a Hungarian revolutionary, who fought for the independence of Hungary from the Austrian Hapsburg Empire.



5. Ferdinand von Hochstetter, photograph by Ludwig Angerer, 1861.
(PA2-0170, Alexander Turnbull Library).



6. Ferdinand von Hochstetter, photograph by Ludwig Angerer, 1861.
(PA2-0172, Alexander Turnbull Library).



7. Ferdinand and Georgiana von Hochstetter, photograph by Ludwig Angerer, 1861.
(PA2-0169, Alexander Turnbull Library).

13. Ferdinand Hochstetter to Julius Haast, Vienna 23 May 1861, MS 37 folder 180.

Vienna, 23 May 1861

Most esteemed friend

Just now, I received your lines dated 13 February from the vicinity of Lake Tekapo. Even though I wrote to you via London 8 days ago, I will answer your letter straight away via Trieste, as the same contains a question regarding your health. I have not yet had the opportunity to consult good doctors, but will do so and write to you by next mail. If your ailment is rheumatic hip pain, sciatica, then the only remedy I know is warm baths, quite warm – as hot as you can bear it, and long – stay in the warm water for hours, with a continuous supply of new warm water, so that it does not cool down. It is best to keep the bath covered so that one does not constantly have the steam in one's face and can breathe freely. If the pain is local then lay cotton soaked in almond oil on it and cover it with rubber cloth to keep the air out. Dr Gullz,²³⁵ a Viennese doctor who I was able to ask today, said that croton oil is a commonly used remedy; and that he once cured long term sciatica by suggesting that the patient should scald the hip with a glowing iron!? But that very much depends on the cause of the hip pain, whether it is connected with a cold or with the spinal bone marrow.²³⁶

A bathing season at Orakei-Korako or Whakarewarewa would be best! Anyhow, more with the next mail. Herewith I send you a copy of the geological map of the Province of Nelson that I created; this map will not be published, but serves as a preliminary working-stage for the geological map for the whole of New Zealand, as I will have everything on it transferred onto the latter. You can see that I have also drawn together the formations. In the tertiary formations for example the Old Tertiary (Eocene? or Miocene?) would be equivalent to the Auckland Drury limestone, all bedded limestone or sandstone. Cape Farewell etc., the Cliffs, and Young Tertiary Awatere, Wanganui on the Cook Strait Onekakara in the Province of Otago are to be separated. I no longer consider anything to be Secondary, except for the formations bearing belemnites and ammonites. The draughtsman has forgotten the gold in a few places, for example at Wangapeka.²³⁷

I hope that this letter will reach you on your happy return from the Alps in good health and with sincere regards from my wife and I,

Yours faithfully,
Ferdinand Hochstetter

The diplomas etc are still lying here. Next week I will send them to London for you with the *Novara* volume and a good book about the healthy and the ailing human by Dr Bock,²³⁸ in which you will find some advice.

14. Ferdinand Hochstetter to Julius Haast, Vienna 16 June 1861, MS 37 folder 180.

Vienna, 16 June 1861

Most esteemed friend

Just now I received your lines dated Rangitata River, Butler's Station,²³⁹ 29 March, with the shocking news of the tragic death of our dear friend Dr Sinclair.²⁴⁰ How odd that your

²³⁵ Dr Gullz was a medical doctor in Vienna.

²³⁶ This sentence appears as a footnote that continues in the margin of the manuscript letter.

²³⁷ Wangapeka River, Kahurangi National Park, tributary to the Motueka River, Nelson District, New Zealand.

²³⁸ Carl Ernst Bock (1809-1874), *Das Buch vom Gesunden und Kranken Menschen*, Leipzig, Keil, 3rd edition 1859 and 4th edition 1862.

²³⁹ The Station of Samuel Butler named "Mesopotamia". See Peter Bromley Maling, *Samuel Butler at Mesopotamia*, Wellington, R. E. Owen, Government Printer, 1960.

²⁴⁰ On 20 February 1861 Sinclair joined Julius Haast on what was to be his last, and fateful, expedition, namely Haast's geological survey of the headwaters of the Rangitata River in Canterbury. On 26 March 1861 Sinclair was drowned while

second-to-last letter dated 18 February still brought me appended at the end a friendly note in his own hand, in which he wrote with youthful enthusiasm: “I now proceed with our common friend jolly joyous Haast to the glaciers of the Southern Alps”, and there he had to find his death. Those lines are now all the more valuable to me and I will keep it as a precious memento. So now the soil of New Zealand has been initiated by the death of a fine man of science in pursuit of his noble aims. I beg you, my friend, take care and be cautious on your dangerous excursions, which you no doubt have to make frequently.

My last letter to you left here last month on 10 May²⁴¹ with a portrait of my wife enclosed. I also communicated to you therein that the Geographical Society has elected you as one of its corresponding members, and that the diploma will be made out for you as soon as the confirmation is received from above (government ministry). At the same time I now congratulate you on Mt Haast in the Haidinger Range of the Australian Alps – courtesy of Dr Müller.²⁴²

Your Silurian discoveries excite my interest to the highest degree; if you have anything distinct that you can spare by way of Graptolites, Trilobites etc and Brachiopods etc etc. and if you have the opportunity to send something, then be so kind as to do so. Also, for describing and identifying, my friends here and I would be available; I know the great authority on the Silurian period, Barrande,²⁴³ who in this regard I place even above Murchison, and I could send things to Paris where he is at present.

Your glacier studies will be of great importance. I wish I was with you – so I am looking forward to your next letter.

Fortunately, thank God, I can only report positive things from my domestic life. My wife is dear and hearty and beautifies my life and gives me hope of a prince in January, who will hopefully already be able to walk and speak when you come to Europe in 2 or 3 years time. The only thing I am not happy with is my health – my chest problem is getting worse due to my daily lecturing; fortunately my holidays begin in July, during which I will undergo serious treatment. But all that again keeps me from my work and despite everything I am not making any progress with my ‘New Zealand’ book.

Today I am sending you with this letter a small pamphlet by me on Madeira²⁴⁴ which has just been published, as well as a few Viennese newspapers and our *Figaro*,²⁴⁵ which will give you an insight into our terribly twisted political situation caused by the arrogance of the Hungarians and nationalistic madness.

These things will go by mail as printed matter together with this letter.

You will have returned from the Alps by the time this letter reaches your hands. Everything you report to me will be incorporated into a separate chapter of my popular Cotta volume on New Zealand, if you have no objection. This week the first volume of the *Novara* travel account written and edited by Scherzer appeared,²⁴⁶ and will be sent to you and numerous others through the official channels via Auckland. You will of course receive the complete work.

My wife sends you her sincerest greetings and wishes you the best of luck.

By God’s command, my good friend

With best regards, your unchangeable

Ferdinand Hochstetter

crossing the Rangitata River and was buried at Mesopotamia Station nearby. See Maling, *Samuel Butler at Mesopotamia*, which includes a map showing location of “Dr Sinclair’s grave”. See also *Dictionary of New Zealand Biography*, vol. 1, p. 397.

²⁴¹ Hochstetter letter to Haast no. 13 dated Vienna 23 May 1861.

²⁴² Ferdinand von Mueller named Mt Haast in the Haidinger Range in Australia in 1861, but the name is now obsolete.

²⁴³ Joachim Barrande (1799-1883), Austrian geologist and palaeontologist.

²⁴⁴ Ferdinand von Hochstetter, *Madeira: Ein Vortrag*, Braumüller, Vienna, 1861.

²⁴⁵ *Figaro: Humoristisches Wochenblatt*, Vienna, 1857-1919. *Figaro* was edited by Rudolph von Waldheim in 1861, and by Carl Sitter from 1862 to 1883.

²⁴⁶ Karl von Scherzer, *Reise der Oesterreichischen Fregatte Novara um die Erde, in den Jahren 1857, 1858, 1859, unter den Befehlen des Commodore B. von Wüllerstorff-Urbair*, vol. 1, Vienna, Hof- und Staatsdruckerei, 1861.

15. Ferdinand Hochstetter to Julius Haast, Vienna 18 August 1861, MS 37 folder 180.

Vienna 18 August 1861

Most esteemed friend

Just now I received your long kind letter of 6 June, and even though I have just returned yesterday evening from a sad journey to Esslingen, where I buried my precious mother,²⁴⁷ and face a huge number of outstanding matters to attend to, I will first of all answer your letter which pleased me very much. I always feel revived when I hear of New Zealand through you. But before I go on to anything else, why is it that you have never received my letters? Your letters have all been correctly received by me. I will summarize the correspondence according to my papers.

Your letters:

1. Dated 24 March 1860, received 22 September 1860, Mawhera pa, Greymouth, West Coast.
2. 21 June 1860, Kawhatiri
28 July 1860, Mouth of the Nga Kawahu²⁴⁸ River, 12 November continued, 22 August Collingwood.
2 September, Nelson, received 12 November 1860
together with letters to Orges²⁴⁹ and Schweitzer²⁵⁰
3. Nelson 8 October 1860, received 16 December 1860
4. 10 November 1860, Nelson
5. 7 December 1860, Canterbury, received after your last letter
6. Nelson 26 January 1861, received 15 April 1861, together with your report, *Taranaki Punch* etc.
7. Christchurch 18 February 1861, received 16 May 1861
8. Rangitata River 29 March, received 16 June
no letters from April and May.
9. Christchurch 6 June 1861, received 18 August 1861 – this is the letter I am answering today.

My letters:²⁵¹

1. Reply of 20 October 1860²⁵²
2. Answered on 30 December 1860²⁵³ together with my photograph and, if I remember rightly, a photograph of my wife and statement on the 50 gulden from Cotta.
3. Answered 1 March 1861²⁵⁴
4. Answered 10 May 1861²⁵⁵ including a photograph of me together with my wife.
5. Answered 16 June 1861.²⁵⁶
and this one is number 6.

You can see from the summary that your nine letters were answered by six letters, and undoubtedly by the time this sixth letter reaches you, letters 2, 4 and 5 will also have been correctly received.

²⁴⁷ Hochstetter's mother Frederike Sophie Hochstetter, nee Orth, died in Esslingen 10 August 1861. Information on the Hochstetter family kindly supplied by Prof. Dr. Hanns Hermann Bühler, Vienna, in a personal communication to the author dated 3 July 2005.

²⁴⁸ Nga Kawahu River is most likely a phonetic transcription of Ngakawau, West Coast, South Island, New Zealand.

²⁴⁹ Hermann Ritter von Orges (1821-1874), editor of the *Allgemeine Zeitung*.

²⁵⁰ Haast had written a letter to Dr Leopold Schweitzer, editor of *Wiener Zeitung*, requesting off-prints of his articles.

²⁵¹ The two lists of letters appear in adjacent columns in the manuscript letter.

²⁵² Hochstetter letter to Haast no. 10 dated 20 October 1860.

²⁵³ This letter is not extant and probably never reached Haast.

²⁵⁴ Hochstetter letter to Haast no. 11 dated 1 March 1861.

²⁵⁵ There is no extant letter with this exact date; probably in reference to Hochstetter letter to Haast no. 12 dated 4 May 1861.

²⁵⁶ Hochstetter letter to Haast no. 14 dated 16 June 1861.

With no. 2 I sent you a better photograph of myself and the statement for the money that I received for you from Cotta. I would be very sorry if this letter, which, if I remember rightly, was very long and detailed, had been lost. But the damage would be replaceable, as I again sent you an image of myself together with my wife on the one photograph²⁵⁷ with letter no. 4. and this letter is now undoubtedly in your hands. I am also sending the statement again with this letter, and at the same time you can see from the letter from Braumüller,²⁵⁸ that the books that were already purchased for you in March 1860 have been despatched to you and undoubtedly via Auckland. That they did not arrive is extremely annoying, especially as I would now like to send you a further consignment, and I do not know how and by which avenues I should send them. But if my memory does not fail me, I also wrote to you again between letters 2 and 3 and sent you a photograph of my wife,²⁵⁹ in those days still my fiancée. But I don't have any special notes on this. Yet however it may be, do not judge me too harshly if I am behind by only perhaps two or three letters.

Continued 23 August.

You see how I get prevented from writing, it is just that often so many urgent matters of business arise that something I have started with the best intentions cannot be finished in one go. But now I hope that I will be able to stick to it until I have communicated everything I want to write to you about. But first of all, my sincere congratulations on your ever-increasingly glowing successes, in which I am already taking a great interest, and I look forward to the day when we can see each other again in old Europe. I am a very happy married man in the fullest sense of the word, and there would be nothing left to be wished for if I was satisfied with my health. But the plaguing spirit on my chest, which has now been occupying me for one year, does not want to go away, even though we have had truly tropical weather since May, which I was expecting would get rid of the last traces of my cold. In the meantime I hope that things will get better. My dear wife is a fine little woman and is already giving me hopes of a healthy boy for the New Year. If it really is a boy, then I speculate on a New Zealand godfather and am thinking of you. *Nous verrons a dit l'aveugle* – we'll see said the blind man. In the meantime my wife sends you her kindest regards.

Of the *Novara* publications, as I already wrote to you in an earlier letter, one volume of the travel account by Scherzer has appeared, encompassing the journey up to the arrival on the Nikobar Islands. Your name is on the list²⁶⁰ of those who will receive the work from the Naval Office. But I recently heard to my utter surprise that the copies for New Zealand have not been sent off yet and instead, to save on the high cost of postage, they will wait until the other two volumes have also been published. It is a real pain with the mail to New Zealand from here. I had recently prepared a number of newspapers, brochures and similar things to send as printed matter to you and announced them in my letter of 16 July,²⁶¹ but the post office demanded no less the 12 gulden for the little parcel, more than six times the value of the contents, so that I took the parcel back. I now have the following works ready for you.

The prices are approximate as I don't know them exactly right now.

- 13fl 1. Naumann: *Geognosie*²⁶² part 2
- 2. *Novara* book:²⁶³ part 1 (I do not want to wait until you receive the official copy, as that could take until all three volumes have appeared.)
- 10fl 3. Quenstedt:²⁶⁴ *Mineralogie*²⁶⁵

²⁵⁷ Portrait of Ferdinand and Georgiana von Hochstetter held in Alexander Turnbull Library.

²⁵⁸ Wilhelm Ludwig Carl Ernst Heinrich von Braumüller (1807-1884), Viennese bookseller and publisher.

²⁵⁹ Portrait of Georgiana von Hochstetter from this period has not been found.

²⁶⁰ See earlier note regarding list of persons who supported the *Novara* expedition, which includes Haast.

²⁶¹ Most likely in reference to Hochstetter letter to Haast no. 14 dated 16 June 1861.

²⁶² Carl Friedrich Naumann, *Lehrbuch der Geognosie*, 1st edition in 2 volumes with atlas, 1849-1852; 2nd edition, in 3 volumes 1857-1872.

²⁶³ Karl von Scherzer, *Reise der Oesterreichischen Fregatte Novara um die Erde, in den Jahren 1857, 1858, 1859, unter den Befehlen des Commodore B. von Wüllerstorff-Urbair*, vol. 1, Wien, k.k. Hof- Staatsdruckerei in Commission bei Karl Gerold's Sohn, 1861.

- 12 fl 4. Quenstedt: Epochs of nature,²⁶⁶ a new textbook of geognosy
5. Hochstetter: *Madeira*.

Plus various newspapers, brochures and off-prints; I am quite prepared to add more works at your request, perhaps a metallurgical or good zoological book that takes palaeontology into consideration at the same time. Or a palaeontological work by itself. If only I knew how to send the books safely! I have grown a little afraid after the first lot went missing.

I will still await your next letter and in the meantime make enquiries in London. The best thing would be if you instructed Trübner & Company, booksellers in London, Paternoster Row or another company, to take over the shipments to you. I am in contact with Trübner and in this way the English books you indicated could also be acquired.

And now my New Zealand book for Cotta in Stuttgart: After I had to overcome all sorts of difficulties – Scherzer conspired against it, partly out of jealousy, partly out of envy and used every means both with the Contre Admiral Wüllerstorff and the Archduke – and only after all kinds of presentations and writings have I now received official permission from the Archduke to publish a travel account of New Zealand with Cotta, obviously not the larger purely scientific official publication, which I always intended to write for the scientific publications of the *Novara* from the start – if this ever happens – according to my obligation and duty. The work is to be ready for distribution by September 1861 and appear as an English edition with Trübner & Company in London at the same time.²⁶⁷ It will be a thick octavo volume with numerous illustrations, woodcuts and coloured steel engravings, and besides the special title of Travels in New Zealand by Dr Ferdinand Hochstetter it shall also carry the general title of the *Novara* travel accounts and be added to this as a fourth supplementary volume, but at the same time be a stand alone book. Only in these holidays did I get to start on the text and unfortunately it has not come very far, as I was interrupted by the illness and death of my mother. I will arrange the work for the general public, but still include all the significant scientific results, even include a few maps and similar things. But as there is so little German literature known about New Zealand, I also want to include something on the traditional literature of the Maori and something on the habits and traditions of the natives. Only the bigger journey in the Province of Auckland will be presented in the form of a travel diary, everything else in summary.²⁶⁸

For example:

Chapter 1: Arrival of the *Novara* in New Zealand

Chapter 2: Alone in the Antipodes, introduce the circumstance of how it came about that I stayed in New Zealand.

Chapter 3: Nine months in New Zealand. Overview of my work and similar.

Chapter 4: Names and provinces of New Zealand etc.

Chapter 5: Traditions on the migration of the natives

Chapter 6: History

Chapter 7: The natives today in relation to their earlier circumstances. The Maori war etc.

Chapter 8: General natural characteristics geological, botanical and zoological, especially of the Province of Auckland.

Chapter 9: The City of Auckland and the Isthmus of Auckland

Chapter 10: Auckland volcanoes with map

Chapter 11: Brown coal measures in the Province of Auckland

Chapter 12: Kauri forests

²⁶⁴ Friedrich August Quenstedt (1809-1889), German geologist and mineralogist, under whom Hochstetter studied at the University of Tübingen.

²⁶⁵ Friedrich August Quenstedt, *Handbuch der Mineralogie*, Tübingen, Laupp, 1855. See H. F. von Haast, *Catalogue of the Books belonging to the Late Sir Julius von Haast*, p. 8.

²⁶⁶ Friedrich August Quenstedt, *Epochen der Natur*, Tübingen, Laupp, 1861. See H. F. von Haast, *Catalogue of the Books belonging to the Late Sir Julius von Haast*, p. 9.

²⁶⁷ Hochstetter's negotiations with London publishers were all unsuccessful and in the end both the German and English edition were published by Cotta in Stuttgart.

²⁶⁸ The published book contains 24 chapters, rather than the twelve outlined here.

Journey to the interior of the province etc.

I have hereby given you an approximate indication of how I want to proceed, and I will always be grateful for notes of any kind, but especially for any contributions of unpublished Maori literature. Of course I will put everything under your name, just as I never miss an opportunity to place you and your loyal friendly help in the appropriate light.

The steel engravings are already being worked on in Munich,²⁶⁹ and enclosed I send you the first proof print of Mt Cook.²⁷⁰ I wanted to include a view of the New Zealand Alps and I had no other option but to choose Heaphy's sketch, and I just hope that the picture is not just as untrue to reality as Heaphy's view of Lake Taupo in Dieffenbach's work.²⁷¹ You now know the view, write to me therefore your opinion, or even better, write to me from your diary the appropriate passage on the view, and give me the necessary notes on the geological character of the mountain range, in order that I might provide appropriate annotations to accompany the picture authentically under your name. In a similar manner the view of Lake Taupo, Te Tarata at Rotomahana, Fischer's native forest picture, a native chief and perhaps Orakei-Korako will be executed.²⁷²

But now to my main business, your Report on the west coast of Nelson²⁷³ already arrived here in January and I presented the key points from it in a lecture at the meeting of the Geographical Society. But to this day I have received neither your maps nor further copies of your report from the Nelson Provincial Government. I therefore ask you to please again ask the Nelson Government to send me these things, as despite my best efforts I was not able to follow your route without your maps nor was I able to get a clear overview of the geological characteristics.

And now a further plan: Perthes in Gotha²⁷⁴ only wants to take on my New Zealand maps and publish them if he is allowed to publish them separately as a New Zealand atlas. There is no objection to this on my part or that of the *Novara* expedition, but it also needs both our support. My suggestion to him is now for a New Zealand atlas of 12 sheets, 6 for the North Island and 6 for the South Island, issued in 4 parts of 3 sheets:

First issue: No. 1 the Southern Parts of the Province of Auckland, that is my big travel map, on which in the corner on a smaller scale would appear the Lake Taupo and Rotomahana folio 1: 800000

In quarto no. 2 the Isthmus of Auckland, geological

No. 3 travel map of the lake district 1:200000

Maps by Hochstetter²⁷⁵

The second issue:

No. 4 the North Island of New Zealand 1:2000000, compiled by Dr Petermann

No. 5 The Southern part of the Province of Auckland, geological, Kawhia harbour especially.

No. 6 Geological general map of the whole of New Zealand

²⁶⁹ They were engraved by Arno Meermann (1829-1908), a German artist in Munich.

²⁷⁰ This was published as: "Die südlichen Alpen mit Mt Cook (13,200 englische Fuß hoch), Ansicht von der Mündung des Arahura oder Brunner-Flusses an der Westküste der Südinsel. Nach einer Skizze von Ch. Heaphy", Hochstetter, *Neu-Seeland*, 1863, p. 32.

²⁷¹ Ernest Dieffenbach, *Travels in New Zealand*, 2 volumes, London, John Murray, 1843. Charles Heaphy came to New Zealand at the same time as Dieffenbach, who was naturalist to the New Zealand Company.

²⁷² These ideas for large illustrations were realised as follows: "Taupo-See, Ansicht des südlichen Ufers mit dem Tongariro-Vulkan und dem schneebedeckten Ruapehu. Nach einer Skizze vom Verfasser", Hochstetter, *Neu-Seeland*, p. 228; "Te Tarata am Rotomahana, kochender Sprudel mit kieselsinter-Terrassen. Nach einer Photographie von Hamel", Hochstetter, *Neu-Seeland*, p. 272; "Urwald im Papakura-District bei Auckland. Nach einer Skizze von Dr C. Fischer", Hochstetter, *Neu-Seeland*, p. 416; "Ko Paora Matutaera (Paul Marshall), Maori-Häuptling am Kapanga, Coromandel-Hafen, Provinz Auckland. Nach einer Skizze von Ch. Heaphy", Hochstetter, *Neu-Seeland*, frontispiece. These are all coloured steel engravings, while "Die heißen Quellen von Orakeikorako, nach einer Skizze vom Verfasser", Hochstetter, *Neu-Seeland*, p. 257, is a woodcut.

²⁷³ Julius Haast, *Report of a Topographical and Geological Exploration of the Western Districts of the Nelson Province*, Nelson, Printed by C. & J. Elliott, 1861.

²⁷⁴ Justus Perthes Verlag in Gotha, Germany.

²⁷⁵ Note in left margin adjacent to above three items in manuscript letter.

The six other maps would then cover the South Island.

Initially two maps on a scale of 1:2000000 topographical, then a detailed topographical map and geological maps; for the third and fourth issue you would have to send in the necessary material and appear as a contributor, as I would in the first and second issue. Do give it some thought and write to me about it.

At the same time I earnestly request, as I want to include a general geological map of New Zealand in my New Zealand work, that you would draw for me, of course only on a small scale, a map of the South Island, just showing the main groups and formations in different colours, such as, for example, red for crystalline slates, and only describe with words things like granite, gneiss, mica, argillite and especially notable localities of serpentine, limestone, hornblende and similar. Primary, that is Devonian, green; coal, brown; Triassic, light purple; Jurassic and Cretaceous, blue in shades; Tertiary, grey; volcanic, neutral ink. Fossil localities and ore deposits are to be marked in specially. You must have gained such a good overview of the geological features in the South Island by now that it will be easy for you to draw these in on a copy of the sea chart of the South Island.

And now in reply to the other points in your letter:

I will make sure that the Canterbury Museum gets a copy of the plaster cast of *Palapteryx ingens*. You will receive the skeleton already fully mounted so that you only have to screw on the neck to the head. All the plaster casts have so far been sent fully mounted and have arrived with only a few broken bits that have to be joined together again with plaster.

You ask me how I stand with Haidinger: quite well, but of course I am now more distanced from the Geological Survey of Austria than before, as I have left, and therefore only get to mention it on special occasions. The promised collection for the Nelson museum has still not been sent, these things unfortunately always take a long time with us. Whilst on the subject, if you are starting a museum in Canterbury, then I can get for you at a very good price a complete Jurassic collection with many fossils, all precisely labelled, and a large number of crystalline rock specimens, but only in about a years time.²⁷⁶

Do be so kind and send me from time to time newspaper cuttings on the Maori war and the gold returns in Nelson, as I want to include all that in my book. And how does the nephrite occur, I am having nephrite newly analysed, and have collected many notes²⁷⁷ on it, but the source is still not known to me, do give me the major places where it is found and how it is found in layers and in relation to what rock formations or rock types.

Regarding the elevation crater theory of Leopold von Buch,²⁷⁸ your objection is fully valid and justified. By the way, I have long dropped the theory and even in New Zealand I only spoke of elevation crater L. v. B. to describe the phenomena for which there is still no shorter term, and already last year in Oxford at the British Association for the Advancement of Science, supporting my position on New Zealand, I defended the simple accumulation theory with Lyell against Daubeny.²⁷⁹ The elevation crater theory must be completely dropped. Unfortunately I still cannot say anything definite on the New Zealand fossils, as they have not been worked on. I can only tell you the genera:

Awatere Valley: *Cassidaria*, *Purpura*, *Strombus*, *Natica*, *Turbo*, *Crepidula*, *Navicella*, *Dentalium*, *Calyptraea*, *Tellina*, *Nucula*, *Astarte*, *Pinna*, *Cardium*, *Lucina*; undoubtedly young Tertiary.

²⁷⁶ Heinrich von Haast wrote: "Professor von Hochstetter had presented a fine collection of Jurassic fossils", see *The Life and Times of Sir Julius von Haast*, p. 220.

²⁷⁷ The OR Dr. A. Schedl Collection, Vienna, includes manuscript notes on nephrite by Hochstetter.

²⁷⁸ Christian Leopold Freiherr von Buch (1774-1853), German geologist.

²⁷⁹ Charles Giles Brindle Daubeny (1795-1867), geologist. Daubeny presented a paper with the title "Remarks on the Elevation Theory of Volcanoes." The abstract reads as follows: "This paper was chiefly intended as a protest against the assumption of certain geologists, that because it had been shown, more especially by Sir Charles Lyell in his memoir published in the 'Philosophical Transactions' for 1858, that sheets of compact lava have been formed on steep inclines, it therefore followed, that all volcanic mountains have been built up by a series of successive eruptions." See *Report of the Thirtieth Meeting of the British Association for the Advancement of Science*, pp. 75-76.

Cape Farewell: *Ostraea*, *Lima*, *Venus*, *Teredo*, *Schizaster*, *Spatangus*; possibly Cretaceous or old Tertiary.

Richmond Sandstone: *Monotis*, *Inoceramus* (*Mytilus*), *Carpenteria*, *Spiriferina*, *Turbo*; Secondary probably Triassic.

The belemnite layers on the west coast of the North Island are Neocom.

What you wrote to me about the New Zealand Alps interested me very much. Why don't you design a profile from Banks Peninsula to Mt Cook



Figure 2: Geological section of the South Island from Mt Cook to Banks Peninsula

Something like that?²⁸⁰

It must be quite remarkable. I am eagerly looking forward to receiving specimens from your collections – send me good clear ones. I spoke to Haidinger about the freight charges, as unfortunately I have no means to spend money on postage. Haidinger would cover the cost of shipments to the Geological Survey, but on the other hand the things will be lost to me in the Geological Survey, just like the fate of my Novara collections has not been decided yet. There reigns an incredible confusion in regard to the regulations applicable to our collections. Recently I was asked to repay the costs of shipping my collections from New Zealand and when I stood up against this impudence I was ordered to return all my collections to the Naval Office in Trieste after the dismantling of the Novara Museum; what regulations they have there, God only knows. That is the way it goes – if I had not collected and brought back anything I would already have saved myself an endless amount of trouble. But now my letter has grown long. Accept my best regards and keep up the good work. My sincerest good luck to you and greetings from my wife and me.

Yours faithfully,
Ferdinand Hochstetter

NB Nephrite and a geological map of the South Island etc.

16. Ferdinand Hochstetter to Julius Haast, Vienna 20 September 1861, MS 37 folder 180.

Vienna, 20 September 1861

Most esteemed friend

I am rushing to try and immediately answer your letter of 12 June, which I received yesterday. With it I received the first copy of a draft for £60 and I express my and my wife's most sincere thanks for your kind wedding present. I will certainly choose something for the 50 to 60 gulden indicated by you that will be a lasting memory for my children and children's children of our friend in New Zealand. Your further instructions regarding moa, the doctoral diploma, and various books and instruments etc. will be carried out as promptly and quickly as possible. I am hoping that no insurmountable obstacle will appear in regard to the doctoral diploma, although I have no idea how and where to get it from as yet. Our universities have only recently stopped the practice of purchasable doctoral diplomas, but I hope to achieve the desired result on the basis of your report and my input, although perhaps not as quickly as you expect.

²⁸⁰ Compare with Hochstetter's hypothetical section of the South Island in Ferdinand von Hochstetter, *Geologie von Neu-Seeland*, Wien, Staatsdruckerei, 1864, p. 199 and Hochstetter, translated by Fleming, *Geology of New Zealand*, p. 214.

Yet I will do everything I can, you can rely on that. The copy of the Lyttelton tunnel report and Lyttelton newspaper²⁸¹ have not arrived and may still be coming. I only have one copy of the report on hand that arrived in April.

I will get geological maps and books in the indicated subject areas for you, and as soon as the minerals and fossils arrive I will identify them for you.

Cotta's book on the mineral deposits²⁸² will probably serve the indicated purpose, and also a very nice geological map of Germany and central Europe, with England, France and Italy, which was recently published by Perthes, and I will also enclose a map from the Geological Survey by me.²⁸³ But these things will hardly get away from here before November and I am not sure what to do to make sure that they arrive safely.

I have now given up as lost my very long and detailed letter to you of the 30 December of last year.²⁸⁴ When I have a bit more time and I get the chance I will try and write to you again some of the most important details from it.

On the 18 August²⁸⁵ of this year I again wrote to you regarding the 50 gulden from Cotta for your articles in the *Allgemeine Zeitung*, and the way it has been spent, except for a remainder of 23 gulden 99 kreutzer. I now also have to give up as lost the shipment of books, although I will make more enquiries. I also wrote to you in the December letter in regard to your articles in the *Wiener Zeitung*, and that when I came here I had the greatest difficulty, even though I had an honorarium guaranteed in writing by the ministry, and it was only after I had taken refuge in the police ministry, that I was paid the fee that was due to me for the *Novara* travel accounts that had appeared in more than ninety issues of the *Wiener Zeitung*. In the meantime the *Wiener Zeitung* had been transferred from the Ministry of Internal Affairs to the Ministry of Police. In the process of trying to get my fee I completely fell out with the editor Dr Schweitzer,²⁸⁶ and therefore I did not give him your letter, as I know it would not lead to any results. Your reports appeared as a continuation of my serialised articles – I will send you copies if I can still get them – and were therefore put on my invoice. But my fee was a lump sum, so that I would actually have to pay you. I don't know where the diploma of the Geological Survey got lost, you have already been on the published list of corresponding members since the spring of 1860,²⁸⁷ and if I remember rightly, I enclosed the cutting in my December letter for you, and will just have to apply to Haidinger for a second diploma for you. I found the notes you sent me on moa footprints, crocodiles and Plesiosaurs highly interesting. I will include them in my New Zealand work, albeit with the necessary caution.²⁸⁸ But did you read that Professor Owen in London gave a paper in the British Association for the Advancement of Science in Manchester on remains of *Plesiosaurus australis* from the oolite formations on the West Coast of New Zealand? I only read the notice and don't know the details yet.

²⁸¹ *The Lyttelton Times*

²⁸² Haast owned a copy of Bernhard von Cotta (1808-1879), *Die Lehre von den Erzlagertstätten*, 2 volumes, Freiberg, Engelhardt, 1859, 1861. See H. F. von Haast, *Catalogue of the Books belonging to the Late Sir Julius von Haast*, p. 8.

²⁸³ Hochstetter contributed to a number of geological maps of the Imperial Geological Survey of Austria, including: *Umgebungen von Carlsbad und Eger*, 1:144.000, F. Hochstetter and J. Jokely, Wien, Geologische Reichsanstalt, 1860; *Umgebungen von Leitmeritz und Theresienstadt*, 1:144.000, F. v. Hochstetter and J. Jokely, Wien, Geologische Reichsanstalt, 1857; *Umgebungen von Neudek*, 1:144.000, F. v. Hochstetter and J. Jokely, Wien, Geologische Reichsanstalt, 1855; *Umgebungen von Lubenz*, 1:144.000, F. v. Hochstetter and F. v. Lidl, Wien, Geologische Reichsanstalt, 1855; and *Umgebungen von Klentsch*, 1:144.000, F. Hochstetter, Wien, Geologische Reichsanstalt, 1854.

²⁸⁴ This letter presumably did get lost as there is no extant manuscript letter of this date.

²⁸⁵ Hochstetter letter to Haast no. 15 dated 18 August 1861.

²⁸⁶ Dr Leopold Schweitzer, editor of the *Wiener Zeitung*.

²⁸⁷ A list of corresponding members of the Geologische Reichsanstalt appears at the beginning of each *Jahrbuch*. Haast's name already appears on the list for the year 1859. See *Jahrbuch der kaiserlich-königlichen Geologischen Reichsanstalt*, vol. 10, 1859, p. XV. The entry reads: „Haast, Julius, Nelson, Neuseeland. F.“ The “F” denotes: “[A]ls Ausdruck des Dankes überhaupt und für Förderung specieller Arbeiten der k.k. geologischen Reichsanstalt, wodurch diese zu dem grössten Danke verpflichtet ist.“ *Jahrbuch der kaiserlich-königlichen Geologischen Reichsanstalt*, vol. 10, 1859, p. XIII.

²⁸⁸ Hochstetter included a note to this effect in *Neu-Seeland*, p. 429.

Today I applied for one year of leave from my lecturing,²⁸⁹ as I just cannot cope with the amount of work that is resting on my shoulders, and I hope this will be granted, so that I might finish my New Zealand book by the summer of 1862. I also want to create a lasting memorial in it for you, and have therefore, if you will permit me to do so, included your description of our expedition to the North Shore from the *Allgemeine Zeitung*,²⁹⁰ under your name, with only a few small changes, but now I want to ask you for something bigger and more original.²⁹¹ How would you like to write a chapter for me on the New Zealand Alps, the high mountains with glaciers around Mt Cook? Of course you will eventually write your own larger book on New Zealand, perhaps even a continuation of my Cotta “New Zealand”. Then this would already make be a start. A chapter on the New Zealand Alps by my friend Julius Haast. Now if that seems alright, then go ahead. Frauenfeld is also writing a chapter for my book to immortalise himself, on some zoological frippery.²⁹² But how different will your alpine flora, snow peaks, ravines, mountain streams and glaciers appear!

More by the next mail, dear friend, my wife sends you her warmest regards.

The maps of Nelson have not arrived yet.

In January I am expecting a prince.

Good luck for the New Year!

Your unchanging

Ferdinand Hochstetter

17. Ferdinand Hochstetter to Julius Haast, Vienna 25 October 1861, MS 37 folder 180.

Vienna, 25 October 1861

Most esteemed friend

I hasten to write to you straight away, after I was again pleased by the receipt of your letter on 22 October. In my last letter of 20 September²⁹³ I already confirmed the receipt of £60, of which your August letter also brought me the second copy. I also expressed my wife’s gratitude for the beautiful gift you gave her. In accordance with your wishes I took £5 and bought Goethe and Schiller²⁹⁴ for my wife in your name, a present of lasting value. Again my best thanks for that, dear friend. With the remaining sum I will act according to your instructions. The *Palapteryx ingens* plaster cast skeleton is already sitting all packed up, it is completely mounted, only the neck has been unscrewed and all you have to do is to screw the neck back on. I hope it arrives in one piece; with those that have been sent in this way so far, only very minor, easily repaired damage has occurred. It is a large case: three sides are marked with

²⁸⁹ The “Personalakte Hochstetter” in the “Archiv der Technischen Universität Wien”, includes a letter by Hochstetter dated 9 December 1861 in which he indicates his intention of commencing his 1-year-leave on the 12 December 1861.

²⁹⁰ Julius Hanf [Haast], “Streifzüge in Neu-Seeland: 1. Eine Villegiatur in Auckland”, *Beilage zu Nr. 336 der Allgemeinen Zeitung*, 2 December 1859 “Streifzüge in Neu-Seeland: 1. Eine Villegiatur in Auckland”, *Allgemeine Zeitung* (Beilage), no. 336, 2 December 1859, pp. 5497-5498; *Beilage zu Nr. 337 der Allgemeinen Zeitung*, no. 337, 3 December 1859, pp. 5513-5515.

²⁹¹ Hochstetter writes the following acknowledgement in a footnote: “Ich lasse in diesem Kapitel größtentheils meinen Freund Haast erzählen, der, während ich mit dem Zeichnen der Karte beschäftigt war, den Historiographen unserer Erlebnisse machte.” Hochstetter, *Neu-Seeland*, p. 102 note. For the later English edition he wrote: “Most of this chapter is from the pen of my friend Dr Haast, who acted the historiographer of our adventures, while I was engaged in drawing the map.” Hochstetter, *New Zealand*, p. 246 note.

²⁹² Frauenfeld wrote chapter XX “Die Thierwelt” in Hochstetter’s *Neu-Seeland*, pp. 426-437. In a footnote Hochstetter writes: “Mein Freund und Reisecollege, Herr Georg Ritter v. Frauenfeld, welcher die Novara-Expedition als Zoologe begleitete, hatte die Gefälligkeit, auf meine Bitte dieses Kapitel auszuarbeiten. Nur einige Anmerkungen erlaubte ich mir noch selbst beizufügen.” see Hochstetter, *Neuseeland*, p. 426. Hochstetter also refers to this in a letter to the Cotta Verlag when he asks for off-prints of the chapter for Frauenfeld: “Zugleich erlaube ich mir die Anfrage, ob Sie geneigt wären von Cap. 20. Die Thierwelt, das nun demnächst in Druck kommen wird, gegen besondere Bezahlung mir 75 Separatabdrücke zukommen zu lassen; mein Reisecollege Frauenfeld, der dieses Capitel größtentheils gearbeitet hat, wünscht nämlich 75 Separatabdrücke, im Falle solche von Ihnen abgegeben würden, und im Falle der Preis für 75 Separatabdrücke 5fl Ö. W. nicht übersteigen würde.” Hochstetter letter to Cotta Verlag, dated 23 October 1862, folder 2, no. 25, Cotta-Archiv, Marbach am Neckar, Germany.

²⁹³ Hochstetter letter to Haast no. 16 dated 20 September 1861.

²⁹⁴ Johann Wolfgang von Goethe (1749-1832), German poet, philosopher and naturalist. Johann Christoph Friedrich von Schiller (1759-1805), German poet, writer and historian.



Figure 3: Glass bottle symbol to indicate fragile contents of case

The case is always to be placed in such a way that the bottle symbol is the correct way up, and the case is to be opened from the side, by removing the side that does not have the bottle symbol. Then the skeleton is to be pushed out by the pedestal and the neck screwed on. The label should read: *Palapteryx ingens*, kiwi-like moa from Aorere District.²⁹⁵

The skeleton did end up being a bit more expensive, as it is completely mounted. I had to pay £12 for it, but I will give you an exact account for it later. I have now also nearly got all the books together for you and will put these books, together with the hammers and instruments in a second case for you, as I would only be able pack very light things with the moa skeleton. I will let both cases go via Hamburg and London, and eventually write to you by which ship they went to New Zealand.

In the book case you will also get a second copy of your diploma as a corresponding member of the Geological Survey, which should have reached you more than a year ago and obviously went missing. I hope to still be able to send the second case to you by mid November, so that they will reach you by April of next year after all. The diploma of the Geographical Society will hopefully also have come by then; the confirmation from the minister has still not come through. I will also enclose a few Jurassic fossils in the case for you.

I am having difficulties with regard to the doctoral diploma. I turned to Tübingen and Breslau, but everywhere they want at least a curriculum vitae, biographical summary and academic record; I therefore ask you to send me a brief description of your life by return mail. It only has to be one page long; in the meantime I will continue my efforts, but I don't think that I am going to succeed without a biographical outline and a testimony of some kind but *nous verrons* – we shall see. Enclosed I send you for your own judgement the statutes of Tübingen University; they are nearly the same for all universities.

The copies of your Nelson report have been received:

1 copy for me,

1 copy for the doctoral matter, and

1 copy that came with yesterday's mail and was presented by me at yesterday's meeting of the Geographical Society in your name, when I reported your most interesting news.

The newspapers sent with the previous mail have still not arrived; I am hoping that they will come soon, and then I want to completely bury myself in New Zealand.

Now my congratulations on the discovery of the anthrazite-like coals, which is very significant. Coal seams that are upside down are not as easy to mine as horizontal ones, though. But they can be mined, just as ore deposits that are normally upright are mined, and one can presume that as one follows the seam it will also change position. Water will be the main problem in the mining process. If no shaft can be made to drain the water then a steam engine will have to be set up.

I am quite hopeful that you will win the prize of £2000 for a Canterbury coalfield. What is it that I hear – the province of Otago has subscribed itself to an English geologist. My friend Stache still hopes to one day be able to geologise by your side in New Zealand.

²⁹⁵ The original of which was presented to Hochstetter by the trustees of the Nelson Provincial Museum in 1859. See Richard Wolfe, *Moa: The Dramatic Story of the Discovery of a Giant Bird*, Auckland, Penguin, 2003, p. 156.

I was very pleased to hear that my letter with the photographs arrived. I will write again by the next mail. Glückauf dear friend, carry on the way you have started and you will go well.

With heart and hand,
Yours faithfully,
Ferdinand Hochstetter

Richmond sandstone is probably Devonian.

Be sure to send me a chapter on the Southern Alps for my book.

The second volume of the *Novara* travel account has appeared, and you will find this in the case as well.²⁹⁶

18. Ferdinand Hochstetter to Julius Haast, Vienna 19 November 1861, MS 37 folder 180.

Reply to the letter of 24 August with postscript dated 6 September.

Vienna, 19 November 1861

Most esteemed friend

I am counting on your letters arriving in the middle of each month and was not mistaken this time either; as always they contain not only highly interesting communications, but also evidence of your friendship for me. My wife and I were very pleased to get your photograph together with the smaller photographs. The photograph of you from Auckland hangs in my study above my desk, but now by way of your new photograph you are also in the album of friends, as one does nowadays. The small Canterbury photographs were of great interest to me, like everything from New Zealand, but especially your house and your rooms in the Government buildings.²⁹⁷ A pity that the prints of your sketches from Nelson, Rotoiti and Rotorua did not work out. I could have used these in my work, while I can probably only use the Government buildings one from Canterbury.²⁹⁸ In my last letter I sent you a picture of the Southern Alps for your comments. Now you can compare it to your sketch. The newspapers announced in your last letter still arrived, as well as your report. I spoke on your coal discoveries and the discovery of gold in Otago at the Geographical Society. As a result of several talks I have given here on your results, your name is now more widely known. Do keep up the good work. This time your letter again contained most interesting things, especially the profile of the Malvern Hills. Enclosed is my new description for the rocks in question.

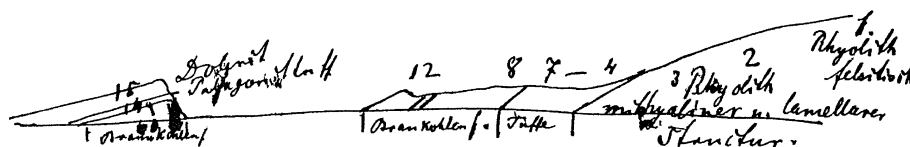


Figure 4: Geological section

The matter is like this: the recent lavas form a series; at one end are the silica-rich rocks, the so called acid mixes, on the other end are the silica-poor basic mixes. The acidic end.

²⁹⁶ These last three sentences appear as marginal notes in the manuscript letter.

²⁹⁷ This is in reference to a series of photographic prints by Alfred Charles Barker (1819-1873). See Sascha Nolden & Sandy B Nolden, *Hochstetter Collection Basel: Part 2 – New Zealand Photographs & Prints*, Auckland, Mente Corde Manu, 2012, pp. 9-12 (cat. nos. 2.1.1 to 2.1.3).

²⁹⁸ This was published as a woodcut: “Das Regierungsgebäude von Christchurch in der Provinz Canterbury”, Hochstetter, *Neu-Seeland*, p. 79.

- 1) Rhyolite consisting of sanidine lava, quartz mica, the name rhyolite by Richthofen²⁹⁹ for all the known Taupo rocks, as the sphaerulite (rhyolite obsidian) from Lake Rotorua belong here. Like granite.
 - 2) Trachyte sanidine, oligoclase that is, glassy variety of andesine and hornblende, such as trachyte from the "Drachenfels" on the Rhine, like syenite.
 - 3) Andesite oligoclase, hornblende, augite and lime feldspar; to this belong almost all rocks that one has hitherto included in the trachyte group, (Mt Egmont rocks) like diorite.
 - a) Amphibole andasite – hornblende oligoclase
 - b) Pyroxene andesite – augite, oligoclase, hornblende and lime feldspars = trachydolorite.
 - 4) Basalt – augite and lime feldspars (labradorite and anorthite) like diabase
- The Basic end.

The acidic rocks are generally the older in each period of eruption, specific gravity 2.6 to 2.7; the basic are the more recent, for example, Auckland basalts are the most recent eruptive layer, all other eruptive rocks can be aligned here, compare with enclosed table.

I will enclose with the book consignment for you Richthofen's work on rhyolite and Roth's "Gesteinlehre". Your section is a fine example, the rhyolite is older, and the palagonite-tuff with dolorite as a basic rock is younger. I am sending you a more detailed note on palagonite enclosed with this letter.³⁰⁰ I do not doubt that what you identified as palagonite is really palagonite. A suite of rocks from your section, good fresh pieces would be very interesting to me, as I am just wanting to start reworking the volcanic rocks of New Zealand.

I am already looking forward to the next mail that will bring me your map and sketches. I am also expecting an article on the New Zealand Alps that I can include in my book. For now I will just work up my material as best as I can, and when you get back we will then be able to discuss more plans for further New Zealand publications. Do collect lots of material and write me notes now from time to time. For example, who is the discoverer of gold in Otago; is it found on

²⁹⁹ Ferdinand Paul Wilhelm Dieprand Freiherr von Richthofen (1833-1905), explorer, geologist and geographer.

³⁰⁰ On a separate sheet of paper enclosed with this letter are the following two manuscript pages of notes written in Georgiana von Hochstetter's handwriting with Hochstetter's corrections: "Nb Handschrift meiner Frau. | Das Mineral Palagonit fand Sartorius von Waltershausen zuerst in Tuffen von Aci Castello auf Sicilien, es ist braungelb bis braunschwarz und erinnert in seinem äußeren fettglänzenden Ansehen an Gummi, Harz oder Pechstein, unterscheidet sich von letzterem aber gleich durch seine geringere Härte, nur 3 bis 4. | Sart. v. W. unterscheidet in chemischer Hinsicht drei Species: | I. 3 RO. SiO₂ + 2 R₂ O₃. 3 SiO₂ + 6 HO | II. 3 RO. SiO₂ + 2 R₂ O₃. 3 SiO₂ + 9 HO | III. 3 RO. SiO₂ + 2 R₂ O₃. 3 SiO₂ + 12 HO | Nach ihm bilden die Palagonite eine Gruppe von Mineralien, welche als amorphe, eisenoxydonische Zeolithe zu betrachten seien. Er hält die Palagonittuffbildung für in der Weise vor sich gegangen, dass die feingeriebenen Aschen submariner Ausbrüche ins Meer zurückgefallen und in der Art eines hydraulischen Mörtels cementiert worden seien, so daß ein Theil derselben eine feste chemische Verbindung eingegangen, der andere in dem früheren Zustande zurückgeblieben sei. Damit steht das Vorkommen von eingebetteten Conchylien im Zusammenhang (Fossvargur bei Reykjavik, Island Hallbjarnastadir bei Husavik am Eismeer), so wie die vollkommene Stratification des Palagonittuffs, dessen Schichten entweder Horizontal liegen, oder durch Hebungen und Durchbrüche vulkanischer Gesteine aufgerichtet wurden. Aber nur solche Aschen, die basische Feldspathe (Labradore und Anorthite) enthalten, sind zur Palagonitbildung geeignet, Kieselsäurereiche Feldspathe (Oligoklase, Sanidine) sind dieser Metamorphose überhaupt nicht fähig. Die sauren Aschenpartikelchen liegen daher meist unverändert im Palagonit. [2] Der meiste Palagonit ist durch Aufnahme von Wasser aus einem Minerale, Sideromelan, entstanden, welches man noch oft im Innern der Palagonitkörner antrifft, der Sideromelan ist ein amorpher eisenoxydreicher Labrador mattschwarz, glasartig und enthält nur 49°SiO₂, weßhalb er vorzugsweise leicht gelöst wird. Seine Formel ist: | RO. SiO₂ + R₂O₃. 2 SiO₂. | Von der Gegenwart des Sideromelans im Palagonit kann man sich überzeugen, wenn man ein Stückchen reinen Palagonits mit kalter verdünnter Salzsäure behandelt, der Palagonit wird unter Bildung von Kiesalgallerte gelöst, und der Sideromelan bleibt als rundliches sammtschwarzes Körnchen mit muscheligem Bruch zurück. So wurde er fast in allen isländischen Palagoniten nachgewiesen. Oft bildet der Palagonit nur das Bindemittel der Gesteinsbrocken, oft setzt er allein das ganze Gestein zusammen, welches dann seinen Character als ehemaligen Tuff vollständig verliert und der Name Palagonitfels verdient (Weideplatz Seljadalur zwischen Reykjavik und dem Thingvallasee, Island). | Bunsen glaubt, daß Palagonitsubstanz bei höheren Temperaturen durch Einwirkung von glühenden pyroxenischer d. h. Augitischer Gesteinen auf Kalkerde entstehen kann, er hat auch Palagonit mit allen chemischen und mineralogischen Eigenschaften des isländischen erhalten, indem er Feingeriebenen Basalt in einen großen Überschuß von geschmolzenen Kalihydrat eintrug und das gebildete überschüssige Kalisilicat mit Wasser übergießt. | Er denkt sich die Palagonite als metamorphische Gebilde, welche durch Reaction der glühenden Augitlaven auf Kalk- und Alkalienreiche Gesteine gebildet seien. Die Frage, woher die Maße des Kalks und des Alkalis gekommen wird mit der Annahme beantwortet, daß neben einem pyroxenischen und trachytischen Herd, der die Basalte und Trachyte und durch Verschmelzung diesen Typen alle Mischungsgesteine gebildet habe, ein dritter gegenwärtig erloschener Herd bestanden habe, welcher Kalk- und alkalienreiche Silicate ergoß. | NB. Man findet auf Island auch Sideromelan, der noch nicht zu Palagonit zersetzt ist, z. B. auf der Insel Visey bei Reykjavik. Es ist vielleicht dieselbe Substanz, die sonst Trachyt heißt."

slate or on Silurian slates? I am looking forward to your shipment of rocks, minerals and fossils, and I will identify everything as best as I can.

And now for another favour: I am very keen to get seeds, namely seeds of alpine plants, and seeds of *Dracaena* (*Cordyline*) *Daviesia*, *Dillwynia*, *Pultenaea*, *Eriostemon*, of evergreen trees, *Araucaria*³⁰¹ and *Dammara*.³⁰² Whatever seeds you can enclose with the consignment of rocks would be extremely welcome. My brother, the gardener, has urgently requested me to ask you for seeds.

Now the business of the shipment to you. Enclosed is an off-print of the moa skeleton. I have now finished packing up two cases for you, which will be despatched to you just as soon as I have sorted things out in Hamburg with Merck the Austrian consul. I will send you the complete specifications of the contents later. You will receive therein Bronn's *Lethaea Geognostica*³⁰³ with numerous plates, the most comprehensive palaeontological work with illustrations, as good as a complete museum, but you will also be receiving a Jurassic collection, Lias, Middle Jurassic, Upper Jurassic, which is intended to serve for the comparison of fossils, as I suspect that you have the whole Jurassic group in the Alps. I will not be charging you for this collection, and would only charge a very cheap price, if you were to integrate them with the collections of the Canterbury museum as well as the Kranz collection. But I would prefer not to charge for them at all: take it for the museum in exchange for the rocks etc. that you are sending me, and present the collection to the museum in my name.

I hope and wish that you will win the £1000 and wish you good luck for this, and wish and hope that your rheumatism will go away completely. Unfortunately I am not yet free from my chest problems, and next year I will visit a spa.

Stache sends you his best regards, he is very excited in anticipation of the enquiries you are making in Otago. How nice it would be if he could explore in New Zealand together with you. I would be as happy as a child.

I have taken the next steps toward the doctoral diploma, but there is no way around the curriculum vitae, brief biographical notes and academic record, and therefore I once again ask you for this. I will try to see if I can bring the matter to a decision by promising that your curriculum will be arriving soon. Do make sure that you become one of the founders of a Royal Society of New Zealand. I will write to the director of the Botanical Museum³⁰⁴ that he should write to you for plants. But our Imperial museums are unfortunately the tardiest, what is there and what one presents is buried, buried to death. Even today I know nothing about my cases from New Zealand, which I gifted to the Zoological Museum with the request that they might be identified. But I have heard nothing. The machinery in our old states is cumbersome; one has to grease them every day if one wants to succeed in getting anything through.

The sincerest regards from my wife, she is well. By January I am expecting a boy, and if it is a boy, then our joint bidding is that you take on the role of godfather, in spirit for now and later in person.

I hope that my letters are arriving regularly now – I am writing every month, I have made it my duty.

Do also send me a nice piece of New Zealand palagonite-tuff.

The Richmond sandstones are Devonian, that is my latest and probably final opinion. Paleozoic formations must be very widespread in New Zealand.

³⁰¹ Hochstetter was most likely desiring seeds of the Australian Bunya Bunya pine tree, *Araucaria bidwillii*, and the Norfolk Island Pine tree, *Araucaria heterophylla*, already commonly propagated in New Zealand at the time of his visit.

³⁰² *Dammara* synonym for *Agathis*; Hochstetter most likely wanted seeds of *Agathis australis*, the New Zealand Kauri.

³⁰³ Heinrich Georg Bronn (1800-1862), zoologist and palaeontologist, author of *Lethaea Geognostica: Oder Abbildungen und Beschreibungen der für die Gebirgs-Formationen bezeichnendste Versteinerungen*, 3 volumes and atlas, Stuttgart, Schweizerbart, 1835-1838. See H. F. von Haast, *Catalogue of the Books belonging to the Late Sir Julius von Haast*, p. 6.

³⁰⁴ Director of the botanical museum was the Austrian botanist Eduard Fenzl (1808-1879).

The Letters of Ferdinand von Hochstetter to Julius von Haast

And now farewell dear friend – if you now own such a comfortable house,³⁰⁵ won't you then be thinking of a wife soon?

With sincere regards also from my wife,

Yours faithfully,

Ferdinand Hochstetter

Table of Crystalline Rocks³⁰⁶

A. Acid series with 62 to 78% silica, specific gravity of 2.40 to 2.70. Mineralogical composition

| | | | |
|-----------------|---------------------|-------------------|---|
| I Granite Group | III Porphyry group | V. Trachyte group | |
| 1. Granite | 5. Felsite porphyry | 9. Rhyolite | Orthoclase, Quartz mica in part Hornblende, Oligoclase |
| 2. Syenite | 6. Porphyrite | 10. Trachyte | Othothoclase, Oligoclase, Hornblende, Mica and also quartz in part. |

B. Basic series with 45 to 58% silica, specific gravity of 2.80 to 3.20

| | | | |
|---------------------|--------------------|------------------|--|
| II Greenstone group | IV Melaphyre Group | VI Basalt group. | |
| 3. Diorite | 7. Melaphyre | 11. Andesite | Hornblende, Oligoclase Augite, Labradorite in part |
| 4. Diabas | 8. Augite porphyry | 12. Basalt | Augite, Labradorite, Olivine, magnetite |

| | | |
|--------------------|--------------------|--------------------|
| Period of Eruption | Period of Eruption | Period of Eruption |
| Paleozoic Period | Mesozoic Period | Cenozoic Period |

Note 1) The rocks in one horizontal line, for example, Granite, Felsite porphyry, Rhyolite, and the same for 2, 6, 10 also 3, 7, 11 and 4, 8, 12, have the same mineralogical composition and are only different in their structure and their geological age.

2) The rocks follow in their geological age the order of the numbers, Granite being the oldest, Basalt the most recent.

3) In the vertical direction there are numerous transitional forms.

4) There are numerous alterations of structure with each rock.

19. Ferdinand Hochstetter to Julius Haast, Vienna 18 December 1861, MS 37 folder 180.

Vienna, 18 December 1861

Most esteemed friend

Your letter of 2 October with all the notable and interesting enclosures has reached me. It put me in such a state of happy excitement as I have not felt for a long time, thanks to your fine work. I am really proud of you; I drummed together all my friends, and let them admire your works with me. That is to say, keep on moving forward and sincerest good luck.

Today I am letting you know that two cases have been despatched to you, one large and one small, and a list of contents and costs as far as I was able to work them out is enclosed with this letter. I sent the cases to the Austrian Consulate H. J. Merck and Company in London, who have kindly agreed to take over the shipment. It would be good if in future you could give me the name of a specific company in London to whom I could always send shipments for you, of whatever nature, then I could send consignments to you more easily and more often, as nobody here accepts consignments for shipment to New Zealand, only letters can be posted here, and even printed matter is not an option any more, as the post office charges the most ridiculous rates. Now I hope and wish that the two cases will reach you by the end of May or June, in time

³⁰⁵ In 1863 Haast acquired a house in Christchurch which he named "Glückauf", not long after he married Mary Dobson on 25 June 1863. See Haast, *The Life and Times of Sir Julius von Haast*, pp. 322-323.

³⁰⁶ This table was published in Hochstetter, *Geologie von Neu-Seeland*, p. 83.

for winter I think, and that the contents will be to your satisfaction; namely the geological maps and Bronn's *Lethaea Geognostica*, which is the best and most complete work in terms of palaeontological illustrations and should be very valuable for you.

The news that you already have a miner's compass unfortunately came too late, as I had already bought one and packed it in the case. You write that you received a Naumann – was that finally the consignment of books that I sent you and had already given up as lost or was it another Naumann that you had ordered yourself in the meantime?

In my November letter I already thanked you for your September letter³⁰⁷ and for the small photographs, my wife and all my relatives had much pleasure in seeing them. You are so often the subject of discussions in the Bengough family,³⁰⁸ that one already anticipates your monthly letters with great interest. Your letters always come notably regularly on the 16th or 17th of every month; I am now already counting on it, just as I always regularly reply to your letters. In my last letter I sent you a woodcut of the plaster cast³⁰⁹ of *Palapteryx*, the way it looks when it is mounted, and all you have to do is to screw on the neck.

Your section through Banks Peninsula is grand and I am keen to get the rocks. Only the name 'Laterite' is not applied correctly, in Ceylon and India one uses it to describe weathered masses of gneiss, so I suspect that what you call laterite is tuff that has been coloured reddish by more recent lava flows.

The newspapers you mentioned have not arrived yet, they always come about eight days later than the letter. I congratulate you with all my heart on the £1500. Translated into Austrian currency with the current exchange rate, which went up to 14.0 in the last month, this would be no less than 21000 fl, which is more than ten times as much as I make.³¹⁰ Honestly I would almost be inclined to go back to New Zealand, if I think about how hard I have to work here for my 2000. Now I have fortunately been given leave for one year,³¹¹ so that I can work on my travel account and geology of New Zealand without interruptions. Now things are going better for me. But it was high time too, as not only am I expecting a prince, if I dare say so, any day now, and naturally I like to be at home during such times, but also my chest condition has unfortunately got worse again with the coming of winter, and I am pleased to be free, so that I can get away for the start of spring to a fresh and beautiful area, in order to work and rejuvenate myself. When you wrote that you were lying ill with rheumatic fever I was worried about you, and am very pleased that you are now mended. Do take care of yourself.

The rocks and minerals you sent off will probably reach me at the same time as the case I sent will reach you.

I was astounded at the panoramic views of the Alps, so grand, surpassing all description. In my enthusiasm I wrote to Petermann straight away and sent him your topographical and geological maps and your view, in order that he might also share the pleasure.³¹² Petermann is currently working very enthusiastically on my maps, which are to be published as an atlas of New Zealand with six plates by the end of 1862. The isthmus of Auckland³¹³ has been drawn and

³⁰⁷ See Hochstetter letter to Haast no. 18 dated 19 November 1861.

³⁰⁸ The Bengough family were Hochstetter's in-laws.

³⁰⁹ This is a reference to one of two woodcuts first used to illustrate Hochstetter, "Die ausgestorbenen Riesenvögel von Neu-Seeland", 1862; and later published in Hochstetter, *Neu-Seeland*, pp. 452 and 454.

³¹⁰ Haast has written a footnote in the manuscript letter saying: "Notabene £1000 Gehalt + 500 Reisekosten, welche ich ausgeben muß." Which translates as: NB £1000 salary + 500 for travel costs, which I have to spend.

³¹¹ Hochstetter was given leave from his professorial post at the Technical University of Vienna. See earlier note.

³¹² Hochstetter's letter to Petermann carries the same date as this letter to Haast, 18 December 1861. Hochstetter writes: "Ich habe nun, nachdem mir diese Post, gestern, meines Freundes Haast geologische u. topographische – ganz ausgezeichnete – Aufnahmen gebracht hat, das Material beisammen zu einer prächtigen geologischen u. topographischen Detailkarte des Nordens der Südinself [...]. Wie schön wäre es nun, wenn dieses Blatt für den Neuseeland Atlas auch noch ausgeführt werden könnte. [...] Ich schicke Ihnen hiermit auch dieses Material damit sie es vorderhand sehen, u. sich daran freuen, wie ich mich gestern daran erfreut habe." Briefsammlung Hochstetter, Sammlung Perthes, Schriftleitung Petermanns Geographische Mitteilungen, Forschungsbibliothek Gotha, Germany.

³¹³ Hochstetter's map of the isthmus of Auckland, *The Isthmus [sic] of Auckland with its extinct Volcanoes by Dr. Ferdinand von Hochstetter 1859*, Gotha, Justus Perthes, 1862.

you will be surprised when you see this topographical and geological sheet. I will send it to you as soon as I have off-prints, maybe by the next mail.

My suggestion to Petermann was to have the geological and topographical map of Nelson by the joint authorship of Haast and Hochstetter; that is a geological map with complete topography, as the sixth sheet. As soon as I get the map back from Petermann, I will merge your bit and my bit and work them in together, finalise the formations and then send you a copy on a small scale. Your map motivated me and all I am missing now are a few profiles from East to West, and perhaps your essay will bring me these with your next letter. Once I have your essay I want to turn it into an article on your and my work for Petermanns journal. With the next letter I will send you tables, from which you will be able to read heights without calculations. Anaroid with compensation for temperature is as with a clock, where different metals expand differently with the heat; one could come up with a construction where the expansion of one counteracts that of another, so that the instrument will work in different temperatures, as if it was always the same temperature. As the anaroid is made of metal, the temperature does influence its working. An anaroid with compensation will be more accurate than one without compensation, but the difference will not be big.

I am amazed at the news from Otago.

Petschler³¹⁴ is also going to receive copies of the *Novara* travel account.

Mt Ceniz consists of gneiss granite, gneiss mica schist, protogine and similar crystalline rocks. I do not share Murchison's view on gold. Gold can be found on quartz layers in primitive metamorphic shales and in the Silurian formations; more recent granite eruptions are not necessary for this. There are even gold-bearing debris accumulations in Victoria that are the same age as the Australian coal formations, and I consider these coal formations as older than oolite, despite McCoy.³¹⁵

(Postscript: according to your map I consider the Pakawau coals as of the same period as the Grey coals, but more on the formations another time.)

I have not read the glacier book you mention but will do so now. The seat of the German geological society is in Berlin and I will nominate you as a member, if you like, but they do not issue an actual diploma, only their annual publications in return for the annual membership subscription. The diploma of the Geological Survey has been written a second time and sent to you, as Haidinger told me. You will also receive the diploma of the Zoological & Botanical Society.³¹⁶ Unfortunately I am not getting any results in the matter of the doctoral diploma, as I am missing your curriculum vitae. A short biographical description and academic record are needed everywhere. I will try again but I am afraid it will be without success until I receive your curriculum vitae.

The receipt for *Palapteryx* is enclosed. The *Novara* work is not in the case as it is not quite finished yet. The third volume will only appear in the New Year. The Naval Office is planning to send all the copies for New Zealand to Sir George Grey,³¹⁷ and then you will receive your copy from Auckland, most likely even before my case reaches you. New Zealand is only dealt with briefly in the third volume, as a fuller description is to follow.

I passed on what was applicable to my friend Stache, who will write to you himself by the next mail. Although he is not yet a fluent English speaker, that will happen. He already reads well and is studying diligently. He is quite prepared to accept the other points, and if his passage

³¹⁴ Carl (Charles) Petschler (d. 1882) was a merchant at Vulcan Lane, Auckland. He is mentioned as, "Karl Petschler, Kaufmann", on the list of persons who supported the *Novara* expedition in Auckland. See Scherzer, *Reise der Novara*, 1866, vol. 2, Beilage, p. 5.

³¹⁵ Sir Frederick McCoy (1823-1899), British palaeontologist who went to Australia and was later appointed professor of natural sciences at the University of Melbourne.

³¹⁶ The diploma from the Zoological & Botanical Society in Vienna states: "Die Kaiserlich Königliche | zoologisch botanische Gesellschaft | in | Wien | ernennt | den wolgebornen Herrn | Julius Haast | in Neuseeland | als | Mitglied | Wien am 18. März 1862 | [signed:] Dr. Moriz Hörnes Vice Präsident | August Neilreich Präsident Stellvertreter | Georg Ritter von Frauenfeld Secretär."

³¹⁷ Sir George Grey (1812-1898), Governor of New Zealand.

is paid for and he has a secured income of £800 to £1000, then he is prepared to come. Do make sure that you get this sorted out, as I would be very pleased. I know the young Otago geologist Hector,³¹⁸ he was with Captain Palliser³¹⁹ in the Rocky Mountains and at least he is a good bushman. Quartz, amethyst, chalcedony, jasper etc. are metamorphic products, in view of melaphyre and augite porphyry metamorphic rocks, but trachytic rocks are also not original formations. They have nothing to do with gold.

In Hungary and Transylvania gold is found only with iron pyrites on actual mineral veins in very uncharacteristic greenstone trachytes and near porphyry rocks, but there exists some uncertainty surrounding this.

Bengough or Georgiana are certainly very pretty names, and I will also use one; and at least you are represented on my map of the North Island.³²⁰

And now God speed. My wife sends her sincerest regards. She looks splendid and is a fine wife.

I will also give a lecture at the Geographical Society here on your work.

A happy New Year, from me and my wife. I expect one will soon be saying Haast is engaged.

If I get a prince, then I will ask you to be godfather; then it will be a New Zealand lad.

With heart and hand,

Yours faithfully,

Ferdinand Hochstetter

| | |
|--|-------------------|
| Received | Austrian currency |
| Remainder from the 50 fl from Cotta from previous account | 23.99 |
| Draught received on the 18 August 1861 on the Union Bank of Australia in London for £60. | |
| Less £5 as instructed | |
| The rest £55 on 2 October 1861 sold at a rate of 135.75 | 746.68 |
| Interest of 3½ % for 84 days on £60 | 6.73 |
| Total received | 777.40 |
| Expenditure to the 15 December 1861 according to standing bill | 364.58 |
| Remainder | 412.82 |

20. Ferdinand Hochstetter to Julius Haast, Vienna 18 January 1862, MS 37 folder 181.

Vienna, 18 January 1862

Most esteemed friend

You will be wondering about the strange handwriting of this letter, it is just that I am bedridden due to a small ailment and am therefore sending you my monthly greetings by the hand of my faithful sister Sofie,³²¹ who is visiting me. Again the 18th has passed without bringing me your expected letter, maybe it will come later, as I am eagerly looking forward to getting the little essay on the Southern Alps you promised me, after I was most gratified to get your most excellent map and sketches in your last letter. Since the last mail (20 December of last year)³²² I have written to you letting you know that the case for you containing the moa, the other books, hammers and maps has been sent off to Hamburg for you by arrangement of the Austrian General Consul Merck. I had the consignment insured and will also pay the freight to New Zealand from

³¹⁸ Sir James Hector (1834-1907), director of New Zealand Geological Survey and Colonial Museum.

³¹⁹ John Palliser (1817-1887), Irish explorer of North America. Leader of the British North American Exploring Expedition to the Saskatchewan River and the Rocky Mountains of Southern British Columbia in 1857-1859. This expedition was carried out under the auspices of the Royal Geographical Society in London and its president Murchison. One of the major objectives was to find a pass over the Rocky Mountains to the Pacific within British territory. See Dietmar Henze, *Enzyklopädie der Entdecker und Erforscher der Erde*, vol. 4, Graz, Akademische Druck- und Verlagsanstalt, 2000, pp. 2-3.

³²⁰ Haast's name does not appear in the North Island of New Zealand.

³²¹ Letter dictated by Hochstetter to his sister Julie Franziska Sofie Hochstetter (1836-1893), "Schulrätin" in Stuttgart.

³²² Hochstetter letter to Haast no. 19 dated 18 December 1861.

the amount sent to me. I have enclosed an account from which you see that I still have more than 300 fl in hand for you, a sufficient amount to sort out the doctoral matter, as soon as I have your biographical notes and curriculum vitae. I hope the shipment will arrive sometime during the New Zealand winter and give you pleasure. Yesterday I finished the chapter on coal³²³ for my New Zealand book in which I have included the Buller, Grey and Malvern Hills. I would really like to have the plant fossils here from the Grey, as Unger,³²⁴ our most famous phytopalaeontologist, is just working on what I brought back, and yours would be more conclusive than mine. I have to consider the Buller, Grey and Rakaunui to be identical and would like to include the west coast south of Waikato, all four Secondary, that is, Oolite or Wealden. Cape Farewell is then of course Cretaceous but all comparisons with European strata patterns are extremely difficult so far. One simply needs to make do with locality names for the New Zealand strata like Maitai slate, Richmond sandstone, Grey strata etc. and only look for parallels for the periods. As soon as I have completely finished my table I will send it to you. But first of all I have to put together your map and mine and study your report word for word. In my last letter I also asked you for seeds, including seeds of 'Bordylium',³²⁵ and pretty trees and shrubs for my brother the gardener. I herewith enclose a small piece of Icelandic palagonite-tuff; do send me a specimen of your palagonite-tuff in the case. You will hopefully have received my letter with the table of igneous rocks;³²⁶ the volcanic rocks of the North Island are now being examined, rhyolite etc from Lake Taupo. I have given them to Dr Zirkel,³²⁷ a young scholar who has just come from Iceland and is staying here at present, to analyse, as I could not possibly find the time to do it myself. Naturally this will all be incorporated in the *Novara* work. At the last meeting of the Geographical Society (on 14 January) the confirmation of your membership as a corresponding member of the Geographical Society was finally received from the Ministry of Foreign Affairs, after more than one year. The diploma will now be sent to you; you will hopefully also receive the diploma of the Zoological & Botanical Society soon, and I will get other things when the opportunity arises, even though I have little opportunity to make these connections as I hardly own any of these kinds of diplomas myself. I hope to be up and about again soon – the ailment stems from my sinus condition, about which I have often lamented. I am hoping this all the more as I expect my dear wife to go into labour any day now. I think I may already be able to write to you about this by this mail – as I said, if it is a prince, then I ask you to stand as godfather. My wife sends you her best regards and also the writer of these lines. With longing I look forward to your essay on the Alps; I will then give a long lecture on it and appropriately highlight the merits of your contributions. The fateful Australian expedition³²⁸ was on the agenda at the last meeting. I am making good use of your notices and newspaper items, do continue to send me these, and now good luck and all the best for the New Year.

Yours,³²⁹

[Ferdinand Hochstetter]

Postscript, 19 January, Sunday.

I can still write to you of the happy event after all. Today at 11 o'clock in the morning my wife had a strong baby girl, all went well thank God. Even though it is not a prince, the joy is in no way diminished.

³²³ Chapter 17, "XVII. Die Kohlen", *Neu-Seeland*, 1863, pp. 364-380.

³²⁴ Franz Unger (1800-1870), Austrian palaeontologist and botanist.

³²⁵ Uncertain reading of the original manuscript here.

³²⁶ Reference to Hochstetter letter to Haast no. 18 dated 19 November 1861.

³²⁷ Ferdinand Zirkel (1838-1912), geologist and mineralogist, professor at the universities of Lemberg, Kiel and Leipzig.

³²⁸ In reference to the Ludwig Leichhardt expedition in Australia.

³²⁹ The letter is dictated by Hochstetter to his sister Sophie up to this point and the postscript is in Hochstetter's own hand.

21. Ferdinand Hochstetter to Julius Haast, Vienna 21 February 1862, MS 37 folder 181.

Vienna, 21 February 1862

Esteemed dear friend

Your October letter with the essay on the Alps, together with your lecture and the sketch maps of Canterbury only reached me on 25 January, a little later than usual; my January letter had already been sent by then, so that I was unable to confirm receipt of your letter therein. Your November letter of 24 November, Kowai coal measures, reached me on 17 February, so I have 2 of your letters to answer today.

First of all, I cannot understand why you have again been without mail from me for three months. I wrote to you in June last year, July was missed due to the death of my mother, but then I sent a long letter to you on 18 August last year,³³⁰ enclosing a picture of the Southern Alps from my New Zealand book for your critique – that letter should have long reached you by 24 November. Since August I have written to you regularly every month, and will continue to write to you regularly every month in future. I hope my letters arrive correctly, just as yours do. You will now receive several letters all at once.

Now, getting on to replying to your last two letters:

My little daughter,³³¹ who was born on 19 January at eleven o'clock in the morning, and for whom my wife and I would like you to stand as godfather, is called Georgiana Julie. The first name is after my wife, and the second after you, dear friend. She really is model child, and until now everything has gone well, thank God. My wife is up again, and if we did not have such horrible wintry weather I would have likely already gone out with her. Five days after the birth, your letter of 29 October arrived, which surprised us with the news that you want to turn the little one into a New Zealand land owner.³³² We thank you very much for this interesting christening gift; but may God keep you, and in years to come when you have brought your boats to safety, return you to us and then when we are old we might go once more to New Zealand together, to revisit the sites to remember where we did our man's work. So once again, our sincere thanks for your love and friendship for us.

I have already confirmed the receipt of your Nelson map and sketches, and now I can also confirm the receipt of the essay on the Alps together with the Canterbury sketches. You cannot imagine with how much interest and enjoyment I follow your work. I worked on your alpine essay for fourteen days in order to turn it into a chapter on the Alps together with my own observations, which I will initially present together with your maps to the Geographical Society here and then use it later as a chapter in my New Zealand book. I have already spoken about your work at the Geographical Society several times. When I have completely finished the essay, I might send you a copy, but I will already make a few remarks now: instead of glaciers of first and second order, it is more fitting to describe them as valley glaciers and high glaciers, just as there are valley moors and high moors. Furthermore, everything you call drift is in fact diluvial marine sediment. The circumstances on the South Island are the same as those in Patagonia as described by Darwin.³³³ The Canterbury Plains are equivalent to the Patagonian plains, and the broad valleys filled with gravel and scree to a thousand feet deep, often with lakes, with all the rivers flowing out of the Alps to the East, were fiords prior to the last rise of the land, and sounds like Milford Sound on the West Coast, the scree glaciers between the individual river valleys, with the small lakes such as Lake Heron, were sea inlets running parallel to the mountains, as one can still see on the west coast of Patagonia. In those days the Alps were still much lower, and there were no glaciers. You say yourself that the glaciers are moving forward and that there are no traces of old glaciers. I know the English geologists are very fond of the Ice Age and glacial

³³⁰ Hochstetter letter to Haast no. 15 dated 18 August 1861.

³³¹ See also postscript of previous letter. Hochstetter's eldest daughter Georgiana Julie (19 January 1862 - 26 April 1871).

³³² This is referred to in H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 255.

³³³ Charles Robert Darwin (1809-1882), English scientist who formulated the theory of evolution.

action, but one is not allowed to go too far with this, as the description of the drift formations, the clay deposits in individual places speak for deposits in water. The whole drift formation is therefore marine diluvia, formed in the same way as the Boulder Bank in Nelson.

The election as a member of the New Zealand Society³³⁴ was more pleasing to me than if I had been named a member of the Academy of Sciences here. But I am having a hard time with your diplomas; I see that you were already expecting them in November. It is through no fault of mine that you have not long since received them. The casualness of our people here is deplorable. I have asked Haidinger and Mining Councillor Foetterle³³⁵ a dozen times for the diploma of the Geological Survey and I was assured that it had been sent months ago, and now I find that it has not been sent. I am now going to go to Foetterle every day, as he has the task, until he gives me the diploma and I can send it off. He has now promised it to me together with the diploma of the Geographical Society by next Tuesday. I will post both to you and send them by the next mail, and also enclose tables for the calculation of elevations. The diploma of the Geographical Society could not be sent earlier, as the confirmation from the ministry has only just come through, and now the president of the society, the Rear-Admiral Wüllerstorff, has been sent on holiday by Archduke Max, and nobody knows where to or when he will be back. I would have liked to have had his signature on the diploma, but that would probably take months again, and so I will just have to send it to you with the signature of the vice president. The diploma of the Zoological & Botanical Society and the doctoral diploma are things that I will get for you still. For the latter I am now expecting your curriculum vitae with every mail as without it this is not possible.

I now have the news from Hamburg that the two cases for you were sent by the *Kensington* under Captain King.³³⁶ I enclose for you the bill of lading, and as you can see I paid for the transport all the way to New Zealand. You will have these things in hand by the time you return from your summer campaigns, and the books will be just right for you then. I am also sending you a brief article on the Mt Ceniz tunnel.

Now, in reply to your letter of 24 November that I received on 17 February:

Granite-like, that is quartz-rich trachyte we now name rhyolite according to our new system of classification. The primary authority on geothermal heat is Gustav Bischof³³⁷ in Heidelberg, as you can see from Naumann volume 1. In less deep mines no heat comes out. Just bury a thermometer well wrapped in cotton in a wooden case, for example in a hole drilled in a rock, leave it there for days and then take a reading, by just opening a small lid in the wooden encasement, but be careful not to let the bulb be exposed to the air. Normally one has very long thermometers for this purpose. What you write to me about Kowai coals reminds me of Jenkins coals in Nelson. The coal seams are usually greater in the middle of a basin than at the sides. But are not the Kowai coals also brown coals in the end? I am very keen on your shipment of specimens as evidence.

³³⁴ Hochstetter was elected an honorary member of the New Zealand Society, later Royal Society in 1862. See H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 222.

³³⁵ Franz Fötterle (1823-1876), Austrian geologist.

³³⁶ The *Kensington* under Captain King left Gravesend on 6 February 1862 and did not arrive in Lyttelton until 182 days later on 18 July 1862. "Her voyage seems to have been a succession of petty disappointments, occasioned by light winds and calm." *The Lyttelton Times*, 19 July 1862.

³³⁷ Carl Gustav Christoph Bischof (1792-1870), German chemist and geologist in Heidelberg, professor at the University of Bonn.



Figure 5: Thermometer in wooden case

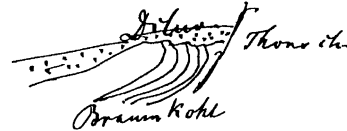


Figure 6: Coal deposits

My New Zealand book is intended to appear simultaneously in both German and English, and I intend to send you off-prints if possible. I have sent all your maps and sketches to Dr Petermann in Gotha, first of all so that he can get some idea of your work. In the summer issue of 1861 of his *Geographische Mittheilungen* he has written quite a fine article: *J. Haast's Erforschung der Alpen Neu Seelands*,³³⁸ with much recognition and praise for you. I asked him for off-prints for you and will send these as soon as I get them. As soon as the maps come back, I will start working on the map of the Province of Nelson. I have also recently received letters from Fischer and Purchas.

My health is a little better, although I am not yet fully satisfied; in summer I will again visit a spa. I live here quite withdrawn with my wife and my work. Yesterday I attended a larger gathering for the first time, and perhaps I will attend the next ministerial soiree. At the *Novara* evening of the male choral society someone appeared as a character with the "Mög-Sie kaner Krone". I hope you still understand enough Viennese dialect to get this joke – the crown of Mexico.

With sincere regards from my wife and me and a little kiss from Georgy Julie.

Glückauf, your old faithful

Ferdinand Hochstetter³³⁹

Bill of lading for Prof. Dr Hochstetter in Vienna for items received by train and sent via London by the ship *Kensington* under captain W. King, with insurance secured in Hamburg to Mr J. Haast, Government Geologist in Christchurch Province of Canterbury in New Zealand. Conveyed:

N.Z. 2 cases of books, instruments and plaster casts, no. 1 of 2

Cost of freight from Vienna to Hamburg 8 Thaler and 7 silver groschen = 16.7

Costs of freight in Hamburg 4

Insurance from Hamburg to New Zealand of 400 at 2¼ % = 9

(free of damage, except in the case of shipwreck, only for sea risk)

Commission and agency fee ½ % = 2

Stamp duty 0.5

Freight from Hamburg to London £13.1

Storage fees in London 2.10.6

Freight from London to New Zealand 4.17.4 = 114.5

8.10.11

Total 146.1

Hamburg, 10 February 1862.

³³⁸ Julius von Haast, "J. Haast's Erforschung der Alpen Neu-Seelands", *Mittheilungen aus Justus Perthes' Geographischer Anstalt über wichtige neue Erforschungen auf dem Gesamtgebiete der Geographie*, 1862, pp. 36-37.

³³⁹ The order in the manuscript letter is different in so far as the letter is written before the account and then continues after it, for this edition the letter has been presented as a whole followed by the account in the interest clarity and coherence.

H. J. Merck and Company

On 21 February this bill was paid to J. M. Milne & Company in Vienna with 152 fl in Austrian currency together with 85 kreuzer for postage.

In addition, a second outer case around the large case, paid to J. M Milne, 6 fl

Total 158 fl 85 kr.

According to the bill sent on 20 December 1861

| | |
|-----------------------------|--------------|
| Remainder of the money sent | 412 fl 82 kr |
|-----------------------------|--------------|

| | |
|---------------------------|--------------|
| Expenditure since then of | 158 fl 85 kr |
|---------------------------|--------------|

| | |
|---------------------------------|--|
| Total remaining cash balance of | 253 fl 97 kr Austrian currency in banknotes. |
|---------------------------------|--|

22. Ferdinand Hochstetter to Julius Haast, Vienna 20 March 1862, MS 37 folder 181.

Vienna, 20 March 1862

Most esteemed friend

The mail so far has not brought me a letter from you this month – probably you are, or have been, in the higher regions again, and I am very pleased to be able to send you the diplomas of the Geological Survey and the Geographical Society. In prompt New Zealand one can have no idea of how much effort this has cost. I also hope to still be able to enclose the diploma of the Zoological & Botanical Society. You have long since become a member of the latter society, the diploma was promised to me for Monday and today is Thursday, and I do not want to miss the mail that leaves for Marseille on 26 March. As I happen to be sending a parcel that is expensive to post, I am enclosing a number of other things that may be of interest to you, and ask you to please forward the other copies to Auckland when you get an opportunity. Dr Fischer thrilled me by sending me photographs³⁴⁰ by this mail and Crombie³⁴¹ sent me his 4 foot long panorama of Auckland,³⁴² so I was again able to get much pleasure from New Zealand. I am now working on the geological map of the province of Nelson, and if it is finished on time it will go into our Novara exhibition in London and be sent to you. The Auckland isthmus map is a proof print, the geological colouring is still to be added; this will be the first sheet for my New Zealand atlas, which will be finished in the winter of this year. Perthes has promised to send you publications from his publishing house that may be of interest to you.

In June the printing of my *Neu-Seeland* will begin.

About my young New Zealander I can write to you that she is doing very well. The baptism will be on 2 April, the day of our wedding anniversary. She will be christened Georgiana Julie, after you, and you are the godfather, my sister-in-law Betsy³⁴³ the godmother. Last week we were all down with the flu. God be praised we are now all better, but I have again got behind in my work and will have to try and catch up as best as possible.

More details by the next mail. For this time you are getting enough to read anyway.

With sincere regards,

Your faithful old friend,

Ferdinand Hochstetter

Postscript 16 May 1862

After the parcel was gone for a month it came back from Strasbourg with the message from Marseilles that no parcels are carried to New Zealand. In the meantime I have fortunately

³⁴⁰ Carl Fischer sent Hochstetter a series of stereographic prints taken by John Kinder (1819-1903) in Auckland, including one showing part of the exterior of Fischer's house. See Nolden & Nolden, *Hochstetter Collection Basel: Part 2 – New Zealand Photographs & Prints*, pp. 85-94, (cat. nos. 2.9.1 to 2.9.9).

³⁴¹ John Nicol Crombie (1827-1878), Auckland photographer and businessman. "Crombie was one of the first photographers in Auckland to record outdoor scenes. The panorama from Point Britomart won a medal at the International Exhibition in London in 1862." See *Dictionary of New Zealand Biography*, vol. 1, p. 96.

³⁴² Crombie's panoramic view of Auckland in six sections. See Nolden & Nolden, *Hochstetter Collection Basel: Part 2 – New Zealand Photographs & Prints*, pp. 22-25, (cat. no. 2.3.2).

³⁴³ Elisabeth (Betsy) Julie Bengough (1838-1916), was Hochstetter's sister-in-law.

received the address of your London agent, and am just waiting a few more days in order to be able to send the whole of the Novara travel account, of which the third volume has just appeared. I hope you receive it earlier this way than by way of the official shipment, as I do not know how that will be sent. I am only sorry that you have had to wait so long for the three diplomas.

23. Ferdinand Hochstetter to Julius Haast, Vienna 18 April 1862, MS 37 folder 181.

Vienna, 18 April 1862

Most esteemed friend

Your last letter of 6 December, which reached me on 22 March, contained much of interest to me, as all your letters do, for which I thank you most sincerely, and I am already looking forward to your next letter, which will come in the next few days. In the meantime, on the anniversary of my wedding on 2 April, we celebrated the baptism of my little daughter, who is called 1. Georgiana, 2. Sophie, 3. Julie. (No. 1 after my wife, no. 2 after my mother and no. 3 after you.) As my father-in-law could not go out due to his gout, we celebrated the baptism in his home. Dr Stache represented our absent New Zealand friend, and a toast to your health was drunk with jubilation. The gathering was not a large one, on account of my father-in-law's illness, but we were happy and in good spirits, although you were missed.

I still am, and will be for another year, completely buried in New Zealand. The manuscript for the book to be published by Cotta has now reached the point where I will be totally finished with it by June, and then the printing can begin straight away. The illustrations are being worked on and they will be executed most splendidly. The plan for the work is now as follows: it will have 24 chapters, 6 coloured steel engravings, 8 large woodcuts, 60 to 80 woodcuts in the text and 2 maps, one general map of the whole of New Zealand, according to the latest information, and my map of the Southern parts of the Province of Auckland. The chapters are.³⁴⁴

1. Nine months in New Zealand (brief overview of my stay)
2. Physical and geographical outline of New Zealand
3. Traditions and myths of the Maori
4. History, Politics and Statistics
5. The Isthmus of Auckland
6. The North Shore (using your articles from the *Allgemeine Zeitung*)³⁴⁵
7. Expedition to the Manukau and the mouth of the Waikato
8. Kauri forests
9. Coals (North and South Island)
- Expedition into the interior of the North Island
10. On the lower Waikato
11. Waipa and the West coast
12. From the Waipa to Lake Taupo
13. Lake Taupo, Tongariro and Ruapehu
14. Ngawhas and Puias, boiling cauldrons, solfateras and fumeroles
15. The East Coast and return to Auckland
16. The Natives
17. The Maori King movement and the Maori war
18. Maori prose and poetry

³⁴⁴ The order of the chapters was changed in the published version, but the basic content and structure outlined here was retained in essence. Hochstetter's *Neu-Seeland* has 24 chapters with 6 coloured steel engravings as mentioned here, but instead of "8 große Holzschnitte", it has 9 large woodcuts and instead of "60-80 Holzschnitte im Text", it has 89 woodcuts inserted in the text, while the two maps were both published as planned.

³⁴⁵ The Chapter headed "Das Nord-Ufer (North Shore)", has a footnote acknowledging Haast: "Ich lasse in diesem Kapitel größtentheils meinen Freund Haast erzählen, der, während ich mit dem Zeichnen der Karte beschäftigt war, den Historiographen unserer Erlebnisse machte". Hochstetter, *Neu-Seeland*, p. 102.

19. The animal kingdom (by Frauenfeld)
20. The moa and kiwi
21. The plant kingdom
22. Nelson
23. The Southern Alps (with considerable use of your outstanding results)
24. Gold (a golden conclusion, "All's well that ends well")
- Appendix: Elevations, etc. etc.

I am just finishing work on chapter 18, while all the other chapters have already been conquered by the quill. The work will be in large octavo format with up to around 600 pages. But unfortunately I still have not sorted matters with the English publisher³⁴⁶ and the English edition will be accompanied by great difficulties, as the translation will be very difficult. Yet I hope that it will still happen. A consignment received by the last mail, sent to me by Mr Thomson,³⁴⁷ chief surveyor of Otago, by your prompting, has been very valuable for chapter 24. Thomson sent me the latest map of the province with all the gold fields marked in,³⁴⁸ also a fine photograph of Gabriel's Gully³⁴⁹ that I will reproduce as a woodcut,³⁵⁰ and finally a nice photograph of Dunedin.

I was quite thrilled by this, and I immediately sent the map of Otago to Petermann so that he may still use it for the general map.

Reply to your letter of 6 December 1861.

- 1) Unfortunately I cannot get copies of the newspapers with your articles. I would have liked to have had them myself, but have to do without.
- 2) John Marshman³⁵¹ in London wrote to me with your instructions; I am pleased that I now know where to send things for you, as it is almost impossible to send parcels from here. In the last mail, which left Vienna on 20 March, I sent you three diplomas from the Geological Survey, the Geographical Society and the Zoological & Botanical Society together with other printed matter. The post office here only wanted to accept them unfranked as they did not know what the cost to New Zealand would be, so I sent it with three German, two French and two English freight letters via Marseilles, but I am afraid that they will come back in the end. [Footnote:] as I expected I have just received notification from Marseilles that the parcel is being returned to Vienna, and I am expecting it any day now. I will send the same to Marshman, and I am only sorry that you will have to wait so long for it. I also enclosed the finished map of the isthmus of Auckland for you, which has come out magnificently. In future I will send things like books to Marshman for you.
- 3) I will look out for books for you, but the large consignment has already been sent off to you, as I wrote earlier.
- 4) The newspapers that you sent have always been correctly received, and also your letters, and with the last mail I also received your report from Nelson for me, so I now have one spare copy that I will present to the Imperial Mineralogical Museum in your name.
- 5) Arrowsmith,³⁵² who is also collecting material for his topographical map of New Zealand, has not published it yet; I think we will get there before him.³⁵³

³⁴⁶ Trübner & Co.

³⁴⁷ John Turnbull Thomson (1821-1884), Chief Surveyor of the Province of Otago and after the provinces were abolished appointed Surveyor-general of New Zealand.

³⁴⁸ J. T. Thomson, "Map of the Province of Otago, from official surveys. Otago. Scale 1:1,000,000". See Hochstetter, *Neu-Seeland*, p. 555, where he notes: "(Nach den neuesten Aufnahmen. Die 1861 entdeckten Goldfelder sind darin angegeben.)".

³⁴⁹ Photograph of Gabriel's Gully in 1861 by William Meluish (1823-1888). See Nolden & Nolden, *Hochstetter Collection Basel: Part 2 – New Zealand Photographs & Prints*, p. 125, (cat. no. 2.10.6).

³⁵⁰ Woodcut illustration in Hochstetter, *Neu-Seeland*, p. 400; and Hochstetter, *New Zealand*, p. 111.

³⁵¹ John Parker Marshman (1823-1913), in London.

³⁵² John Arrowsmith (1790-1873), London map maker, lithographer and geographer.

³⁵³ J. Arrowsmith, "Map of the colony of New Zealand, from official documents", 1858, is considered by Hochstetter to be, "Bisher die beste Karte, aber jetzt veraltet" and also mentions "Eine neue große Karte von Neu-Seeland in 6 Blättern wird von J. Arrowsmith in London zur Publikation vorbereitet", Hochstetter, *Neu-Seeland*, p. 555.

- 6) As you left it up to me to decide, I have not passed on your letter to Haidinger, as you did not write to me whether you had addressed the cases to the Geological Survey or to me.³⁵⁴ In the latter case, the letter would confuse the matter, as this consignment is coming prepaid, in the other case it will be very welcome, but I will look after the identification. As far as I can see it would be best if you wrote to Haidinger directly after you have now received the diploma of the Geological Survey,³⁵⁵ and ask him if consignments are welcome or not, and whether the Geological Survey would be inclined to carry the costs involved.

I received a panoramic view of Auckland from Dr Fischer and a few photographs of trees and shrubs, which were also very valuable to me.

The geological and topographical atlas by Perthes is being worked on and will contain the following six sheets:³⁵⁶

1. General geological map of the whole of New Zealand. I am eagerly awaiting your sketches of the South Island.
2. Geological and topographical map of the Southern part of the Province of Auckland
3. Isthmus of Auckland
4. Aotea and Kawhia
5. Rotomahana
6. Province of Nelson by you and me.

Once the maps are finished I will then move on to the official geological report.³⁵⁷ The plates of the fossils and the landscapes³⁵⁸ are already being sketched. The work will contain at least thirty plates. You know how much work all this is. Once I am finished with the Cotta book, the rest will be easy. The non-geological parts give me the most work, as I am trying to make it as complete as possible. Please continue to send me interesting news. Your last notes on the early inhabitants of the South Island came just right. I interpreted the tradition of the migration from Hawaiki mythically, like Schirren.³⁵⁹ Hawaiki is not a specific island, but the underworld or world of the dead; but you will shortly be able to read it.

You now have the three diplomas from here that you wished for, even though they may only reach you in a few months time. But I cannot change that, as the post office does not accept parcels. In the matter of your doctoral diploma, I will take renewed steps as soon as I have a curriculum vitae from you. I will also be looking out for interesting literature and sending everything to Marshman in London for you.

I am still not satisfied with my health, and I am yearning for the summer and some rest.

I will also be having your views of glaciers and Alps³⁶⁰ engraved, if at all possible, and I hope that a skilled artist will be able to do it.

And now farewell. My wife sends her sincere regards and also my little one, who is already uttering various sounds, 'ara ari' etc., so obviously Maori.³⁶¹

³⁵⁴ This is at least the second occasion that Hochstetter has decided not to forward letters from Haast to their addressee, the earlier occasion was when Haast had written to Dr Leopold Schweitzer, the editor of the *Wiener Zeitung*.

³⁵⁵ "Geologische Reichsanstalt in Wien", Haast was made a corresponding member in 1860.

³⁵⁶ The published version includes all six maps mentioned here by Hochstetter with only slight changes to the title of each map.

³⁵⁷ Ferdinand von Hochstetter, et al., eds., *Reise der Österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859 unter den Befehlen des Commodore B. von Wüllerstorff-Urbair: Geologischer Theil: Erste Abtheilung, Geologie von Neu-Seeland. Zweite Abtheilung, Paläontologie von Neu-Seeland*, Herausgegeben im Allerhöchsten Auftrage unter der Leitung der kaiserlichen Akademie der Wissenschaften, Wien, 1864.

³⁵⁸ Illustrations for Hochstetter, *Geologie von Neu-Seeland: Beiträge zur Geologie der Provinzen Auckland und Nelson*, Wien, 1864, include 6 coloured geological maps, 6 Lithographs, 1 copper-engraving, 1 photograph and 60 woodcuts.

³⁵⁹ Carl Christian Gerhard Schirren (1826-1910), German historian and author; Schirren, *Die Wandersagen der Neuseeländer und der Maui-Mythos*, Riga, R. Kymmel, 1856. This is listed in the bibliography of Hochstetter, *Neu-Seeland*, p. 554.

³⁶⁰ Haast's sketches of the glaciers and Alps appeared as the frontispiece: "Gletschergebiet um Mount Cook, Charakterbild aus den südlichen Alpen von Neu-Seeland. Nach Skizzen von Dr. Jul. Haast entworfen und gemalt von Professor Friedrich Simony in Wien" and in the English translation by Fleming, 1959 as: "Glacier Region around Mount Cook, painted by Professor Friedrich Simony, Vienna, from sketches by Dr J. Haast" and a copper engraving: "Ansicht der südlichen Alpen von der Spitze des Black Hill, Provinz Nelson, nach einer Skizze von Dr. J. Haast, 1860", Tafel 11, Nr. IX; and in English as: Plate 11 No. IX. "View of the Southern Alps from the Summit of Black Hill, Nelson Province, from a sketch by Dr J. Haast, 1860."

With heart and hand,
Yours,
Ferdinand Hochstetter

24. Ferdinand Hochstetter to Julius Haast, Vienna 16 May 1862, MS 37 folder 181.

Vienna, 16 May 1862

Most esteemed friend

I received your long and highly interesting January letter on 21 April. It is strange how its contents were so fitting, as I was just finishing my chapter on Maori prose and poetry, and had even already translated and included one of the poems you sent.³⁶²

From a publication of mine of last year which I enclose in the parcel, you will see that I came to the same conclusions as those you expressed in your last letter with regard to the moa. The good news from you has made me and all of us, I mean the whole Bengough family, who take a great interest in your destiny, very happy. Today I am very interested in the Stache matter. Following your advice, Haidinger immediately wrote to Sir Roderick Murchison³⁶³ and urgently recommended Stache, but a reply has not been forthcoming as yet. Stache has made the decision, if he receives the calling, to go to New Zealand, and I have to tell you that this would please me very much both for him and for you.

Enclosed I send you a photograph of your godchild, which was a surprise from my wife for my 33rd birthday on 30 April.³⁶⁴ The little one is doing very well, and she seems to be wanting to start to speak Maori, as the sounds she makes sound like 'ari' and 'ara'.

Here the spring has begun most splendidly, and with you the winter. We had an especially early and warm spring and the joke is going around that it is so hot because hell has been freshly heated for Count Windischgrätz,³⁶⁵ who died recently.

I am very much looking forward to the case of minerals, fossils and rock specimens. I am thinking that the case with *Palapteryx* and the books will have reached you by now.

I don't know if I already wrote to you about *Apteryx*. Do pay attention to this species. I think that in the North Island there is only *Apteryx mantelli* and in the South Island only *Apteryx oweni* and your roaroa. I consider *Apteryx australis* to be a subspecies of *mantelli*.

Despite my best intentions I have not found the time to get around to submitting your recently arrived curriculum vitae,³⁶⁶ but this will happen soon.

I am pleased that your tunnel sections worked out.³⁶⁷

Has the Otago geologist Hector not published any reports yet? Thomson has just sent me his reports, in which I found some things of great interest to me.

The Nelson map is now finished and I am just having it copied for you, and will send it to you in the parcel, as well as an idealised picture of *Palapteryx ingens* with skin and hair,³⁶⁸ which has really turned out very well, and a photograph.

³⁶¹ Heinrich von Haast makes reference to this passage when he writes: "In a later letter Hochstetter wrote, 'I hear tunes from my little daughter, 'Ara, Ari,' manifestly Maori'." H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 255.

³⁶² Chapter 24 "Maori-Prosa und Poesie", the final chapter in Hochstetter, *Neu-Seeland*, 1863; this was not included in the English edition of 1867.

³⁶³ Sir Roderick Impey Murchison (1792-1871), president of the London Geographical Society.

³⁶⁴ See "Georgiana von Hochstetter and baby", photograph by Adolf Ost, 1862.

³⁶⁵ Fürst Alfred Windisch-Graetz (1787-1862). See *Personenlexikon Österreich*, p. 538.

³⁶⁶ Haast's manuscript curriculum vitae is dated 23 January 1862 and is held in the file: "Unterlagen zur Dissertation von Julius Haast" in the Universitätsarchiv Tübingen, Signatur 131/172, p. 20; 131/12 b (9); 15/13 a f. 92. Excerpts from this are quoted in Wolfhart Langer, "Der Bonner Neuseelandforscher Sir Johann Franz Julius von Haast (1822-1887)", p. 275. This is the culmination of Hochstetter repeatedly requesting a curriculum vitae from Haast for the purposes of gaining a doctorate from a European university for him. Hochstetter was later successful in gaining a PhD for Haast from the University of Tübingen, from which Hochstetter had himself graduated with a PhD, ten years earlier.

³⁶⁷ Haast had been requested to make a geological assessment of the Lyttelton Tunnel site after contractors hit hard rock and stopped working on the project. Haast together with Arthur Dobson started surveying Mount Pleasant on 1 December 1860 and by 19 January Haast was able to present his report. See H. F. von Haast, *The Life and Times of Sir Julius von Haast*, pp. 119-120.

I only have three more chapters to work on and then I will be finished with the manuscript of the Cotta New Zealand: namely chapter 22 Nelson, chapter 23 the Southern Alps and chapter 24 Gold.³⁶⁹ I hope to be finished by the end of June.

Last week I was in Wieliczka to see the magnificent salt mine and to get some fresh air after being inside the house all winter, and the outing gave me great pleasure.

Thank you very much for the geological sketch map and the alpine section etc. that you will later recognise in a slightly changed form. I have previously written to you about seeds, do be so good as to send me a small parcel of different seeds of alpine plants and the like; and another favour, Brunner³⁷⁰ the director of the telegraph here has repeatedly asked me for New Zealand wetas, *Deinacrida heteracantha*,³⁷¹ and other species – many of these creatures fit into a jar of alcohol, and would be received here with jubilation.

Glückauf, valiant friend, sincere regards from my wife and your old
Ferdinand Hochstetter



8. Georgiana von Hochstetter and baby, photograph by Adolf Ost, 1862
(PA2-1290, Alexander Turnbull Library).

³⁶⁸ This is in reference to the woodcut illustration of a moa (*Palapteryx ingens*) together with three kiwi in Hochstetter, *Neu-Seeland*, p. 438.

³⁶⁹ The order of the chapters was changed for the published version, although the basic plan of 24 chapters was retained. What Hochstetter here refers to as chapter 22 “Nelson” became 15; Chapter 23 “Die Südlichen Alpen” (The Southern Alps) became 16 and Chapter 24 “Gold” became Chapter 18.

³⁷⁰ Karl Brunner Ritter von Wattenwyl (1823-1914), Viennese entomologist and physicist. Hochstetter mentions New Zealand species described by Brunner the „k.k. Staatstelegraphendirektor in Wien”, in Hochstetter, *Neu-Seeland*, 1863, p. 436 note 2.

³⁷¹ New Zealand Weta. Hochstetter included an illustration of a Weta (*Deinacrida heteracantha*) based on a drawing by Brunner in Hochstetter, *Neu-Seeland*, 1863, p. 435.

25. Ferdinand Hochstetter to Julius Haast, undated, c. 17 June 1862, MS 37 folder 181.

[c. 17 June 1862]

Most esteemed friend

This time the mail on 16 June again brought me two very nice letters from you, dated Lake Tekapo, 21 February and 14 March. I thank you most sincerely for these and for the pleasing news that your sciatica has eased a little. Our friend Purchas complained of the same evil in a recent letter. In the meantime I have again asked various doctors. They are all of varying opinion and say the ailment can stem from a variety of different causes, and has to be treated accordingly.

Dr Hitzfelder, my father-in-law's doctor, gave me the following advice: if it is an infection of the nerves or the hip nerves, then one should take:

Aconitin, 3 grams to one ounce of alcohol, to rub in and at the same time Aconitin 1 gram to 2 drachmas of alcohol, take five drops internally 3 times daily.

A second remedy:

Chinin, 1 gram every three hours.

A third remedy, the strongest:

Arsenic, Fowler's solution, 1 drop in the morning and in the evening in 2 drachmas of water, the second day 2 drops early and late, then the third day 3 drops and so on until you reach seven drops and then in the second week you go back to one drop.

I will still be asking other doctors. So far I still think that hot baths would be the best for you. Just make sure you get rid of your sciatica soon, as when it grows mature it is one of the most stubborn and worst of ailments.

My wife and my little one are very well, thank God, but I am still not all better, though I should be. I was lying in bed for three days again last week, the slightest cold causes the most terrible throat infections and long term catarrh, throat, larynx and bronchial glands are extremely sensitive and are always more or less chronically infected. I will thank God when I have finished my New Zealand book; then I think I will recuperate, as mental work causes me congestions in the chest, and I still miss exercise with mountain and ocean air. Sincerest regards from my wife. I hope you received the photograph of your godchild that was enclosed with my last letter. I am now writing the last chapter of the book and the printing will begin in July. At least the book will give you more pleasure than any other reader. The woodcuts have increased to eighty³⁷² and I hope that you will find that it will clarify many points for you. I will send you two quick copies of sections that I am including in the book; your alpine section is a little changed, perhaps not for the better? but I cannot help that. Again, with regard to your drift formations, if I have not already written about this before: the Alps used to be much higher. In those days there were large glaciers, with all their effects and creation of valleys; then there was a slow sinking, the glaciers gradually melting down completely, and with the sinking, the banks of sand and gravel deposits, and further out to sea the mud deposits, are formed, and, in suitable estuarine rivers, also moors, so that the highest peaks are then a full 5000 feet lower. Then a gradual rising again, renewed forming of those deposits on the shores, and in the high mountains new glaciers, those of today, are formed. So the drift formations in the lower parts must have the following composition:

³⁷² The final published version of Hochstetter's *Neu-Seeland*, included 89 woodcuts in the text.

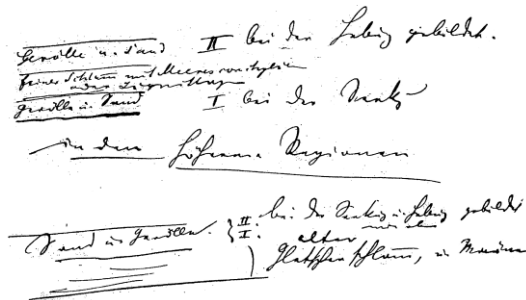


Figure 7: Geological strata in drift formations

Gravel and sand formed in the second rising
 fine mud with sea shells or layers of lignite
 Gravel and sand from the first lowering
 in the higher regions
 Sand and gravel formed in the second rising and lowering
 one like above
 older glaciers, mud and scree.

No Ice Age! That is rubbish! Only a rising and lowering without any glacial action. The main fill of the banks in the valley is caused by the sea, but in the higher lakes it is dammed by the old glacial moraines. This is my point of view. For more details see chapter 23, the Southern Alps.

Enclosed are various things you wished for: tables for the calculation of elevations, the diploma of the Geological Survey, etc. By the next mail a registered letter will follow with the rest of the diplomas, and as soon as my *New Zealand* is finished I will send you a parcel of books via London and also a new work on glaciers with great maps, and also photographs of Mt Blanc and Mt Rosa glaciers,³⁷³ which although expensive are outstanding and you will be able to give them to the museum in Christchurch.

Haidinger wrote to Murchison regarding Stache, but has not yet received a reply. I am very excited.

And now to get back to sciatica. This morning, after I began this letter to you, I saw Dr Türk,³⁷⁴ who was recommended to me as an authority on sciatica, and you see, he recommended the same as the English doctor; application of oleum crotonis vulgo, croton oil and in the following manner:

Take 10 to 12 drops of very diluted croton oil, and ask someone, (who should not get too close with their head, as the oil irritates the eyes, and must wash their hands with warm soapy water after the procedure), to apply it to the painful areas, for example on the back of the hip joint, and rub it in. This is done every three hours for two to three days, each time using 10 to 12 drops. After rubbing it in, a piece of cloth soaked in croton oil should be placed over the rubbed area, and over the greater area a piece of gutta percha – natural rubber – is placed. This is done in order that the oil does not evaporate too quickly. After 2 to 3 days of this kind of rubbing it will begin to burn and then blisters will form and once these are quite numerous, one stops the rubbing and applies a healing ointment, simply fat on a piece of linen, placed over the rubbed area, and leaves this on for 2 to 4 days, until the blisters have healed.

Continued: if the pain has not completely gone away after this first rubbing, then one repeats the whole procedure, but the rubbing should be less frequent, perhaps only once a day. If

³⁷³ Most likely in reference to photographs by Bisson Freres: Louis Auguste Bisson (1814-1876) and Auguste Rosalie Bisson (1826-1900), who took high altitude photographs in the Mt Blanc region during the climbing seasons from 1859 to 1862. The partnership between the two brothers was dissolved in 1864 when one of them retired from photography.

³⁷⁴ Ludwig Türk (1810-1868), Viennese neurologist and laryngologist. Türk was "Primärarzt" at the Allgemeinen Krankenhaus in Vienna. Note that Hochstetter uses both the spelling 'Türk' and 'Türck' in the manuscript letter.

one notes that it is effective, then one should not stop until all the pain is gone. The doctor says just do not stop too soon. If the pain spreads from the hip to the upper and lower legs, then after the hip has been treated, the upper and finally the lower legs must be treated in the same way. During this process the scrotum must be well protected, for which Dr. Türck recommends a complete embalming in sticky tape of 1½ inch width. First around the top and then moving downwards and then long strips, also the base of the member is to be protected. One should also take care not to touch one's face after rubbing the affected area with one's fingers.

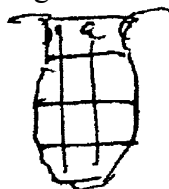


Figure 8: Protective sheath

Dr Türck says the ailment is a muscular rheumatism, caused by lying on cold damp ground. You do always use a rubber blanket as an underlay, don't you? He also says that hot baths often work, but often it just makes it worse. As much rest as possible is also important. I have to say that I wish from the bottom of my heart that this remedy will work. The doctor assured me that he knew of no worse complaint that could have affected you, as someone of your profession.

Now a few more questions:

1. How high is the snow boundary in the Alps? In my chapter I state the following as probable: lower limit of the glacial ice is generally at 4500 feet, the permanent snowline between 43 and 44 degrees latitude at 7500 English feet. In the European Alps 46 to 47 degrees northern latitude the limit of the glacial ice is generally 5700 Parisian feet³⁷⁵ or in the higher isotherm of +5 degree centigrade, individual glaciers come down much lower, the lower Grindelwald glacier in the Chanmar Valley comes down to 3135 feet.³⁷⁶ The permanent snow line on the northern side lies at between 7600 to 8000 feet above sea level and on the southern side at between 9000 to 10000 feet. On the map you find the height of two famous glaciers marked in. The Bernina group is in the upper Engadin (Inn valley) or Graubünden,³⁷⁷ one of the largest areas of ice in the Alps. You should order a copy of Tyndall³⁷⁸'s book on glaciers³⁷⁹ from London for yourself, there is a lot in it on the Mt Blanc glacier.

In July I will send you a parcel of books, in which I will also include a new book on glaciers.

2. Who was the discoverer of gold in the Province of Otago in the year 1861?

Farewell for now, dear friend.

I hope that the next news from you regarding your ailment will be of an improvement.

Good luck. You are now back in Christchurch.

Greetings from my wife, and my little one.

Yours faithfully,

Ferdinand Hochstetter

Excuse my hurried scribbles, but there is no other way.

³⁷⁵ Parisian foot is an old measurement: 1 Parisian foot = 0.325 metres. This is to differentiate it from the Viennese fott = 0.316 metres, and the English foot = 0.305 metres.

³⁷⁶ The Unterer Grindelwaldgletscher in Switzerland is 9.4 kilometres long and covers an area 27.1 square kilometres.

³⁷⁷ Graubünden is the largest Canton of Switzerland.

³⁷⁸ John Tyndall (1820-1893) was a British scientist, who studied in Germany where he graduated with a PhD from Marburg University.

³⁷⁹ John Tyndall, *The Glaciers of the Alps, being a narrative of excursions and ascents, an account of the origin and phenomena of glaciers, and an exposition of the physical principles to which they are related*, London, John Murray, 1860.

26. Ferdinand Hochstetter to Julius Haast, Vienna 12 July 1862, MS 37 folder 181.

Vienna, 12 July 1862

Dear friend

The last mail of 16 June brought me your interesting letter from Lake Tekapo, which I already answered on 17 June with a thick letter containing the diploma of the Geological Survey, a map of the Bernina group, glacial regions in the upper Engadin, and copies of the geological sections of the New Zealand Alps, through the western ranges of the Province of Nelson, one photograph etc., and also remedies for sciatica that will hopefully completely cure you of this evil. This time there follows, even before I wait for your next letter by this mail, another big letter which contains a number of things that will be valuable to you. Hopefully the last letter has already reached you, and this one will also reach you safely. I enclose the following in this letter:

- 1) Diploma of the Zoological Society.
- 2) Diploma of the Imperial Geological Survey.
- 3) Isthmus of Auckland map that has just been finished.
- 4) Rotomahana map that has just been finished.
- 5) Sonklar's map of the Oetztales Firnes.
- 6) 1 map of the Mt Blanc area.
- 7) 1 panorama of part of the Alps seen from Mt Pilatus.

The last two maps and the panorama are from a new guide book to Switzerland, which I will also send you.

As you wished for maps, I bought a few things for you that will be of interest to you in your researches, and that will to some extent allow you to make a comparison of our Alps with those in New Zealand.

The items are the following:

1. Sonclar, the Oetztales Mountains with atlas,³⁸⁰ which contains the latest researches on glaciers and illustrations of glacial regions; the general map is enclosed with this letter.
2. 12 small photographs in the carte de visite format, from the Mt Blanc area. These photographs are also available in large format but are very expensive at 6 gulden each.
3. Latest travel guide to Switzerland by Berlepsch,³⁸¹ with many maps, views and panoramas etc.

The above two numbers will have to be glued back into the book when it arrives.

4. Dufour,³⁸² Atlas of Switzerland, with a map of the area of Mt Rosa and Mt Blanc, as an example of topographical portrayal of alpine regions and glaciers, this is the best European map in this regard.
5. Bezold, View of the Bavarian Alps,³⁸³ also an example of an extremely simple yet attractive rendering of an alpine panorama.

Furthermore I send you:

6. 3 volumes of *Novara* travel accounts³⁸⁴ as a gift from the Naval Office; the work is now complete.
7. 2 publications on moa, articulation of the skeleton etc.
8. An interesting brochure on the formation of volcanic cones.
9. For entertainment a third part of Faust by Fischer in Zurich, the old Schartenmeyer.³⁸⁵

³⁸⁰ Karl Edler von Innstädten Sonclar (1816-1885), geographer, geologist, topographer and alpinist.

³⁸¹ Hermann Alexander von Berlepsch, editor of a serialised guidebook to Switzerland: *Schweizerische Fremden-Führer*, published by J. J. Weber, Leipzig, c. 1858.

³⁸² Guillaume-Henri Dufour (1787-1875), Swiss cartographer, engineer and director of the "Eidgenössisches Topographisches Bureau", which produced the first official topographical map of Switzerland, known as the "Dufourkarte".

³⁸³ Gustav von Bezold, *Ansicht der Alpenkette auf der bayrischen Hochebene in München: mit erl. Beschreibung u. 1 Höhenstab*, (aufge[ommen] u.[nd] geze[ichnet] v.[on] G[ustav] von Bezold, Gestoche[n] v.[on] G. M. Kurz), München, May & Widmayer, 1862.

³⁸⁴ Karl von Scherzer, *Reise der Oesterreichischen Fregatte Novara um die Erde, in den Jahren 1857, 1858, 1859*, 3 volumes, Wien, Staatsdruckerei, 1861, 1861 and 1862.

10. Bock, book on the healthy and the ailing human.³⁸⁶

I will send these 9 items³⁸⁷ in a parcel via booksellers to your agent in London, whom I will notify beforehand.

I will send you a statement of your account, which is still in good shape, later, as I do not know all the prices for the books yet.

My 'New Zealand' is now being printed and the map of the Southern parts of the Province of Auckland³⁸⁸ is finally being engraved and will turn out very nicely.

I also sent the finished maps of the isthmus of Auckland and Rotomahana with this mail to Williamson³⁸⁹ in Auckland.

Now I want to again ask you for a favour. I recently wrote to you about a grasshopper-like monster,³⁹⁰ of which my friend Brunner would like to get specimens, and today I approach you with another request. Dr Felder,³⁹¹ the deputy mayor of Vienna, a very well respected and wealthy man, who probably owns the biggest butterfly collection in the world,³⁹² wants to make contact with New Zealand, in order to acquire New Zealand butterflies. He wrote to Dr Monro in Nelson on my advice to get the address of the butterfly collector there, where I saw beautiful collections. Unfortunately I forgot his address and did not write it down. Maybe you can remember it or can find out the address of other possible collectors. Please do let me know the addresses of New Zealand butterfly collectors. Dr. Felder would purchase what ever can be found and cover all expenses. As the man is a likeable citizen and scholar who contributed to the *Novara* expedition, I would be very pleased if his wishes could be fulfilled.³⁹³

By now the skeleton of *Palapteryx* and the books that I sent via Hamburg and London at the end of last year will hopefully have arrived. It would certainly be high time.

My wife sends you her best regards, and thank God, she and the little one are both very well. Unfortunately I am not yet fully recovered and my chest complaint has fixed itself in the throat and does not want to move. In the next few days I will try a change of air, perhaps that will help me somewhat – I want to spend a few days in Steiermark.

The matter of the scientific publications of the *Novara* is again coming up for debate by the government, and it is possible that with the ongoing financial crisis, the government still won't be prepared to spend the necessary sums, so everything could come to a halt.

Murchison has just written with regard to Dr Stache, that he enquired in Wellington in regard to salary and period of the engagement, but had not received a reply yet, and that if none of his own geologists felt inclined to go to New Zealand then he might recommend Stache, so there seems to be little prospect for him.

With sincere regards and best wishes for your ongoing success,
Yours faithfully,
Ferdinand Hochstetter

27. Ferdinand Hochstetter to Julius Haast, Vienna 18 August 1862, MS 37 folder 181.

Vienna, 18 August 1862

Most esteemed friend

³⁸⁵ Friedrich Theodor von Vischer (1807-1887), German poet and writer, was the author of *Faust: Der Tragödie dritter Teil*, 1862. Scharnmeier was one of Vischer's pseudonyms.

³⁸⁶ Carl Ernst Bock (1809-1874), *Das Buch vom Gesunden und Kranken Menschen*, Leipzig, Keil, 3rd edition 1859 and 4th edition 1862.

³⁸⁷ Hochstetter refers to nos. 1-9; as no. 10 in the list above was inserted later.

³⁸⁸ Map of the southern part of the Province of Auckland inserted in the back of both Hochstetter *Neu-Seeland* and *New Zealand*.

³⁸⁹ John Williamson (1815-1875), founder and editor of *The New Zealander*, and Superintendent of Auckland Province. See *Dictionary of New Zealand Biography*, vol. 1, pp. 599-601.

³⁹⁰ This is a reference to a request for specimens of New Zealand weta. See Hochstetter letter to Haast no. 23 dated 16 May 1862.

³⁹¹ Cajetan Freiherr von Felder (1814-1894), was the mayor of Vienna from 1868-1878.

³⁹² Today this collection is a core part of the collections of the Natural History Museum in Tring, England.

³⁹³ A letter by Charles Heaphy to Dr Cajetan Felder dated Auckland 1 February 1861 is held in the OR Dr. A. Schedl Collection, Vienna, and has been published in: Iain Sharp, *Heaphy*, Auckland, Auckland University Press, 2008, p. 155.

Your long and interesting letter from Mt Cook and Lake Pupaki with the views of the high Alps and glaciers: Haidinger Range, Hochstetter Glacier etc. has reached me, and still in time for me to include information from it in my chapter on the Southern Alps. Haidinger was most delighted and had the small picture of the Haidinger range copied for himself. He has asked me to express to you his sincere thanks; unfortunately he has been lying in bed two months with open wounds to his feet, and is very unwell. He will most probably write to you sometime when he is better. In no lesser degree I send my own thanks for the icy immortalisation. The map and Mt Cook from the South will still be included as woodcuts. But there is not enough time to have the other images realised, so I will use them for the Geology of New Zealand.

The printing of the German work has progressed to the eighth printed sheet, but unfortunately I am still lacking an English publisher, as the arrangement with Trübner & Company did not work out as a result of disputes between the company and Cotta. With the last mail in July I sent you a very thick letter, with the diploma of the Zoological Society, the map of the isthmus of Auckland, the map of Lake Rotomahana, alpine views, map of Mt Blanc, map of the Otz valley firs etc., through Marshman in London. A letter that was similar in thickness went off with the June mail for you, also containing things you requested.

I will also be sending a parcel of books to Marshman for you, containing the *Novara* travel account in three volumes; see the detailed list in my last letter. I hope that your next letter, which I am very much looking forward to, will confirm for me the receipt of the two cases. Note that you will not have to pay anything more for these, as I paid the freight all the way to New Zealand, as I wrote to you in my last letter. The little packet that you gave to a gentleman from Canterbury for me, as Marshman tells me, should have arrived here two months ago, but it is not here and probably went missing on the journey from London to here. What were the contents?

The reason for the major glaciations of the Alps is the humid ocean climate of New Zealand and the limited warmth of summer.

My wife sends her fondest regards.

Are you thinking of marrying at all? You never write to me about your relationships with the fair sex in Canterbury, and I know that you are a hero in this regard. I hope that you found letters from me on your return to Christchurch, as I write to you regularly by every mail.

In two days time I will commence a little holiday trip, to visit my brother in Silesia together with my whole family and spend a few weeks there.

I do not have much news to share with you today. Yesterday an immense procession of torch bearers was supposed to take place to celebrate the recovery of the Empress. 18000 torch bearers and 10 military bands in the procession, but rain spoilt the festivities, for which half of Vienna was on its feet. It will now take place in the next few days.

Prussia and Austria are wrangling and quarrelling together as usual, and the newspapers will have told you about the sharp shooters spectacle in Frankfurt on Main.

I have to send this letter today and will be able to write more by the next mail.

With sincere regards from my wife and me,

Yours faithfully,

Ferdinand Hochstetter

28. Georgiana Hochstetter to Julius Haast, Hruschau 18 September 1862, MS 37 folder 191.

Hruschau in Moravia, 18 September 1862

Worthy friend

A visit to a friend who lives a few hours from here has robbed my dear husband of the pleasure of being able to reply to your kind letter of 25 June 1862, which he received yesterday. In order that this mail may nevertheless bring you news of him, I take up this great opportunity to write to my honoured unknown friend, sending a friendly greeting in my own hand, and to let

him know that his friend Ferdinand is well, and sends him his best regards and many thanks for his interesting letter.

Before I get on to answering your last letter, allow me first, esteemed friend, to express to you my best and most grateful thanks for your friendship of our dear child, which you have demonstrated in so many ways. The beautiful presents that you have given will certainly be very much appreciated by her when she is older and she will keep them as a precious memento. The photograph that you were kind enough to send me gave me great pleasure and I am happy to have lined you up with all our friends in my album, I thank you very much for this. I have to make do with the picture for now, until one day I have the good fortune of making the personal acquaintance of an honoured friend of my husband.

We would be pleased to have the opportunity of introducing our little Georgy Julie to you soon; you would surely have a great deal of fun with her. She is very lively and fresh, she has never been unwell, and even though she is still very young and stupid she still gives us much pleasure. She is eight months old now. I also wish to thank you in anticipation for the table-top, which I am eagerly looking forward to receiving and will make a fine piece for my room.

I am to let you know from my husband that the doctoral diploma will come sometime during this year; he has only recently made the submission and will send you a copy of it by the next mail. The case with rock specimens that you mention in your last letter has not arrived yet. If the sinking of the *Kensington* is confirmed then this would be a most deplorable accident, but fortunately the items sent to you are insured. Mr Fenzl³⁹⁴ is currently in London, but as soon as he returns my husband will hand your letter over to him. Ferdinand has received your letter with all the sketches from the Alps, and he was still able to include the most important things in his New Zealand book. This has now reached the 14th printed sheet, and he will send you the proofs of the Alps, Gold and Coal via London as soon as they are finished. In the meantime he sends you proof-prints of woodcuts. He will also be fulfilling your orders as best he can. That is all with regard to your orders.

We have been here in the country for a few weeks now, with our siblings, Ferdinand's brother who has my sister for his wife. We rarely see each other as Hruschau is 40 miles distant from Vienna, so we are feeling very happy to be able to spend a few quiet weeks together. But soon our holidays will be over and then we will have to return home.

As I cannot give you a hearty handshake, please accept the written affirmation of my friendship, and I send you with these lines across the wide oceans my sincere regards.

Your salient friend,

Georgiana Hochstetter

29. Ferdinand Hochstetter to Julius Haast, Vienna 16 October 1862, MS 37 folder 181.

Vienna 16 October 1862

Most esteemed friend

This month's mail has not yet arrived, but I want to write to you already anyway, to let you know the good news that you are a Doctor of Philosophy from the Royal Wurttemberg University of Tübingen.³⁹⁵ Three cheers to the newly created doctor, who according to old

³⁹⁴ Eduard Fenzl (1808-1879), Austrian Botanist. Studied at the University of Vienna and graduated Dr Med. in 1833; assistant to Joseph von Jacquin, and took up position of 'Custosadjunkt' in the botanical section of the Austrian Imperial Hofnaturalienkabinett, where he reorganized the collections together with Stephan Endlicher. 1840 Custos and Leiter of the Botanisches Hofkabinett and took up the chair in botany at the University of Vienna in 1849, and became director of the Botanical Gardens in Vienna.

³⁹⁵ Haast was awarded a doctorate from the University of Tübingen, Germany, on 11 October 1862. Wolfhart Langer writes: "Am 11.10.1862 wurde, *Julius Haast Bonnensis Geologus publicus in Nova Seelanda insula* promoviert." See Langer, "Der Bonner Neuseelandforscher Sir Johann Franz Julius von Haast (1822-1887)", p. 283. The doctoral diploma states: "QVOD DEVS OPTIMVS FELIX FAVSTVMQVE ESSE IVBEAT | CLEMETISSEME INDULGENTE | AVGUSTISSIMO ET POTENTISSIMO | DOMINO | GVILIELMO | REGE WÜRTTEMBERGIAE | RECTORE VNIVERSITAS MAGNIFICO | CAROLO GVSTAVO GEIB | IVRIS VTRIVSQVE DOCTORE ET PROFESSORE PVPLICO ORDINARIO | FACULTATIS

tradition has to initiate this honour with a doctoral feast. I will drink a glass of champagne here to his health.

The well-styled submission that I made can be found attached as a copy herewith. Two days ago my brother,³⁹⁶ the university gardener, wrote to me that the faculty had *post eruditionem optime comprobata* – after the examination was passed in the best way – made you a doctor. I immediately paid the fees by return mail, amounting to 100 gulden in Austrian currency and the diploma will be issued to you.³⁹⁷ As soon as I receive it, I will send it to your agent in London for you, and I also hope to be able to send you at the same time the chapter on the Southern Alps that is now in print, and if possible everything else that has been printed so far. Here for now are a few more proofs of woodcuts that may interest you. Your other requests, membership of the German Geological Society etc., will now be carried out one by one, but I have to let you know at the same time that your account is now empty, due to your all too great godfatherly generosity. The statement will follow at the end of December, when I have the final bills from the booksellers for the books and maps, which I have sent to you via London.

Have the cases for you not arrived yet? The unfortunate *Kensington*. The items are insured, but the clause in the insurance reads: “With the exception of stranding”. I still have to research what this means, once I hear from you that there is no more hope of the *Kensington* arriving. Unfortunately the case for me from you that you announced has not arrived yet either, and none of the rocks and minerals for which you are keenly awaiting identification have reached me yet either. My wife wrote to you by the last mail, you will have received the letter by now. We are well, thank God.

Haidinger is very pleased about the Haidinger range and had your sketch copied for himself. I passed on your letter for Fenzl. My work will not be able to be published before November, as we are only on the 21st printed sheet and it will probably become 36 sheets long. The woodengraver is the greatest hold up. I have admired the grand woodcuts of the Müller Glacier in the Australian Illustrated, and I hope my artist makes something better of it. News from Hector on Otago would be most valuable to me for the general geological map of New Zealand, of which the topographical foundation is now finished, and I am just working on the geological rendering, but have to leave Otago completely blank, as I do not like to use my fantasy.

With sincere congratulations, and best wishes from me and my wife, and a kiss from the little one.

Yours faithfully,
Ferdinand Hochstetter

To the dean’s office of the Philosophical Faculty of the University of Tübingen.³⁹⁸

A request and commission from my friend and former travelling companion in New Zealand, Mr Julius Haast, currently Government Geologist in the Province of Canterbury in New Zealand.

PHILOSOPHIAS DECAN SPECTATISSIMO | GVILIELMO SIGISMUNDO TEUFFEL | PHILOSOPHIAW DOCTORE | LITERARVM ANTIQVARVM PROFESSORE PVPLICO ORDINARIO | AMPLISSIMVS PHILOSOPHORVM ORDO | IN REGIA VNIVERSITATE EBERHARDO-CAROLINA TVBINGENSI | VIRVM PRAENOBILISSIMVM ATQVE DOCTISSIMVM | DOMINVM | IVLIVM HAAST | BONNENSEM | GEOLOGVM PUBLICVM IN NOVA SEELANDIA INSVLA | COMPLVRIBVS SOCIETABVS DOCTIS ADSCRIPTVM | POST EVDITIONEM BENE COMPROBATAM | DOCTOREM PHILOSOPHIAE AT ARTIVM LIBERALIVM MAGISTRVM | RITE CREAT | HOC IPSO DIPLOMATE SOLLEMNITER RENVNTIAT | EIDEMQVE OMNIA IVRA ET PRIVILEGIA CVM DOCTORIS GRADV CONIVNCT CONFERT. | TVBINGAE | SVB MAIORE FACVLTATIS PHILOSOPHICAE SIGILLO | D. V. ID. OCTOBR. MDCCCLXII.” signed by Teuffel with the seal of the University of Tübingen; 543mm x 621mm. MS papers 37 folder 338, Alexander Turnbull Library.

³⁹⁶ Hochstetter’s brother, Wilhelm Hochstetter (1825-1881), was university gardener at Tübingen.

³⁹⁷ Heinrich von Haast refers to this letter and mentions that Haast had to thank Hochstetter for this honour, but uses a slightly different Latin wording than Hochstetter in the manuscript letter: “post eruditionem bene comprobata”. See H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 230.

³⁹⁸ This is an attachment on a separate page of the manuscript letter.

I take the liberty to apply in his name to the philosophical faculty of the University of Tübingen for the award of a doctoral diploma of this faculty.

I enclose herewith the curriculum vitae of my friend, as well as a scientific report by him that was published in Nelson. In this way I am fulfilling the requirements for the award of the doctoral degree as best as circumstances permit. In support of my submission I might highlight the fact that Mr Julius Haast, as the Government Geologist of Canterbury, holds one of the highest and most respected positions in the Provincial Government of this Province, and through his support of the scientific aims of the *Novara* Expedition he has gained the recognition of our scientific community in Vienna, by being made a corresponding member of the Imperial and Royal Geological Survey³⁹⁹ and the Imperial and Royal Geographical Society⁴⁰⁰ as well as the Zoological & Botanical Society.⁴⁰¹

Mr Haast, who has been in the Province of Nelson since 1860, and spent 1861 and 1862 in the Province of Canterbury, has undertaken with the most courageous endurance exploratory journeys into the wilderness of the alpine regions of New Zealand never before trodden by man, the results of which are being prepared for publication, and has gained well-earned recognition and fame, and was elected an honorary member of the Royal Society of Melbourne⁴⁰² and the New Zealand Scientific Institute.⁴⁰³

May the faculty feel inclined to grant my friend this on the merits of his scientific endeavours, despite the lack of some conditions in the regulations being fully met, and allow me to say how pleased I would be to see the name of my friend and travel companion, who so honourably represents the German sciences and exploratory intentions in our antipodes,⁴⁰⁴ linked with the faculty from which I myself had the honour to graduate as a doctor ten years ago.

Vienna, 24 September 1862.

Ferdinand von Hochstetter, Dr. phil., Professor, etc etc.

30. Ferdinand Hochstetter to Julius Haast, Vienna 17 November 1862, MS 37 folder 181.

Vienna, 17 November 1862

Dear friend

Until now this mail has not brought me any letters from you either, so that I have been two months without any letters from you (your last letter was dated 25 June). I suspect that in the meantime you have been to the Buller or Grey. My last letter of 17 October 1862⁴⁰⁵ announced that you had become a Doctor of Philosophy at the University of Tübingen, and brought you my and my wife's congratulations. This time I can let you know that I sent, at the same time as this letter, the diploma and three printed sheets of the chapter "Southern Alps" from my New Zealand book and finally 3 plates that have just been finished of the Drury and Nelson plant fossils for the geological report, to your London agent Marshman for you.

³⁹⁹ Kaiserlich-königliche Geologische Reichsanstalt.

⁴⁰⁰ Kaiserlich-königliche Geographische Gesellschaft.

⁴⁰¹ Zoologisch-Botanischer Verein.

⁴⁰² Letter informing Haast of his election as honorary member of the Royal Society of Victoria reads: "*Royal Society of Victoria* | *Victoria Street*, | *Melbourne*, 14th March 1863 | Sir, I have the honor to inform you that at the Ordinary Meeting of the Royal Society of Victoria held on the 17 of November last, you were unanimously elected an Honorary Member of the Society. | I have the honor to be Sir | Your most Obed. Servant. | R. Brough Smyth | Hon. Sectr.", MS papers 0171, Alexander Turnbull Library.

⁴⁰³ Haast was elected honorary member of the New Zealand Society on 2 August 1862. The diploma reads: "Be it known unto all men that the New Zealand Society recognizing and highly valuing the eminent services to Science rendered by Julius Haast Esquire, and particularly his services to the Colony of New Zealand by his Geological and Topographical Surveys of the Nelson and Canterbury Provinces, have unanimously elected him an Honorary Member. | Witness the hands of the President and Members of Council of the Society this second days of August One thousand eight hundred and sixty two." signed by eleven persons including James Crawford, Walter Buller, Walter Mantell and Jonas Woodward. Parchment document 300mm x 425mm, MS papers 37 folder 21, Alexander Turnbull Library.

⁴⁰⁴ This passage is quoted from the actual letter sent to Tübingen by Hochstetter and now held in the university archive in Tübingen as, "deutsche Wissenschaft und deutschen Forschersinn bei unseren Antipoden so ehrenvoll". Langer, "Der Bonner Neuseelandforscher Sir Johann Franz Julius von Haast (1822-1887)", p. 283.

⁴⁰⁵ Hochstetter letter to Haast no. 29 dated 16 October 1862.

The printing of the Cotta New Zealand book in 36 sheets = 550 pages of text in large octavo is now all complete except for the last sheet; the foreword and everything for the appendix and conclusion are already set, so that I may now congratulate myself on being finished with this work. Unfortunately the release will not be able to take place before the New Year as Perthes has let me down with my Province of Auckland map, and it will not be finished before the end of December.⁴⁰⁶ I am sorry that I could not already send you the whole thing with this letter, but I simply don't have it, and I want to surprise you with a complete copy, therefore I have only sent you what will interest you most as it is your work, the chapter on the Southern Alps. The preceding chapter bears the heading 'Nelson'. And now I can also let you know that our most outstanding alpine landscape artist, Professor Simony,⁴⁰⁷ has composed a most grand and impressive picture from your sketches of Mt Cook etc: "Glacier Region around Mount Cook: A picture characteristic of the Southern Alps of New Zealand, from sketches by J. Haast."⁴⁰⁸ It makes a great impression. The viewpoint is imagined from 5000 feet above sea level; one looks down into the valleys with the Tasman and Hooker Glacier and looks over the whole range of mountains from Mt Elie de Beaumont to Mt Moorhouse, Mt Cook and next to that the Haidinger Range in the centre. Until now only the master copy of the sketch has been finished. The execution of the work will take the artist 2 to 3 months. It will be done in ink and then photographed. You will be amazed, once I can send you the picture (the photograph), what we were able to make of it, and hopefully we at least stayed true to nature. The biggest difficulty is the vegetation in the foreground as we have no model for this.

As I am waiting for this picture and my work, I have not yet given a detailed talk on your discoveries in the Alps for our Geographical Society; I could not really table the sketches you sent, and the subject matter in your letters is too diverse to be suitable for reading. I have always only given brief notices and will now present a longer lecture, using what I have put together from your letters into the chapter and the above picture.

Unfortunately the Canterbury rocks have still not arrived, so that I now have to give them up as lost. There are people in London who intercept all consignments of natural history objects, and who already appear on board the ships immediately on arrival where they suspect the same, and take possession of them by bribery. Therefore one cannot be careful enough with these kinds of shipments. Everything goes fine as far as London, but in London these things disappear if someone is not right there to receive them when they are unloaded.

My wife and child are well, and my own condition is bearable. But my chest and throat are still not all right. I am now moving on to the official geological report with all my might. It has to be printed by this time next year.

⁴⁰⁶ The publication of Hochstetter's *Neu-Seeland* was delayed due to the maps not being completed on time. In the correspondence between Hochstetter and Petermann we find Hochstetter trying to hurry the process. In a letter dated 1 September 1862 Hochstetter writes that the publisher Cotta is getting concerned that the maps are not ready yet: "Sobald ein Reindruck der Karte fertig ist, bitte ich mir 2 Exemplare zuzusenden, damit ich eine Cotta schicken kann, der mir wiederholt wegen der Karten geschrieben hat, und in Sorge ist, daß diesselben noch rechtzeitig fertig werden." One month later Petermann then replies saying that the map will not be finished until December, as Hochstetter writes in this letter to Haast. Petermann's letter dated 4 October 1862 states, "Was die große Karte (No. 2 Auckland) anlangt, so wird unausgesetzt daran gesessen, ich fürchte aber, daß Cotta vor Dezember keine Abdrücke erhalten wird, - die Platte enthält viel Arbeit für die Stecher. Sie können Sich aber darauf verlassen, daß dieselbe möglichst gefördert werden wird." Hochstetter then writes to Petermann expressing his disappointment about being "let down", when he writes in a letter dated 8 October 1862: "Sehr, sehr fatal ist, daß die große Karte (No. 2 Auckland) noch nicht fertig ist. Gerade auf diese Karte hätte ich den allergrößten Werth gelegt, u. gab mich der sicheren Hoffnung hin, daß sie meinem Buche nicht fehlen werde. Ich habe mich im Text darauf bezogen. Sollten Sie aber wirklich vor Dezember, wie Sie schreiben, keine Abdrücke liefern können, so wäre das viel zu spät. Ich ersuche Sie, in dieser Sache zu thun, was möglich ist. Wenn die Abdrücke Anfangs November, oder bis Mitte als aller letzter Termin nach geliefert werden können, so dürfte es noch Zeit sein. Das Buch soll Mitte November spätestens ausgegeben werden." Briefsammlung Hochstetter, Sammlung Perthes, Schriftleitung Petermanns Geographische Mitteilungen, Forschungsbibliothek Gotha, Germany.

⁴⁰⁷ Friedrich Simony (1813-1896), Austrian geologist, artist and professor at the University of Vienna.

⁴⁰⁸ This became the frontispiece in Hochstetter, translated by Fleming, *Geology of New Zealand* and the frontispiece to Hochstetter, *Geologie von Neu-Seeland*, 1864.

Fenzl sends you his sincere regards and is looking forward to your shipment. Unfortunately I have not heard any news from Dr Hector, which I was keenly anticipating in order that I might finish the general map.

Our joint map of Nelson will appear in the January 1863 issue of *Petermanns Mittheilungen*.⁴⁰⁹

With sincere regards and in excited anticipation of your letters,

Yours,

Ferdinand Hochstetter

I repeat from my last letter that your account with me is now empty.

Have the *Palapteryx*, books, hammers etc. still not arrived?

Your letter of 6 August has just arrived and I am very pleased that the case reached you. Unfortunately your rocks still have not reached me, so that I must now give them up as lost.⁴¹⁰

31. Ferdinand Hochstetter to Julius Haast, Vienna 14 January 1863, MS 37 folder 182.

Vienna, 14 January 1863

Dearest friend

First of all, good luck for the New Year and for the ongoing splendid progress of your career. But what are you doing? I hope that the gout is not keeping you in bed, as the December mail did not bring a letter from you, but most likely your letters went missing with the sinking of the *Colombo* steamer.⁴¹¹ I received your last letter, dated 6 August, on 18 November and replied the same day, while in December I missed the date for mailing. I have already expressed to you my happiness at the fact that the two cases on the *Kensington* reached you after all; your consignment of rocks unfortunately went missing, and I urge you again to send future shipments to London by registered mail, as otherwise everything gets stolen, especially natural history objects, as dealers have their own agents for this type of theft. I am all the more sorry about the loss as fresh pieces of the volcanic rock types of Bank's Peninsula would have been of great interest to me. The fossils are Culm beds (Upper Devonian or Lower Carboniferous) and the coals are from a anthracite coal formation.

The fossils I brought back have now all been described and identified, but no new results on the age of the formations were forthcoming, only insofar as the Cape Farewell sandstone is most likely young Tertiary. The plates are now being lithographed, and once they are ready I will send them to you. The last map, the large Auckland one, has now been successfully completed and looks very good, so that the popular travel account can now be issued. I am expecting the first bound copies any day now, and will send them to London for you. I want to send all the copies for New Zealand to your address, and I also want to ask you to look after the forwarding of the copies destined for Auckland, Nelson and Wellington, for otherwise I do not know how to get the books to New Zealand.

I celebrated a happy and enjoyable Christmas. I lit the first Christmas tree for little Georgiana Juliana. The child is developing well, much to our unspeakable joy, and gives us great pleasure. Her second birthday is on 19 January. She is to receive the silver cutlery on this day, as a godfather's present from you.

Unfortunately, since I have taken up my position again, where I have to put together a whole new reference collection of rocks, I am not making progress on the geological report. But

⁴⁰⁹ Hochstetter and Haast, *Geologische Übersichtskarte der Provinz Nelson (Süd Insel)*, Gotha, Justus Perthes, 1862, was first published in: August Petermann, *Mittheilungen aus Justus Perthes Geographischer Anstalt über wichtige Neue Erforschungen auf dem Gesamtgebiete der Geographie*, no. 1, January 1863, plate 2.

⁴¹⁰ The last paragraph appears as a note in the left margin of the manuscript letter.

⁴¹¹ The *SS Colombo* steamer was built for P&O in 1853 and left on her maiden voyage from Southampton to Alexandria on 20th December that year. The *Colombo* under Captain Farquhar left Galle, Sri Lanka bound for Aden on 17 November 1862 and ran aground on 19 November near Minicoy. All passengers and crew were safely evacuated and most of the cargo and mail salvaged.

it does have to be finished this year. Unfortunately I find that my chest problem, which has become more of a throat problem, takes away so much of my energy that I have to save myself. A journey to New Zealand would be the best way to relieve me from this, but how and when? This cure is unfortunately impossible. In my next letter to the German geological society I will nominate you as a member.

Just think, at Christmas I received 28 letters returned from Panama, which should have still reached me during the expedition. At New Year an adventurous letter “saved from the wreck of the Colombo” reached me. I had to soak the letter which was completely stuck together, and was then able with much effort to decipher the wording of the half rotten parchment, being my diploma of honorary membership of the New Zealand Society, signed by Sir George Grey. I will write to the secretary of the society by this mail.

With sincere regards also from my wife and a kiss from the little one,

Your loyal friend

Ferdinand Hochstetter

Summary of account for J. Haast

Balance carried forward from account of 21 February 1862, Austrian currency in bank notes: 253 gulden and 97 kreuzer

Expenditure for the year 1862

1) Books, maps and photographs

| | |
|---|-------|
| Berlepsch, Switzerland | 4 |
| Bezold, Bavarian Alps | 3.68 |
| Dufour, ⁴¹² Map of Switzerland | 3 |
| Sonclar, Öetzthaler Firns | 2.50 |
| ditto book and atlas | 24 |
| Bock, Book of Man | 3.50 |
| 12 Mt Blanc photographs | 6 |
| Nelson map, the draughtsman | 6 |
| Bernina map | 1 |
| Austrian currency in bank notes | 53.68 |

2. Freight charges for sending diplomas

| | |
|--|------|
| 25 April parcel to Marseille, that came back | 3.15 |
| 17 June registered letter parcel via Trieste prepaid to New Zealand | 3.68 |
| 15 July registered letter parcel to Marshman in London prepaid to London | 2.85 |
| | 9.68 |

3. Doctoral diploma from Tübingen 14 October

| | |
|--|--------|
| Fees, tips and postage | 106.15 |
| (the official fees in silver 94 fl 30 k South German currency) | |

4. 2 raffles purchased according to instructions for my little daughter Georgy,

| | |
|--|----------|
| 3 September | 53.53 |
| Silver cutlery as a present for godchild | 25 |
| Total | 248.04 |
| Remainder to the credit of J. Haast in Austrian currency | 5fl 93 k |

Vienna, 14 January 1863

Ferdinand Hochstetter

⁴¹² Guillaume-Henri Dufour (1787-1875).

32. Ferdinand Hochstetter to Julius Haast, Vienna 16 February 1863, MS 37 folder 182.

Vienna, 16 February 1863

Dearest friend

Three of your letters dated 11 October, 2 November and 20 November have arrived since I sent my last one to you on 14 January.⁴¹³ I am answering them in order.

1. First of all congratulations on becoming the president of the Philosophical Society.⁴¹⁴ Your address⁴¹⁵ reached me, but not your report and the newspapers you mentioned. Foetterle received your address and both Foetterle and Haidinger subsequently received your letters, which had swallowed water with the sinking of the *Colombo* steamer.⁴¹⁶ They will write to you themselves. I think the address is good, but it was very incautious of you, and I have to tell you off for this, to send copies to Haidinger and Foetterle, as I would have been most embarrassed for you if Suess,⁴¹⁷ who is a perfect Englishman, had got hold of it. Although I find it quite excusable that you included the passage in question, others and namely the person in question would have judged differently. Only due to the fact that the meeting of the Geological Survey at which the address should have been tabled was postponed, did it not reach Suess. Obviously the others will not recall the exact wording of the talk from a year ago.

Concerning the diplomas, the Geological Survey has no others except the corresponding member's diploma; Mueller and Macadam⁴¹⁸ in Melbourne received the same one as you received. The diploma of the Geographical Society is not signed by the president, due to the fact that Wüllerstorff, who was president at the time, was away for the entire year.

My New Zealand book will finally be published in two weeks time. I will then send you copies via London. Unfortunately an English translation does not exist yet and I did not succeed in coming to an arrangement with an English publisher, but have no doubt that once the English see the book an English edition will still happen. In the meantime you will have received the doctoral diploma. By the last mail I sent you a statement of your account showing how your money was spent, according to which you have a remaining credit of 5fl and 93k in Austrian currency.

The poems you sent me were very amusing.

Re letter 2: The big event. First of all, sincerest congratulations to you and your fiancée on your engagement, from me and my wife.⁴¹⁹ The photograph of your fiancée, which your third letter brought us, gave us much pleasure and was most attractive, and I do not doubt for a moment that those open features will mean happiness and pleasure, which we wish you with all our hearts.⁴²⁰ It was right of you to look after your hearth and you made a good choice. Perhaps this letter will reach you just in time for your wedding, so we also send our best congratulations for the happy celebration.

We thank you for the friendly way in which you think of your godchild, my little daughter, on this occasion. The child is doing very well, thank God, much to our satisfaction and

⁴¹³ Hochstetter letter to Haast no. 31 dated 14 January 1863.

⁴¹⁴ At the first meeting of the Philosophical Institute of Canterbury, held at the Geological Survey Office on 30 August 1862, Haast was elected as president. See H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 221.

⁴¹⁵ Julius Haast, "[The Following is the address delivered by Mr. Haast at the dinner of the Philosophical Institute of Canterbury]", *Philosophical Institute of Canterbury*, 1862, 8 pp.

⁴¹⁶ Mail received after sinking of the *SS Colombo* is mentioned by H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 222.

⁴¹⁷ Eduard Suess (1831-1914), geologist and politician, studied in Vienna and Prague; Kustos of the Hofmineralien-Cabinet in Wien, 1852-1862, and from 1857 professor of geology and palaeontology at the University of Vienna. Later president of the Akademie der Wissenschaften in Wien from 1898-1911.

⁴¹⁸ John Macadam (1827-1865), Australian chemist, physician and politician, was made a corresponding member of the geologische Reichsanstalt in 1859. See *Jahrbuch der kaiserlich-königlichen Geologischen Reichsanstalt*, vol. 10, 1859, p. XVI.

⁴¹⁹ Julius Haast became engaged to Mary Dobson at the end of 1862, and they married on 25 June 1863 at St. Mary's church in Heathcote Valley, Canterbury. See H. F. von Haast, *The Life and Times of Sir Julius von Haast*, pp. 319 and 322.

⁴²⁰ A translation of this passage is quoted in H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 319.

will soon be walking. At the same time I am expecting a new arrival in the next few days, and hope that all goes as well as the first time.

The changes in the Mt Cook section have been made. With regard to the case of rocks that I had given up as lost, there is now a good chance that it will arrive in the next few days. According to your instructions I wrote to Dalgety & Co. in London⁴²¹ and the reply was that a case weighing 234 pounds had been found in the docks in London. The day before yesterday I received a notification from a freight company in Cologne, but strangely enough the contents are declared as books and old published material, and it has a large postage due on it. So by the time the case gets here it will amount to about 40 fl. But it is lucky enough if the things get here in the end and your purposes have been fulfilled. I am very eager to get the contents as I am particularly interested in volcanic rocks and will send you the identifications by the next mail. I will get started on it straight away. The small crystals sent in your last letter are not precious stones and they only have a hardness of 5 to 6. It must be feldspar or zeolite, but the pieces are too small to be identified exactly. I am completely occupied with the display and arrangement of a geological collection in the Polytechnic Institute. The New Zealand fossils have now finally been described by Zittel. I will send you the description by the next mail and include the plates with the next consignment of books, as far as they are ready. For Richmond we have come back to my original conclusion, that they are Triassic (limestone). It is still doubtful whether the Belemnite strata formations are Upper Jurassic or Cretaceous.

More news by the next mail. Farewell for now, and don't let your dear fiancée wait too long, before you return from the wilderness.

With heart and hand,

Yours,

Ferdinand Hochstetter

Once again, please send all your letters via Marseille or via London, as otherwise I have to pay double the postage if they arrive via Trieste.

NB. Your letter of 13 September still reached me on 30 January of this year after swallowing sea water.

33. Ferdinand Hochstetter to Julius Haast, Vienna 15 March 1863, MS 37 folder 182.

Vienna, 15 March 1863

Dear friend

Finally the case of rocks has arrived that had long been given up as lost, but only now, at the beginning of March 1863, and with freight charges of 48 gulden in Austrian currency. But enough said, the case is here, and after having examined all the rocks carefully, I can send you the results on the enclosed pages. There were some very interesting things amongst the collection. Banks Peninsula is composed mainly of trachytic lava and predominantly sanidine-rich lava, which may be called 'Sanidine lava' basalt. Only the more recent points of eruption seem to feature basalt lavas. The quartz bearing rocks from the foothills of the Alps are all quartz porphyry and some are clearly defined by garnets, which is rare in European quartz porphyry, they are not trachytes, and very few rhyolites, – our Taupo rocks were rhyolites. These quartz porphyrys are probably of the age of the anthracite formation or the Permian formation, at most Triassic, but certainly not more recent than that. Apart from quartz porphyry there are the melaphyres with their numerous metamorphic rocks and finally, as the most recent product of eruption in the foothills, dolorite and basalt with palagonite-tuff.

There is therefore an error in the section of the South Island in my popular New Zealand book, which I will correct in the geological section of the *Novara* report. This is the fact that I

⁴²¹ Dalgety & Company, a London shipping firm founded by Frederick Gonnerman Dalgety (1817-1894).

have presented Mt Somers as trachyte and Bank's Peninsula as basalt; the first is quartz porphyry and the latter trachyte and basalt lava.⁴²²

The first complete copy of my New Zealand book is now on hand and soon I hope to be able to send you copies. The geological report is being worked on, and I hope that it can be printed next winter. This month's mail has not arrived yet, but I already answered the last mail, so that leaves me with little to say this time. By the next mail I will announce the arrival of the second off-spring in my family, as any day now I am expecting my wife to go into labour. Little Georgiana Julia, your little godchild, walked through the room for the first time on 10 March and is now already walking around quite happily. The little one is doing very well. My wife is keen to know whether she will receive a reply by this mail to the letter she wrote you. She and I both send our best regards to your fiancée, soon to be your loyal wife, whose photograph gave us much pleasure. Once again, our sincerest congratulations to you and your fiancée. At the moment I am completely removed from my scientific work as I am occupied with setting up a display of a new geological collection at the Polytechnic Institute. There is little news of scientific significance. The question of the day, which is preoccupying politicians and non-politicians alike, is the fighting in Poland and the stance taken by Prussia in relation to this. Now I have to write an essay on the Ice Age⁴²³ as a result of a polemic I have got involved in, as a Hungarian professor published a nonsensical theory in explanation of the Ice Age.⁴²⁴ I don't think I have told you yet that the Bavarian Academy of Science elected me as their corresponding member.

I am not sure yet how I want to dispose of your rocks, as there are some things that I would like to keep for myself, while I will give some away, as there are many duplicates, in order to recover some of the cost of the freight. Today I once again received a copy of *The New Zealander*⁴²⁵ from Dr Fischer, from which I see that the gold discoveries in Otago and Southland still continue and the Coromandel is starting to produce.

Goodbye for now, dear friend. I hope that by the time this letter reaches you, you will have returned from the West Coast and are now taking your wife home.

With sincere regards,
Yours,
Ferdinand Hochstetter

Postscript

15 March, 6 o'clock in the evening. My wife presented me with a fine baby boy at 4 o'clock this afternoon. I am jubilant.

34. Ferdinand Hochstetter to Julius Haast, Vienna 26 April 1863, MS 37 folder 182.

Vienna, 26 April 1863

Most esteemed friend

Your letter from Lake Ohau dated 2 January arrived on 16 March, so you are once again on an expedition, but now, by the date of this letter and by the time this letter arrives, you will have safely returned richly laden with fine new results, and undoubtedly the best result is that

⁴²² The section of the South Island was first published as „Idealer Durchschnitt der südlichen Alpen“, with “Mt Somers”, (no. 9 in the section) designated as “Trachyt”, and “Banks Halbinsel” (Banks Peninsula, no. 12 in section), designated as “Basalt”. Hochstetter then corrected this in his *Geologie von Neu-Seeland*, where the same section was published on p. 199. Fleming in his translation, designates Mt Somers as “Quartz trachyte and quartz-bearing trachyte tuffs”, and Banks Peninsula as “Trachyte, andesite, and basalt”. See Hochstetter, translated by Fleming, *Geology of New Zealand*, p. 214.

⁴²³ Ferdinand von Hochstetter, “Die Erscheinungen der sogenannten ‘Eiszeit’ und deren naturgemäße Erklärung”, *Österreichische Wochenschrift für Wissenschaft, Kunst und öffentliches Leben*, nos. 13 14 and 16, 1863, pp. 401-408, 432-435 and 496-503.

⁴²⁴ Johann (Jan) von Pettko (1812-1890), geologist and mineralogist, wrote articles in *Österreichische Wochenschrift für Wissenschaft, Kunst und öffentliches Leben*, vol. 1 no. 3 and 8, 1863, on the Ice Age. Also Johann von Pettko, “Polemisches: Entgegnung den Herren Ed. Suess und Dr. F. von Hochstetter”, *Österreichische Wochenschrift für Wissenschaft, Kunst und öffentliches Leben*, vol. 1, 1863, pp. 306-310.

⁴²⁵ *The New Zealander*, Auckland newspaper founded and edited by John Williamson, Superintendent of Auckland Province.

you have taken your wife home, are living in the new house and are celebrating a happy honeymoon. My wife and I send out best wishes for this. My wife was expecting a reply from you by this mail to her letter of 18 September of last year,⁴²⁶ but nothing arrived, which is understandable due to your departure, and we probably need to be patient for a few more months.

By the last mail I sent off the descriptions of your rocks and minerals, hopefully the letter reached you, if so then it still came in time. Herewith I send you two maps. The Auckland map is also geologically finished in colour print including two detailed maps inserted in the lower corners, but I have only received one off-print so far, which I have sent to Auckland by this mail. I have also enclosed Dr Zittel's results on the examinations and identification of the New Zealand fossils, and finally a series of articles on the Ice Age by me, which will be of interest to you. I was led to this through a polemic, in that a Hungarian geologist claimed in the Hungarian Academy that the Ice Age was caused by a solar eclipse during the forming of asteroids.

Your requests:

Adhemar,⁴²⁷ only a small brochure, the contents of which I consider to be incorrect, and Le Hon,⁴²⁸ Deluges, are already on my desk ready for you.

I will also acquire a good meteorological book for you and send the books together with the copies of my New Zealand book via London for you. Just think – the New Zealand book is not released yet, but this should definitely happen in the next few days, and then they shall be sent off straight away. The death of Cotta caused many delays.

I already announced the birth of my son in the last letter. Mother and child are well and Julia sends you many kisses.

Goodbye for now.

With sincere regards,

Yours,

Ferdinand Hochstetter

Do be good enough to send me specimens of Otago gold at some stage for the completion of my gold collection.

35. Ferdinand Hochstetter to Julius Haast, Vienna 19 June 1863, MS 37 folder 182.

Vienna, 19 June 1863

Most esteemed friend

I have been two months without letters from you and now the mail brings me three letters all at once, and the *Lyttelton Times* with your interesting reports has also arrived. So, my sincere congratulations on your return from the West Coast and congratulations and congratulations and for a third time congratulations to you and your wife on your wedding. How happy you will feel in your 'Glückauf' house with your loyal wife by your side! In the meantime the plants for Fenzl have arrived here and aroused jubilation. Fenzl said to me that this was the most interesting collection that had reached him in many years.⁴²⁹ I only saw a few things, as Fenzl only wants to show them once he has sorted everything. The nestor is also very nice. What you write in regard to a new kiwi is most remarkable, do have the specimen described and drawn exactly, before you send the skin to London. I assume, though, that it is nothing other than the *Apteryx oweni* that we also came across in Nelson. Just think, at Pentecost Captain Rough surprised me with a visit and in a few days I am expecting Dr Mueller here. Just imagine, my New Zealand book has only now been issued, and only today did I have a case of copies collected from the customs office, which are destined for New Zealand. In the next few days these will go off to London. The book is

⁴²⁶ Georgiana von Hochstetter letter to Haast no. 28 dated 18 September 1862.

⁴²⁷ Joseph-Alphonse Adhemar (1797-1862), French geologist.

⁴²⁸ Henri Sebastian le Hon, (1809-1872), French geologist.

⁴²⁹ This is referred to in H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 345

beautifully bound; you will get great pleasure from it; if I could send it to you telegraphically, then that would be preferable. Concerning the English translation, I am still only at the stage of negotiations with Murray. In old Europe good things take time; everything takes terribly long.

Fortunately another school year will soon be finished and I want to use the holidays for a small journey, probably to Naples, mainly for my health, as I think that the ocean air will put me back in order, as unfortunately I am still ailing, although the doctors just laugh at me. But that only proves that the doctors know nothing. My wife asks me to convey her best thanks for your letter, which gave her much pleasure. I have just finished packing the stack of books for New Zealand. You cannot imagine how much work New Zealand still gives me. I have sent seven copies to Auckland in a separate case. A second case with six copies is now going under your address to Dalgety & Company in London. Three of these copies are intended for Nelson: one for the Nelson Government, one for Monro⁴³⁰ and one for our fellow German countryman Kelling. The remaining three copies are for your disposal: one of these is personally dedicated to you, that is your personal copy, the other two copies I am sending to you so that you may do with them what seems most fitting. Note that I have not sent a copy to the New Zealand Society in Wellington. I had to be extremely frugal. Just think – I have already spent more than 200 fl for my own New Zealand book. That is a bit much for my circumstances. Even with the best intentions I could not have sent more copies, as I had to distribute the few complimentary author's copies here. I had to buy all the copies for New Zealand, which is a bit hard. Therefore you may sell the two spare copies for £2 each if you wish and are able to.⁴³¹ But just do with them what you wish. I hope and wish for just one thing, that the book meets your expectations. The German press is full of effusive praise, and I will eventually send you some reviews. The binding is all in Maori style.⁴³² You will laugh. But that way at least it is New Zealand through and through.

Goodbye for now, dear friend. By the next mail I will write more. Today I am too tired. I am also sometimes a little over-worked; one then has to find some respite at the side of one's loyal other half in marriage.

With sincere regards to you and your dear wife,
Your loyal friend
Ferdinand Hochstetter

I will get the photographs. Please send the three copies to Nelson and charge the recipients there the appropriate portion of the freight charges from London to New Zealand.

I have also enclosed for you the two other books you wanted: a meteorological book and Deluges by le Hon – my copy, as I am only receiving the copy I ordered for you in two weeks time. Adhemar, only a little brochure, which says very little, is coming later.

36. Ferdinand Hochstetter to Julius Haast, Vienna 17 July 1863, MS 37 folder 182.

Vienna, 17 July 1863

Most esteemed friend

Just now I received your letter of 22 April from Lake Wanaka and hasten to write in reply. First of all, once again sincerest congratulations to you and your wife, from me and my wife. I can understand that Dr Hector will not communicate his results to me before he has published them himself. In the meantime, as I already wrote to you earlier, I have given up the plan of including a general geological map of the whole of New Zealand in the geological report, as I soon realised in trying to execute this map, that it was not possible, especially as I do not want to present too much that is idealised. So I am leaving this for the New Zealand geologists. I

⁴³⁰ The copy inscribed by Hochstetter for Dr David Monro is held in the Nelson Provincial Museum Library, Nelson.

⁴³¹ This is referred to in H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 345.

⁴³² This is referred to in H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 345.

am busy working on the geological volume, as I want to have it finished so that it is printed by May 1864. The case of copies of *New Zealand* for you and for Nelson went to London at the beginning of this month to Dalgety & Company. I am receiving letters of recognition in response to the book from all directions. The archduke and the minister of state wrote me very charming letters. I hope that it will also be well received by you and your fellow countrymen. I hope the English edition will soon get started; I am expecting Murray's final decision any day now.

In the meantime you will have received the identifications of the rocks. I recently went through them again and when I compared what I had described as quartz porphyry with Hungarian rocks, some doubts arose as to whether these are not all quartz trachytes, that is von Richthofen's rhyolite, and that it might in fact be Richthofen's felsitic rhyolite. But it all depends on the geological age. If the rocks are Tertiary eruptive matter, then it is quartz trachyte, but if they are Secondary eruptive matter, then they are to be described as quartz porphyry. You will have to decide that. The mineralogical and chemical composition of quartz porphyry and quartz trachyte is identical.

At the same time as your letter I received one from our friend Fischer, wherein he asked me if I would not be inclined to take up an appointment as provincial or colonial geologist in New Zealand, that is Auckland, for £800 to £1000. What shall I say to that here in the Imperial city with wife and child?

Today I again saw Simony's picture of Mt Cook and surroundings. It is now almost finished, – grand and magnificent – you will be amazed when you receive the photograph of it. But I cannot promise it before next year.

10 o'clock at night.

At six o'clock tomorrow morning I am travelling with my whole family to Pystjan spa in Hungary, where my parents-in-law are currently staying, as my father-in-law is utilising the warm sulphur springs for his gout. I will be there for three weeks and then I want to go to Mt Vesuvius in Naples.

When Dr Hector publishes reports in the Otago newspapers, be good enough to send me them. In the last issue of his journal Petermann published an article on your work, which was full of praise. I am always very pleased for you, as your honour is a part of my honour.⁴³³ Your most recent highly interesting reports and letters gave me much pleasure and I again congratulate you on these.

But enough for now.

Farewell, enjoy your honeymoon! I succeeded in getting a professorship in mineralogy and geology in Lemberg for Dr Zirkel, a fellow countryman from Bonn. But I do think it is better in New Zealand than in Poland.

With heart and hand,

Yours,

Ferdinand Hochstetter

37. Ferdinand Hochstetter to Julius Haast, Vienna 16 August 1863, MS 37 folder 182.

Vienna, 16 August 1863

Most esteemed friend

I received your detailed letter of 9 June just now and congratulate you and your wife on your wedding, which took place on 25 June.

So finally you, the wanderer, have arrived in the happy harbour, and on this occasion, to you and your dear wife from me and my wife our most sincere best wishes. I acknowledge the receipt of £20, which I will place on your account. I am pleased that the rock identifications have reached you. As far as number II is concerned you may call it trachydolorite. I was uncertain on this myself, for if one does not know the source locality, then it is often difficult to identify.

⁴³³ This is referred to in H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 345.

In my last letter I already wrote to you about the quartz porphyrys and how they are to be identified as quartztrachyte, if they are really Tertiary. The rocks are the same even with their garnetiferous qualities, as the quartztrachytes from Hungary and Transylvania. Note that I only call real quartztrachyte lavas rhyolite, like those at Lake Taupo, while for mass eruptive matter the term quartz trachyte is more fitting. With regard to the rocks, I will act according to your wishes and only keep a few pieces that are of particular interest to me, and use the remainder to your best advantage. The New Zealand book has been dispatched to you as I wrote in my last letter, and I am now working intensely on the geological report, which is still giving me a lot of work and will unfortunately become a very weighty volume, and I still have a request in regard to this. In the second section I give an overview of the formations and strata according to their age for both the North Island and South Island of New Zealand, as best as I can, but it is difficult for me to pick out the most important information from your letters and reports. Your opinion also changes. So I would like to ask you for a very brief overview of the formations and strata in the areas examined by you. For example:

Metamorphic shale: in the Province of Canterbury, only on the West Coast. Paleozoic formation. Mesozoic formation. Cenozoic formation. Quartz formation.

Always in just a few words, three to four lines for each of the main localities, and a brief characterisation. You can best see what I mean from the enclosed sketch of the formations found in Southern parts of the Province of Auckland, taken from the New Zealand atlas. This atlas will also be finished in the next few weeks with a short text. Also include anything you can glean from Dr Hector's reports from the Province of Otago. In the text of the work I am limiting myself to those areas I observed personally. Only in the overview do I wish to bring in your full results. I was pleased to hear that you were satisfied with your, or my, article on the Alps. The picture by Simony of Mt Cook is going to be brilliant and you will be amazed. It is the grandest alpine landscape I have ever seen. I am afraid that the fantasy will not have completely hit on reality. For *Plesios. australis* I have the locality Waitaki and you write Waipara beds. How is that?⁴³⁴

For your magnanimous separate letter, my special thanks. I cannot even think of a trip to New Zealand, certainly not at this stage, but I hope that I will still have the pleasure of seeing you here before then anyway. I do not know what will happen in years and years to come. Things are going better with my health, thank God. My chest is no longer causing me any trouble and it is now only the throat. The whole thing has moved up into the throat and glands as the doctor says. But for now it troubles me very little, and in order to do something that will make me completely better I have planned a trip to Naples and Mt Vesuvius, and in three days time I will already be leaving with some friends to travel through Switzerland to Naples. I have a married sister there, who I wish to visit at the same time.⁴³⁵ The next mail will therefore not bring you a letter, as I will only be able to write to you again in October. We will leave the New Zealand questions for another time, in the meantime the New Zealand works will have to be finished anyway.

My children are healthy and well and give us daily pleasure.

What do you say to the steps taken in the Austro-German situation? One is very eagerly awaiting further developments.⁴³⁶

I will also get the diploma of the German geological society in Berlin for you.

⁴³⁴ The remains of *Plesiosaurus australis* (Owen), were from the Waipara River, Canterbury, New Zealand. See Hochstetter, translated by Fleming, *Geology of New Zealand*, p. 4.

⁴³⁵ Hochstetter's sister Franziska Sophie Wilhelmine Hochstetter (1831-1910), married Karl Friedrich Stochdorph (1824-1908) in Esslingen on 24 July 1855. They lived in Naples, Italy, where Stochdorph was a merchant. The visit to Naples is also referred to in H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 345.

⁴³⁶ The 16 August 1863, the date of this letter, was also the date of the start of the so called "Fürstentag" in Frankfurt am Main. On this occasion the Austrian Government invited all the German states to negotiate a reform of the German Confederation. Prior to this the "Reformverein" had been founded by Julius Fröbel under directions from the Austrian Government in 1862, which was intended to counter the Prussian "Nationalverein". The "Deutsche Frage" ("German Question" also known as the "Schleswig-Holstein Question"), was basically one of either Prussian or Austrian supremacy in the German Confederation. See Görlich-Romanik, *Geschichte Österreichs*, Innsbruck, Tyrolia, 1970, p. 409.

And now, good luck, esteemed friend. By the way, the Richmond sandstones are now definitely identified as Triassic (Cretaceous), just as I originally said in my Nelson lecture.

With heart and hand

Yours,

Ferdinand Hochstetter

You will sense a degree of haste in this letter as I have to go to town.

38. Ferdinand Hochstetter to Julius Haast, Vienna 18 October 1863, MS 37 folder 182.

Vienna, 18 October 1863

Most esteemed friend

I am dating my letter Vienna although I am beginning it on the steamer between Pressburg and Vienna and will then probably post it from Vienna. I have two of your letters to answer as both the mail of September and October brought me one letter each. I did not write in September; I went on a very nice journey to Italy and through Switzerland, St Gotthardt, Lago Maggiore, Genoa, Naples, Rome, Florence, Bologna, and Venice. On 3 October I was back in Vienna. My wife and children were with my brother during my absence, and I picked them up from my brother on 7 October, and since then I have been back in Vienna doing the usual things and giving daily lectures.

Now in reply to your letters: I am doubly pleased to have been elected as an honorary member of the Canterbury Philosophical Society, as I am also proud of the worthy president of the institute, whom I may call my student. I congratulate you on your election as fellow of the Geological Society F. G. S., which is definitely the most important title for you.

In response to your question concerning the sanidine lava and basalt or dolorite, a transition stage between the two rocks is not impossible, but not likely. That the two rocks of Banks Peninsula, the crystalline and the dense black, merge into each other is stated for a fact in your reports; you should therefore call them both Trachydolorite, and you will thereby describe a middle rock, which on the one hand can take on the characteristics of trachyte and on the other those of dolorite.

I already confirmed the receipt of £20 in my last letter.

The second letter brought my wife the friendly lines from your wife, which gave her great pleasure, and which she answers with the enclosed. It will be a fine festive day when we see each other again and we can introduce our wives to each other. The photograph gave us great joy and the little one must now learn to pronounce the name of her godfather.

The case with the copies of the New Zealand book went off to Dalgety in London, and as I hear from there went on board the *Alpaca*, under Captain Jordan, on 1 September, from London to Christchurch, and will hopefully arrive soon after this letter.⁴³⁷ In the meantime the atlas with six maps and a short text has also been published, and I will send it to you at the first opportunity. My New Zealand book has been well received, both Archduke Ferdinand Maximilian and the Emperor presented me with an impressive diamond ring featuring their monograms, and this recognition made me very happy. But the English translation has not happened yet and it is not for a lack of translators, but rather I have not been successful in persuading an English publisher to take on the book. It is strange how a German publisher can sell 2000 copies but the English publishers shy away. Recently Mr Tancred in Bonn, the brother of the former postmaster general in Auckland,⁴³⁸ very kindly offered to do the translation himself, and I replied that I would be

⁴³⁷ The barque *Alpaca*, 439 tons, under Captain Jordan, arrived in Lyttelton on 26 January 1864. See "Arrival of the Alpaca", *The Lyttelton Times*, 28 January 1864.

⁴³⁸ Henry John Tancred (1816-1884) was the Postmaster-General in Auckland at the time of Hochstetter's visit in 1859. His brother was Sir Thomas Tancred (1808-1880), who had spent some time in Canterbury in the 1850s, he then went back to Europe only to return to New Zealand in 1872.

happy to consider any suggestion, if he is able to find an English publisher. I am hoping that the geological report will be finished this winter.

My wife and I are very pleased to hear of your domestic bliss. Family happiness is the only true happiness on earth. My children are developing very well and give us much pleasure, thank God.

Dr Stache has just brought me the letter he received from you. It would be rather charming if Stache could come to Nelson, and I will not fail to write to the superintendent about it.

I close for today as there are a number of other matters of business waiting for me.

With sincere regards to you and your wife

Yours,

Ferdinand Hochstetter

Postscript: The book by Dr Stache and von Hauer⁴³⁹ on Transylvania was published just the other day, and Dr Stache says he will give me a copy for you, which I can then send with the next shipment. Dr Stache thanks you for your letter and your efforts, and will write to you again himself.

39. Ferdinand Hochstetter to Julius Haast, Vienna 20 December 1863, MS 37 folder 182.

Vienna, 20 December 1863

Most esteemed friend

I did not find the time to write to you by the last mail as any number of tasks fully occupied my time. I am therefore making up for lost time now, and will start by answering your letter of 12 September.

When you dispatch the next case of plants etc. that you mentioned, do not forget to also include seeds for me, as my brother the gardener asks for them in nearly every letter he writes. I received the maps of Canterbury in due course and distributed them to the various addresses. I also used the opportunity, which presented itself when I handed over your maps to the Geographical Society, to speak about your work and the expedition of Hector and Whitcombe.⁴⁴⁰ A few days earlier an article on your work appeared in *Petermanns Mittheilungen* with a map. By this mail, the day before yesterday, I received reports and newspapers, which were of great interest to me. But I shall have to read them again in the Christmas holidays at leisure and will then be able to make further comments. On a normal day I hardly have time to read the daily newspapers. In the meantime I have nominated you for membership of the German geological society in Berlin, and the day before yesterday I received the message that the diploma had been sent to your agent Marshman in London.⁴⁴¹ Gustav Rose⁴⁴² and Dr Roth⁴⁴³ seconded my nomination. So I can congratulate you on your new honour and another new diploma, so they must really be piling up now. The publications of the society will be sent to you via Marshman. I paid the subscription for three years in advance and debited your account with me. I will write the account for the £20 you sent me later when more transactions have been added.

⁴³⁹ Franz Ritter von Hauer (1822-1899), Austrian geologist, who later became the director of the Imperial Geological Survey of Austria and the Natural History Museum in Vienna.

⁴⁴⁰ John Henry Whitcombe (died 1863), was trained as a civil engineer and came to New Zealand in 1857 and appointed provincial surveyor of Canterbury. In May 1863 he set out on an expedition together with Jacob Lauper and crossed what was later named Whitcombe's Pass, but he was drowned while crossing the flooded Teremakau River.

⁴⁴¹ The certificate is dated 5 November 1863 and is signed by Gustav Rose. It reads: "*Der Vorstand der Deutschen geologischen Gesellschaft beehrt sich Ihnen hierdurch anzuzeigen, dass Sie in Folge des Vorschlages der Herrn G. Rose, Roth, v. Hochstetter in der am 4 November 1863 in Berlin abgehaltenen Sitzung als Mitglied der Gesellschaft verzeichnet worden sind. | Berlin, den 5ten November 1863 | Für den Vorstand G. Rose | Herrn Dr J. Haast | Christchurch, Prov. Canterbury | New Zealand.*" MS papers 0171, Alexander Turnbull Library.

⁴⁴² Gustav Rose (1798-1873), German geologist and mineralogist.

⁴⁴³ Justus Roth (1818-1892), German geologist.

Today I can also let you know that I sent a parcel to your brother-in-law Rossum⁴⁴⁴ in Bonn for you. The parcel contains a copy of Stache's book on Transylvania as a present from Dr Stache, and also a copy of the geological atlas of New Zealand, which I ask you to forward to the Nelson Museum in Nelson for me, and finally a number of little trifles for you and your wife, which my wife enclosed, as it just happened to be Christmas. How wonderful it would be if we could spend a Christmas or New Year's Eve together. As this is not possible then may these products of Viennese industry be a token from us to let you know that we have been thinking of you at this time.

The seventh sheet and sixteen plates of the geology of New Zealand have been printed, and it is progressing daily. The volume will probably be forty sheets thick, bigger than the popular book. The German reviews are praising the book all too much. But nonetheless the latest efforts to find an English publisher have again failed. Tancred's efforts have also been of no avail up until now, so that I have now given up all hope. But that is how the English are; they distrust anything foreign, and do not make the effort to get to know it more closely.

One hundred copies of the New Zealand atlas were sent by Justus Perthes to Dr Fischer, so copies are available for sale from there.⁴⁴⁵

I am also enclosing herewith my reply and thanks for the honourable election as member of the Philosophical Institute, and express to you as president my special thanks for the same.

You write in your last letter that I should tell you about my children. Well, thanks to God, I can tell you that they are doing very well. Georgiana Julie is already walking through all the rooms in the house, can say everything, and is beginning to retell little stories. Soon I will show her New Zealand on the map and globe and teach her where her godfather is. Arthur is a chubby and very lively boy, who is making his first attempts to crawl on all fours now, and where he can hold on, to stand up. You cannot imagine how much pleasure my children give me. When I come home at lunchtime they run up to me cheering. I wish you and your wife had a pair of such lively children. That is the greatest happiness in this world.

What do you say to the Danish quarrels? Tomorrow, 21 December, 22,000 men of the German federal forces are moving to the execution in Holstein,⁴⁴⁶ and everyone is very keenly waiting to see whether the Danes, who are relying on England and Sweden for support, will offer any resistance. A further 40,000 men are standing by as reserves, to move in at any moment, if it really comes to a conflict. The whole of Germany is in a feverish state of excitement, everywhere collections are being made for Schleswig-Holstein, and people are singing and drinking for it. I for my part want the war for the sake of Germany's honour.

And now goodbye, dear friend. I wish you from my heart a good and happy New Year, to you and your dear wife and your first child.

Your faithful friend,
Ferdinand Hochstetter

⁴⁴⁴ Rossum was Haast's brother-in-law. Haast's sister Veronica Rossum, nee Haast, married Rossum in Bonn.

⁴⁴⁵ Dr Carl Fischer had offered to act as agent for the atlas and Hochstetter had asked for at least 100 copies to be sent to Fischer, as we read in a Hochstetter letter to Petermann dated 18 October 1863, in which he writes "Heute nun betone ich nochmals sehr dringend, daß doch die Perthes'sche Verlagshandlung schleunigst ein Packet mit wenigstens 100 Exemplaren des Neu-Seeland Atlas nach Neu-Seeland abgehen lassen möge. Mein Freund Dr. Fischer in Auckland, der sich als Agent für den Verkauf angeboten, hat mich brieflich dringend darum ersucht. Das Exemplar der Prov. Aucklandkarte, welches ich vor mehreren Monaten absandte, ist jetzt – da voller Krieg mit den Maori's ausgebrochen – in den Händen des commandirenden Generals. Es ist die einzige Karte, welche den kriegführenden Engländern Aufschluß über das Innere der Nordinsel gibt!!" The last part of this excerpt provides evidence of the practical use Hochstetter's maps were put to in New Zealand. See Briefsammlung Hochstetter, Sammlung Perthes, Schriftleitung Petermanns Geographische Mitteilungen, Forschungsbibliothek Gotha, Germany.

⁴⁴⁶ Following the death of King Friedrich VII of Denmark in April 1863, the question of succession led to the people of Schleswig-Holstein not recognising the new ruler. On 23rd and 24th of December troops from Saxony and Hannover marched into Holstein under orders of the German Confederation. In January 1864 Austria and Prussia decided to occupy Schleswig; war broke out on 1 February 1864 after Denmark had rejected an ultimatum. See Görlich-Romanik, *Geschichte Österreichs*, Innsbruck, Tyrolia, 1970, p. 410.

40. Ferdinand Hochstetter to Julius Haast, Vienna 9 February 1864, MS 37 folder 183.

Vienna, 9 February 1864

Most esteemed friend

Unfortunately I did not get to write to you last month, and will do so all the more conscientiously this month; therefore I am already starting today, sometime before the posting date. First of all, in answer to your letters of 11 November and 10 October: I have given the two specimens indicated by you as no. 5 and II from Banks Peninsula to the laboratory at the Polytechnic Institute for analysis, but will be lucky if I get the results by May or June. Unfortunately things are not so good here in this regard as all the laboratories are over-run with work, and one cannot get by with money. By the way, I examined the two rocks again more carefully and came to the conclusion that they are both the same, the darker one is just fresher and the lighter one more weathered. The glassy feldspar is oligoclase in both, the black crystals are augite in both, so it is an oligoclase-augite rock, therefore a trachyte-dolorite, which is pyroxene-andesite, which in turn is the same as andesitic trachyte.

Unfortunately I cannot send you the photograph of Mt Cook etc. yet as Professor Simony developed an eye problem which has prevented him from completing the execution of the picture. But I think it will be finished before the spring, and I will send it to you as soon as I have it on hand. The geological part is being printed busily but it will not be published before autumn. Sixteen sheets are printed so far and there will be a total of 50 with many plates, of which twenty are also finished. The photograph is also going to be included in the geological report.

Now to get on to your very private request. I already understood the first hint, and have since kept an eye on the matter, and it shall happen, but I beg you to still have a little patience. Just last summer I was instrumental in arranging for Dr Mueller in Melbourne to receive the Order of Franz Joseph, and I hope to be able to do the same for you. But I cannot do these things directly and have to go through the Imperial museums; when your new shipment arrives for Fenzl and Frauenfeld, then the time will have come to forge the steel, while it is hot. *Nous verrons a dit l'aveugle* – we'll see, said the blind man. So far I have achieved everything that you have asked for, and I hope to be able to succeed this time too. Be so good as to include some seeds in the case for my brother.

And now on another topic. By now a copy of my New Zealand book is hopefully in your hands. Despite all efforts the English translation in London has not happened. That means there is nothing left but to translate it in New Zealand; that is, a new edition could be worked on, without necessarily being a strict translation of every chapter. I am now thinking that you and Dr Fischer in Auckland could do this together: you doing the more geological and the South Island and Dr Fischer the North Island.⁴⁴⁷ This would also provide an opportunity to add and expand and basically have it published as a revised version. Many of the chapters that I had aimed at a German readership, like the natives, the war, and prose and poetry could be left out. Dr Fischer wrote to me saying that he would take the matter on, if you did not want to, but I think it would be better if you did it together. Do think about it and arrange it with Dr Fischer.

In Europe, that is here, the war with Denmark is captivating all attention. It started on 1 February, and even today perhaps the Danes may have been chased from all their strongholds by the Prussians and Austrians, maybe the whole Danish army that was in Schleswig is today already destroyed. The field campaign was carried out with unprecedented energy and speed and continues to this day despite the most terrible weather; albeit with considerable losses. On the German side it will already have cost more than 1000 men, but Randsburg, Schleswig, also Danewerk⁴⁴⁸ and Flensburg are already in German hands. The English are furious at the aggression of the German superpowers, and in his fury Palmerston⁴⁴⁹ is throwing the meanest

⁴⁴⁷ This proposal is mentioned in H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 363.

⁴⁴⁸ Danewerk, a historical boundary between German Schleswig Holstein and Denmark.

⁴⁴⁹ Henry John Temple Palmerston (1784-1865), English statesman and Prime Minister.

insulting speeches against Germany in Parliament. If the English made everything they say come true then Germany would have long since been at war with England. But England will come to its senses. In the meantime the matter has come to the point where the German people would greet a war against England with jubilation, due to the crazy, unfair insults from the English against Germany. But may God spare us from this. I see the Germans and English as two brothers who will have a major row from time to time, but won't take each other on with knife in hand, and therefore I think Denmark will go to pieces without England and Germany going after one another. As an example, I send a cutting from the *Wiener Zeitung*.⁴⁵⁰

My wife and children are well. Your godchild celebrated her second birthday on 19 January. I gave her sweets in your name, for which she sends you a nice kiss, and I put the change in her piggy bank, and together with my wife express my thanks for your kindness to the child. My boy is growing chubby and strong and will soon be walking.

When may we congratulate you?

My sincere thanks,

Your faithful,

Ferdinand Hochstetter

41. Ferdinand Hochstetter to Julius Haast, Vienna 16 March 1864, MS 37 folder 183.

Vienna, 16 March 1864

Most esteemed friend

Since my last letter to you, two of yours have reached me dated 10 December and 10 January, and God be praised, they both brought me good news about you and your wife. I assume that by the time this reaches you, your wife will have given you a prince, on which occasion my wife and I congratulate you from all our hearts, and to whom I send greetings and a kiss as my New Zealand godson.

Now, in answer to your letters: I always follow the events in New Zealand with just as much interest as I follow the developments in Schleswig, where our army is fighting. I am pleased for the Maori and the colonists that the war has come to an end. The new discovery of coal on the Waikato is ridiculous. By the way I find it very annoying that they went ahead and published my map without the mention of my name. Heaphy won himself a medal in London with my maps and now I am being totally ignored. I do wish to ask you, should things continue in this way, that you would represent my interests through one of the New Zealand newspapers. Hopefully my New Zealand book is now in your hands; albeit in German. Despite all efforts, I did not succeed in terms of an English edition. But I wrote about that in my last letter.⁴⁵¹ The printing of the geological report is already half completed. It will be ready to be published by mid-summer. I will already send you off-prints of the palaeontological sections before then. The whole thing will become a very nice volume, even thicker than the Cotta "New Zealand" work. The volcanic formations especially take up a large portion of it. When this volume is finished, there will then be another volume on my geological observations at the various points along the route of the voyage. By 1866 I hope to have completely finished writing up the results of the *Novara* expedition. I sent the case with the copies of my New Zealand book to Dalgety & Company in London and hopefully these have long since arrived.

I passed on the things you wanted to have analysed to Carl von Hauer,⁴⁵² the chemist of the Geological Survey, for analysis, and he promised to have them ready by May or June. The

⁴⁵⁰ This sentence is a marginal note in the manuscript letter.

⁴⁵¹ See Hochstetter letter to Haast no. 40 dated 9 February 1864.

⁴⁵² Carl or Karl Ritter von Hauer (1819-1880), was head of the chemical laboratories at the "Geologische Reichsanstalt", (Imperial Geological Survey of Austria) in Vienna from 1854-1879. The results of von Hauer's analyses of the rocks and minerals occurring in the Province of Canterbury were included in an appendix of Haast's report "Geological Survey of the Province of Canterbury" which was presented on 2 August 1864. See H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 352.

trachytes of Banks Peninsula are being worked on. In regard to these, I can let you know that I closely examined the loose feldspar crystals VII.c from Mt Pleasant, and found that they are highly unusual double twin crystals. According to the Carlsbad Twin law, the individual twins that have grown together are themselves joined together again according to the normal albite law, so that the surface shows a streak. This already proves that it is not sanidine, and the specific gravity was found to be 2.74, which fits well with andesine, which is a glassy variety of oligoclase. Now I am also examining the crystals ingrown in the rock; all of them show a twin streak and nowhere have I found sanidine, except in the light phenolithic trachytes, for example no. 1. In the darker rocks, which weather a lighter colour, the feldspar is monoclinic and most probably andesine. The rocks are therefore andesite of trachytic dolerite.

You must not draw conclusions too soon on the sub-marine nature of the formation of Banks Peninsula. Tuff layers, which have been burned red by lava flows that have flowed over them, could well be of super-marine origin. However, in no way do I wish to counter your theory that part of Banks Peninsula was formed at sub-marine level. Yet sub-marine formed layers never lie steeply angled, and that which is part of the actual cone is certainly super-marine in origin. I am already looking forward in eager anticipation to your future publications. I was also very pleased and proud to read the praise given by Murchison in regard to your paper for the London Geographical Society. But in London I am also being totally ignored. This is understandable of course, as I send neither correspondence nor papers to maintain a presence in the memory of these gentlemen, and they do not take notice of German publications.

I will soon make use of your permission to spend 50 gulden of your funds for the purposes of the rock analysis, and this will be very necessary if it is to be finished as soon as I would wish.

I also wish to thank you for your geological essay that I received in your last letter; it came very fittingly, just when I was about to send my chapter on the South Island to the printers and I was still able to change the passage on the Alps according to your communication. In your future examinations I recommend you to apply appropriate local names for the strata whose geological age cannot yet be determined on the basis of fossil evidence, but are otherwise well characterised by the rock type and fossils. Just as I used Maitai slate and Richmond sandstone etc. in Nelson. One thereby provisionally identifies the order and later one reaches a definitive identification of the formation. There are a few remarks that I will only be able to write in my next letter when I have read over your communications in more detail. But I can already say now that I would not apply the term melaphyre for Tertiary igneous rocks and instead term the Tertiary ones as dolerite. And now, enough of geological matters.

In my family all is well, thank God. My children are doing very well. Georgiana Julie is now more than two years old, she can say everything, and she knows her uncle Haast from your portrait and is an extremely cheerful and intelligent child who gives us a great deal of pleasure every day. My son turned one yesterday and is referred to as the model boy by his grandparents and friends, as he is so chubby and strong, and behaves so well. It is bad, but he never cries without reason, like other children. My children are my pleasure and my pride. My wife is also fresh and cheerful and did a great deal of singing this winter. We live a quiet family life and only go out to larger social gatherings in the salons of the posh and rich once a fortnight, where my wife then charms the people with her singing and cheerful disposition – for which she is famous in Vienna.

I am still suffering under my throat problem, a hypertrophy of the mucus membrane in the back of the throat, as the doctors say, and nothing is helping. I am now looking forward to the summer. But despite this ailment, I am growing big and obese, and have almost caught up with you.

I am not pleased with my position. 1500 gulden in the most expensive city on the continent – is almost ridiculous and with the miserable financial situation in Austria, one cannot expect an improvement in any hurry, a rise in pay for professors has already been applied for

twelve years ago. Apart from that my position has some pleasant aspects. The best part is certainly the fine collection which I have built up during these two years.

Public interest is still totally absorbed by the war with Denmark. Wüllerstorff, who was out of favour for three years is now suddenly back in favour, much to my pleasure, is the commander of the Austrian flotilla of twelve war ships as Rear Admiral, and will confront the Danes in the channel.

King Maximilian of Bavaria⁴⁵³ has died and the king of Württemberg is lying on his death bed and the small German states will most likely soon collapse. Circumstances are as confused as possible. What will come of it all?

England is playing a ridiculous role: first it sets up Denmark, insults Prussia and Austria, and does nothing for Denmark against Prussia and Austria and will probably end up going against Napoleon⁴⁵⁴ once he shows his true colours, together with Prussia and Austria. In the meantime Archduke Maximilian is Emperor of Mexico.

With sincere regards from me, my wife and from your godchild,

Yours,

Ferdinand Hochstetter

42. Ferdinand Hochstetter to Julius Haast, Vienna 13 May 1864, MS 37 folder 183.

Vienna, 13 May 1864

Most esteemed friend

I did not get to write to you by the last mail, so I will do so all the more conscientiously this time. I received your letters with news, which always give me great pleasure, including the last letter which told me of the arrival of the ship carrying the books. I am now very eagerly anticipating the next mail, which will tell me how the book has been received. I already have news from Fischer and Petschler which made me very happy. The printing of the geological report has now also made considerable progress, with 36 sheets and 26 plates already in final form, and the remainder will soon follow, so that the whole thing will be finished this summer. Only then will I have left New Zealand completely behind me.

The analysis of your rocks is in full progress, the two trachytes are already finished and I am only awaiting the analysis of the andesite feldspars, and I hope to be able to send you these three analyses by the next mail. The others, quartz trachyte and melaphyre, have also been started. The Mt Cook picture is unfortunately not finished yet. Simony promised it to me for this week but has again not kept his word. In the meantime it definitely has to be photographed by May. You will be amazed. By this mail I received programmes for the New Zealand exhibition from Dunedin,⁴⁵⁵ and passed these on to the commerce association here. Whether someone from here will be exhibiting is rather doubtful though. Petschler wrote to me by the last mail concerning an Austrian consulate for New Zealand and I gave his submission to the Ministry of Foreign Affairs here, but rather doubt whether something will happen in any hurry, with the slow mode of working here, especially in that department. I did present the matter as being of urgency in the light of the exhibition and the expected emigration to the North Island, but here nothing is urgent which is of concern to internal affairs, let alone foreign affairs.

Our navy has had its first water and blood baptism at the mouth of the Elbe River: two Austrian frigates against three Danish ships, two frigates and one corvette.⁴⁵⁶ The perfidious English spied for the Danes and an English steamer prevented one of our Frigates from grappling one of the Danish frigates by its perfidious manoeuvring during the battle. Unfortunately one of

⁴⁵³ Maximilian II, King of Bavaria (1811-1864) was succeeded by his son on 10 March 1864.

⁴⁵⁴ Napoleon III of France, Louis-Napoleon Bonaparte (1808-1873), first president of the French Republic and later ruler of the Second French Empire.

⁴⁵⁵ Dunedin Exhibition officially called "The New Zealand Industrial Exhibition 1865".

⁴⁵⁶ This refers to the naval battle fought between Germany (Austria) and Denmark at Helgoland on 9 May 1864.

our frigates, the *Schwarzenberg*,⁴⁵⁷ was set on fire during the battle, so that our ships had to retreat, but only after the Danish ships had been dealt an equal degree of damage. In the British parliament a Danish victory was proclaimed with great jubilation. The whole of Germany is so embittered against the English that one might almost think it could come to a war. For now a one-month truce has been entered into, but nobody believes that the Prussians will leave the German duchies again.

Wüllerstorf is admiral of the Austrian fleet in the North Sea, but was absent from the place of battle with a large part of the ships, one liner and two frigates, when the conflict took place. The English are angry that Austrian warships have appeared in the North Sea and speak of having the whole Austrian fleet sunk by their channel fleet. *Nous verrons* – we shall see!

My family is well. The children are doing well, which is a pleasure to behold. Little Georgiana Julie knows her uncle Haast, who is far far away, quite well from his portrait, and hopes that he might come here sometime. Hopefully your wife has completely recovered from her illness, and perhaps I may already congratulate you now on a prince or princess – probably by the time my letter reaches you anyway. Best wishes from me and my wife on this special occasion. My wife sends her best thanks in advance for the present of a table you have given her, and is looking forward to it in eager anticipation. I will exhibit it in our new museum of arts and industries when it arrives.

In which journal did Miss Dobson Collet⁴⁵⁸ review my book? I would be very interested in getting this article, as I collect all the reviews that I can get hold of. As far as your intention to name some peaks in New Zealand Mt Francis Joseph and Mt Max, I think this is most commendable. Max is now Emperor of Mexico and left for there on the *Novara* in April. But I would really also like to see Wüllerstorf geographically immortalised, could you not perhaps create such a monument?⁴⁵⁹ Unfortunately I did not find a suitable occasion to do so on my maps.

With the current state of affairs between England and Germany there will be very few prospects for Stache, but I did write to Robinson about it.

Professor Fenzl is looking forward to your new shipment.

I am sending you herewith my table of rocks, which is included in my New Zealand book, together with a newspaper clipping, from which you will see what the mood is in England. I received and read with great interest the report by Dr Hector you sent me. But there is too much colonialism and not enough geology in it for me. He seems to be withholding his geological results. I don't really understand this. Otherwise the report is good and interesting, but you may be reassured as to your reports and works and especially your expeditions, that they are far superior to Hector's. Do collect fossils most diligently; there must still be amazing things in New Zealand. The day before yesterday I handed the academy an article on nephrite,⁴⁶⁰ which I will send you as soon as it is published. I will write to Dalgety about the table top. Do search in the mud layers in the drift formations for organic remains.

This time I will probably spend my holidays, which begin at the start of August, in Silesia, and maybe make a small excursion to the Carpathians.

I am now at the stage in the working up of the *Novara* expedition results, where I am working on the island of St. Paul, Nicobar Islands etc. and hope to have everything finished by the time you come here. Do you know Dana's *Geology*? It was published in Philadelphia in 1863

⁴⁵⁷ Imperial Austrian frigate *Schwarzenberg*.

⁴⁵⁸ Sophie Dobson Collet (1822-1894), English author and editor. Heinrich von Haast writes: "As she understood German he [Haast] asks her for her opinion on Hochstetter's *New Zealand*." See H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 322 note.

⁴⁵⁹ Haast must have attempted to name a mountain range in Westland after Wüllerstorf-Urbair, but on the map this appeared as "Muellerstorf Range" and the name is not found on modern maps. See Colin James Burrows, *Julius Haast in the Southern Alps*, Christchurch, Canterbury University Press, 2005, p. 179.

⁴⁶⁰ Ferdinand von Hochstetter, "Über das Vorkommen und die verschiedenen Abarten von neuseeländischem Nephrit (Punamu der Maoris)", *Sitzungsbericht der kaiserlichen Akademie der Wissenschaften. Mathematisch-naturwissenschaftliche Classe*, vol. 49, 1864, pp. 466-480.

and is also available from Trübner & Company in London⁴⁶¹ – an outstanding work, although almost exclusively on the geology of North America.

And now it is time to say goodbye, and with sincere good luck to you, your dear wife and your prince,

Yours,

Ferdinand Hochstetter

43. Ferdinand Hochstetter to Julius Haast, Vienna 12 June 1864, MS 37 folder 183.

Vienna, 12 June 1864

Most esteemed friend

The last mail did not bring me the news of you, your wife and your prince⁴⁶² as I had hoped, so this mail, which I am expecting any day now, will bring it most certainly. In the meantime, in the first few days of this month the fine table top arrived, which you gave my wife as a kind and valuable present, and it is being accorded the appropriate level of admiration from friends and relatives. The fine cabinetwork alone already deserves the highest recognition, but the New Zealand timbers are truly amazing. Unfortunately my knowledge of New Zealand lets me down when I am asked the question: ‘what are these timbers called?’. I always have to answer with a Nicobarean *non savais* – I do not know.⁴⁶³ Perhaps you could at least let me know some of the names, for example the grained timber, the remarkable tiger or zebra wood, the finely striped one, and the light one with a silky sheen etc.



Figure 9: Wood grain

In the autumn, when the season begins again, I will exhibit the table in our museum of arts and industries, and I am sure it will be all the rave in Vienna. My wife has not written her letter of thanks yet, as we have had many visitors in the last few days. In the meantime I express to you my and my wife’s thanks for the grand and precious gift, which gave double pleasure, firstly because it is from you and secondly because it comes from New Zealand. As for us, here in Germany, unlike in England, we do not go so far as to forsake personal friendships in the interests of politics. Note I am writing to you as a German, not as an Englishman. Today I read an article from Sydney, in which one can see that the Danish-English swindle has even gone to the heads of people on the other side of the world. A sarcastic article, wherein there is talk of the Austrian education of the two Maori Toetoe and Rerehau, having made them enemies of the English and having turned them into rebels, and saying that one fine day the *Novara* entered Port Jackson with warring intentions, and that she was spying, and could now come back again, and other such crazy things.

Hopefully now the whole conflict will soon be over, and Denmark and England will have learned a good lesson, as there is no suggestion of the Germans leaving Schleswig again. With this anti-German fever which has gripped the whole of the English nation, there are obviously no prospects for Stache anymore. He has therefore given up his plans to go to New Zealand for now, and I held back my letter to Robinson. Under these circumstances there is also little prospect of my gaining any recognition in England for my New Zealand work. Despite this I continue working and am just correcting the last sheet of the geological report, which will be ready for publication in July. But in my hands it has grown into two volumes and the palaeontological

⁴⁶¹ James Dwight Dana (1813-1895), American geologist, mineralogist and zoologist. Haast owned Dana’s *A System of Mineralogy: comprising the most recent discoveries*, New York and London, 1850; and *A Manual of Geology: Treating of the principle of the science with special reference to American geological history*, Philadelphia, Theodore Bliss, 1867. See H. von Haast, *Catalogue of the Books belonging to the late Sir Julius von Haast*, p. 6.

⁴⁶² Julius and Mary von Haast’s eldest son, Heinrich Ferdinand von Haast (1864-1953).

⁴⁶³ *non savais*, (*Old French*) = I don’t know; (*Modern French*) = je ne sais pas.

volume will not be finished before October, although it is also half printed. You will receive the first copies and I am hoping that they might still arrive in New Zealand in time to be exhibited in Dunedin.

Now, getting on to another subject: a committee has been formed for the celebration of Haidinger's 70th birthday in February of next year when his bust in Carrara marble is to be erected in the Geological Survey of which he is the founder. I am in charge of the matter and have taken the liberty to add your name to the list of subscribers for this purpose. Was I wrong to put you down for 25 gulden in Austrian currency? I ask you in hindsight for your authorisation of the same. Perhaps Dr Hector will also make a contribution; for which he will then become a corresponding member of the Geological Survey, if he is not already one. Perhaps you could let him know about it when you get a chance and the same for Crawford.⁴⁶⁴

Enclosed you will find a photograph of my family, taken on my birthday on 30 April; you can see how your godchild is growing.⁴⁶⁵

Today I received newspapers from Auckland, which brought me the latest news of the war. So fighting is going on at Rangiawhia and Maungatautari. Who would have thought of that four years ago when we were happily wandering through the area, getting on with the natives on the best terms. *Sic transit gloria mundi* – thus the glory of the world passeth away.

By the next mail I hope to be able to send you a series of analyses and a photograph of Mt Cook, as Simony is now finishing the picture after I have been reminding him on an almost daily basis. Will you be taking part in the Dunedin exhibition?

14 June

I was expecting your letter today but as it has not come I will leave mine lying here for another day.

16 June

Today I received your letter, which gave me great pleasure and told me that you had received my book and were very pleased with it, which pleased me doubly. The German newspapers continue to publish the most glowing reviews and the sales of the book have been better than anticipated. But from New Zealand yours and friend Fischer's and Petschler's lines have been the only ones about the book and from England it has not been mentioned with a single syllable – even Hooker has not written even though I sent him a copy. I was very pleased to hear what you wrote to me about the Dunedin Exhibition. Our thoughts must have crossed, as I wanted to ask you to take my New Zealand book, the atlas and the large geological report in two volumes and exhibit them under my name in Dunedin. Hector asks you who is going to write the geology of the North Island. I have written it and it is lying in front of me nearly completely printed with maps and almost 40 lithographic plates, albeit in German. But an English excerpt from it could still be published. I will try to send you at least the first volume of the geological work by the next mail, or at the latest by the mail after next. The second volume of geology will only be finished in October, but it may still come in time though. I do ask you to make sure that no one copies me again, without even mentioning my name. It seems that Heaphy did this repeatedly. You will find a number of new things for yourself in the geological volume. The province of Nelson is also treated in depth. You will find this section useful for your overview.

Just think – my dunite is just plain olivine. Pure olivine as a mountain form, as an igneous mass rock type; that is unheard of and is a completely new confirmed result. Here is a printed excerpt from a larger paper on nephrite (Pounamu) which I presented to the academy. This excerpt will fit nicely into your chapter on Canterbury. The photograph of Mt Cook will hopefully be finished tonight, and I will enclose the first print of it for you, and later send a number of prints in larger and smaller format. A print in the larger format could then also be

⁴⁶⁴ James Coutts Crawford (1817-1889), was appointed Wellington provincial geologist in 1861. Crawford was the president of the Wellington Philosophical Society and a member of the Royal Geological Society of Vienna. See *Dictionary of New Zealand Biography*, vol. 1, p. 93.

⁴⁶⁵ Photograph of Georgiana von Hochstetter and her two children Georgiana Julie and Arthur, 30 April 1864, photographed by Heinrich Harmson, PA2-0833, Alexander Turnbull Library.

exhibited in Dunedin. Would Dunedin not be inclined to acquire a skeleton of *Palapteryx ingens*, to exhibit at the exhibition?

My wife sends her best thanks to your wife for her letter, which she received enclosed with mine. She had to go to a funeral this afternoon otherwise she would have written herself. Tomorrow I am leaving on a three-day trip to Hungary where I am visiting my father-in-law at the spa. Our holidays are in mid July, which I am happily looking forward to with impatience.

You write about a collection of New Zealand alpine plants; if you send me a collection with your next consignment then I will certainly make sure it goes to the best recipient. The University of Tübingen would certainly be highly honoured to receive such a collection. But I would also like to have a souvenir of your botanical successes, even if it is only a miniature collection of alpine plants discovered by you.

Esteemed friend⁴⁶⁶

I want to insert a few hurried words in my husband's letter to express to you my best and most sincere thanks for the fine present which you were kind enough to send me. The wood is most outstanding and awakes my greatest admiration and the workmanship makes it a real masterpiece, such as one would hardly believe could be produced in the antipodes. It will certainly serve as a very fine decoration in my salon and is now already much talked about in our social circles. We are awaiting the news of your wife's deliverance with great impatience, and I hope that all went well for her, please give her my warmest regards.

You are greeted in friendship,

Your salient friend,

Georgiana Hochstetter⁴⁶⁷



9. Georgiana von Hochstetter and two children,
photograph by Heinrich Harmsen, 1864.
(PA2-0833, Alexander Turnbull Library).

⁴⁶⁶ Letter from Georgiana von Hochstetter to Haast.

⁴⁶⁷ In the manuscript the letter by Georgiana is in the middle of Hochstetter's, it has been moved to the end to avoid confusion, and because this would have been the authorial intention.

44. Ferdinand Hochstetter to Julius Haast, Vienna 16 July 1864, MS 37 folder 183.

Vienna, 16 July 1864

Most esteemed friend

Just now I received your letter of 11 May with the news that your wife has given birth to a son.⁴⁶⁸ So, only now, do my and my wife's congratulations definitely apply. We hope that mother and child are all well and the little one is doing well. A fresh and healthy child is the greatest joy on earth, and a boy especially is the father's pride and rejuvenation. I am therefore doubly pleased for you. So, good luck to you and your wife on this happy occasion.

Enclosed you will now find the requested analyses. Three were done in the laboratory of the Polytechnic Institute and six by Carl von Hauer⁴⁶⁹ in the laboratory of the Geological Survey. I was able to get the former at no cost, and for the latter I paid the honorarium of 50 gulden indicated by you. The analyses are all very reliable. Some of the results surprised me, especially XXXIV⁴⁷⁰ and the feldspar crystals, which proved to be labradorite. You can also see from the analyses that the black dolorite lava II and the grey I are the same. So dolorite is actually the predominant rock of Banks Peninsula, and that is how it shall remain. When you use the analyses I ask you to mention the names of the chemists.⁴⁷¹ At the same time I am now sending you a few good prints of the Mt Cook picture, and contents and overview of the first volume of the geological report; the second volume is only palaeontological. By the next mail I will send you, via London, the first volume all complete and the second as far as it has been printed. I would have liked to have sent you the individual sheets, but our postal system here does not accept printed matter for New Zealand, and to send each sheet via London would have been too awkward. The geology is dealt with in detail and if there are things you still wish to include in the Otago book, then I authorise you to give the work to whoever is doing it, I only ask you that my name be mentioned and not ignored completely, as Heaphy did. If possible I will send a case of copies to you and Dr Fischer via London, which will come in time so that a copy may still be exhibited in Otago. If not, then take the copy that is coming by the next mail for you to the exhibition. Perhaps the palaeontological section will still be completed on time for the Otago exhibition. At this stage it is only half printed. A number of copies of the Mt Cook picture⁴⁷² in large, medium and small format will also be dispatched to you, as I imagine that you will be pleased to have copies of it to distribute. I will send copies from here to Hooker, Tyndall and Murchison in London. For the sake of my friend Simony, who has put a great deal of effort into the execution of the picture, I hope that you will take a large copy of the photograph to be exhibited in Otago for me, and that Simony may gain a foreign mention. Perhaps you can arrange that.

Now, my best thanks for your efforts in regard to an English translation of my work. That is very kind of you and I will write to England and to Sir Tancred, and then let you know by the next mail how successful these renewed steps have been. I already wrote to you in my last letter the highly remarkable result that dunite is olivine rock. Farewell for now, I do not have time for more.

With sincerest regards from me and my wife to the entire Haast family,

⁴⁶⁸ See earlier note regarding the birth of Haast's son Heinrich Ferdinand von Haast (1864-1953). The date of Haast's letter mentioned was the exact day that Heinrich Ferdinand von Haast was born, 11 May 1864. See H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 327.

⁴⁶⁹ Carl von Hauer (1819-1880).

⁴⁷⁰ This number is a reference to a manuscript list by Haast sent to Hochstetter with the rock specimens. The list is headed: "Liste der Felsarten: Neu Seeland – Julius Haast, Mt Pleasant. Banks Peninsula. Tunnel Survey", and numbered I – XXXIV and I – 280. Original manuscript list held in Strassgschwandtner Private Collection, Vienna.

⁴⁷¹ Haast acknowledged the chemists when he published the results of these analyses in Julius von Haast, *Geology of Canterbury and Westland*, 1879, p. 313 note, 337 and 352. Haast writes "Chevalier Charles de Hauer" and later Carl Ritter von Hauer when referring to specimens analysed in Vienna in 1863.

⁴⁷² This was used as a frontispiece in Hochstetter, *Geologie von Neu-Seeland*, 1864, and in the translation by Charles Fleming, *Geology of New Zealand*, 1959.

Yours faithfully,
Ferdinand Hochstetter

As soon as the case arrives I will put it to good use.⁴⁷³

45. Ferdinand Hochstetter to Julius Haast, Vienna 21 September 1864, MS 37 folder 183.

Vienna 21 September 1864

Most esteemed friend

Unfortunately I did not get to write to you by the last mail, as I was in Carinthia and Carniola on an assignment of the Academy of Science, to search for lake dwellings, of which I found traces at various locations.⁴⁷⁴ I returned yesterday and found your kind letter of 20 May to 5 June had arrived. I acknowledge the receipt of £10 for your credit. It is a great pleasure for me to be godfather to Henry Ferdinand Haast, and my wife joins me in sending best wishes to you and your wife.⁴⁷⁵ I am eagerly anticipating the arrival of the next consignment, and then I will forge the steel and hopefully turn it into the form of a decent award for you.

I took note of your remarks on the Bohemian goldfields.⁴⁷⁶ I will see what can be done. You may be correct and I will come back to it another time.

We hope that your wife is completely well again. I already wrote to you that I had sent the scientific report on New Zealand in two volumes, the second unfortunately still incomplete, to you through Marshman, but I do not know whether he sent it by post or by ship; I ordered per post, but he wrote to me to enquire about it again as it would cost 30 gulden, and I was unable to reply as I was away, but I hope that even by ship you will still get it in time for the Otago exhibition. But now to get to the main reason for my writing today, in regard to the English edition of my New Zealand book. I had written to Tancred in response to your first letter, to say that he should begin the translation, and Tancred wrote to me that he could only do so once the sum had been approved by the New Zealand parliament and the matter had been sorted out with an English bookseller. But the English booksellers are extremely stubborn, so I turned to Cotta and came to the positive result that Cotta are prepared to take on the publication of the English edition themselves under the following conditions.

1. The colonial parliament of New Zealand would have to guarantee the sum of £525 to the company J. G. Cotta in Stuttgart. For this Cotta would agree to supply the colonial government with 500 completely bound copies of the New Zealand book, like the original, post free as far as Rotterdam or Hamburg.

⁴⁷³ This sentence appears as a note in the upper margin of the manuscript letter. The German original states more literally: 'I will work the iron while it is still warm,' which means to use an opportunity while it is there.

⁴⁷⁴ Ferdinand von Hochstetter, "Bericht über Nachforschungen nach Pfahlbauten in den Seen von Kärnten und Krain", *Sitzungsbericht der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Classe*, vol. 51, 1865, pp. 261-282.

⁴⁷⁵ Henry was the name that Julius and Mary von Haast had first considered for their first son. Heinrich Ferdinand von Haast (1864-1953), New Zealand barrister and solicitor; eldest son of Julius and Mary von Haast, and author of *The Life and Times of Sir Julius von Haast*. See p. 327, regarding the name Ferdinand after Hochstetter his godfather. This would also have been in response to Hochstetter's eldest daughter having been named Julie, after her godfather Julius von Haast. In an excerpt of a letter cited by Heinrich von Haast, Julius writes: "Mary is so happy and proud with her baby, whom we shall probably call Henry", H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 329.

⁴⁷⁶ Some years later Haast wrote to Franz von Hauer on his views on the Bohemian goldfields and how modern methods would make the gold extraction there feasible again. In a letter to Hauer dated „Glückauf Christchurch 18 March 1870“ he wrote: „Was etwaige Goldfelder in Böhmen betrifft, so bin ich fest überzeugt, dass mit den jetzigen so vielfach verbesserten Waschmethoden, – hydraulisch und auf andere Weise – manches Terrain sich bezahlen dürfte, welches den früheren Goldgräbern im Mittelalter nicht zugänglich war. So z. B. arbeiten wir jetzt alte Alluvionen an der Westküste auf, in einer Tiefe von 150-200 Fuss, welche indessen nur mit Dampfmaschinen von 100 Pferdekraft frei vom Wasser gehalten werden können, und doch trotz der grossen Kosten ausgezeichnete Dividenden bezahlen“, "Bericht vom 30 Juni 1870", *Verhandlungen der k.k. geologischen Reichsanstalt*, no. 9, 1870, pp. 157-158.

2. The company J. G. Cotta would have to be allowed to print a further 500 to 600 copies over and above the 500 and put these on the English market or sell these to English booksellers at a retail price of not less than one Guinea per copy.

These are Cotta's conditions. Cotta has now turned to English booksellers, but has not succeeded in finding a company yet that is prepared to take over the 500 to 600 copies.

But as I have no doubt, that apart from the 500 copies for the New Zealand government, it will be possible to sell a further 500 copies through the book trade, I have written to Cotta about this, so I think there is nothing in the way now. I have therefore had the translation started at my own risk and ask you to take care that we do not get stuck. I think Cotta's conditions are very acceptable. It is basically just a subscription by New Zealand for 500 copies at one guinea each. New Zealand will get 500 copies for its money. I definitely want to change the English edition so that it includes some things from the geological report, and therefore complete the geological aspect and instead leave out some chapters, such as those on history, travel and literature. Be good enough to write me your opinion on this matter. Perhaps it would also be possible to include some of yours and Dr Hector's results, which would be very important for the English market. I ask you therefore to make sure that the guarantee for the £525 or 500 copies is granted, as only then can the printing really begin. If you can get more, then that is all the better. If by return mail your reply brings me a guarantee from you or the Christchurch parliament, which would also be sufficient for me as Cotta in turn would accept my guarantee, then the printing can begin straight away and be carried out as quickly as possible, so that the book can be ready in spring; approximately May 1865.

I have written about these conditions to Dr Fischer as well, so he can work on it in Auckland. If an honorarium for the English edition could be found for me then that would please me very much, as I can certainly use it; and you can see from the geological report that I have written up and published my New Zealand observations as promised, which was no small task.

And now it is time to say goodbye.

Sincerely, your friend,
Ferdinand Hochstetter

Dr Mayr,⁴⁷⁷ our expert on ants, asks whether there are ants in New Zealand.

I will send Miss Dobson in London a copy of the geology of New Zealand, and I have another translator instead of Tancred, as Cotta has taken over the matter, that way the excuse is simple.

46. Ferdinand Hochstetter to Julius Haast, Vienna 21 October 1864, MS 37 folder 183.

Vienna, 21 October 1864⁴⁷⁸

Most esteemed friend

Your letter of 9 August reached me on 20 October, and almost at the same time I received the 24 alpine maps that were enclosed in the case for Fenzl. I have not had time to visit Fenzl yet, but will do so soon, and will then work on your private matter, although one cannot expect a definitive result before January or February when the Lord High Chamberlain, Count Auersperg,⁴⁷⁹ comes here again, as I can only reach the desired result if I speak to him personally. I sent the geological volume and half of the palaeontological one, as far as it had been finished, to London for you two months ago. The analyses of the rocks and the picture of the Alps etc. have also been sent to you already in earlier letters, and have hopefully all arrived by now. Today I am enclosing the identification of the 24 specimens. Wüllerstorf is the name, not Wüllersdorf, as you wrote. I was very pleased to get the good news from you and your dear wife

⁴⁷⁷ Dr Gustav L. Mayr (1830-1908), Austrian entomologist who contributed the sections on Formicidae and Hemiptera to volumes two and three of the zoological part of the official publications of the *Novara* expedition.

⁴⁷⁸ The year inserted later in blue pencil on manuscript letter.

⁴⁷⁹ Karl (Carlos) Wilhelm Philipp Fürst von Auersperg (1814-1890), Austrian politician, "Präsident des Herrenhauses" 1861-1867.

and my little godson. I am expecting an addition to my family in the next eight days, and then I will already have a trio.

Fischer has ordered one thousand copies of the maps of the New Zealand atlas from Perthes and I admire his courage. Will it really be possible to sell a thousand copies?⁴⁸⁰ I want to thank you both for correcting the translation of my notes. The English translation of the large book has also now been started, after Cotta agreed to take over the publication of the English edition under the conditions I wrote to you in my last letter. But unfortunately the matter is again giving me a lot of work, as I have to correct the translator too much, so I am already thinking of looking for another translator. I am now eagerly anticipating your definitive communication in regard to the English edition.

Be so kind as to let me know straight away if Heaphy publishes anything in the newspapers against my comments. I am also keen to get the book on New Zealand, which is being published on the occasion of the exhibition; please send me a copy straight away.

As far as I know the German geological society does not issue any special membership diplomas; at least I do not have one. If you have received the books you will find in one of the proceedings of the meetings that you became a member on the bases of nominations by me, Roth and Rose.

I will soon send a large case with copies of the geology of New Zealand and will also enclose a copy for Hector. You will receive the copies for Canterbury from our friend Fischer in Auckland.

I will do everything in my power in the matter of your private business.

Together with warmest regards from my wife,

Yours,

Ferdinand Hochstetter

47. Ferdinand Hochstetter to Julius Haast, Vienna 20 November 1864, MS 37 folder 183.

Vienna, 20 November 1864

Most esteemed friend

I have not received a letter from you this time, not yet anyhow. I already answered your last letter of 9 August, and that only leaves me to report on that which is new here.

Firstly, my family has again increased, as my wife gave me another little daughter on 25 October.⁴⁸¹ Fortunately, all went very well and both mother and child are well.

Secondly, your private matter is now going well. I discussed the matter with Fenzl, who was in full agreement and only asked me if you were not politically suspect, to which I replied – not that I know of. I put together a list of your titles, honorary positions and contributions in relation to the Imperial Botanical Museum, the Imperial Museum of Natural Curiosities, and the Imperial Mineralogical Museum etc., and the matter will now run its course, just the way it did with Mueller in Melbourne. So just have a little more patience, good things take a long time.

Your kakapos arrived quite scruffy-looking, but they now look very nice – first rate specimens. By the last mail I also sent you the rock analyses.

3. A young engineer named H. Czerwonka⁴⁸² from Brunswick boarded the *Mermaid* bound for Port Lyttleton⁴⁸³ in New Zealand, partly on my advice, in order to go from there to

⁴⁸⁰ We find the answer to Hochstetter's question in a letter he wrote to Cotta dated "Wien, den 10 Febr. 1866", in which he says that Fischer still has more than half the 1000 copies left unsold and could they be used for the English edition of Hochstetter's *New Zealand*, 1867. See Hochstetter letters to Cotta, Cotta-Archiv, Deutsches Literaturarchiv, Marbach am Neckar. Hochstetter also asked to be paid his author's fee for the 1000 copies 'sold' to Fischer in New Zealand, as we read in Hochstetter's letter to August Petermann dated 2 November 1865: "Und nun noch eine kleine Bitte. Würden Sie nicht so gefällig sein, für mich bei Herrn Perthes anzufragen, wie es sich mit der Honorarrechnung für die engl. Ausgabe des Atlas von N.S. (1000 Ex. an Dr Fischer in Auckland) verhält. Ich habe beim Jahres Abschluß immer auch gerne alle pekuniären Dinge abgeschlossen.", Briefsammlung Hochstetter, Sammlung Perthes, Schriftleitung Petermanns Geographische Mitteilungen, Forschungsbibliothek Gotha, Germany.

⁴⁸¹ Emma Alexandra Theodora von Hochstetter (1864-1941), the Hochstetter's third child, was born on 25 October; Emma later married Felix Edler von Luschan (1854-1924) and resided in Berlin.

Dunedin, where he hopes to find a position in railway construction. He will certainly introduce himself to you in Christchurch, and wished to know the whereabouts of the engineer Alex. Smith or the contractor Mr Davis. Perhaps you could enquire about these gentlemen from Hector when you get a chance. I ask you to support Mr Czerwonka with good advice; he would also stay in Christchurch if there was work for him there. I do not know the man personally. He approached me by mail several times.

4. The last New Zealand newspapers brought me Heaphy's meanness under the title Major Heaphy and Dr Hochstetter.⁴⁸⁴ Lies from beginning to end; positively lies. I soon wrote a reply and sent it to the editor of *The New Zealander*.⁴⁸⁵ The matter is quite disagreeable to me and if I had known that Fischer was going to translate the text of the atlas, then I would have written to him asking him to suppress the section against Heaphy, as one wants to avoid scandals with people of that nature at all cost. He does not hesitate to lie, saying I did not use his name in connection with the woodcuts and illustrations, and yet every illustration that stems from his hand is published under his name. He claims I copied his map of Auckland and Nelson! He does not hesitate to write that he mentioned me when he published the map of Auckland and cites a comment by Sir Charles Lyell on his essay, in order to protect my scientific property against his silence. I will send you a copy of my reply by next mail, but I hope that Fischer has already replied in response to this personal libel against me.⁴⁸⁶

5. The English translation is making fast progress, and I am expecting a decision as soon as possible on Cotta's application through your mediation, so that we are not left sitting here with our English translation.

6. The palaeontological volume will be completely finished by December, and then I will send both volumes to you at once. I hope that the two volumes I sent to you have arrived and will be taken to the exhibition in Dunedin by you. Enclosed is an off-print on dunite.⁴⁸⁷

With sincere regards to you, your wife and child,

Yours,

Ferdinand Hochstetter

48. Ferdinand Hochstetter to Julius Haast, Vienna 19 January 1865, MS 37 folder 183.

Vienna, 19 January 1865

Most esteemed friend

Your letters of 15 September and 13 November reached me on 14 December and 14 January. I can therefore confirm receipt of the diploma for Haidinger and the photograph of your dear wife and of Heinrich Ferdinand, which gave us much pleasure. My wife will thank your wife herself in the next letter; for now she asked me to convey her best regards and thanks. I am writing on the third birthday of my little daughter Georgiana Julie, and I gave her coral bracelets, as you instructed, for which she sends her uncle, who should come here quite soon, many kisses.

⁴⁸² H Czerwonka – a letter from Czerwonka to Haast dated Shortland 6 December 1869, indicates that Haast provided Czerwonka with financial support in the form of a loan, which was not repayed until 1869. Czerwonka also received support from others including Dr C. F. Fischer in Auckland. MS papers 37, Alexander Turnbull Library.

⁴⁸³ The *Mermaid* was a clipper ship of 1233 tons under Captain Henry Rose, which arrived at Lyttelton on 16 February 1864 carrying 358 passengers. See "Arrival of the Mermaid", *The Lyttelton Times*, 18 February 1864.

⁴⁸⁴ This subject has been discussed in a number of papers and articles: See for example Alan Mason, "The Hochstetter – Heaphy Controversy: Or Whose Map Was It?" *Historical Studies Group Newsletter*, no. 25, September 2002, pp. 31-40; and "The Hochstetter – Heaphy Controversy: Some further information", *Historical Studies Group Newsletter*, no. 27, September 2003, pp. 33-40. For a well balanced scholarly discussion see: Carmia Shoeman, "Heaphy vs. Hochstetter: Controversy vs. Legacy", in: Richard Bade, ed., *German Perspectives on New Zealand and the Pacific from the Eighteenth Century to the Present Day*, Working Paper No. 7, Auckland, University of Auckland Research Centre for Germanic Connections with New Zealand and the Pacific, 2012, pp. 17-31.

⁴⁸⁵ The *New-Zealander* was founded by John Williams (1815-1875) in 1845 and edited by him until 7 May 1866 when the office burnt down and the newspaper stopped. See *Dictionary of New Zealand Biography*, vol 1, p. 599.

⁴⁸⁶ A translation of this passage is given in H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 364.

⁴⁸⁷ Hochstetter published an article on Dunite in 1864: "Dunit, körniger Olivinfels vom Dun Mountain bei Nelson, Neu-Seeland", *Zeitschrift der Deutschen Geologischen Gesellschaft*, vol. 16, 1864, pp. 341-344.

The little girl is doing very well and due to her liveliness and beautiful blond locks she is admired by all who know her. My little boy and the smallest girl are also doing well, and so the professor's family is constantly growing. May God grant that everything will continue so happily and that one day we may be able to meet each other again in person, together with our loved ones.

I will hand over the diploma to Haidinger on 5 February. The bust came out very well. But we accumulated so much money that there was still enough for a nice present for Haidinger. We had an artificial gold crystal made of exactly one ounce in weight as a button on a letter weight, and I am only sorry that we could not foresee this, otherwise I would have ordered a lump of gold from Australia or New Zealand, but these are unfortunately too rare in this country.

I had hoped to perhaps already hear from you in your last letter about the reception of Cotta's conditions, as the English translation is almost completed, so that in February, when the confirmation arrives, the printing might soon begin. I hope that my letters on this matter to you and our friend Fischer still arrived in time. Perhaps the next mail will bring me a reassurance on this.

Finally the case with copies of the first geological volume has been dispatched via London to Sir George Grey in Auckland, and you will receive copies from Auckland. The second palaeontological part is now also finished, made up of 42 printed sheets with 26 plates. The dispatch of this second part, which is most impressive, will take another 1½ months. Once this and the English translation are also gone, then I will finally be able to say that I am finished with New Zealand after five years of work. There has been no lack of scientific recognition from Germany, but I am not satisfied with England, and materially the huge task bore few fruits. But enough; I have fulfilled my duty and kept my word, so I can be satisfied with that. Hopefully the geological work and the first half of the palaeontological one, as far as it was finished, still reached you in time for the Dunedin Exhibition.

I placed all the contributors to the Haidinger bust on the list and with the next case of books I will send you the confirmation, photographs of the bust, and corresponding membership diplomas of the Geological Survey etc.

In your private matter nothing has been decided yet, though it is in progress; but everything takes a long time with us. Yet I will and I must succeed in making it happen. Just give me time.

My best thanks for your letter 'Fair Play'.⁴⁸⁸ I sent my reply to Fischer.

I was very interested in Dr Hector's photographs of *Palapteryx*, but the restored specimen gave us much to laugh about, but that stays between us. I am eagerly anticipating your publications. I see you are picking up on the questions that are current in London. That is fine. I now already have a very nice collection of New Zealand photographs; if you can find things from geologically remarkable areas or other things of interest then I will always be pleased to receive them.

I could not write to you by the last mail as too much piled up at the end of the year.

Figure 10: Ink sketch by Georgiana Julie von Hochstetter

⁴⁸⁸ This is in reference to the letter Haast wrote under the pseudonym "Fair Play" that was published in *The Lyttelton Times*, 15 September 1864, in which he writes that Hochstetter would deal with the matter himself, in due course. See H. F. von Haast, *The Life and Times of Sir Julius von Haast*, 364.

Original handwriting of the little birthday girl.⁴⁸⁹ A big kiss for dear uncle Haast, from Georgiana Julie Hochstetter.⁴⁹⁰

Now you also have the work of the Dunedin Exhibition behind you, and I may congratulate you on your victory in the provincial parliament, on the curatorship of the museum and on the exhibition medal.⁴⁹¹

Petschler wrote to me by this mail that he is coming to Vienna in May and I am really looking forward to his visit. I also had letters from Fischer by this mail. I always look forward to the New Zealand mail with the eagerness of a child.

I recently received fossils from Australia from Dr Mueller, though mainly Tertiary ones, but still a nice and valuable collection.

I still have not congratulated you and your wife on the New Year yet either. I am thinking that the year 1865 will also increase your family again.

Just imagine, in New Caledonia the same Triassic layers have been found with the same *Monotis richmondiana* as the beds in Nelson.

I am taking part as little as possible in the Shrovetide carnival. Goodbye for now.

With sincerest regards,

Yours,

Ferdinand Hochstetter

49. Ferdinand Hochstetter to Julius Haast, Vienna 20 March 1865, MS 37 folder 183.

Vienna, 20 March 1865

Most esteemed friend

Yesterday I received your long awaited letter of 10-15 January. My wife and I read with sadness the news of the illness of your dear wife and my little godchild, but we hope that by now all will long since have become healthy and well and that the continuation of this New Year was better for you than the beginning. The last mail brought me your "Canterbury Plains" and the reports, and I distributed the latter in accordance with your instructions. I admire the former report. Until now I have only read through it, but I found it so convincing, that I soon decided to give up my previous position on this, and to rework the applicable chapter for the English edition of my New Zealand. I congratulate you on this report, in which a real geological problem has been more successfully solved than in any previous works. This report will bring you much honour.⁴⁹² I will only study it in detail when I work on the chapter.

⁴⁸⁹ Note on drawing in manuscript letter.

⁴⁹⁰ Georgiana Julie Hochstetter. Caption written below drawing in manuscript letter followed by small child's scribble as signature.

⁴⁹¹ Haast was awarded a silver medal at "The New Zealand Industrial Exhibition 1865" in Dunedin. The official report states that Haast was awarded a silver medal: "For his interesting and instructive Essay on the Physical Geography and Geology of the Provinces of Canterbury, Nelson, and Marlborough; his extensive and admirably arranged Collections, illustrating the Physical History of the same Provinces; his general services to New Zealand as a Naturalist and Explorer; and his zealous efforts to promote the success of the Exhibition." *New Zealand Exhibition, 1865: Reports and Awards of the Jurors: and Appendix*, Dunedin, 1866, p. 509. See also a letter dated October 1866, signed by Alfred Eccles, which states: "The Commissioners of the New Zealand Exhibition 1865 have awarded you a Silver medal in the following terms: | Award. | Julius Haast, Ph.D. F.G.S. F.L.S. &c &c &c Canterbury. | For his interesting & instructive Essay on the Physical Geography and Geology of the Provinces of Canterbury Nelson and Marlborough; his Entries in and admirably arranged Collections illustrating the Physical History of the same Province; his general services to New Zealand as a Naturalist and Explorer; and his zealous efforts to promote the success of the Exhibition." MS papers 0171, Alexander Turnbull Library.

⁴⁹² Excerpts from the first part of this letter were published in translation in a notice which begins: "Dr. Haast. – We have persuaded Dr. Haast – in justice to that gentleman we are bound to say somewhat against his will – to permit us to publish the following extract of a letter which he has recently received from Dr. Hochstetter, on the subject of his recent Report on the Canterbury Plains. There are many persons in this province who doubt whether any benefit is derived from the employment of the Provincial Geologist, and who are in the habit of underrating his labours amongst us. It is therefore right that the public should know that Dr. Haast's labours are attracting the attention of, and are highly appreciated by, some of the most eminent geologists in Europe; and it cannot but be felt to be a credit to the Government and public of Canterbury that so young a community should have added something to the scientific knowledge of the day by securing the services of a gentleman whose labours are thus highly spoken of by men whose approval it is an honor to have earned.", *The Press*, 22 July 1865. This passage from the letter is also published in translation in H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 355.

I had arranged everything in regard to the English edition, so that by the time your last letter came the English translation was all finished, and I was expecting the definitive decision on the £525 demanded by Cotta, in order to then be able to start with the printing without delay. This definitive decision has not come yet as your letter tells me, but your friendship has nonetheless made it possible for me to give Cotta the instructions to start printing, as postponement in this case would have meant the same as to abrogate. I thank you very much for doing me this big favour in friendship by guaranteeing the above sum. But I only accept half of it. I will also be happy to take on part of the risk. Today I wrote to Cotta that I would personally guarantee the £525, on the basis of your guarantee, as Cotta had already written to me earlier saying that he would accept a personal guarantee of payment for the above sum from me. I now have to pay this sum to Cotta by 1 January 1866, if the matter does not, as your letter indicates, resolve itself in any other way before then. I hope the book will be printed in four months, and it could therefore be in New Zealand by the end of this year, and I ask you to let me know to which address the case with the 500 copies is to be sent. At the same time I do have to ask of your friendship the favour that, in order that I might fulfil my obligations by 1 January 1866, in case the matter has not been settled in some official way and the sum of £525 has not been sent to Cotta or myself before you receive this letter, that you will then send me a bill of exchange for £250, which is part of the sum in order that I might fulfil my obligations by 1 January 1866, and I will gladly find the other half here, in order to carry a portion of the risk with you, until we have covered ourselves through the sale of the 500 copies in New Zealand. I will certainly get you the complimentary copies you wished for. In the meantime, I am optimistically hoping that everything will still work out fine on an official level and that it will not be necessary for you to actually send me the £250. But in any case I thank you for the extraordinary mark of friendship of your guarantee, as thereby the English edition has now really become possible, and it is due to you, and I am forever obliged to you for this.

I congratulate you on 'Leopold von Buch III'⁴⁹³ from the academy of German naturalists, and I also nominated you as a member of the science academy in Frankfurt on Main, and hope to send you the diploma with the books. The Order of Franz Joseph is secured for you, but a strange coincidence has held up the matter. The first application to the Lord High Chamberlain was intercepted by Fenzl's servant, to whom he had given the letter, as the matter was taking too long for me. I went to the master in chancery, Aulic Councillor Hofrat Raimond, and found to my surprise that he had not received the document, so it had to be written a second time.

I for my part do not doubt that the matter will be successfully settled, as the Aulic Councillor assured me, and so I hope to be able to congratulate you on the Knight of the Order of Francis Joseph by the next mail. Two friends who stand by one another can do a great deal for each other.

It was very reassuring for me to read in your last letter that the geological report had arrived in New Zealand in time to be brought to Dunedin.

I think that as a whole the translation of my *New Zealand* will have turned out well. Although the translator is a native German, he has spent more than twenty years in North America, and has already worked on scientific works and journals there.⁴⁹⁴

I will write with regard to the translation of the geological work in my next letter.

I will close for now. The Haidinger celebration was glorious, and I will send the reports for the subscribers from New Zealand at some stage. They will all receive diplomas as corresponding members of the Geological Survey.

My three children are all healthy and well. With sincerest regards from my wife and me,

Yours,

Ferdinand Hochstetter

⁴⁹³ The cognomen was in fact "Buch IV", see H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 346.

⁴⁹⁴ The translator was Edward Sauter, the principal of Little Rock Academy in Arkansas, United States of America.

50. Ferdinand Hochstetter to Julius Haast, Vienna 20 May 1865, MS 37 folder 183.

Vienna 20 May 1865.

Victory!

Congratulations! Member of the Order! Congratulations!

Most esteemed friend

I did not write to you by the last mail, as I was anticipating the decision of the Lord High Chamberlain's office with each day, and in the meantime I missed the mailing date. The decision arrived this week. You are a Knight of the Order of Francis Joseph⁴⁹⁵ and the medal is already on its way to the Austrian Embassy in London⁴⁹⁶ for you, and will be forwarded to you by the British Embassy. Sincerest congratulations from me and my wife. The matter has now been successfully achieved and I will allow myself to drink champagne to the health of the decorated one, as Petschler is just dining with me. And to your prince! Hip hip Hurrah!

Now you have to send a well-formulated letter of thanks to His Imperial Royal Apostolic Majesty Franz Joseph I, Emperor of Austria. It would be best if you sent it through the Austrian Embassy in London.⁴⁹⁷ Director Fenzl played the role of mediator in the matter, as he is a court official as the director of the Botanical Museum, so you may thank him also. I am happy like a child, because I know it will make you happy. And for our collections and for me you deserved the award.

And now going on to the tiresome English edition of my New Zealand. After my last letter you will now be under the impression that the printing is half-finished. That is what I had hoped too, but unfortunately that is not the case. Although Cotta accepted your guarantee without further ado, I had completely forgotten about the second condition imposed by Cotta earlier, which is still unfulfilled; namely the condition that an English company takes over the remainder of the print run of 500 copies. All efforts in this direction have failed so far. I turned to Murchison for help, but alas, his intervention in the matter did not help either. Cotta has now turned to America, in an effort to be able to sell part of the edition there, but I am afraid that this step will not help either. Cotta only wants to print the book if he can print an edition of 1000 copies. But despite everything, it will still happen, as soon as I get the guarantee of £525 from New Zealand, as I have decided to arrange it with Cotta in such a way that I will forgo any royalty, and take on a part of the second half of the English edition, maybe 200 to 300 copies, if he takes over the risk of the other half, and that I may then get to receive some kind of fee if we share the profits. Cotta will go in for this arrangement, and in any case I will have to pay or at least guarantee approximately £150, and if I can count on your help with this then you will very much oblige me. I am certain that we will sell the edition, and that the money will come back in. But you will understand that there is no way that I could let the printing begin when everything was still uncertain, and the risk for 1000 copies would have rested on my shoulders and yours; I

⁴⁹⁵ The diploma dated 13 April 1865 reads: "*Seine kaiserlich königliche apostolische Majestät* | haben mit allerhöchstem Kabinettschreiben vom 12ten April 1865 dem Herrn Doktor Julius Haast zu Christchurch in Neuseeland das Ritterkreuz Allerhöchst ihres Franz-Joseph Ordens huldreichst zu verleihen geruht. | Die Kanzlei des Ordens hat die Ehre im Anschlusse die entsprechende Dekoration mit dem Ersuchen zu übermitteln, den beiliegenden Revers wegen dereinstiger Zurückstellung derselben an den Ordensschatz mit Beisetzung des Datums, gefälligst eigenhändig unterfertigen und anher einsenden zu wollen. | Wien, den 13 April 1865. | [signed by] v. Lichtenfels | Ordens-Kanzler." MS papers 0171, Alexander Turnbull Library.

⁴⁹⁶ A letter from the Austrian Embassy in London to Haast dated 3 May 1865 reads: "*K.K. Oesterreichische Botschaft in London.* | London, den 3 Mai 1865. | Wohlgeborner Herr, | Es gereicht mir zur wahren Befriedigung Euer Wohlgeboren mittheilen zu können, daß Seine k.k. Apostolische Majestät geruht haben Ihnen das Ritterkreuz des Franz-Joseph Ordens allergnädigst zu verleihen. | In der Anlage beehre ich mich Euer Wohlgeboren die bezügliche Dekoration sammt Notificationsschreiben der Ordenskanzlei, mit dem Ersuchen, zu übermitteln, den gleichfalls mit folgenden Revers unterfertigen und, zur weiteren Veranlassung, anher rückerleiten zu wollen. | Empfangen Eure Wohlgeboren den Ausdruck meiner vollkommenen Hochachtung. | Der k.k. Botschafter | [signed] | Seiner Wohlgeboren | dem Herrn Dr Julius Haast." MS papers 0171, Alexander Turnbull Library.

⁴⁹⁷ There are several lines of deleted text on the first page of the manuscript letter, which are given here for reference and comparison, with the words not deleted shown in italics. Hochstetter originally wrote: "[...] kannst dasselbe entweder direkt, durch das engl. Gouvernement oder durch mich einsenden. Durch das engl. Guvern wäre offiziell der passendste Weg, *da Du*, die Dekoration durch diese bekämmst, oder *am aller besten* du schickst das Schreiben an *die Österr. Gesandtschaft in London*. Jedoch wie Du willst."

could not allow myself to go that far. In the meantime, however, if Cotta finds an American bookseller for the second half of the edition, then the printing will begin on the basis of my guarantee and yours for the first half of the edition. In either case, however, if you have sent funds with your last letter, then this money will be used entirely in your interest and according to your intentions, either for its intended purpose, or if it is not needed, I will deposit it in an interest bearing account, until you wish to use it in some other way. I discussed the whole thing with Petschler repeatedly, and Petschler was also of the opinion that as I might have to make use of your help to cover the second half of the edition, I should definitely wait with the printing, until the New Zealand government has made a decision. This is now just a matter of a few months, which is annoying, but since the whole thing has become so drawn out, it hardly makes a difference.

My best thanks for your efforts in Dunedin etc., and with regard to Czerwonka etc. This month the case with the palaeontological part will go off to New Zealand, through the English ministry. In the case there are also the Corresponding Membership diplomas for those persons who subscribed to the Haidinger bust, as well as the report on it and some off-prints for you. The palaeontological part has become much thicker than the geological one, and the whole is now certainly a fine work on New Zealand. The dedication to me of the new map of New Zealand would certainly be the most flattering reward for my work and the best revenge against Heaphy. Fischer, as he writes, did not have my reply published,⁴⁹⁸ as the matter has now gone totally to

⁴⁹⁸ Hochstetter sent a letter to Carl Fischer in Auckland on 20 November 1864 regarding the Heaphy controversy, intended for submission to the editor of the *New Zealander* newspaper, but withheld by Fischer and consequently never published. The draft copy held in the Hochstetter Collection Basel states: "To the Editor of the *New Zealander*. | Sir: In the August summary for Europe, of the "New Zealander" on page 3 I meet with a letter, & on page 6 with an article both entitled: Major Heaphy & Dr Hochstetter, the contents of which greatly surprised me. I will believe for Mr Heaphy's honour that he has only been lead, by his perhaps too irritable temper, by thoughtlessly overlooking clearly written words & by total forgetfulness to utter against me the false and quite unjust accusations contained in the afore mentioned letter & article. I must reply to these accusations for the sake of my own honour & the opinion of the population of Auckland to whom I shall ever feel indebted for the kindness bestowed upon me during my stay in the Province. It is not correct that, as Mr Heaphy says in his letter I only mentioned his name on two illustrations and omitted it on six others. On the contrary! On pages XVIII & XIX in the list of illustrations, by the wood-cuts, the originals of which had been drawn by Mr Heaphy (vis: Entrance to the Harbour of Auckland – Mt Egmont – a Cannibal – Mt Eden with the old stockade – a canoe – and Coromandel harbour) – it is expressly mentioned "From Sketches of Heaphy." The drawings of the lake Taupo, Tongariro & Rotomahana, mentioned by Mr Heaphy, were copied by him from my own sketches and from a Photograph by Mr Hamel. Mr Heaphy at that time had not himself been to, nor seen these parts of the country. It is very natural that I mentioned the originals of the Illustrations and not the copies. With regard to the map of Auckland on pages 15 & 16 of my book, it is said according to the truth: "As basis for the geological map of the Auckland district I made use of topographic sketches upon a great scale (1 inch to the mile) with which the Provincial Survey Office provided me." For the geological survey of this District, the attempts made by Mr Heaphy in the year 1857 could be of no use whatever to me – these attempts having been made without the most necessary geological knowledge. This was also the case with Mr Heaphy's geological sketch of the Province of Nelson, which this gentleman mentioned in his letter. It is an incorrect and unjust accusation if Mr Heaphy says, that I did not acknowledge the services which Mr Boulton rendered me. In the same publication (The Geology of New Zealand) in which, as Mr Heaphy remarks, "I (not I, but Dr. Petermann) was so careful as to recite the name of every midshipman of the survey ships" – on page 41 is literally written: perhaps the most perfect specimen of this kind occurred at Otakuhu and near Captain Haultain's a map of which, from actual measurement, has been prepared by Mr. W. Boulton". I am perfectly and conscious of having cited with most anxious care and attention the names of all my friends & protectors, who assisted me during my sojourn in New-Zealand, and supplied me with scientific contributions. Particularly toward Mr Heaphy I lost no opportunity to acknowledge the valuable services he rendered me and to mention his name (Vid: New Zealand p. 15, 17, 21, 103, 109, 384, 386.) I therefore had a right to reciprocity on his part. But in which manner did Mr Heaphy act? In the year 1860, on my return from New Zealand to London, my friend Mr J. R. Jones, secretary to the Geological Society – showed me a manuscript from Mr Heaphy on the volcanic country of Auckland, with a map & illustrations. Among these illustrations were some, the originals of which Mr Heaphy had made in consequence of my invitation and partially after my indications – Mr Heaphy always assured me, what I of course thought to be the truth, that these sketches were in the most disinterested manner intended for the publication I had in view. The manuscript contained to a great extent my own observations and the map was corrected according to my own survey – as the remark: "corrected to February 1859" shows, this being the date of the completion of my survey of the Isthmus of Auckland. The suite of specimens which Mr Heaphy had sent at the same time, contained all the duplicates I had given Mr Heaphy out of my own collection, and not withstanding my name was not mentioned with one syllable! – Should Mr Heaphy in consequence of the afore said, not scruple to appeal to an additional remark on his article and his map in the "Quarterly Journal" as an acknowledgement of my share in his work? I must declare that this remark does not originate from Mr Heaphy, but that my friends Sir Charles Lyell – at that time President of the Geological Society in London, and Mr J. R. Jones – by this addition protected my scientific property against Mr Heaphy's silence. What finally concerns the geological Map of the Province of Auckland which Mr Heaphy sent to the International Exhibition in the year 1861 – it were again friends in London who directed my attention to this new attempt of Mr Heaphy to appropriate to himself what was my literary property. Only now I find

sleep, and he did not want to stir it up again now, just at the moment when the matter of the subsidy is supposed to be passed in parliament. I don't know if he was right, but I can't influence the matter anymore now,⁴⁹⁹ however I will insert a reply on a loose sheet in the English edition.

You can imagine how pleased I was that Petschler came here; I am indulging with him in magnetic antipodean memories. Petschler has taken up a private apartment and will be here for four to five weeks, and he is favoured by the most beautiful weather. But how great our jubilation would be if one day we could have you here, together with your wife and children! When will that happen?

I have not read your articles in the *Quarterly Journal*⁵⁰⁰ yet, but will get to it when I am revising the chapter on Canterbury and the Alps. The latest news from New Zealand was quite numbing – Robinson drowned! Völkner⁵⁰¹ beheaded! Hideous, how will this war end?

So finally your goldfields have matured! My congratulations on this, as it means a new upswing for Canterbury. I would very much like to have small gold samples to the value of £1 from Otago and Canterbury, to compliment my collection. Could you get me these?

With this mail you will have received a letter from a Princess Ruspoli,⁵⁰² who has the fixed idea that she wants to immigrate to New Zealand. She is an enterprising but eccentric woman, without any fortune, who would not allow Petschler or me to dissuade her. As she had made up her mind to go, I suggested Nelson; she has the means to remain in New Zealand for 1 to 2 years, and will then probably return. If you should happen to meet her then I ask you to help her, if her demands don't require any sacrifices – you certainly should not let yourself in for any. The lady is a complete stranger to me, and I am writing to you about her purely out of human interest.

My wife and children are well.

With sincerest regards to yours,

Your loyal friend,

Ferdinand Hochstetter

in the "New-Zealander" at letter dated August 22nd 1864 that "Mr Ed. Ring remembers the acknowledgement of the parts copied from Dr. F. Hochstetter's Plan." – Of what nature this acknowledgement was, I as yet do not know. In the Catalogue of the Exhibition my name was never mentioned and not the real Author of the principal part of the map – but the copier has received the medal! – These observations are sufficient for the just and reasonable observer to decide which of both parties is authorized to complain of the unjust appropriation of the property of the other. With regard to the personal invectives and allusions I do not find it necessary to answer. My friends in Auckland know me & they know Mr Heaphy. It is now five years since I returned home from New Zealand. All the happiness & joy I experienced there I have truly & faithfully put down in my work on New-Zealand. The scientific results which I elaborated with the assistance of numerous scientific friends, form the contents of two large volumes which now lay completed before me. The Imperial Government has liberally offered the means for the publication of this work which only very recently has been brought to an end. These two volumes contain the Geology and Palaeontology essentially of the Provinces of Auckland and I purpose Forwarding numerous copies of this new work to my friends in Auckland I can without hesitation leave the judgement, of their value to the contemporariness and to the posterity. – But shall I allow the happiness and pleasure I feel at the fulfilment of my heavy duty, to be disturbed by unjust attacks?! – Shall abuses and untruths be the only thanks I receive for the five years of labour and troublesome work from the very people for whose special Interest I have unce[a]singly toiled?! Surely not! – I am perfectly convinced that the public opinion in Auckland has already protected me, being absent, against such impure and unscrupulous proceedings – and with this assurance I can safely leave this matter, declaring this to be my first and last reply to Mr Heaphy. Yours etc. Dr. F. v. Hochstetter Vienna – Novbr 15th. 1864."

⁴⁹⁹ In a letter to Fischer, Hochstetter wrote: "In der Heaphy-Angelegenheit theile ich Deine Ansicht; u. danke Dir für Deinen freundschaftlichen Rath. Haast wird allerdings nicht einverstanden sein, daß meine Entgegnung nicht erschienen, allein ich kann von hier aus unmöglich die Verhältnisse beurtheilen." Hochstetter letter to Fischer, dated Wien 20 May 1865, Nachlass Sammlung Felix von Luschan, Handschriftenabteilung, Staatsbibliothek zu Berlin – Preussischer Kulturbesitz.

⁵⁰⁰ Julius von Haast, "Notes on the causes which have led to the Excavation of deep Lake-basins in the Hard Rocks in the Southern Alps of New Zealand", *The Quarterly Journal of the Geological Society*, vol. 21, 1865, pp. 130-132; and "Notes to a Sketch-Map of the Province of Canterbury, New Zealand, showing the Glaciation during the Pleistocene and Recent Periods as far as explored", *The Quarterly Journal of the Geological Society of London*, vol. 21, 25 January 1865, pp. 133-137.

⁵⁰¹ Carl Sylvius Völkner (1819-1865), German missionary in New Zealand, who was murdered by Maori insurgents at Opotiki in 1865. See Anon., "Papers relative to the Murder of the Rev. Carl Sylvius Volkner by Hau Hau Fanatics", *Appendix to the Journals of the House of Representatives of New Zealand*, Section E – 5, Wellington, 1865.

⁵⁰² It has not been possible to identify which "Fürstin" Ruspoli Hochstetter is referring to here.

51. Ferdinand Hochstetter to Julius Haast, Vienna 16 August 1865, MS 37 folder 183.

Vienna, 16 August 1865

Most esteemed friend

Unfortunately I did not write to you by the last mail as I was absent on a journey to Frankfurt and Stuttgart. But the July mail brought me your interesting letter from the new gold town on the West Coast. What amazing things you are experiencing and have experienced in New Zealand! On your return from the goldfields you will have found the fine award the emperor decorated you with, and I am looking forward to hearing what sort of impression this made on you. I hope that you have safely returned to your loved ones and to your house named 'Glückauf', and that you are resting from your strenuous journey. I have been living in the country in Ober-Döbling near Vienna with my family since mid-June, in a house my father-in-law purchased. The beautiful garden around the house is a welcome play area for my children, who are doing very well. The case with the palaeontological part went off to London yesterday, after a lengthy delay, as the commerce report by Scherzer was still to be included. You will eventually receive the volume through Sir George Grey. I also enclosed a small packet of off-prints. In the parcel you will also find the diplomas for the Haidinger subscribers.⁵⁰³ I have now hereby concluded my New Zealand era, as I can see more and more that things are not working out with the English edition of my New Zealand book. It is almost getting too late now anyhow, as much of what is in the book is now already out of date. We – Cotta and I – have made repeated efforts to find an English or American company to take on the second half of the edition, but all in vain, and a definite answer from New Zealand has not yet come either. One must ask what we are to do now, with the completed English translation lying here, and how do we recover the costs of 400 gulden that have accrued for this. This is where I have to appeal to you again. How would it be if you were to revise the New Zealand book in such a way that it becomes a new joint work; the applicable chapters with additions and the necessary changes for those on the North Island, as well as the general chapters from my book, while the South Island section is written by you? In this new form it could then become two volumes and have illustrations printed in New Zealand and thereby make the £40 for the translation. From this new 'New Zealand', which would initially be published in English by the company of Haast and Hochstetter, a German version could then perhaps be worked up later. Think about it. If this is not possible either, then perhaps a New Zealand newspaper might take the translation and publish the chapters one by one in serialised form and then finally the whole thing as a book. In any case there is very little left for me to do except to send you the translation, for you to do with as you please, as long as I get the cost of the translation back for it.

I have not heard of the success of the Dunedin Exhibition yet and hope that this month's mail may bring me the book on geology, which would interest me in the highest degree.

I recently received letters from Neubrandenburg from Petschler, with whom I made good friends when he was staying here, and he will now be in Manchester. By the last mail I received newspapers from Fischer with the reports of Völkner's murder and the behaviour of Reverend Grace. I must say that this news has really upset me. The Maori war will become a terrible genocide due to the fanaticism of the Maori and the indecisiveness of the English government, something that is to be greatly feared.

On matters of European politics you will be informed through your newspapers. Of course it will not come to a war between Austria and Prussia, no matter how popular this would be both in Austria and Prussia. One is reasonable enough to realise that only others would gain from this. The argument between the two major states is a chronic disease, which may lead to a decision, but only when an acute illness is added to it from the outside. I am on holiday at the moment, which I am using to work on the third volume of the *Novara* geology. I was also in Frankfurt at the congress of the German Academy, at which a German Arctic expedition was

⁵⁰³ These two sentences appear as a footnote in the manuscript letter.

discussed. At this gathering I met my friend Neumayer⁵⁰⁴ from Australia. Now the financial means for the expedition needs to be found. I let your relatives in Bonn know that you received the Order. On my journey I saw many fine things from New Zealand with Kaup,⁵⁰⁵ who is the taxidermist at the Hesse Natural History Museum and is in contact with a man from Hesse, by the name of Gerhard Müller⁵⁰⁶ in Invercargill, from whom he has received six specimens of the large nestor and an almost complete *Dinornis casuarinus*.

Warmest regards also from my wife, to you and your dear wife. If you wish to become a member of the German Academy, then I will nominate you as a master.⁵⁰⁷

I just received your letter dated Lake Kaniere, 15 May. You may be very unhappy about the matter of the English edition. But in the end my suggestion in today's letter will be the most practical. I was very pleased about the good news from your family.

Won't you also make a contribution towards the German Arctic Expedition? Your account still has 21 gulden in it and I will send you the statement in the next letter.

Your faithful friend,
Ferdinand Hochstetter

52. Ferdinand Hochstetter to Julius Haast, Vienna 20 September 1865, MS 37 folder 183.

Vienna, 20 September 1865

Most esteemed friend

I have just received your letters dated Hokitika 26 June, and Nelson 12 July. As usual the letter is so full of new and inspiring things that I could almost become jealous, if I was not always so pleased about anything that benefits you. We heard about your wife's accident with numbing sympathy, but hope that you will have found everything all fine again on your return to Christchurch. I read your papers in the second issue of this year's *Quarterly Journal* with great interest;⁵⁰⁸ I only got around to acquiring the journal yesterday. Although Murchison published one of them in the form of an excerpt only, it is interesting enough, and I considered your view to be better founded than all opposing ones. Professor Ramsay⁵⁰⁹ thinks along similar lines, and I have to take some more time to read his articles, in order that I might be fully orientated in the question. The opposing remarks in the anniversary address⁵¹⁰ in the same issue don't mean anything, for there the perspectives of the opponents is not even understood correctly. But I was little pleased by the attitude of Hector's paper on the geology of Otago in the same issue.⁵¹¹ Hector should have written something better, and more, than those unclear views and things; I hope that his actual works are better. The way the president, the author of the address, discusses

⁵⁰⁴ Georg Balthasar Neumayer (1826-1909), German geophysicist and meteorologist who spent some years in Australia.

⁵⁰⁵ Johann Jakob Kaup (1803-1873), German palaeontologist, naturalist and director of the museum in Darmstadt.

⁵⁰⁶ Gerhard Müller (1834/35-1918), a German who worked in New Zealand as surveyor, engineer and land commissioner.

⁵⁰⁷ Haast was made an honorary member and master ("Ehrenmitglied und Meister") of the Hochstift in Frankfurt. The diploma reads: "Das Freie Deutsche Hochstift für Wissenschaft, Künste und allgemeine Bildung in Goethe's Vaterhause | an Herrn Dr. phil. Julius Haast, königl. großbrit. Regierungs-Geologe der Provinz Canterbury und Präsident des Philosophischen Institutes zu Christchurch, Provinz Canterbury, auf Neuseeland. | Frankfurt a. M., den 21 Februar 1864. | Hochgeehrter Herr! Indem wir uns beehren, Ihnen, mit Beziehung auf Satz 27-33 und 37 unserer Satzungen hiedurch ergebenst anzuzeigen, daß Sie auf den Vorschlag der Meisterschaft durch die Mitgliedschaft unserer Stiftung zum Ehrenmitgliede und Meister ernannt worden sind, ertheilen wir Ihnen hiemit die Rechte eines solchen und bitten Sie zugleich, Sich in dem von Ihnen mit so großem Erfolge gepflegten Gebiete der Erdkunde kräftigst an der Thätigkeit des Freien Deutschen Hochstiftes zu betheiligen. | Die Verwaltung des Freien Deutschen Hochstiftes: [signed by:] d. B. Obmann. | d. B. Verwaltungsschreiber. | Schriftführer." MS papers 0171, Alexander Turnbull Library.

⁵⁰⁸ Julius von Haast, "Notes on the causes which have led to the Excavation of deep Lake-basins in the Hard Rocks in the Southern Alps of New Zealand", *The Quarterly Journal of the Geological Society*, vol. 21, 1865, pp. 130-132 and "Notes to a Sketch-Map of the Province of Canterbury, New Zealand, showing the Glaciation during the Pleistocene and Recent Periods as far as explored", *The Quarterly Journal of the Geological Society of London*, vol. 21, 25th January 1865, pp. 133-137.

⁵⁰⁹ Andrew Ramsay (1814-1891), geologist.

⁵¹⁰ William John Hamilton, "The Anniversary Address of the President", *The Quarterly Journal of the Geological Society of London*, vol. 21, part 1, 1865, pp. xxx-cxvi.

⁵¹¹ James Hector, "On the Geology of the Otago, New Zealand", *Quarterly Journal of the Geological Society of London*, 7 December 1864, pp. 124-128.

my work is characteristic of the English national pride, which does not give legitimacy to anything foreign. Before he goes into it any more he wants to await the surveys which our own government in New Zealand carries out, as these will be more comprehensive than what I was able to achieve. Obviously the president has not even made the effort to look at my two volumes, he does not even know of their existence, and thinks that I spent three weeks in New Zealand. That is how shallow a judgement is made of that which is not English.⁵¹² But I hope that next year's presidential address will do it better.

Your plans regarding the paintings are grand, and I am convinced that they will gain a great deal of attention here, and I will make sure that they are presented in the right light. I am looking forward to your detailed article for the journal of our Geographical Society and will also publish excerpts from it in other journals.

In my last letter I wrote in regard to the English edition of my *New Zealand*, and am now still waiting for a definitive answer from parliament, and then I will either instruct Cotta to begin the printing by guaranteeing the other half of the edition myself or otherwise send you the translation in order to carry out our joint plan as outlined in my last letter.

Herewith you will also find a statement of your account with me, from which you will see that things have still not dried up.

I am now in the depth of my work on the second volume of the Novara geology,⁵¹³ the printing of which is to begin in October: St Paul, Nikobar Islands etc.

I was in Southern Bohemia again at the beginning of September to search for *Eozoon canadense* in the limestone there. I found similar things, although they still require a more detailed examination.

I am eagerly anticipating your Nelsoniana.

My wife and children are very well. Sincerest regards to you and your dear wife. I am already looking forward to the year 1867, when we shall have you here.

From the heart

Yours,

Ferdinand Hochstetter.

53. Ferdinand Hochstetter to Julius Haast, Vienna 16 November 1865, MS 37 folder 183.

Vienna, 16 November 1865

Most esteemed friend

Two of your letters – the long one of 2 August and the second of 15 September are lying in front of me, as unfortunately I did not have time to reply last month. The start of the winter season is always the busiest time for me. I want to reply in the order of the content of your letters, so that I do not leave anything out. First of all, I am pleased that the award pleased you. Enclosed you will also find the piece of ribbon you wished for. As far as the knighthood is concerned, you are knight of the Order of Francis Joseph, but there is no nobility attached to this order so you may not call yourself 'von', and one cannot apply for a knighthood on the basis of the Order of Franz Joseph; any step taken by me in this direction would be futile. The knighthood for you still

⁵¹² In his presidential "Anniversary Address" Hamilton wrote, "The general results of the Novara Expedition, undertaken by the Austrian Government, have been for some time before the public. We have now before us two specific works on the geology of New Zealand which deserve notice, as well as a geological and topographical atlas of New Zealand, prepared by Dr. F. Hochstetter and Dr. Petermann. As, however, we may hope to receive shortly the results of the Geological Survey of New Zealand, which has been undertaken by our Government, and as the collections made by Dr. Hochstetter during his comparatively short residence on the island were necessarily imperfect, I shall only briefly allude to them at present." William John Hamilton, "The Anniversary Address of the President", *The Quarterly Journal of the Geological Society of London*, vol. 21, part 1, 1865, pp. cxiv-cxv.

⁵¹³ Ferdinand von Hochstetter, ed., *Reise der Österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859 unter den Befehlen des Commodore B. von Wüllerstorff-Urbair: Geologischer Theil, Band 1 Abtheilung 2, Paläontologie von Neu-Seeland: Beiträge zur Kenntniss der fossilen Flora und Fauna der Provinzen Auckland und Nelson, von Prof. Dr. F. Unger, Prof. Dr. Karl Zittel, Prof. E. Suess, Felix Karrer, Dr. Ferdinand Stoliczka, Dr. Guido Stache, Dr. Gustav Jaeger*, Wien, k.k. Hof- und Staatsdruckerei u. in Kommissionen bei K. Gerold, 1865.

lies in the future's wheel of fortune. Happy is he, who still has something left to gain and wish for. I am keenly anticipating how the emperor will respond to the news of the Franz Joseph Glacier and the paintings. The matter is a little unusual, however I will give the necessary explanations at the High Chamberlains Office if possible, and thereby hope to achieve that the pictures are not simply placed with the other curiosities sent in, but may be displayed and exhibited. I am eagerly looking forward to the arrival of the paintings by the next mail. I received your reports on the Timaru and Waitaki and the goldfields and read these with great interest.⁵¹⁴ Crawford also promised me his reports in the last mail, as he writes: 'to the care of the Austrian Consul in Sydney'. In fact I am not sure whether there is such a consul in Sydney and am rather afraid that I will not receive anything. I would in fact be very keen to read something by Crawford on the Province of Wellington. Hopefully the two cases with the geology and palaeontology books will by now have finally arrived in New Zealand. I very much regret not having allocated a copy for Tancred, who as I see from your letter, has really engaged himself for my matter. I did send a copy to Hector though, and if thereby the exhibition copy becomes disposable then Tancred could be given this one. Unfortunately I do not have any more copies at my disposal, otherwise I would like to make up for this mistake in some way. Your September letter did not bring me a decision on the £525 either, and I am now awaiting the news that will finally decide whether the English work is to be published or not by the next mail. As I wrote in my earlier letters, I will immediately have the printing started when the £525 has been voted for, even if no English bookseller has been found, and I will then take on the risk myself in God's name, in order to meet my obligations towards the New Zealand Government under all circumstances. But I can only have the printing begun once the £525 are secured, and will now have to simply wait another month. By the way, I am very grateful for everything you have done in this matter and also for all your ongoing efforts. My congratulations on your prospects of becoming a F. R. S.⁵¹⁵ I am pleased like a brother about everything you have achieved through your diligence and hard work. I am expecting very little for myself from jealous England. But I do believe there is one thing that I would have earned just as much as anyone else, that is to at least have become fellow of the Geological Society or Geographical Society, for if Bain is awarded the Wollaston Medal for his geological researches in South Africa,⁵¹⁶ then I also deserve it for my New Zealand work, but it is not my nature to take steps in England for such honours. I would have expected Hooker and Murchison to have done something, to have gained some recognition for the member of the *Novara* expedition who has done something for the exploration of an English colony. But enough.

Best wishes from me and my wife on your domestic bliss. Family happiness is always the true basis of life and everything else is an illusion in comparison. With us all is well, praise be to God, we have been very well since we have been living in the country. If my wife was not so incredibly busy with her three children, she would long since have written to your dear wife, but the wives hear of the events in the other family through our letters anyway.

This winter I am again stuck in work as I have to finish the second volume of the *Novara* expedition geology, and therefore I do not get to do anything else. By next year I hope to have completely finished my *Novara* work and will then be able to breathe easily again. I have successfully finished Gibraltar, Rio, Cape, St Paul and Nikobar Islands, now there is still Java,

⁵¹⁴ Julius Haast, *Report on the Geological Formation of the Timaru District, in reference to obtaining a Supply of Water*, Christchurch, Press, 1865; *Report on the Headwaters of the River Waitaki*, Canterbury Provincial Government, Christchurch, Press, 1865; "West Canterbury Goldfields: Geological Report", *The Littleton Times*, 10 August 1865.

⁵¹⁵ Haast was elected Fellow of the Royal Society in 1867.

⁵¹⁶ Andrew Geddes Bain, "On the Geology of Southern Africa", *Transactions of the Geological Society of London*, 2nd series, vol. 7, part 4. See reference to this in Ferdinand Hochstetter, *Geologische Beobachtungen während der Reise der Österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859*, Wien, Staatsdruckerei, 1866, p. 21. Hochstetter also based his geological map of the Cape Colony on Bain's map: "Geologische Karte des Cap-Districtes nach Andrew Geddes Bain", in Ferdinand Hochstetter, *Geologische Beobachtungen während der Reise der Österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859*, Wien, Staatsdruckerei, 1866, facing p. 38.

Luzon, Stewart Islands and Australia. This is still a huge amount of work. I have not heard or seen anything of the Princess Ruspoli. But I sent your letter to her.

Apart from my geological publications, I have also taken on the responsibility for the German Arctic Expedition⁵¹⁷ for the year 1866 and all the business associated with this. Enclosed is my proposal, from which you will see our intentions.

As you presumed, I did receive Traver's defamatory article. Such low-down things are certainly unpleasant; however one simply has to get over them. It is clear to every reasonable thinking person how the matter really stands. Envy, envy and more envy.

Your diploma as member of the Leopoldina has yet to come from Dresden for you, but these things take a long time.⁵¹⁸ Unfortunately Hector cannot become a member, as the Leopoldina, just like the German Academy, is an exclusively German one. Otherwise I will do for Hector whatever I can.

The news of the large silver medal pleased me, it is just a shame that only Zittel was awarded a medal, and that it was not awarded jointly to all the palaeontological contributors. But who should have received it then, and Zittel's is the main work. Petermann was also very pleased about this.

Your letter to the emperor certainly took on an unusually lengthy form, but that does not matter as it is justified by the circumstances, and apart from that I find it completely fitting.

Hopefully your dear wife will eventually fully recover and regain strength.

A fern album from New Zealand made by your wife would certainly be a very nice present for my wife, but Georgy⁵¹⁹ does not want your wife to have to go to any trouble and suggests you might just bring such an album when you come to Europe. Then she will be doubly pleased.

You have probably already heard that Wüllerstorff has become minister of trade and commerce.⁵²⁰ We are very pleased about this here and expect the best from his insight and energy.

Farewell for now, in loyal friendship,

Yours,

Ferdinand Hochstetter

Sincerest thanks also for the photograph. Photographs are always of the greatest interest to me.

54. Ferdinand Hochstetter to Julius Haast, Vienna 20 January 1866, MS 37 folder 184.

Vienna, 20 January 1866

Most esteemed friend

The December mail did not bring me any letters from you and in the rush that comes at the end of the year I did not get to write to you. However I was pleased to receive your letter of 14 November which the January mail brought me. My wife and I were very pleased to hear that your wife is now well again and we send our best congratulations in retrospect for the New Year.

So the £525 has been granted, as you tell me. I have not received any official communication on this until now, but we now have the means and opportunity for an English edition to be published. By the way, you seem to have misunderstood the content of one of my letters, as despite all I still intend to work things out with Cotta, and have therefore not sent the English manuscript to you. On the basis of the official notification, I still hope to come to an

⁵¹⁷ The "Deutsche Nordpolexpedition" was proposed by August Petermann at the suggestion of Weyprecht, but due to the war between Austro-Hungary and Italy, it was not until 1869-1870 that the second German Arctic Expedition was carried out.

⁵¹⁸ Haast's membership diploma of the "*Kaiserliche Leopoldinisch-Carolinisch Deutsche Academie der Naturforscher*" is dated Dresden, 2 November 1864, and signed by the president Carl Gustav Carus (1789-1869). MS papers 0171, Alexander Turnbull Library.

⁵¹⁹ Georgiana von Hochstetter.

⁵²⁰ Bernard von Wüllerstorff-Urbair was Austrian Minister of Trade from 1865-1867.

advantageous conclusion by taking on the risk of a portion of the edition myself, in God's name. By the time of the next February mail the matter has to be decided, in so far as I will then write to you either that the work will be published here as originally intended or that I will send you the manuscript via London. In the latter case it is understood that the translation costs of £40 to £50 would have to be covered from the £525, and that the New Zealand bookseller who takes on the matter has to allow for this when making their calculations. My best thanks for your efforts in this matter.

I will write to Dresden to the president of the Leopoldina regarding your diploma.

The paintings for our emperor which your letter announced have not reached me yet. As soon as they arrive I will act according to your instructions, and in your best interests do my bit as best as I may.

Unfortunately I cannot write more today, as I lack the time completely. I will now turn to Cotta with the final question and by the next mail I will then either send you the manuscript or write to you that Cotta is publishing the work.

With warmest regards,

Yours faithfully,

Ferdinand Hochstetter

55. Ferdinand Hochstetter to Julius Haast, Vienna 14 February 1866, MS 37 folder 184.

Vienna, 14 February 1866

Most esteemed friend

Your kind letter of 15 December and the newspapers with your most recent report and the *Government Gazette* with the speech of your superintendent reached me, and we were very pleased about the good news and especially the fact that your dear wife is better. Your wife's actual symptoms were probably just related to her pregnancy, which brings out such symptoms in many women. Your letter to Haidinger was also received, as he informs me.⁵²¹ Haidinger really has risen from the dead. He went through a serious typhoid illness in December and January, which brought him to death's door. We are very pleased that he is now recovering, although he will not be able to work for some time yet. Miss Sophie Dobson Collet⁵²² already notified the dispatch of the parcel with the paintings for His Majesty from Brighton on 22 January. I anticipate the arrival of the parcel with each day that passes but until now nothing has come. I am therefore a little worried about the plight of this parcel and have had the matter looked into. At the post office here my researches have brought no results. I then wrote to Miss Dobson in Brighton but have not had a reply yet. I want to hope that the paintings will still appear from somewhere, as it would be extremely unfortunate if they had gone missing somewhere on the way between England and Austria. The emperor is currently in Pest where he will stay until the end of the month, so if the pictures arrive soon then nothing has been missed in regard to the time of the presentation. If they do not arrive I will have to notify the High Chancellor's Office that the parcel went missing due to an unfortunate coincidence, as you already announced them. That would indeed be bad luck and more than bad luck.

It would be equally bad luck and more than bad luck if the new minister, Stafford,⁵²³ did not pay out the sum granted by parliament, as my honour is tied up in this and I had taken the last steps with Cotta to have the printing of the English book started, after your last letter announced

⁵²¹ Haidinger corresponded with Haast in the years 1863 to 1866 as evidenced by Haidinger's letters dated Wien 14 April 1863; Wien 28 April 1865; Wien 19 December 1866, MS papers 37 folder 238, and a brief letter of thanks dated Vienna 5 February 1865, in which he wrote: "I beg leave to return my most sincere thanks for the great honour conferred upon me by the most honoured Philosophical Institute of Canterbury in electing me an Honorary Member of that most meritorious scientific body." MS papers 37 folder 178, Alexander Turnbull Library.

⁵²² Sophie Dobson Collet (1822-1894).

⁵²³ Edward William Stafford (1819-1901), held the positions of colonial secretary, treasurer and postmaster general in the successor ministry, which took office on 16 October 1865. See *Dictionary of New Zealand Biography*, vol. 1, pp. 404-406.

that the sum had been approved. By taking on the risk for the five hundred copies that will be printed on top of the five hundred copies for New Zealand, I was able to persuade Cotta to begin the printing, which has therefore now begun. What happens now if the minister does not want to pay the £525 for the five hundred copies? Should I lose my few savings through this? I was not prepared for this complication in the matter. I ask you therefore to do everything you can so that I do not get stuck high and dry. I committed a great deal of my time to partly revising the work to bring it up to date, and it will be just as lavishly bound as the German edition. No doubt the government will be able to recoup most of the above sum through the sale of the work, but I have to rely on the above sum becoming available by the end of this year at the latest.

In order not to miss anything on my part either, I am writing to Stafford by this mail, to announce the start of the printing of the book, and to ask him to keep the sum available. I cannot go back now, even if I could defer the printing until the arrival of the next mail. But I am afraid that the next mail will not bring anything more decisive either. So I ask you once more to please make sure that the matter is cleared up, after I made sacrifices here on my part – I get nothing for the English edition except effort, and now I have to carry the guarantee for part of the edition. So make sure that things are sorted out at your end, so that I do not end up having to pay for all the work that I have done for New Zealand. If the minister is not prepared to pay, then I ask you to put up a subscription and I will write to Fischer in Auckland in the same vein. But I hope that Stafford will not cause any further difficulties once the book is printed here. Five hundred copies will be supplied for the £525, freight paid as far as Hamburg or Rotterdam – these are the conditions for the New Zealand government as you know.

I was very pleased that the superintendent did you justice and I will put the relevant passage in my book as well. If I still receive the pictures before the 26th of this month then I will write you a few lines and you will hopefully still receive the message with this mail.

With warmest regards from all of us,

Yours faithfully,

Ferdinand Hochstetter

I have so much to do that you will kindly excuse the brevity of this letter.
I will also write to Hector by this mail.⁵²⁴

⁵²⁴ Hochstetter's letter to James Hector: "Vienna, 15th February 1866. | Esteemed dear Doctor⁽¹⁾ | I have long since been intending to write to you to thank you for your kind efforts on my behalf in relation to the Dunedin exhibition. I have followed your work with great interest at all times and often envied you for the grand experiences the south of New Zealand offers, which I unfortunately never had the opportunity to become acquainted with. Certainly I would have never thought that when I met you at the Geographical Society in London in 1860, just after my return from New Zealand, that you would soon be going there to finish the work that I had begun. I am looking forward with a great sense of anticipation to the publication on the geology of New Zealand that you are preparing together with my friends Haast and Crawford. I am also very much looking forward to the medal and the honourable recognition I perceive this to represent. I hope that the palaeontological volume of my work has now also reached you, which brings my geological work on New Zealand to a conclusion. I am now working on the other geological part of the Novara expedition which will contain my observations from St Paul and the Nicobar Islands etc. | By the second-to-last mail, I received news from my friend Haast, that the General Assembly had approved a grant of £525 for an English translation of my travel account of New Zealand. On receiving this news, I immediately gave the go-ahead for the printing of the book by the J. G. Cotta publishing house in Stuttgart, the translation of the same having already been finished some time ago, and I personally guaranteed the above sum, in order for the printing to be able to begin, I would therefore now find myself placed in a most awkward situation, if the above sum was in fact not available after all. I have therefore written by this mail to Mr Stafford in Wellington, but would also like to ask you for your support, in order that I might not be left in the lurch. I have not had any official communication and by the last mail my friend wrote to me quoting from one of your letters, indicating that the payment was not in fact secured. You know that I have committed to supplying 500 bound copies of the book to the New Zealand government for the above sum – freight paid to Rotterdam or Hamburg –, and I would expect that the government will recoup the sum or at least a large portion of it through the sale of the book. The edition will not be a large one. I am convinced that if you used your influence with Dr Stafford that the matter would then be cleared up most readily. I have arranged the English edition a little differently to the German, completely re-worked some of the chapters and revised the whole to reflect the present state of our knowledge of the country. Work, effort and money would be lost if the new ministry was now to let me down. And I certainly would not have deserved that from New Zealand. I would be very pleased if you could soon furnish me with a favourable reply. | With the assurance of my highest esteem, | Your most devoted, | Prof. Dr. F. v. Hochstetter | Polytechnic Institute, Vienna. [[footnote:] 1) Please excuse me for writing in German, however my English is far too poor to be able to write to you in English

56. Ferdinand Hochstetter to Julius Haast, Vienna 19 February 1866, MS 37 folder 184.

Vienna, 19 February 1866

Most esteemed friend

In order not to cause you any unnecessary worry about the paintings for the Emperor, I am writing to let you know that I have just received a letter from Miss Dobson⁵²⁵ letting me know that the paintings were returned by the post office without being damaged. They had been incorrectly posted, and had therefore not even been sent. But as the sender was not known they had been held until they were claimed. I will now write to Miss Dobson to let her know how to post them; then they will hopefully get here alright and be forwarded for their intended purpose.

I repeat from my last letter that I wrote to Stafford in regard to the money matter myself, and let him know that the printing had already begun, and that I am expecting the sum to be made available by September or October.⁵²⁶ I wrote the same to Dr Hector. So I entrust the matter to you again in order that I may not be let down. Apart from that there is nothing new, unless I were to let you know that the Island of Santorini⁵²⁷ is threatening to disappear into the sea as a result of the volcanic eruptions taking place there at the moment.

With sincere regards,
Yours,
Ferdinand Hochstetter

57. Ferdinand Hochstetter to Julius Haast, Vienna 17 May 1866, MS 37 folder 184.

Vienna, 17 May 1866

Most esteemed friend

I have just received your kind letter of 4 March, which unfortunately brings us the sad news that your dear wife has again met with an accident. I think I hardly need reassure you how sorry my wife and I are and hope that your dear wife may soon fully recover, and that the pain may soon be overcome by happier events. I am expecting my wife to go into labour in August, and in the meantime I send you the photograph of my family of 30 April, my 37th birthday, to keep you up to date.⁵²⁸

Today I can write to you that the beautiful alpine paintings for the emperor have been presented. I had to take the official path and this was through the High Chamberlain's Office, as the court regulations do not permit things sent by third parties to be presented in person. After I had had the paintings very elegantly mounted on cardboard with calligraphic captions, I had an especially elegant folder made and then submitted it to the High Chamberlain's Office, in order that the paintings might be presented to the emperor on your behalf. At the High Chamberlain's Office they were already informed that the paintings were coming, probably through a letter from you, and councillor Raimond⁵²⁹ thought that the emperor would be highly pleased and he would have me called, if His Majesty so commanded, in order that I might give an appropriate commentary on them. Until now I have not been called though, however this could still happen. The emperor is currently so completely occupied with the turmoil of our war that everything else has had to shift into the background. But I will enquire how the paintings were received at the next opportunity.

and I expect that you have Germans who will be pleased to be able to translate my letter for you." Translated by Sascha Nolden, the original German manuscript letter is held in MU000198 box 1 item 29, Te Papa Museum of New Zealand, Wellington.

⁵²⁵ Sophie Dobson Collet (1822-1894).

⁵²⁶ Hochstetter letter to Stafford dated Vienna 19 February 1866, IA/1/1866/1647, Archives New Zealand, Head Office, Wellington.

⁵²⁷ Santorini, the Greek island of Thira.

⁵²⁸ Photograph of the Hochstetter family dated 30 April 1866. Portrait of Georgiana von Hochstetter and her three children, photograph by Heinrich Harmsen, 1866, PA2-0832, Alexander Turnbull Library.

⁵²⁹ Hofrat von Raymond, k.k. Hofrat.

In Germany, in fact in Europe, things are looking awful. More than 2 million soldiers are on their feet, and one sees and hears nothing but soldiers and drum rolls here and in all the cities and countries volunteers are being equipped, Prussia, Italy and France are all together under one blanket and the object which this barbarian triad wants to tear apart and break into pieces is Austria and the medium and small German states. The matter is at a point where all prospect of peace has disappeared and one almost wishes that the war might break out as soon as possible. In Austria at least we hardly have anything to lose now, but we are approaching a sad time. The terrible failings of England hopefully do not reflect back to you. In the meantime I am calmly occupied with the last part of my *Novara* geology, which is now half printed. I was pleased to hear that the palaeontological volumes have now finally arrived in New Zealand.

The medal business is of no matter, I am just sorry that I awoke hopes in Zittel which will not come about, but I am almost pleased that it turned out this way, for the other contributors might have expected to get something just as much as Zittel.

I had £20 of the sum in London given to me to cover the costs for the paintings and the subscriptions for the Leopoldina and the German Academy, as well as books that I was supposed to send you. I will eventually send you the statement for this. I am occupied with all kinds of business and have not had the chance to acquire everything for you and will have to put it off until my holidays in July when I will acquire everything you requested as best as I can.

I have not done anything about the clothing yet either, as I almost think that you will move away from this idea again.

As I have already written to you, the printing of the English edition of my New Zealand with Cotta has been suspended and the manuscript is lying here with me, and I think I will keep it here and wait quietly until the time when we might still jointly publish the English work on New Zealand.

I will take steps for a consular position for you and I intend to do the same for Dr Fischer. All else lies in the lap of the future.

Through Wüllerstorff's protection, Dr Scherzer has been appointed ministerial advisor in the ministry of trade and has thereby gone from almost nothing to about the highest rung that can be reached in the Austrian state service.⁵³⁰ For Dr Hector I will try to get the diploma of the Leopoldina Carolina if possible.⁵³¹

I will close for now.

With warmest regards,

Your faithful friend,

Ferdinand Hochstetter

⁵³⁰ Scherzer was appointed "Ministerialrat" in the Austrian "Handelsministerium" in 1866.

⁵³¹ Hochstetter must have forgotten that he had written to Haast earlier in regard to Hector's proposed membership. He wrote: "Hector kann leider nicht Mitglied werden, da die Leopoldina ausschließlich eine Deutsche Akademie ist, ebenso wie das Hochstift." Hochstetter letter to Haast no. 53 dated 16 November 1865.



10. Georgiana von Hochstetter and three children, photograph by Heinrich Harmsen, 1866.
(PA2-0832, Alexander Turnbull Library).

58. Ferdinand Hochstetter to Julius Haast, Vienna 19 July 1866, MS 37 folder 184.

Dr FERD. v. HOCHSTETTER
WIEN
OB. DÖBLING

Vienna, 19 July 1866

Most esteemed friend

I have just received your letter of 11 May 1866, which gives my wife and I grounds for concern for the health of your dear wife. May we hope to God that the matter will take a turn for the better and that the fresh sea air will put a stop to the emerging ailment.

Dear friend, I am writing to you at a sad time, when the heart of every German bleeds, and in a week such as we have never experienced in Vienna before. At any moment now the sound of cannon gunfire might be heard in my study, the rumble of cannons from a battle before the gates of Vienna, one that is more bloody and terrible than any in history, a battle where brothers fight against brothers, and where poor long-suffering Austria must fight for its very existence. Who would have thought that it would come to this? We are approaching events that one does not dare to imagine and the end of which no one can foresee. The Prussians have taken Frankfurt, Prague and Brno and are standing before the gates of Vienna with 300,000 men to force a Danube crossing here, and at any moment the sound of cannon fire might announce the start of the terrible battle. I live only one English mile from the nearest entrenchments and battery and am greatly concerned, especially as I am expecting my wife to go into labour at any time now. May God grant that this terrible week might still have a happy end. Enough, however, on the reasons for the German war. You will know the former developments of the war from the newspapers anyhow.⁵³²

Your letter again provides me with new evidence of your friendship by the way in which you are concerned about the unfortunate business of the English edition of my *New Zealand*. But I hope that you will have received my former letter in which I wrote to say that the printing with Cotta has been suspended and that in the meantime nothing else has been done. Cotta was noble enough not to charge me for the costs accrued so far for the printing, and has written to me most recently that once the sum from *New Zealand* has been definitely approved he would be willing to take the matter up again at any time. So the matter is resting for now and I thank you for your friendly offers and efforts. If in the end something happens, then that is fine, but I am not doing anything more here, until I have the official guarantee for the sum. It is almost for the better that it worked out this way, as it would now have been almost impossible for me to work on such an important task.

I am very pleased about your successes. I have not heard from our emperor since the paintings were submitted and now I can't do anything anymore as the whole court has moved to Pest, and everything is just war and war!

With this we have moved into an unfortunate period, as we have no postal service connection to Germany any more, so I am now quite unable to fulfil your requirements regarding books etc. at the moment, but it is all taken note of and I will conscientiously look after your matters.

With Frauenfeld, whom you mention, I am no longer in any sort of contact; after his mean behaviour in the matter of the *Novara* publication I did not wish to have anything more to do with him.

⁵³² The Austro-Prussian War of 1866 also known as the "Seven Weeks' War" was basically decided by the Prussian victory at Sadowa, the Battle of Königgrätz, on 3 July 1866; after the Austrians were defeated they withdrew and eventually succeeded in assembling at Vienna, where after another conflict at Tobischau on 15 July 1866, the Prussians and Austrians were facing each other outside Vienna when an armistice was agreed to on 22 July 1866, followed by the signing of a peace treaty at Prague on 23 August 1866. This letter, being dated 19 July 1866, only a few days before the armistice, one can understand the anxiety felt by Hochstetter, who lived outside the city of Vienna, at Döbling.

A while ago a Dr F. Hilgendorf⁵³³ from Berlin wrote to me that he would probably be leaving for Australia this year to make zoological and palaeontological collections in Australia, Tasmania and New Zealand. So it is very likely that he will introduce himself to you at some stage; I do not know him personally, but presume he is a well educated and informed zoologist who could be of some use to you.

Excuse me if I finish writing for today, an officer is coming to see me and I want to visit the nearest entrenchments with him to assess what we have to fear from potential bullets. We send our warmest regards to your wife. I will definitely write again by the next mail.

With sincere regards,

Yours,

Ferdinand Hochstetter

59. Ferdinand Hochstetter to Julius Haast, Vienna 22 August 1866, MS 37 folder 184.

Dr FERD. v. HOCHSTETTER

WIEN

OB. DÖBLING

Vienna, 22 August 1866

Most esteemed friend

Apart from your letter of 14 June, I also received a letter yesterday from Mr Gisborne⁵³⁴ on behalf of Mr Stafford, in answer to my letter. Mr Stafford had him write to me that it was a misunderstanding that the £525 had been approved by the General Assembly, but that he wants to let me know 'that during the approaching session of the General Assembly the legislature will be asked to vote the sum', and at the same time he sends me for his justification 'copies of a correspondence with Mr Haast on this subject', your letters of 19 May and 7 June. Now the matter is all fine, in so far as once I receive the official communication that the sum has been granted, the negotiations with Cotta can be taken up again and the printing can be started.

It will then be a case of 'better late, than never'. I will also write to Stafford along these lines. My best thanks to you for your friendship and your offer to guarantee the sum for me personally, but it goes against my basic principles to expect or accept this kind of thing from friends.

My last letter was written at a time of the greatest agitation, when the Prussians were standing before the gates of Vienna.⁵³⁵ The excitement was followed by a truce and peace and a period of the most terrible political depression and then one is most inclined to say nothing. The only refreshing thing in these sad times was Tegetthoff's heroic deed at Lissa,⁵³⁶ and I send you a pictorial sketch of this famous affair of the Austrian navy, which was published a few days ago. By the way, I console myself by Darwinian principles on the results of this battle.

Still nothing new in my family. We seem to have miscalculated, for I was sure that I would be able to announce a newcomer to this world in this letter. We are all well, thank God, and hope that the cholera which the Prussians left behind for us will not spread. In Vienna there have only been a few cases so far.

We are so pleased that you were able to give us better news of your wife's wellbeing, and it would be all the more terrible if your brother-in-law had met with tragedy.⁵³⁷

⁵³³ Franz Hilgendorf (1839-1904), German zoologist and palaeontologist in Berlin.

⁵³⁴ William Gisborne (1825-1898), public servant, politician, writer and chief clerk in the Colonial Secretary's Office.

⁵³⁵ Hochstetter letter to Haast no. 58 dated 19 July 1866.

⁵³⁶ Wilhelm von Tegetthoff (1827-1871), "bedeutendster Admiral der österreichischen Kriegsmarine". In the Austro-Prussian war of 1866, Tegetthoff won the sea battle at Lissa against the superior Italian Flotilla, using a ram tactic, on 20 July 1866.

⁵³⁷ Haast's brother-in-law, George Dobson (1840-1866), was murdered in 1866. He was an engineer and surveyor working on the road construction in the Grey Valley, when he was murdered by the infamous Burgess gang. The township of Dobson, near the site of his murder, on the south bank of the Grey River, east of Greymouth, was named after him.

I have still not heard anything from the court and therefore presume that the acknowledgement went directly to you. My remarks on some of the impossibilities in the paintings, which you mention, were in regard to the ends of the glaciers and on the flow of the Wairau, in the bed of which more boulders should have been drawn. However for the purpose of the paintings that is all the same. The overall effect was brilliant and I only regret that the photographs I had taken of them came out doing so little justice to the originals. I therefore did not have any prints made of them either.

I am now gradually coming to the end of my *Novara* work; the second volume of geology will now also be definitely published this year, and would already be finished if Dr Schwager⁵³⁸ in Munich had not let me down with the work he had promised me on Foraminifera. Actually I am quite pleased that I am coming to an end with these reports, and I will then probably edit some textbooks, in order to do something for the purse in future with the rapid growth of my family. I will now fulfil your wishes in order and send the books and medal ribbon through Williams & Norgate.⁵³⁹ I have not had a chance to talk to any chemists about the sheep dip yet, but will do so soon.

Regards from Haidinger. The old gentleman has now grown very old and has been on leave for one year; in the meantime Franz von Hauer is the director of the Geological Survey, and whether Haidinger will be in a position to take over the director's post in autumn again as he hopes, is yet to be seen.

Concerning the essay for our Geographical Society, don't try too hard – if you find the time and inclination, then fine, if not then don't worry. The newspaper with the *Traversiana*⁵⁴⁰ amused me. Serves him right.

The exhibition medal has still not reached me.

Von Wüllerstorff does not seem to have much interest in continuing his ministry under the present conditions. He has gone on a holiday in the Alps.

The conditions really are such that if I was not bound by my family, nothing would stop me from taking up my walking staff and going somewhere better than this unfortunate Austria.

With warmest regards from us all,

Yours faithfully,

Ferdinand Hochstetter

60. Ferdinand Hochstetter to Julius Haast, Vienna 22 October 1866, MS 37 folder 184.

Vienna, 22 October 1866

Most esteemed friend

Unfortunately I had to leave you for a month without a letter this time, as in order to get some enjoyment out of my holidays I decided to go to the Alps for a few days, which I have now had to pay for with an extended period of illness from which I have not yet fully recovered. Again it is always the throat that plagues me, through more or less acute infections, which sometimes worries me a great deal. Apart from that I am well and my family is always fresh and healthy. On 2 September my wife presented me with a second son, who was baptised Heinrich yesterday – that is, he carries the name of your son.⁵⁴¹ Heinrich is a very common name in my family and in particular it is the name of my grandfather.⁵⁴²

⁵³⁸ Conrad Schwager (1837-1891), German palaeontologist in Munich.

⁵³⁹ Williams & Norgate, booksellers and publishers at 14 Henriette Street, Covent Garden, London.

⁵⁴⁰ *Traversiana* is in reference to William Thomas Locke Travers (1819-1903).

⁵⁴¹ Hochstetter's second son Heinrich Christian John Hochstetter, (1866-1939), was a chemist and industrialist. The reference is to Haast's second son Heinrich Ferdinand von Haast (1864-1853).

⁵⁴² Hochstetter's Grandfather, Johann Heinrich Hochstetter (1751-1796), was a law Professor at the Hohe Karlsschule (Militär-Akademie) in Stuttgart. Information on the Hochstetter family kindly supplied by Professor Diplomdolmetsch Hanns Hermann Bühler of Vienna, in a personal communication to the author dated July 2005.

In September I received your two letters of July, the one via Panama and the other via Suez, and a few days ago I was also pleased to receive your letter of 10 August, with the interesting photographs of the Maori aristocracy. I am very grateful for your contributions to my New Zealand album, which I hope to increase and add to in any way I can. Of your various orders I have fulfilled most of them, namely:

1. Beginning of October I sent to the Leopoldina academy:
as a *Nummus aureus* for your diploma 3 Thaler Prussian currency.
as a contribution to the Carus⁵⁴³ Foundation 4 Thaler Prussian currency.
to the German Academy in Frankfurt on Main 4 Thaler Prussian currency
2. The medal ribbon you wished for is enclosed in this letter, as you probably wished to receive this soon.
3. Of the books you wished for, the following will go from a local bookseller to Williams & Norgate:
Fink, *Musikalischer Hausschatz* – Treasury of Music for the Home, 1 volume⁵⁴⁴
Auerbach, Works in 10 volumes⁵⁴⁵
Weber, *Der Lachende Demokrit*, in 6 volumes.⁵⁴⁶

Although you did not order the last item, it nevertheless belongs in the library of any German and will certainly amuse you; if you should already happen to own it then you will easily be able to sell it. I hope to be able to send a second consignment of books around Christmas with the second volume of the geological part of the *Novara* reports, the third volume of Naumann's Geology, which will hopefully have been published in its entirety by then, and Freytag's latest novels and an excellent handbook of petrography by Zirkel,⁵⁴⁷ and a few others which I think may be of interest to you.

I have asked a number of chemists here with regard to the measurement of the nicotine content in the sheep dip, but nobody was able to tell me a simple method so far, but I will make further enquiries. Why does one actually need the nicotine solution in the sheep dip? Presumably to destroy any vermin.

The terrible murder of your brother-in-law touched us most painfully; up till now New Zealand was free of gangs of robbers. Hopefully your government knows how to create exemplary statutes.

I am now expecting the final decision in regard to the publication of the English translation of my New Zealand. I wrote to Stafford, that is to say Gisborne, by the last mail, that I had the printing suspended, and that I would only have it restarted once I had received a definitive answer.

In regard to the Arctic Exploring Expedition, I did not put you down as a subscriber after all as this matter has now been moved into the distant future.

I was sorry to see from your letter that your hitherto friendly relations with Hector had been somewhat spoilt.⁵⁴⁸ Don't let this go too far, and don't make too much of the fact that Hector got the F.R.S. before you. You will not miss out in the end.

⁵⁴³ Carl Gustav Carus (1789-1869), German medical scientist, philosopher, writer and President of the Leopold-Carolinum.

⁵⁴⁴ Gottfried Wilhelm Fink, *Musikalischer Hausschatz der Deutschen: Eine Sammlung von über 1000 Liedern und Gesängen mit Singweisen und Klavierbegleitung*, 1st edition, 1843.

⁵⁴⁵ Berthold Auerbach (1812-1882).

⁵⁴⁶ Karl Julius Weber (1767-1832), author of the unfinished work in 12 volumes: *Democritos, oder hinterlassene Papiere eines lachenden Philosophen*, Stuttgart, Brodhag, 1832-1840.

⁵⁴⁷ Ferdinand Zirkel, *Lehrbuch der Petrographie*, Bonn, Marcus, 1866. See H. F. von Haast, *Catalogue of the Books belonging to the late Sir Julius von Haast*, p. 9.

⁵⁴⁸ The relationship between Haast and Hector may have become a little strained by the fact that Haast was pushing the idea of an English translation of Hochstetter's *Neu-Seeland* against some opposition. In a letter to Hector, Haast wrote: "I hope you will do everything in your power for Hochstetter & trust that *you* will not say like Mantell 'I do not believe in Hochstetter'. – Does he understand German? – or is it only a personal dislike? I am unable to understand it & am very sorry that a man like Mantell of such high standing as a Geologist as well as a Politician should have taken such a dislike to our friend." (Letter No. 77, dated 19 May 1866). Sascha Nolden, Rowan Burns & Simon Nathan, *The Correspondence of Julius Haast and James Hector, 1862-1887*,

I am writing at the Polytechnic Institute, where I was elected as the head of the department of Engineering Geology for this year,⁵⁴⁹ and get interrupted so often that I have to close now. More next time.

With warmest regards from us all,

Yours,

Ferdinand Hochstetter

61. Ferdinand Hochstetter to Julius Haast, Vienna 20 November 1866, MS 37 folder 184.

Vienna, 20 November 1866

Dearest friend

I received both of your September letters in the November mail, and first of all I owe you my sincerest thanks for your numerous efforts in regard to the book business. According to the newspaper notice you sent me the matter is now finally sorted out, but I have not had an official communication and will still wait for this anyway, before I have the printing restarted. Once the matter has been carried out I will then do my bit to have your wishes fulfilled through Cotta. I definitely expect the official confirmation by the December mail, even if the money itself will only be sent later. However, official matters in New Zealand seem to take a long time, just as they do here, as to this day nothing has arrived in relation to the medal and the honourable mention from the Dunedin Exhibition. I have also long been waiting in vain for Hector's Geology of New Zealand,⁵⁵⁰ which I would be very pleased to receive, in order to be able to still include something on Hector's conclusions in the annotations of my work before it is printed. Could I not perhaps receive individual printed sheets before the whole thing is published? The sketches of Mt Cook were of great interest to me and I will send them to Petermann once I have had them copied. I am completely satisfied with the fine society I find myself in.

I am very unpleasantly held up with the publication of the second volume of my *Novara* geology, as a palaeontologist in Munich⁵⁵¹ is taking a long time to finish the Foraminifera. Apart from this one contribution, everything else has long since been printed. By the New Year I hope that we will have come to a conclusion, and then I will send a consignment of books to you again, in which I will include a number of geological things for you that may be of interest to you, for example, Cotta's Geology of the Present,⁵⁵² and Sartorius von Waltershausen⁵⁵³ on the climate of the diluvial period⁵⁵⁴ and a few other things.

I await your essay for our Geographical Society with great impatience as I was elected as president of the Geographical Society for this year,⁵⁵⁵ and therefore an interesting paper would be very timely for me.⁵⁵⁶ This will then give me all the more opportunity to highlight your achievements in the annual report.⁵⁵⁷

Geoscience Society of New Zealand, Miscellaneous Publication 133D, 2012, p. 97. It should be noted that this is not in reference to the more famous rift in the relationship between Haast and Hector over the Moa Bone Point Cave controversy.

⁵⁴⁹ Hochstetter was appointed a member of the "Vorstand" of the Ingenieur-Schule at the "k.k. Polytechnisches Institut in Wien" for the year 1866-1867. Under the heading: "Personalstand des k.k. polytechnischen Institutes" it states: "Vorstand der Ingenieur-Schule: Ferdinand von Hochstetter", See Anon., *Programm des k.k. Polytechnischen Institutes in Wien für das Schuljahr 1866/67*, Vienna, Verlag des k.k. polytechnischen Institutes, Druck von F. B. Geitler in Wien, 1866, p. 15 and p. 25.

⁵⁵⁰ James Hector, *Geological Survey of New Zealand: First General Report on the Coal Deposits of New Zealand*, Wellington, George Didsbury, Government Printer, 1866.

⁵⁵¹ Hochstetter is referring to the German palaeontologist Conrad Schwager (1837-1891) of Munich.

⁵⁵² Bernhard von Cotta (1808-1879), Edmund Freiherr von Berg, ed., *Die Geologie der Gegenwart*. Leipzig, J.J. Weber, 1866.

⁵⁵³ Wolfgang Sartorius Freiherr von Waltershausen (1809-1876), German geologist and professor at the University of Göttingen.

⁵⁵⁴ Wolfgang Sartorius von Waltershausen, *Untersuchungen ueber die Klimate der Gegenwart und der Vorwelt, mit besonderer Berücksichtigung der Gletscher - Erscheinungen in der Diluvialzeit*, Haarlem, Loosjes Erven, 1865.

⁵⁵⁵ Hochstetter was elected President of the Geographical Society of Vienna in November 1866.

⁵⁵⁶ It was not until 1868 that an article by Haast was published by the society: Julius von Haast, "Beschreibung einer Reise von Christchurch, der Hauptstadt der Provinz Canterbury auf Neu-Seeland, nach den Goldfeldern der Westküste im Jahre 1865", *Mittheilungen der k. k. geographischen Gesellschaft in Wien*, no. 5, 1868, pp. 132-157, 189-194.

⁵⁵⁷ Hochstetter in his "Jahresbericht" highlights the geological achievements of Haast and Hector and various advances made in New Zealand, including the opening of the Arthur's Pass Road, linking Christchurch with Hokitika; also Haast's election to

This year I have 260 students in mineralogy and 80 in geology and now that I have finished the Novara reports I am writing a textbook on mineralogy and geology for my students, which I will initially only have printed as a manuscript, and then once it has been tried out, have it published.⁵⁵⁸

I am extremely pleased that your dear wife is now well again. With me all are healthy and if it was not for our sad political circumstances, then I would be quite satisfied. Now, yesterday, our houses of representatives were opened and the destiny of Austria is now dependent on whether the government can achieve the agreement with Hungary. Yesterday I sent off a letter to you via Trieste, which Dr Müller from Dresden sent to me for you; this letter is going via Panama. I also wish to congratulate you on your appointment as professor,⁵⁵⁹ and hope that you have done the matter well. I will put together a collection for Nelson, even though it is not me who is under an obligation to send a counter present, but the Geological Survey, which to my knowledge has already sent things on several occasions, books and collections. I think I have already written to you before that Haidinger has retired and that Hauer has taken the position of director of the Geological Survey.

Goodbye for now.

With warmest regards also from my wife,

Yours,

Ferdinand Hochstetter

62. Ferdinand Hochstetter to Julius Haast, Vienna 1 December 1866, MS 37 folder 184.

Vienna, 21 December 1866

Most esteemed friend

Your letter of 11 October has come to hand. Two days later a letter came from Mr Morrison,⁵⁶⁰ the New Zealand government agent in London, which complemented your news and announced the notification of the £525 in London. Thus this matter is now finally sorted out and I again express to you my warmest thanks for your mediation in the matter in true friendship. I wrote to Cotta straight away and hope that the printing will now go very quickly. I will write to Mr Morrison about this and will try to have your wishes in relation to Cotta fulfilled; you can certainly count on my sense of obligation in this regard. Of course I regret now that the printing was stopped and that the work is not lying here all finished, but it does not matter now if it comes a few months later. I will definitely make changes to the most pertinent matters to bring it up to date for the year 1866. For me at least I have achieved this: that I can prove to the English what is my intellectual property, it will be in black and white for all time, and that consequently I might receive a more proper and just assessment from that side.

Your letter stirred up in me again the memories of the terrible war, and I have already packed up the *Allgemeine Zeitung* with supplements for June, July and August together with Austrian newspapers for you, from which you will be able to quench your thirst for information on these events. I will also include a few brochures, and then send it to you together with some more books after the New Year.

I was very pleased that you received a diamond ring from our emperor. After receiving the sketch maps and views of the alps that you sent recently, I had the pictures given to me once more to display in the Geographical Society of which I am the president this year, and put

membership of the Royal Society in London. See p. 26, Ferdinand von Hochstetter, „Jahresbericht: des Präsidenten“, *Mittheilungen der k. k. Geographischen Gesellschaft in Wien*, vol. 11, pp. 2-27.

⁵⁵⁸ Hochstetter, *Vorlesungen über Geologie I, II, and III Theil*, als Manuscript lithographiert. Later published as Ferdinand von Hochstetter, *Leitfaden der Mineralogie und Geologie*, Vienna, Hölder, 1878.

⁵⁵⁹ Haast held the position of lecturer in Geology in 1875 and a chair in Geology and Palaeontology was created for him in December 1876. See William James Gardner, et al., *A History of the University of Canterbury 1873-1973*, Christchurch, University of Canterbury, 1973, p. 91.

⁵⁶⁰ John Morrison was the New Zealand Government Agent, at 3 Adelaide Place, King William Street, London.

together a lengthy article on the Franz Joseph Glacier based on your reports, especially the latest one on the West Coast, which is to include the small map.⁵⁶¹ The article will be published in our geographical yearbook and I will eventually send you an off-print.

Now I have one more wish in regard to names, namely that the name Wüllerstorf might appear in some prominent position on the map of New Zealand.⁵⁶²

I have not thanked you yet for kindly sending the seeds and the numerous reports, which were enclosed for me in the case sent to the Imperial Natural History Museum. I gave the seeds to von Arthaber here in Döbling, who owns one of the largest and most beautiful gardens and glass houses.⁵⁶³ There they are being carefully raised, and I am looking forward to see what will come out as no names were noted. I will fulfil your wish to make a donation for the widows and children of the fallen at an appropriate moment. These subscriptions are actually already over but I will see to it that I find an appropriate opportunity.

I am very pleased that my little godchild⁵⁶⁴ is well and that the health of you dear wife is improving. All is quite well with me, thank God, and even though my four children make a lot of noise, they also give me a great deal of pleasure and I would not want to live without them any more. Your little godchild is now already starting to learn to read and often asks me if she might be allowed to travel to see you in New Zealand sometime.

We now find ourselves awaiting Christmas, which the children are already looking forward to, and this time it will be a white Christmas, with deep snow and -8 to -10 degrees, which is almost too much for this time of year. What may the year 1867 bring? I am afraid not a lot of good for us in Austria in political terms, as the internal affairs of government of this much-tested country are in such a state of confusion that one almost doubts that a revitalisation is possible. Unfortunately one does not dare to completely break with the old system, the old traditions and the ultramontanism and to move in a new direction.

I have already put together a considerable collection for the Nelson museum, which I will complete bit by bit and then send off.⁵⁶⁵ But I would actually need to know to whom I can send a case in London for Nelson.

And now I wish you and your family a happy New Year with all my heart.

May destiny continue to be as good to you as it has been until now.

With warmest regards from all of us,

Yours,

Ferdinand Hochstetter

63. Ferdinand Hochstetter to Julius Haast, Vienna 20 February 1867, MS 37 folder 184.

Vienna, 20 February 1867

Most esteemed friend

January and February are always the most strenuous months for me and despite my best intentions I do not always get to write. Lectures in the morning, preparation for the next day in

⁵⁶¹ On the 11 December 1866 Hochstetter presented his paper and the artistic illustrations by Haast to the Geographical Society of Vienna. The paper was published as: Ferdinand von Hochstetter, "Der Franz Joseph-Gletscher in den südlichen Alpen von Neu-Seeland", *Mittheilungen der kaiserlich-königlichen Geographischen Gesellschaft in Wien*, vol. 10, 1867, pp. 57-62.

⁵⁶² This sentence appears as a footnote in the lower margin of page two of the manuscript letter. Note that Hochstetter includes the name "Wüllerstorf" in the list of geographical place names in his paper "Der Franz Joseph-Gletscher", p. 58. The name Haast used in Westland was "Muellerstorf Range". The name is no longer in use. Colin Burrows concludes that this was probably named after Bernhard von Wüllerstorf-Urbair, commander of the *Novara*. See Colin Burrows, *Julius Haast in the Southern Alps*, Christchurch, Canterbury University Press, 2005, p. 179.

⁵⁶³ Rudolf von Arthaber (1795-1867), Austrian industrialist and art collector who owned the Tullner Hof in Döbling.

⁵⁶⁴ Hochstetter was the godfather of Heinrich Ferdinand von Haast. See H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 327.

⁵⁶⁵ The Nelson Museum had already received a valuable mineral collection of 1500 European specimens on the 17 October 1860, in exchange for the moa skeleton presented to Hochstetter by the Trustees. Hochstetter has obviously not forgotten his friends in Nelson and is again working on a further collection to send over to the Museum. It is not recorded whether this collection was received by the Museum though. See Brereton, *History of the Nelson Institute*, p. 37.

the afternoon and in the evening meetings and more meetings, often until 9 and 10 o'clock. So I did not get to write to you last month and only get to do so today in all haste, to tell you that I received your letter of 31 October and was very pleased that you were able to write with better news of your wife. When you receive this letter, the event will already have passed, and, I hope, happily, so that my wife and I can send you our warmest congratulations.

The English edition is now obviously already in the process of being printed and I am working day and night to keep up with the typesetter. I have to completely revise all those chapters that are not travel account, and therefore the chapter on the Alps, for example, will also be a new one. One year ago I thought I was completely finished with New Zealand and now I am up over my head in it again. The discovery of a fossil whale at Lake Kaniere is of great interest; do write to me in more detail on this. Is it a *Physeter* or an animal related to *Zeuglodon*? Do make sure you write a detailed note about it.⁵⁶⁶

I communicated to Wüllerstorff that you had named a mountain after him and he was very pleased about it, and asked me to express to you his most cordial thanks for this memorial.⁵⁶⁷ He survived the change in ministry that took place a few weeks ago. Herewith you will find enclosed the photograph you wished for. I have not received one from Zelebor yet, and will send it as soon as I receive it, but I don't think he is even photographed. The poor man lives in unfortunate circumstances, with an annual 1000 gulden and having to feed a family with 6 children. So there is nothing left over for photographs. I enclose my lecture on the Franz Joseph Glacier⁵⁶⁸ from the Imperial *Wiener Zeitung*. I sent this lecture, together with the sketches you sent earlier, to Petermann according to your wishes.⁵⁶⁹ In the next few days I will send a parcel to Williams & Norgate for you with an interesting book by Sartorius von Waltershausen on prehistoric climates, a description of the German war and other things that I will have accumulated by that time. I gave your address to the director of the museum in Darmstadt, who is one of the most renowned palaeontologists and would like to have moa remains, and I think he will turn to you with his requirements. You can see how little time I have by the fact that I have not even been able to take the time to see the beautiful shipment of birds you sent to the Imperial Natural History Museum.⁵⁷⁰

I paid the 100 gulden for the wounded at the Imperial Government Agency here and will send you the receipt by the next mail. I have used up the credit from London you gave me for this purpose, so that I now have a balance of £30 and a full statement will follow later.

With our best regards,
Yours,
Ferdinand Hochstetter

I enclose a picture of a Hungarian magnate for your dear wife.⁵⁷¹

At the beginning of February I received the beautiful silver medal from the Dunedin Exhibition, which I was very pleased about. The medal is very beautiful and I was doubly pleased that it has been kept in a truly New Zealand style.⁵⁷²

⁵⁶⁶ See Ferdinand von Hochstetter, "Neue Funde von Moaresten und eines riesigen Wallfisch-Skelettes auf Neu-Seeland", *Jahrbuch der kaiserlich-königlichen Geologischen Reichsanstalt*, vol. 17, 1867, p. 76.

⁵⁶⁷ See earlier note – today no New Zealand geographical place name commemorates the name of Wüllerstorff-Urbair.

⁵⁶⁸ Ferdinand von Hochstetter, "Der Franz-Joseph-Gletscher in den südlichen Alpen von Neu-Seeland" *Wiener Zeitung*, no. 40, 16 February 1867, pp. 492-493.

⁵⁶⁹ In a letter to Petermann dated 23 February 1867, Hochstetter writes: "Mein Freund Haast hat mich ersucht, Ihnen die beiliegenden Skizzen, welche er in einem Brief an mich einschloß, zukommen zu lassen. Näheres über den Franz-Josef Gletscher, auf welchen sich die Kartenskizze bezieht, werden Sie aus meinem Vortrag in der geogr[aphischen] Gesellsch[aft] entnehmen können, welchen ich unter Kreuzband geschickt." Briefsammlung Hochstetter, Sammlung Perthes, Schriftleitung Petermanns Geographische Mitteilungen, Forschungsbibliothek Gotha, Germany.

⁵⁷⁰ The Hofnaturalienkabinet, under the direction of August Pelzel Edler von Pelzeln (1825-1891), later Naturhistorisches Museum in Wien received a collection of 70 bird skins representing 39 species from Haast in 1866. Information and copies kindly supplied by HR Dr Ernst Bauernfeind, Curator of Birds, I would also like to acknowledge the contribution of Hans-Martin Berg to my research at the Natural History Museum Vienna and his letter to the author dated 18 January 2006.

⁵⁷¹ This sentence appears as a marginal note on the first page of the manuscript letter.

64. Ferdinand Hochstetter to Julius Haast, Vienna 16 March 1867, MS 37 folder 184.

Vienna, 16 March 1867

Most esteemed friend

I sincerely thank you for the New Year's greetings, which your letter of 2 January brought me, and I imagine that you are now full of joy over the second little one that your wife has presented you with. Hopefully all went well and both mother and child are healthy. We wish you all the best. I have fulfilled your orders and wishes from your last letter. You will receive herewith a ribbon for the medal in the right colour and the photograph of their Majesties. At the same time I confirm the payment of 100 gulden in your name. At the beginning of this month I also sent the following to Williams & Norgate in London for you:

1. Geological section of the *Novara* reports volume 2 part 1. Just the geological parts by me, the complete volume bound like the others will come later. The palaeontological section is not quite finished yet.
2. Sartorius von Waltershausen, *Prehistoric Climates*.⁵⁷³ This will be very interesting for your glacial studies.
3. *Diary of the Austrian War*, by Hans Wachenhusen⁵⁷⁴
4. A small brochure on the Austrian system
5. *The battle of Königgrätz*, by Petermann⁵⁷⁵
6. A few Viennese newspapers, *Figaro* etc.
7. Bischof's *Geology*, volume 3, part 2⁵⁷⁶
8. Zirkel's *Petrography* in two volumes⁵⁷⁷
9. Cotta's *Geology of the Present*⁵⁷⁸
10. Naumann,⁵⁷⁹ volume 3, first issue, sheets 1-12; that is all that has appeared of the third volume so far.

Hereby I have fulfilled all your wishes, and if you have further requests then I am at your service. I withdrew another £10 from Dalgety & Co, as I wrote to you in my last letter, and have thereby used up the credit allocated to me, but I still have 50 to 60 gulden in your account.

The English book is making good progress, but the matter is giving me more work than I expected, as I have to rework entire chapters, such as the chapter on the Alps, and the proofing is a major task by the time the whole becomes correct English and to my satisfaction. So despite all the diligence from both me and the printers there is no prospect of it being ready before July. One will then simply have to say: better late than never and all good things take time.

Your moa discovery is splendid, and what happened to the whale discovery at Lake Kaniere?⁵⁸⁰ If you want to make good use of spare moa bones or skeletons, then I suggest you send a skeleton to Director Kaup in Darmstadt, who has set himself the special task of restoring

⁵⁷² This sentence appears as a marginal note on the second page of the manuscript letter. Hochstetter was awarded a silver medal from the New Zealand Exhibition in Dunedin, 12 January – 6 May 1865. "For the able and valuable services rendered to the colony by his published works on the Natural History of New Zealand", Anon., *New Zealand Exhibition, 1865: Reports and Awards of the Jurors: and Appendix*, Dunedin, 1866, p. 510.

⁵⁷³ Wolfgang Sartorius von Waltershausen, *Untersuchungen ueber die Klimate der Gegenwart und der Vorwelt, mit besonderer Berücksichtigung der Gletscher - Erscheinungen in der Diluvialzeit*, Haarlem, Loosjes Erven, 1865.

⁵⁷⁴ Hans Wachenhusen, *Tagebuch vom österreichischen Kriegsschauplatz 1866*, Berlin, Lemke, 1866.

⁵⁷⁵ August Heinrich Petermann, *Die Schlacht bei Königgrätz am 3. Juli 1866*, Gotha, Perthes, 1866. The Battle of Königgrätz or Sadowa, was a decisive Prussian victory over Austria in 1866. Königgrätz is now Hradecrálove in the Czech Republic.

⁵⁷⁶ Gustav Bischof, *Lehrbuch der chemischen und physikalischen Geologie*, the first edition of vol. 3 appeared in 1866.

⁵⁷⁷ Ferdinand Zirkel, *Lehrbuch der Petrographie*, Bonn, Marcus, 1866. See H. F. von Haast, *Catalogue of the Books belonging to the late Sir Julius von Haast*, p. 9.

⁵⁷⁸ Bernhard von Cotta (1808-1879), Edmund Freiherr von Berg, ed., *Die Geologie der Gegenwart*. Leipzig, J.J. Weber, 1866.

⁵⁷⁹ Haast named the Neumann [sic] Range, near Lake Ohau, after Naumann, the German mineralogist. See Reed, *The Reed Dictionary of New Zealand Place Names*, p. 334.

⁵⁸⁰ See also earlier mention – when Haast first wrote about the discovery Hochstetter published a note on it in the *Geologische Reichsanstalt*. Ferdinand von Hochstetter, "Neue Funde von Moaresten und eines riesigen Wallfisch-Skelettes auf Neu-Seeland", *Jahrbuch der kaiserlich-königlichen Geologischen Reichsanstalt*, vol. 17, 1867, p. 76.

moas and mounting them in the grand palaeontological museum in Darmstadt. Kaup can send you other things in exchange. But the things will also be gladly received here. It is just a pity that here everything is hidden in boxes and drawers, due to the shortage of space in our collections.

I am not satisfied with my health – despite my radiant appearance I am quite unwell; the ailing part is my throat, that is the pharynx and larynx. I constantly have swellings and infections in these parts, which obviously cause me considerable embarrassment when lecturing and frequently prevent me from lecturing at all. I have now been trying homeopathy for months and *mirabile dictum* – amazingly, have completely given up smoking, but nothing really helps.

Goodbye for now.

With warmest regards,

Yours,

Ferdinand Hochstetter

65. Ferdinand Hochstetter to Julius Haast, Paris 27 April 1867, MS 37 folder 184.

Paris, 27 April 1867 at 7 am

Most esteemed friend

When I happened to meet Professor Tyndall yesterday I heard a piece of very good news, which I want to communicate to you straight away. I can and may congratulate you on your F. R. S.⁵⁸¹ You really have reached this very quickly, faster than other mortals are normally able to, and I am very proud of the fact that you have been given this, the highest of all scientific honours. My sincerest congratulations on this. A few days ago my wife also forwarded your letter of 15 February to me here and much to my pleasure I must congratulate you again, this time on your second son. I hope that mother and child are well. You will be surprised to receive this letter from Paris. I have been here for eight days to report on the exhibition of mining products.⁵⁸² I am completely disappointed to find that New Zealand is not represented by a single atom at this international exhibition. I did not want to believe the English commission that New Zealand was not represented and spent a whole day searching around until I was finally convinced that there was nothing there. Why is that? Apart from that I have found a great deal more than I had expected and the whole thing is surprisingly impressive in both design and execution. Especially pleasant is the park and the arrangement whereby every country has a restaurant with its national cuisine, so that one may partake of Russian, Turkish, German, English, Austrian or Greek food and drink according to one's whim or fancy. In practice one does move from one to the other, of course, in order to get to know everything. The warring thunderstorm clouds seem to be subsiding again according to the latest news. The King of Prussia⁵⁸³ personally wrote to Emperor Napoleon and wants to come to the exhibition in Paris.

The English edition of New Zealand is making steady progress and will probably be ready by August, but it keeps me incredibly busy, and I am continuing the proofing even while I am here. I am not sure how much longer I will be staying here, but certainly not a day longer than I have to for the completion of my official task. Therefore you will receive the next letter from Vienna again. Once again my sincerest congratulations to you and your wife.

Yours faithfully,

Ferdinand Hochstetter

⁵⁸¹ Haast was elected a Fellow of the Royal Society in London at the general meeting of 1867. See H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 506.

⁵⁸² Ferdinand von Hochstetter, "Producte des Bergbaues und Hüttenwesens, Classe XL, Erster Theil: Der Bergbau", *Officieller Ausstellungs-Bericht Herausgegeben durch das K.K. Österreichische Central-Comite, 9. Lieferung Bergbau und Hüttenwesen, Erster Theil des Berichtes über die Chemische und Metallurgische Industrie auf der Welt-Ausstellung zu Paris im Jahre 1867*, Wien, Braumüller, 1868, pp. 3-57.

⁵⁸³ The King of Prussia was Wilhelm Friedrich I (1797-1888).

66. Ferdinand Hochstetter to Julius Haast, Vienna 3 July 1867, MS 37 folder 184.

Vienna, 3 July 1867

Most esteemed friend

I am presuming that you are on some expedition as I have not had the joy of receiving any letters from you since May. Last time I wrote to you was from Paris,⁵⁸⁴ albeit briefly, but with the good news that you had become a Fellow of the Royal Society, which I am proud of. Since then I have now been back here and am at the end of my lectures and the beginning of my holidays. The English book, to which I have had to commit months of work, is now quickly reaching its completion. I am now working on writing the forword for the English edition and hope that the 500 copies for New Zealand can be dispatched by the end of August. The English book has actually become a completely new one compared to the German one, with a new arrangement of the chapters, revised and also partly new illustrations. The chapter on the Alps based on works by you, Doyne⁵⁸⁵ and Dobson has been completely revised. I am eagerly anticipating how it will be received in England and New Zealand. I want to dedicate the English edition to the colonists of New Zealand, as after all it is thanks to them that it became possible. I would have sent you proof copies, if one was actually able to send things by book post from here.

Enclosed you will find the latest photograph of my family of 30 April 1867.⁵⁸⁶ I would certainly be happy if my throat problem, which I have been complaining of since 1860, was not depressing my mood. Unfortunately I am in such a state again that I will have to make up my mind to visit a spa in the holidays. The doctors are suggesting Reichenhall in the Bavarian Alps, with mountain air and salt water spa. Those who see me do not believe that there could be anything amiss with me, as I am fat and strong, so that I will soon have caught up with you in this respect. It is a localised ailment that I am suffering from and only periodically affects my general well being, although it hinders me in my lecturing.

Here everyone is upset at the latest news that Emperor Maximilian was shot on 19 June.⁵⁸⁷ The emperor shot, like a bandit, and the empress⁵⁸⁸ demented and occupied with thoughts of suicide. If this is not a tragedy more terrible than one could ever imagine, then there is nothing tragic in the world any more.

In the midst of the swirl of the exhibition there were again rumours of impending war. We are obviously moving towards a major Franco-German war, which will probably break out this winter, when the Baltic Sea is frozen over.

France needs 780 million francs for military purposes and is arming at a horrific rate. Only the gods know what will become of poor Austria in this war. You fortunate people in New Zealand!

Just before I left for Paris in mid May, they had started to erect a New Zealand section in the exhibition building; unfortunately I did not get to see it, and only saw the beautiful water colours of the Alps and an enormous foot of *Dinornis giganteus* and your Mt Pleasant cross-sections;⁵⁸⁹ unfortunately none of the specimens had been unpacked at that stage.⁵⁹⁰

⁵⁸⁴ Hochstetter letter to Haast no. 65 dated Paris 27 April 1867.

⁵⁸⁵ William Thomas Doyne (1823-1877).

⁵⁸⁶ Portrait of Georgiana von Hochstetter and her four children, photograph by Heinrich Harmsen, 30 April 1867, PA2-0830, Alexander Turnbull Library.

⁵⁸⁷ Kaiser Ferdinand Maximilian of Mexiko (1832-1867), was shot at Querétaro, Mexico, on 19 June 1867.

⁵⁸⁸ Kaiserin Charlotte of Mexico (1840-1927), was the daughter of King Leopold I of Belgium.

⁵⁸⁹ The geological section of Mt Pleasant was most probably originally drawn to accompany Haast's *Report of a Geological Survey of Mount Pleasant*, Lyttelton, Times office, 1860.

⁵⁹⁰ New Zealand exhibits for the International Exhibition in Paris in their incomplete state are mentioned in Hochstetter's report where he writes: "Von Neu-Seeland, dessen Ausstellung erst nach der Abreise des Berichterstatters von Paris vollendet wurde, haben wir nur den Riesenfuß eines Moa (*Dinornis maximus* Owen), gefunden zu Glenmark in der Provinz Canterbury und ausgestellt von Major Michael gesehen, so wie den lehrreichen geologischen Durchschnitt durch die vulkanischen Schichten des Mount Pleasant bei Christchurch von dem verdienten Geologen der Provinz Canterbury, Dr. J. Haast. Der Kohlen- und Goldreichthum Neu-Seelands scheint nicht repräsentirt gewesen zu sein." Ferdinand von Hochstetter, „Producte des Bergbaues und Hüttenwesens, Classe XL, Erster Theil: Der Bergbau“, *Officieller Ausstellungs-Bericht Herausgegeben durch das K.K.*

The Letters of Ferdinand von Hochstetter to Julius von Haast

With warmest greetings also from my wife,
Yours faithfully,
Ferdinand Hochstetter



11. Georgiana von Hochstetter and four children, photograph by Heinrich Harmsen, 1867.
(PA2-0830, Alexander Turnbull Library).

67. Ferdinand Hochstetter to Julius Haast, Vienna 18 August 1867, MS 37 folder 184.

Vienna, 18 August 1867

Most esteemed friend

I write to you in all haste before my departure for Bad Wartenberg near Turnau in Bohemia, where I am undergoing a six-week cold water cure for my throat problems, to let you know that I received your letter of 31 May and that we are very pleased about the good news. Our warmest congratulations to you and your wife on your son.⁵⁹¹ I will write in more detail from Wartenberg, for now only that I enclose the ornithological information you asked for and that we have reached the thirtieth sheet in the printing of the book. Therefore the book is virtually finished and will hopefully be sent off in September. I would be grateful if you could write about this to Wellington in my name. I will write to Morrison, the government agent in London. Unfortunately the printing became more drawn-out as the corrections gave me a great deal of work, as two and sometimes three proofs were necessary. A few new illustrations were also a bit of a hold-up. But the printing is brilliant and the book will surpass the German in the way it has been put together. I only wish for a good reception of it. I received a letter from Kaup and I am quite prepared to fulfil his wishes. Everything else later.

With warmest regards from all of us,

Your faithful friend,

Ferdinand Hochstetter

68. Ferdinand Hochstetter to Julius Haast, Vienna 24 September 1867, MS 37 folder 184.

Vienna, 24 September 1867

Most esteemed friend

I received your letter of 4 July in Wartenberg near Turnau in Bohemia where I underwent a cold water therapy for five weeks, for my chronic throat problems, but without coming away with any notable improvement. From your letter I see that you did not receive my letter which I wrote to you from Paris at the end of April, in which I hoped to be the first to announce to you your election as Fellow of the Royal Society.⁵⁹²

I already expressed to you my sincerest congratulations on this extraordinary distinction then and repeat it now. I don't need to tell you that I was as pleased as if I had become F.R.S. myself, and put a little portion down to myself anyhow.

New Zealand is finished, title and foreword already printed, the book is at the bookbinders and I hope that in a few weeks the 500 copies for New Zealand will already be in the hands of the government agent in London. I made every effort to revise the work, and I hope that this will be acknowledged. On the urgent advice of English friends I have taken steps to gain permission to dedicate the work to the Queen of England⁵⁹³ and hope to get a reply in the next few days; the dedication will then be inserted afterwards. My original plan, as I wrote to you, was to dedicate the work to the colonists of New Zealand, however my friends in England thought that it would be of great importance for the circulation in England that the book be dedicated to the queen, and as I only get my fee from the copies sold in England, which I can well use, I allowed myself to take these steps. I hope that the situation in New Zealand will soon get better than it seems to be judging by your last letter.

I am pleased about the good news of your family; in my family all is well too, thank God, all are well except for me, as I cannot get rid of the annoying throat problem. I have completely

⁵⁹¹ Haast's son George Augustus von Haast was born 7 February 1867 in Christchurch.

⁵⁹² Hochstetter letter to Haast no. 65 dated Paris 27 April 1867. Obviously Haast did eventually receive this letter, but it must have been delayed.

⁵⁹³ Queen Victoria (1819-1901).

given up smoking and was putting a lot of hope in the cold water therapy; however the ailment is still stuck there as before, and I am very afraid that it will affect my teaching again this winter.

I wrote to Kaup that I would like to pass on to him the case of moa bones intended for me, all the more so as until we have a new building for a palaeontological museum here, these treasures would just lie buried here, while they are in the best hands with Kaup. Apart from that I hope that this gift will earn you another honour.

The last volume of the *Novara* geology has only just been finished.⁵⁹⁴ I will send you a copy through Williams & Norgate at the next opportunity. I will not send any copies of the English edition of my *New Zealand*, as 500 copies are going to New Zealand anyway and I only received a very few complimentary copies. You will be able to receive several copies from the government anyway. I will try to get a few things from the Cotta publishing house for you at the time of the final settlement anyhow.

In my last letter I sent the notes on New Zealand birds you wished for.

How do things look in regard to your intentions of coming to Europe? In order to live in Austria in the way you are used to with family, you need a minimum of 5000 gulden per annum. But this does not allow you to take any leaps, hold any social gatherings etc. It is much cheaper to live in Southern Germany. What you need 5000 gulden for in Austria, you can get in Bavaria or Wurttemberg for 3000 gulden. A family life in your own home in the country, that is to say near Vienna, costs – and I mean a gentleman's lifestyle – 8,000 to 10,000 gulden per annum. I need an annual 4000 to 5000, although sometimes due to travel and spa costs also a little over 5000, and I have the house very cheaply for 400 gulden per annum, lighting and heating free, as my father-in-law looks after this. This gives you some idea of what the costs are like here.

I hope to see you and your family back in old Europe in a few years' time and then we will make plans.

With warmest regards from me and my wife to you and your dear wife,

Yours faithfully,

Ferdinand Hochstetter

69. Ferdinand Hochstetter to Julius Haast, Vienna 14 December 1867, MS 37 folder 184.

Vienna, 14 December 1867

Most esteemed friend

I do not wish to delay my writing to you any longer as I already have two of your letters to reply to dated Glenmark, 1 August, and Christchurch, 4 October. I did not get to do so earlier due to other business. First of all I have to report to you on the present state of affairs in regard to the English edition of my *New Zealand*. The printing of the book has been finished since the end of September and now 500 bound copies have also been delivered in accordance with the order to Mr Morrison, the government agent. I am awaiting the news of the confirmation of receipt of the books and the payment of the sum of £525 any day now from Cotta, and thereby the matter would be closed for Cotta and me. However I also have to tell you that when we were dealing with the delivery of the books, Mr Morrison the agent of the New Zealand government gave us the surprising and to us unpleasant news that the New Zealand government had given instructions to only send 200 of the 500 copies to New Zealand and put 200 copies on the market in England at a price of £1 per copy and, as it seems, to also sell the other 100 copies in England or to keep them in London at the government's disposal. I have to admit that I was completely surprised by these revelations, as Cotta had only agreed to undertake the publishing of the book under the prerequisite that the 500 copies would go to New Zealand and be sold there and in Australia by the government and that the remainder of the edition, a total of 1200 copies being printed, would

⁵⁹⁴ Ferdinand von Hochstetter, *Reise der Österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859 unter den Befehlen des Commodore B. von Wüllerstorff-Urbair: Geologischer Theil, 2. Band, Mit 12 lithographischen Tafeln u. 33 Text-Holzschnitten*, Wien, k.k. Hof- und Staatsdruckerei in Commission bei Karl Gerold's Sohn, 1866.

be sold by us in England. The agreed price was one guinea, which is 21 shillings. Under this presumption I also relinquished the right to a fee from Cotta, in that our contract said that we would share the net profits from the 700 copies. The New Zealand government comes and creates competition on the English market for us and even with a price that is lower than our contractually fixed price. It was this unfortunate situation that led to a lengthy and unpleasant correspondence between Cotta, Mr Morrison and myself, which also delayed the dispatch of the books by more than one month.⁵⁹⁵ But in the end I instructed Cotta to send the books anyway after he had also realised that Morrison had his particular instructions to follow, and that there was nothing that could be done in this unpleasant affair any more. We are now also forced to sell the books at £1 each. In this way my interests and Cotta's are obviously most unexpectedly harmed, and Cotta told me that he would never have taken on the matter if he had known how dirty the New Zealand government was. What is there left to do now – I have promised Cotta that I would do the one thing that is still possible, which is to complain to the New Zealand government. I have not written this letter yet, but will do so in the next few days, and will then send it to you unsealed, so that you can send it to Wellington if you think it is appropriate. In any case, I am not prepared to give it to the gentlemen in Wellington for nothing, for in this way I would have worked for a whole year for nothing, as I don't think much will come out of the matter if we now have to sell the book in England for £1 and have to contend with the competition of the New Zealand government on top of all that. In the meantime I would be very pleased if you could let Wellington know that you had heard that the books have been delivered in London, but that Cotta and the author were not very pleased with the news that a portion of these books are to be sold in London, as their interests would be harmed by this.

The book came out looking very fine and I hope that it will also be to your satisfaction. It has no dedication. Unfortunately I allowed myself to be dissuaded from my original correct intention to dedicate it to the colonists of New Zealand, by the advice of a friend in England who suggested it should be dedicated to the Queen and promised to get the permission for me. But he let me down with this, time was lost in the waiting and in order not to lose more time, as the dedication would still have to have been printed afterwards, I left out the dedication completely.

But enough about the book for now. You will receive one copy directly through Williams & Norgate, to whom I have already sent it off, while the *Novara* volumes which I have already put together for you will be packed in a case and go by the English admiralty to the governor of New Zealand.

I negotiated with Cotta about a present for you and you will be surprised by an impressive work such as has never before been seen in New Zealand, which will also come via Williams & Norgate.

My best thanks for Captain Hutton⁵⁹⁶'s report, which I was very pleased to receive.

I fully agree with your intention to send moa bones to Kaup, and I wrote to Kaup about this, and they will thereby end up in the right hands, through which they will be scientifically utilised.

It is easy to understand that you came away from Paris empty-handed, for, as I wrote to you, not a single atom of your material had been unpacked at the time the jury had already completely finished its task, and only in the middle of May did your sections become visible, and by mid-May I still searched for your rock collection in vain. The other thing is that New Zealand could not be found in any catalogue, and the jury only works according to the catalogue.

It is in your interests to send Owen as much material as possible.⁵⁹⁷ But I would definitely at least publish my observations in German first and I am therefore eagerly anticipating the paper you promised for the Leopoldina.

⁵⁹⁵ This correspondence, including copies of letters and some official translations from the time, are held at Archives New Zealand, Head Office, Wellington.

⁵⁹⁶ Frederick Wollaston Hutton (1836-1905).

⁵⁹⁷ This is in response to a letter from Haast dated 4 October 1867, in which he wrote: "Trotzdem dass ich erst die Hälfte des Sumphes bei Glenmark home station (Provinz Canterbury) untersucht habe, bin ich doch bereits im Besitze einer Maasse von

We are very pleased about the good news of your wife and children. I will write to Fischer in the next few days. I sent a copy of my New Zealand to Miss Collet. I have been using homeopathy for my throat for two months, but also without success so far. My wife and children send their warmest regards. Happy New Year, and I will certainly write again soon.

Yours,
Ferdinand Hochstetter

70. Ferdinand Hochstetter to Julius Haast, Vienna 17 February 1868, MS 37 folder 185.

Vienna, 17 February 1868

Most esteemed friend

Just a few brief lines to let you know that your letters of 4 December and 4 November have reached me. Your report on the Rakaia⁵⁹⁸ for the Geological Survey and Geographical Society has also arrived, as well as your photographs of the moa skeletons. You can afford to be proud of the 6 skeletons, they are certainly a real treasure. I have already displayed the photographs⁵⁹⁹ in the Geographical Society and will do the same in the Geological Survey tomorrow and speak about it in detail, appropriately highlighting your achievement. I will send you the printed notice later. Enclosed herewith is a review of your Rakaia report from the Geological Survey.⁶⁰⁰ In the Geographical Society I discussed your essay; I will send you the notice by the next mail together with a copy of your travel account of the journey through the Alps in 1865, which I finally managed to put in print in the third issue of the journal of our Geographical Society.⁶⁰¹ I do not have the issue yet, otherwise I would have enclosed it today. I did not show the photographs in the Academy of Sciences, as our academy is completely indifferent to these sorts of things, and is nothing more than a society for the publication of good and bad papers at the expense of the government. A reorganisation of the academy is now being worked on and then things might improve. Anyway, I can assure you that your moa skeletons are creating a sensation in Europe. The *Illustrated London News* has published the general view.⁶⁰² I suggest you urgently complete the excavations of the precious swamp at Glenmark home station; you still have a treasure lying there and then it will suddenly all be over.

Kaup is very pleased that you are sending a shipment to him and the Duke of Hesse will decorate you with a medal for it.⁶⁰³ If you have more to give away, then send something to the Natural History Museum in Stuttgart.

With regard to my *New Zealand*, the news I can tell you is that the Queen subsequently accepted my dedication, through which I have been placed in a rather awkward position, as the

Moaknochen, die zu 118 Individuen gehören. Darunter zeichnet sich ein Individuum, von welchem ich tibia, femur, fibula, pelvis und die zwei letzten Rückenwirbel besitze, durch besondere Grösse aus. Die tibia ist 39 ½ englische Zoll, der femur 18 ½ Zoll lang. [...] Ich werde auf den Wunsch der Regierung alle meine Notizen, sowie Photographien und Messungen von Moaknochen nebst vollständigem Material an Prof. Richard Owen senden, und eine zweite Serie von Knochen an Herrn Dr Kaup in Darmstadt schicken, der die Absicht hat, und auch bereits damit begonnen hat, in dem Grossherzoglichen Museum eine Reihe von Moaskelen zur Aufstellung zu bringen". *Verhandlungen der k.k. geologischen Reichsanstalt*, Sitzung 17 December 1867, no. 17, 1867, p. 375.

⁵⁹⁸ Julius von Haast, *Report on the Headwaters of the River Rakaia, with twenty illustrations, and two appendices*, Christchurch, 1866.

⁵⁹⁹ Six photographs by Daniel Louis Mundy dated 25 October 1867, and annotated by Hochstetter as having been received in January 1868, feature a series of articulated moa skeletons. See Nolden & Nolden, *Hochstetter Collection Basel: Part 2 – New Zealand Photographs & Prints*, pp. 135-140, (Cat. no. 2.12.1 to 2.12.6).

⁶⁰⁰ Haast Rakaia report was reviewed by Edmund von Mojsisovics, in *Verhandlungen der k.k. Geologischen Reichsanstalt*, meeting 21 January 1868, no. 2, 1868, p. 42.

⁶⁰¹ Julius von Haast, "Beschreibung einer Reise von Christchurch, der Hauptstadt der Provinz Canterbury auf Neu-Seeland, nach den Goldfeldern der Westküste im Jahre 1865", *Mittheilungen der k. k. geographischen Gesellschaft in Wien*, 1868, pp. 132-157, 189-194.

⁶⁰² The anonymous article, "The Canterbury Museum, New Zealand" includes two engraved illustrations "The Museum, Government Buildings, Canterbury, New Zealand" and "Skeletons of the Dinornis in the Canterbury Museum, New Zealand", *The Illustrated London News*, vol. 52, no. 1468, p. 144.

⁶⁰³ Haast was awarded the "Ritterkreuz 1ste Classe des Ludwigs-Ordens", on 21 February 1877, as indicated by a letter from the 'Ordenskanzler' dated 3 March 1877. See MS papers 0171, Alexander Turnbull Library.

book is already in the shops, so I had the dedication printed later as quickly as possible and will send them out.⁶⁰⁴ I have sent my letter of thanks to the Queen and the copy with the dedication for the Queen will be sent in the next few days. I am also writing to Stafford about this affair, after the whole thing has now come to a complete close, but I hear from Cotta that the English booksellers refuse to take any copies, as the New Zealand government is selling them. We will therefore be doing very poor business.

In my family I am expecting an addition any day now, the fifth.

I have finally had the notification of the arrival of the case from Fischer.

With best regards,

Yours,

Ferdinand Hochstetter

71. Ferdinand Hochstetter to Julius Haast, Vienna 10 April 1868, MS 37 folder 185.

Vienna, 10 April 1868

Most esteemed friend

Your letter of 3 February 1868 has reached me and I want to use a quiet day in the Easter holidays to work on my correspondence. I thought that you would reply to Dr Weiss in the way you indicated and I fully agree. I said something similar myself when he came to see me. I hope that your foot is now better; unfortunately I cannot say the same of my throat or my chest. The ailment is established and no doubt I will again be making a futile attempt to be healed by a visit to a spa. However, now for something happy: my wife again presented me with a son, on 31 March – number five in my family, who will be named Egbert.⁶⁰⁵ Mother and child are very well, God be praised, and the boy is a strong child who awakens the amazement of the women. So my family grows almost yearly and with it my worries. I enclose with this letter what I said in the Geological Survey when I presented the moa skeletons. Over the next few days I will also send the photographs to Ehrenberg⁶⁰⁶ in Berlin, who writes to me that he is very interested in them and he will probably present them to the Berlin Academy of Sciences. Your essay, ‘Journey through the Alps’, which you were enquiring about, has just now been published in the journal of our Geographical Society, as I already wrote to you in my last letter. I have a number of off-prints, but at this stage only eight copies for you, and I ask you for your instructions regarding their disposal. I will send one copy as printed matter to London for you. In the same issue you will also find a review of your Rakaia report. The Palla Beds⁶⁰⁷ are nothing other than a particular type of volcanic tuff, which can be found with the same characteristics in diverse regions. I am keenly anticipating your results in regard to the Tertiary formation. By the way, the second part

⁶⁰⁴ Hochstetter's dedication to Queen Victoria for his *New Zealand* reads: “To Her Most Gracious Majesty | Queen Victoria. | May it please Your Majesty, | Having been favoured whilst fulfilling a scientific commission from my own Government, with a request and opportunity to explore a most interesting and important, though very distant part, of your Majesty's dominions, and having been since enabled by the liberality of the General Assembly of New Zealand to publish an English report of my researches, I have the highest satisfaction in availing myself of your Majesty's most gracious permission to dedicate the volume to your Majesty. | Will your Majesty allow me, in making this high dedication, to record my most grateful recollections of the friendly welcome and important help given everywhere on British ground to the expedition with which I was associated, and especially enjoyed by myself during my stay in the young and hopeful Colony which forms the subject of my report; and to assure your Majesty of my profound sense of the honour your Majesty has conferred upon me by your Majesty's distinguished recognition of my Work. | With the highest respect, I am | your Majesty's most humble | and most devoted Servant, | Ferdinand von Hochstetter. | Vienna, January, 1868.” Note this was printed after the book was published and distributed and no copies seen by the author have had the dedication included. A printed copy together with a number of draft manuscript versions are held in the Österreichische Nationalbibliothek, Handschriftensammlung, Cod. Ser. n. 38807.

⁶⁰⁵ Egbert Wilhelm von Hochstetter (1868-1906), Austrian mining engineer and geologist, who worked as a volunteer for the “Geologische Reichsanstalt” in Vienna in 1896. Later he worked as a ‘Bergingenieur’ in Ostrau.

⁶⁰⁶ Christian Gottfried Ehrenberg (1795-1876), German naturalist in Berlin.

⁶⁰⁷ Hochstetter refers to Palla-Schichten, see Ferdinand von Hochstetter, *Geologie von Neu-Seeland*, Wien, Staatsdruckerei, 1864, p. 52 note. This is translated as “Palla Beds”, Fleming writes, “This is the introduction into New Zealand geology of the word ‘Palla’ (later used by Haast, Cox and Hutton)”, see Charles Fleming, *Ferdinand von Hochstetter: Geology of New Zealand*, p. 86 note.

of the third volume by Naumann has just been published. The second volume ends with page 1093 and of the third volume only the first section pages 1 to 192 have become available so far, which you already have. I will now only send you the rest when it is all published. I hope that by the time this letter reaches you, *New Zealand*⁶⁰⁸ will also be in your hands. The Queen subsequently accepted the dedication, as I wrote to you in my last letter. I had a copy presented to the Queen and received a letter of thanks from a Colonel Biddulph,⁶⁰⁹ which is so dry and contains only the minimum of polite phrases, so that I am in no small degree annoyed about this whole affair, which caused me and my friend Blews⁶¹⁰ so much unnecessary effort. If you are potentially expecting counter consignments in exchange for moa remains you send, then it is better not to send anything here at all, as they are very laissez-fair about this sort of counter shipment here. Although I will do my utmost, I know the way things go; it is not only postponed from one day to the next, but from one year to the next. As I said there is a far greater likelihood of something being forthcoming in Wurttemberg.

Have no ore deposits been found in the Southern Alps of New Zealand yet?

Fischer's case arrived, but the birds were all spoilt, and amongst the fossils there was nothing of interest, the kiwi egg was smashed, the kiwi rotten, so that I am very dissatisfied that I had to pay 60 gulden in freight, and now cannot achieve the recognition for Fischer which I wanted to gain on the basis of this shipment.

With sincere regards,
Your faithful friend,
Ferdinand Hochstetter

72. Ferdinand Hochstetter to Julius Haast, 20 May 1868, MS 37 folder 185.

20 May 1868

Dearest friend

Just very briefly. In the interests of my health I am travelling to see Professor Bruns in Tübingen,⁶¹¹ one of the first authorities on ailments of the throat, and in the meantime I am sending you the price list of Schiedmayer.⁶¹² From Stuttgart I will also be sending you the price list of a second manufacturer, Lipp,⁶¹³ who is said to have become vastly superseded by Schiedmayer. You may then choose. In my family all is well. In ten days, at the latest, I will be back.

With sincere regards,
Yours,
Ferdinand Hochstetter

73. Ferdinand Hochstetter to Julius Haast, Vienna 4 July 1868, MS 37 folder 185.

Vienna, 4 July 1868

Most esteemed friend

I have your two letters of 29 February and 3 May to answer. I am pleased to see from your second letter that you have safely returned from your West Coast expedition and that my *New Zealand* has already found its way across the pacific and met with your applause. I know

⁶⁰⁸ Ferdinand von Hochstetter, *New Zealand*, Cotta, Stuttgart, 1867.

⁶⁰⁹ Sir Thomas Myddelton Biddulph (1809-1878), officer in the British Army and courtier in the household of Queen Victoria.

⁶¹⁰ Maxwell H. Blews, of William Blews & Sons, 38 West Smithfield, London.

⁶¹¹ Viktor von Bruns (1812-1883), Professor of Medicine at Tübingen University. Haast mentions this when he writes about Hochstetter: „His throat complaint gradually getting worse, he went, in May 1868, to Tübingen to consult Professor Bruns”. Julius von Haast, “In Memoriam: Ferdinand Ritter von Hochstetter”, *The New Zealand Journal of Science: Devoted to the furtherance of Pure and Applied Science throughout the Colony*, vol. 2, no. 5, September 1884, p. 207.

⁶¹² There were two Stuttgart piano manufacturers by this name at the time: J. & P. Schiedmayer, began production in 1853; Schiedmayer & Söhne, began production under this name in 1845.

⁶¹³ Richard Lipp & Sohn, Stuttgart, company of piano makers, began production in 1831.

very well that the translation left much to be desired.⁶¹⁴ But I did my best and it was enough work as it was. I did not write to Stafford, I thought about the matter, and communicated my complaint to the English agent Mr Morrison, and he promised to write to Stafford about it. I did not want to ask you to deal with such an unpleasant affair, and the matter cannot be reversed anyhow. I only hope for one thing, that my work and effort may still be appreciated and that especially Hector, whose work I give due recognition, will not refuse to reciprocate this. The off-prints of your alpine article that decorates the pages of our journal will go to Williams & Norgate for you. I have not received your Rakaia report yet. I am looking forward to your observations on *Apteryx*; do communicate these to the British Association for the Advancement of Science. Herewith I enclose a price list of a second Stuttgart piano maker. The grand pianos in the American style are supposed to be quite outstanding and renowned as being the ultimate, and only grand pianos like this are able to stand the sea voyage well, but as you can see they are very expensive; 1000 gulden, therefore approximately £100. You can now decide on an American one from Schiedmayer or Lipp.⁶¹⁵

In the English newspapers positive reviews have been published in the *Daily Telegraph* and in the *Morning Post*; I have not seen anything else, apart from reviews in American journals, which are also full of praise. I am now keenly anticipating what will come from New Zealand.⁶¹⁶

I congratulate you and your dear wife from all my heart on your number four, which has hopefully come into the world by now.⁶¹⁷ Our five are now better and jumping around in the garden again after whooping cough broke out among them two months ago and took its usual longwinded progression. We are having an unusually fine summer. May and June were as hot as a normal July or August and without rain except for thunderstorms. But the harvest has been excellent, which hungry Europe, that would have half starved during the last winter if it had not been for Hungary, really needs. At the end of July the big German sharpshooters fair – “Schützenfest” – begins and 20,000-30,000 sharpshooters from all parts of Germany are expected and the grandest preparations are being made. So despite the fact that we have been thrown out of Germany politically, we are still German and will stay that way.

Things are going better with my health. Professor Bruns in Tübingen very much reassured me, by telling me that it was not a physical ailment, but just a nervous irritability, for which I should use saltwater baths. So I might decide to go to a sea spa in the holidays if my financial circumstances allow it.

This mail also brought me letters from Dr Fischer in Auckland. The poor man complains bitterly that he has lost a large part of his fortune and that the new regulations are making it difficult for him to practise in his old days. He has therefore turned to me, and I will gladly do for him whatever I can. In the next few days I want to go to the Salzkammergut to see the Austrian salt mines. By the way, have no salt deposits been found in New Zealand yet? If you are ever making a shipment to Europe, then be so kind as to include some seeds of *Novo Zelandica* for me as I want to plant them in both my and my brother's gardens.

Now farewell, dear friend.

Wife and children send their distant friend warmest regards,

Yours faithfully,

Ferdinand Hochstetter

⁶¹⁴ Hochstetter's *New Zealand* was translated by the native German, Edward Sauter, who was the Principal of Little Rock Academy, Arkansas, United States of America.

⁶¹⁵ Haast chose to order two Richard Lipp & Sohn pianos: “1 Mahagoni Pianino & 1 Mah. Tafelpiano”, which were sent via Dalgety & Co in London in September 1869. See Richard Lipp letter to Haast, dated Stuttgart 12 November 1869, MS papers 37, Alexander Turnbull Library.

⁶¹⁶ Reviews of Hochstetter's *New Zealand*, include “Review: New Zealand: By Dr. Hochstetter”, *The Weekly News*, 30 May 1868; and “Review: Hochstetter's New Zealand”, *The New Zealand Herald*, 6 August 1868, p. 3.

⁶¹⁷ Julius and Mary von Haast's fourth child Julius Hermann von Haast, was born at “Glückauf” in Christchurch on 16 December 1873, see H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 681.

74. Ferdinand Hochstetter to Julius Haast, Vienna 30 October 1868, MS 37 folder 185.

Vienna, 30 October 1868

Most esteemed friend

I hope that this letter will arrive just in time to bring you and your family our sincerest best wishes for Christmas and the New Year. I still have two letters of 27 June and 5 September from you to answer. First of all in regard to your latest letter, I do not know what sort of discount Schiedmayer usually gives, but I do know that he gives agents and similar a discount of 15 to 20 percent for multiple orders. But I think the best thing would be if you bought an American instrument. They are the best pianofortes according to general consensus, and if not then have one delivered by a renowned company in London, and then you save on the expensive transport from here to London and other difficulties as well. It would be a different matter if Schiedmayer was here so that I could see the instrument myself and have it tried out and arrange everything personally, but like this I have to leave it up to Schiedmayer to choose what he wants to send you.

The news from New Zealand on the terrible tsunami was most interesting; you certainly had no idea then that these were connected to an earthquake in Peru on 13 August. According to my calculations the waves moved from the coast of Peru to New Zealand at a speed of 440 nautical miles per hour or $7\frac{1}{3}$ nautical miles per minute. You will no doubt have more reports of the damage from these waves in the Pacific Islands and the Australian coast in your newspapers, and I would be very grateful if you cut out and send me everything relating to this, as I am very interested in this and have just started writing a larger paper on these earthquakes.⁶¹⁸ I am therefore sorry that you sent the relevant report to Petermann and not to me.⁶¹⁹ I could have made such good use of it for the journal of our Geographical Society.

I am extraordinarily excited to hear in your next letter how your future is shaping up, and we are always pleased to hear that your family is well. Your little godchild is always asking how her godfather is. I am keen to hear when your plan to visit Europe will finally be carried out.

I had never imagined that you would leave New Zealand completely, and I could certainly hardly advise you to do so. If one is connected to a country through one's life work, like you, then one must not leave it during one's lifetime. Your sons will also be able to go their ways much better in New Zealand than in this country.

You ask whether I still have money of yours; there are still approximately 70 gulden left. I can fully support your plan to publish your travel experiences in continuo, and I am convinced

⁶¹⁸ Hochstetter published a number of articles on this tsunami including: Ferdinand von Hochstetter, "Ueber das Erdbeben in Peru am 13. August 1868 und die dadurch veranlassten grossen Fluthwellen im Pacifischen Ocean, namentlich an den Küsten von Chili und von Neu-Seeland (Erste Mittheilung)", *Sitzungsberichte der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften*, vol. 58, 1868, pp. 837-860. Hochstetter, "Die Erdbebenflut im pacifischen Ocean vom 13. bis 16. August 1868", *Mittheilungen der kais. und königl. geographischen Gesellschaft in Wien*, vol. 12, pp. 235-241. Hochstetter, "Die Erdbebenfluth im Pacifischen Ocean vom 13. bis 16. August 1868", *Mittheilungen aus Justus Perthes' Geographischer Anstalt*, vol. 15, no. 6, 1869, pp. 222-226. Hochstetter, "Die Erdbebenfluth im Pazifischen Ocean vom 13. bis 16. August 1868 und die mittleren Tiefen dieses Oceans", *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Classe*, vol. 59, no. 2, pp. 109-132. Hochstetter, "Die Erdbebenfluth im Pazifischen Ocean vom 13. bis 18. August 1868, nach Beobachtungen an der Küste von Australien", *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Classe*, vol. 60, 1869, pp. 818-823. Hochstetter, "Über das Erdbeben in Peru am 13. August 1868 und die dadurch veranlassten Fluthwellen im Pacifischen Ocean, namentlich an den Küsten von Chili und von Neu-Seeland", *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Classe*, vol. 58, 1868, pp. 837-860.

⁶¹⁹ Hochstetter wrote to Petermann asking him to send him Haast's manuscript on the Tsunami, and Petermann did not refuse to comply with this request. In a letter dated 2 November 1868 Hochstetter writes: "Von Freund Haast höre ich, daß er Ihnen über die Erdbebenwellen an der Küste von Neu-Seeland, die offenbar mit dem Erdbeben in Peru zusammenhängen, i Bericht geschickt hat. Ich bin daran, diese Sache auszuarbeiten nach den Daten, die ich in neuseel. Zeitungen finde, da es einer der merkwürdigsten Fälle ist, wo sich die ungeheuer Schnelle Fortpflanzung der Erdbebenwellen berechnen lässt. Falls nun der Bericht Haast's wichtige Daten enthält, so wäre ich Ihnen sehr dankbar, wenn Sie mir eine Einsicht in denselben gestatten könnten." In the next letter dated 13 November 1868 Hochstetter then thanks Petermann for sending Haast's paper: "Jedenfalls bin ich Ihnen zum größten Danke verpflichtet für die freundl. Ueberlassung der Mittheilungen von Haast". Briefsammlung Hochstetter, Sammlung Perthes, Schriftleitung Petermanns Geographische Mittheilungen, Forschungsbibliothek Gotha, Germany.

that you will easily find an English publisher, just fill it with good sketches and maps, of which you will not be lacking. It will also be easy to find a German publisher, and when you get to that stage, I will be happy to help you. In your last letter you do not mention whether you received your essay on the West Coast, which however I do not doubt. I will send two copies to your brother-in-law Rossum. I was pleased to hear that the Schiller gave you pleasure. I have not received your Rakaia report yet, but still hope to get it, as I would not like to miss it in my library, which contains everything else of yours.

If you want to send moa bones to Stuttgart, then the address is either Prof Dr Krauss,⁶²⁰ director of the Natural History Museum or Prof Dr Fraas,⁶²¹ also director, the former for the zoological and the latter for the palaeontological department. Both are friends on first name terms with me. Sending things to Vienna would be useless due to the reasons formerly mentioned.

Only now am I able to fulfil the requirements of your letter of 27 June, namely: Stifter,⁶²² Jean Paul,⁶²³ *Conversations Lexikon*⁶²⁴ etc. I will use the available sum for this and send these things via bookseller avenues to the Canterbury Agent for you. I will also enclose recent geological things of interest.

My requirements would be seeds of conifers and alpine plants which my brother asks about almost every day, and branches of conifers with cones on them if possible. If you were sending something to Stuttgart then you could enclose something under my brother's address, Wilhelm Hochstetter, university gardener in Tübingen.

Also photographs from the New Zealand Alps, as I already own a substantial collection of New Zealand photographs I want to keep this up-to-date if possible.

Now concerning myself, I have been travelling a great deal this summer and autumn, mainly in the interests of my health, firstly to Swabia, then to the Bavarian Alps and then to the Salzkammergut and to the Tatry in the Carpathian Mountains and finally to the Naturalists' Convention in Dresden, where I showed your moa photographs, and in Berlin. I was feeling quite well during the summer, but am now much less satisfied again. I will see how I am over the winter. I am not working on a major work at the moment, but am quite busy with our Geographical Society, for which I am now having to write the annual report⁶²⁵ and have just had a small crystallographic work published for my students,⁶²⁶ and am trying to put together a collection of thin sections of alpine rock types.

In my family all is well. My children all suffered from whooping cough in the summer and have not quite got over this yet.

For today I close, dear friend. Just one last thing, I was pleased that my *New Zealand* was well received despite the poor translation. I do not know how the work is going in England. I will only hear about it from Cotta in one year's time.

With best regards from all of us,

Yours,

Ferdinand Hochstetter

⁶²⁰ Ferdinand Krauss (1812-1890), director of the "Königliches Naturalienkabinett" in Stuttgart.

⁶²¹ Oscar von Fraas (1824-1897), geologist, palaeontologist and prehistorian, director of the "Königliches Naturalienkabinett" in Stuttgart.

⁶²² Adalbert Stifter (1805-1868), Austrian writer and poet. His *Studien* were first published in six volumes from 1844-1850.

⁶²³ Jean Paul Friedrich Richter (1763-1825), German writer who published his work under the pseudonym "Jean Paul".

⁶²⁴ "Brockhaus Conversations Lexikon in 15 volumes, 1865", as listed in H. F. von Haast, *Catalogue of the Books belonging to the Late Sir Julius von Haast*, p. 14.

⁶²⁵ Ferdinand von Hochstetter, "Jahresbericht des Präsidenten der k. k. geographischen Gesellschaft", *Mittheilungen der kais. und königl. geographischen Gesellschaft in Wien*, vol. 13, no. 1, 1869, pp. 1-25.

⁶²⁶ Ferdinand von Hochstetter and Anton Bischof, *Leitfaden der beschreibenden Krystallographie: Zum gebrauch bei dem Studium der Mineralogie*, Wien, Wilhelm Braumüller, 1868.

75. Ferdinand Hochstetter to Julius Haast, Vienna 27 December 1868, MS 37 folder 185.

Vienna, 27 December 1868

Dear friend

I do not want the year to come to a close without wishing you and your family a sincere Happy New Year from all of us. I hope and wish that we will all stay healthy. Today I also finally sent off the small case containing the books you wished for (*Conversations Lexikon* – I got the latest edition after all, Jean Paul, Richter's "Studien" and a new pamphlet by Naumann; to fill the available space I also enclosed a *Figaro* and a few fossils that I just had on hand), to A. O. Ottywell⁶²⁷ Esquire, Canterbury Agent in London, according to your instructions. The books are carefully packed into a tin case and will eventually hopefully reach you in good condition. I sent the case unfranked to Ottywell. With this latest shipment your account with me has just been exhausted and I therefore send you the enclosed statement no. 4. The last mail did not bring me a letter from you, however I received the newspaper. Within a month I hope to be able to send you as printed matter my essay which I wrote on the seaquake and earthquake of 13 August 1868, in which I carefully utilised all the information I received from you, and hope that your next letter will bring me more news, especially from the South Seas. Has nothing become known about the impact of the tsunami at Oparu? Exact times from all the locations are most important, and these are missing in most cases.

Our mining industry is currently in great commotion due to the tragedy in Wieliczka,⁶²⁸ where in their search for potassium salts they drilled a spring, which, initially flowing at a rate of 120 to 140 cubic feet per minute and now approximately 30 to 40 cubic feet per minute, is threatening to completely drown this famous old mine. The disaster was caused by irresponsible negligence and geological ignorance, and that is what the jokes in the *Figaro* which I enclosed in the case are in reference to. I also enclosed in the case the first issue of this year's journal of the Geographical Society. Perhaps you will also find time to send us something again some time.

My wife and children are well and happy. We had a very happy Christmas Eve. My wife gave me an aneroid for Christmas this time.

And now, how are the surveys on the North Island progressing – I would really like to have heard something of Hector's results of the exploration of the Tongariro group and then the Kaikouras, how are these going?

May your lucky star continue to be good to you, this is my wish for you from all my heart for the New Year.

Yours faithfully,
Ferdinand Hochstetter

Statement of account no. 4, 30 December 1868

Opening balance according to Statement no. 3 of 16 September 1865.

March 1866 to Dalgety du Croz & Co. 20 gulden 33 kreutzer

Withdrawn in London £20 at 10.4 = 208 gulden

March 1867 £10 at 12.5 = 125 gulden

Total 354 gulden and 33 kreutzer

Expenditure

1866.

| | |
|--|-----------|
| January for the birthday of Georgy Julie | 15 gulden |
|--|-----------|

| | |
|---|------|
| February correspondence to London and Hamburg regarding the pictures for the Emperor and freight for the pictures | 4.40 |
|---|------|

| | |
|---|----|
| March. Calligraphic captions under the pictures | 12 |
|---|----|

⁶²⁷ Albert Osborne Ottywell was the London agent for Canterbury, New Zealand.

⁶²⁸ Mining disaster in Wieliczka, See "Der Wassereinbruch im Salzbergwerke zu Wieliczka", *Oesterreichische Zeitschrift für Berg- und Hüttenwesen*, vol. 16, no. 49, 7 December 1868, pp. 385-386.

| | |
|---|-----------|
| 2 folders for the pictures | 25 |
| Tip for the servant for delivery | 1 |
| August. German Treasury of Song including binding | 3 |
| October. Auerbach's Works | 12 |
| To the Leopoldina 3 Thaler | |
| For the Carus foundation 4 Thaler | |
| To the Free German Science Academy 4 Thaler | 21.12 |
| Postage for sending the money | 90 |
| Ribbon for the Order of Franz Joseph | 70 |
| "Lachendes Democrit" including binding | 8 |
| November 2 annual subscriptions for the Botanical & Zoological Society | 8 |
| Sent off letter from Mueller | <u>72</u> |
| Total for 1866 | 111.84 |
| 1867. | |
| January Birthday present for Georgy Julie | 15 |
| February. To the fund for wounded soldiers | 100 |
| Correspondence to London with Dalgety | 75 |
| March. Sartorius von Waltershausen, "Climates of the prehistoric world" and binding | 10.56 |
| Hans Wachenhausen, Diary | 1.34 |
| March. Battle of Königgrätz | 75 |
| The Austrian System | 50 |
| Bischof's Geology volume 3 part 2 | 5 |
| Zirkel, Petrography, 2 volumes | 10.68 |
| Cotta, Geology of the present | 5 |
| Naumann, volume 3, first part. | 2.50 |
| medal ribbons | 60 |
| Photograph of the Emperor and Empress | <u>1</u> |
| Total for 1867 | 153.68 |
| 1868. | |
| January Birthday present for Georgy Julie | 15 |
| Sent off on 27 December to A. Ottywell, Canterbury Agent in London for you | |
| Jean Paul's works in 60 volumes | 12.50 |
| Stifter's studies, 3 volumes | 6 |
| Brockhaus Conversations Lexikon 15 volumes (new) | 45.50 |
| Naumann, volume 3, part two | 2.50 |
| Packaging of the books in a tin case | 2.50 |
| Correspondence to London | 50 |
| Balance | 4.31 |
| 88.81 | |
| Resume | |
| Balance 354.33 | |
| Expenditure 1866 – 111.84 | |
| 1867 – 153.68 | |
| 1868 – 88.81 | |
| Total 354.33 | |
| Balance nil. | |

76. Ferdinand Hochstetter to Julius Haast, Vienna 3 May 1869, MS 37 folder 185.

Vienna, 3 May 1869

Dearest friend

Two of your letters dated 4 November 1868 and 12 January 1869 are lying on my desk to be answered. I have waited a long time before replying this time, partly due to being overloaded with business and partly due to hypochondria, for as usual in the transition to spring my throat and chest problems are plaguing me and affecting my mood, but I do not want to wait any longer now. I was very interested in Hector's wedding,⁶²⁹ and ask you to send him my congratulations when you get an opportunity, and to kindly bring me once more into the remembrance of David Monro. Regarding the *Novara* publications, I will see that you get the complete works eventually, but you will just have to be patient, until the zoological and botanical parts have all been published, then you will get the whole thing sent to you all together. My congratulations on your 'Philipp' and also on your position of director of the Canterbury Museum,⁶³⁰ whereby you are now at least secure and safe. The photograph of your 'Glückauf' house gave me much pleasure. I could see from it how pretty and beautifully you have bedded yourself and wish you from all my heart that destiny may continue to be as kind to you in the future as before.

Herewith I send you a programme of our geologists' ball during this year's Shrovetide carnival with a humorous poem by Stache; in order not to make the letter too heavy I removed the actual order of the dance.⁶³¹ I am also sending you an excerpt from my two essays that I wrote on the tsunami on 13 to 16 August of last year, published by our Academy.⁶³² Unfortunately our Chinese-style postal service is still not set up to take shipments of printed matter to New Zealand. I was expecting more notes on these phenomena from you; perhaps the next mail will bring me these. You can see from these excerpts what interesting results the discussion of our phenomena has lead to. My throat problem unfortunately hinders me, as it robs me of all my energies for weeks and thereby prevents me from working. Therefore this winter has gone by without me doing anything beyond my official position and my efforts as president of the Geographical Society which is now starting to be revived again. A few days ago on 30 April I celebrated my fortieth birthday.⁶³³ Thereby I have now entered the stage in life where the Swabians say one first grows wise. Well, we will see what effect this will have.

⁶²⁹ James Hector (1834-1907), married Maria Georgiana Monro, daughter of Sir David Monro, speaker of the House of Representatives, in Nelson on 30 December 1868.

⁶³⁰ Haast had offered to take charge of the Canterbury Museum as Honorary Director or Curator on 31 July 1868 and on 5 August Edward Jollie, the secretary for Public Works replied to say that the Government had appointed him as Honorary Director.

⁶³¹ The poem reads: "In Felsen umschlossenem Thale | Hatt' ein Geologe versteckt | Im Kalke der Erdkugelschale | Versteinertes Leben entdeckt; | Und als er gehämmert zu Tage | Mehr als in den Taschen war Raum, | Entschlief er – da brachte die Plage | Ihm flugs einen Urwelts-Traum. | Hoch sah er als Goldpomeranze | Im Nebel die Erde entsteh'n | Und auf ihr in närrischem Tanze | Ein wunderlich' Pärchen sich dreh'n. | Der Mensch-Affen Jüngling letzter | Der Aff-Menschen Töchterlein | Ur-derbst-allererstes – merkt jetzt er – | Sind's, die sich am Urwalzer freu'n, | Und plötzlich wird selbst ihm zu Muthe, | als sei er der Aff' in der Höh', | Als spuk'te ihm äffisch im Blute | Pfahlbau'rische Liebe – o weh! | Er stolpert, von sehnigen Händen | Gefesselt, von Pfähle zu Pfahl; | Da seufzt er im Traum: „Möchte sie enden, | Die präadamitische Qual!“ | Aus Wolken rauschet hernieder | Zur Stirn ihm ein eiskalter Guss | Pfui! – ist die Urwelt zuwider! – | Das war der Pfahlbauerin Kuss. | Und bei dem Kusse erwacht er | Nasskalt und zur Hälfte noch heiss; | „Die Affen-Abstammung“, so dacht er, | „Macht selbst mir der Vogt nicht mehr weiss. | „Wie soll von den täppischen Ahnen | Ein liebliches Wienerisch Kind | Abstammen, das leicht seine Bahnen | Im Tanze durchfliegt, wie der Wind“?! | DIE GEOLOGISCHEN KRÄNZCHEN, | STÜRZEN DIE THEORIE | DES DARWIN BEI JEDEM TÄNZCHEN | DURCH PRAKTISCHE GEOLOGIE." A copy of the original programme with the title "Geologen-Kraenzchen" and the poem by Guido Stache is held in the archive of the Geologische Bundesanstalt in Vienna.

⁶³² This is in reference to Hochstetter's first two of three papers on tsunami published by the Viennese Academy: Ferdinand von Hochstetter, "Über das Erdbeben in Peru am 13. August 1868 und die dadurch veranlaßten Fluthwellen im Pazifischen Ocean, namentlich an den Küsten von Chili und von Neu-Seeland", *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Classe*, vol. 58, 1868, pp. 837-860; Hochstetter, "Die Erdbebenfluth im Pazifischen Ocean vom 13. bis 16. August 1868 und die mittleren Tiefen dieses Oceans", *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Classe*, vol. 59, pp. 109-132; Hochstetter, "Die Erdbebenfluth im Pazifischen Ocean vom 13. bis 18. August 1868, nach Beobachtungen an der Küste von Australien", *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Classe*, vol. 60, 1869, pp. 818-823.

⁶³³ Hochstetter's 40th birthday was on 30 April 1869.

The case with the books which I sent to you in December 1868 through A. O. Ottywell will presumably have reached you by now. I note this as Ottywell asked me for instructions regarding the freight charges from Vienna to London, to which I replied to Ottywell that the cost of approximately £1, if I remember rightly, as well as the freight charges from London to New Zealand would be covered by you. I received no counter reply to my reply and am therefore presuming that Ottywell will charge you this postage, and am hereby expressly noting that I did not pay these freight charges.

For my birthday my wife again surprised me with an excellent photograph of my family, of which I will send you a copy as soon as I have prints, so you get some idea of the current status of my family.⁶³⁴ The five little ones are doing very well and the smallest is just starting to walk.

Your little godchild Georgiana Julie personally instructed me to send you her best regards, and I am to ask you in her name how her garden in New Zealand is doing, and whether the lilac is already flowering there as it is here.

We heard to our great satisfaction and interest that all is going well in your family.

You write in regard to collections for your museum. Unfortunately I am not in the possession of any duplicates worth mentioning, the only thing that I could get for you would be minerals and rocks, but as you know one can only get these by purchasing them.⁶³⁵ However, the Geological Survey has masses of duplicate fossils. I have already repeatedly said to the present director, my friend Hauer, that he should have collections put together for the Canterbury Museum, but you know the way these things go – things are promised and not carried out. The best thing would certainly be to write directly to Franz von Hauer, Head of Department and Director of the Imperial Geological Survey and suggest an exchange, and once he has the official letter on his desk then there is a moral obligation, and then once a collection has been put together, I will be happy to do my bit to make sure they send you something decent. One must say, though, that so many of these requests have been directed to the Geological Survey recently that the gentlemen have had to become thriftier with their duplicates.

I do not have anything new to write to you. The newspapers will be keeping you up to date on the politics of old Europe anyway. The old jealousy between Austria and Prussia is unfortunately causing ongoing discord. Austria still hopes to gain South Germany for its realm of power and is making futile efforts in this direction against Prussia I think.

A terrible newspaper scandal has broken out, after the publication of a Prussian communication of June 1866 to the Prussian Ambassador in Paris in the general staff report on the war of 1866. In this communication, which ended up in Austrian hands and was deciphered, only God knows how, Bismarck literally says that the King of Prussia is more interested in annexations to Prussia than a German confederation, and now there are angry indignations about this in the Prussian camp, as if it had not been obvious to every reasonable thinking person that the war of 1866 was purely a cabinet war.⁶³⁶

By the way, have you never heard anything more of Toetoe and Rerehau, the two Maori who sailed to Europe on the *Novara*, and travelled back in the year 1860? Do make some enquiries when you get a chance.

With sincerest regards from me and my wife to you and your wife.

Your eternally faithful,

Ferdinand Hochstetter

⁶³⁴ A copy of a family portrait of Georgiana von Hochstetter with 5 children in carte de visite format is held in the Hochstetter Collection Basel, however there does not appear to be an extant copy in the collections of the Alexander Turnbull Library.

⁶³⁵ The latter part of this sentence appears as a footnote in the lower margin of the manuscript letter.

⁶³⁶ This “Depesche”, should not be confused with the more famous “Emser Depesche”, of 13 July 1870.

77. Ferdinand Hochstetter to Julius Haast, Constantinople 29 July 1869, MS 37 folder 185.

Constantinople, Pera, 29 July 1869

Most esteemed friend

You may be more than a little surprised to receive a letter from Constantinople from me, and even more so when you hear that I am not here for pleasure, but after 3 weeks of preparation I am here about to undertake a major expedition into the interior of the country, which will take two to three months. It came about like this: Turkey is to get railways, a Viennese engineer has taken charge of the construction and he invited me to accompany him on a trip through Turkey to establish where the lines will run. Thus I left Vienna three weeks ago together with 20 young engineers and 10 topographers; these gentlemen have now already moved off in the various directions of the lines as directed, while tomorrow the chief party is to leave, made up of the director, myself, a topographer, an engineer, a secretary, a cook, and servants, and we will be travelling along all the lines. In consideration of my wife, children and my health it was only with some difficulty that I decided to go on this trip. On the other hand, I could not let the temptation of the opportunity to again undertake something bigger pass me by. I just wanted to write these fleeting lines to you, amongst the hurly burly of departure, so that you don't find it inexplicable when you do not receive any news from me for the next two to three months.

We are travelling from Constantinople to Adrianople, then from Burgas by steamer around to Enez, and from there back to Adrianople, then to Philippopolis, Samakov, Nobuk, Salomik, Pristina, Bosna, Jeraï and will reach Austrian soil again at Novi on the Croatian border. As we are just heading into the hottest months, and have to ride all the way, the trip won't be without its stresses. I am expecting only good effects on my health though, as I put a good part of what I am labouring under down to my sedentary lifestyle in Vienna.

I left my wife and children in good health, and hope to find them that way on my return.

With sincere regards to your wife and children,

Yours faithfully,

Ferdinand von Hochstetter

78. Ferdinand Hochstetter to Julius Haast, Vienna 25 March 1870, MS 37 folder 185.

Vienna, 25 March 1870

Most esteemed friend

I have left it rather longer than I should have to answer your last letter of 2 September, and if I remember rightly then my last letter to you was sent in July from Constantinople.⁶³⁷ Since my return from the Turkish journey I have been completely buried in work, and even now I still feel as if I have hardly started. The expedition which took me criss-crossing from Constantinople to Adrianople, Philippopolis, Sofia, Vranje, Nish to Belgrade, was interesting to the highest degree, and the results will keep me busy for years to come. I found my family in the best of health on my return after an absence of four months, and the trip, which was mainly on horseback, did me good; throughout the whole journey I hardly ever thought about my throat, and only back in the Viennese climate did the old ailment reappear. We have had a very severe winter, in fact we are still having it now, as it has been snowing incessantly for the past three days, and the snow is lying several feet deep on 25 March, when we are normally already in full spring.

The collection which the Geological Survey put together for you will hopefully have reached you and met with your satisfaction. Your work on the Tertiary deposits⁶³⁸ which you

⁶³⁷ Hochstetter letter to Haast no. 77 dated Constantinople 29 July 1869.

⁶³⁸ A notice of Haast's discovery published in Vienna was based on the information in his letter: Julius von Haast, "Saurier in der Tertiärformation Neuseelands", *Verhandlungen der Geologischen Reichsanstalt*, no. 15, 1869, pp. 350-351; and in New Zealand as: Julius von Haast, "Notes on a Collection of Saurian Remains from the Waipara River, Canterbury, in the possession of J. H. Cockburn Hood, Esq.", *Transactions and Proceedings of the New Zealand Institute* 1869, vol. 2, April 1870, pp. 186-189.

mentioned in your last letter and that I was expecting in excited anticipation has not arrived yet. Tertiary marine saurian remains; that would certainly be a most unusual fact. I would have liked to have received some more details on the moa bone cooking middens and the shape of the stone tools that were found with them, so that I could speak on this to our anthropological society, which has recently been founded and already has around two hundred members. The society is also putting together a collection and wishes to found an anthropological-ethnological museum, so contributions will be gladly received.

The news of the Thames goldfields were of immense interest to me – the wealth must be fabulous. Our friend Fischer also wrote on this to me, and sent me shares in the Hochstetter Gold Mining Company, about which I was as much surprised as I was pleased.⁶³⁹ I could have sold a good portion of these shares here and am awaiting the next mail with further instructions from Fischer.⁶⁴⁰

I don't know of any important geological news to share with you. The most interesting results are those from the deep sea exploration, where one finds animal life developed which was previously completely unknown. You probably heard of the mysterious death of the phytopalaeontologist Unger in Graz from the newspapers.⁶⁴¹ One morning Unger was found dead in his bed, with injuries that would lead to the conclusion of murder and initially the members of his own family were suspected, and the case is not yet solved.

I have not received anything geological from New Zealand for a long time, and would be very keen to receive the publications of the New Zealand Institute in Wellington.⁶⁴² I would be very grateful if you could write to Wellington about this for me, as I like to stay up to date with New Zealand, and this publication especially, which as I have seen from the contents page, contains much that would be of great interest to me.

My family is all well, thank God, and I expect to complete the half dozen next August. We hope and wish that all is well with you also and send our sincere best regards to you and your dear wife.

Yours faithfully,
Ferdinand Hochstetter

79. Ferdinand Hochstetter to Julius Haast, Vienna October 1870, MS 37 folder 185.

Vienna, October 1870⁶⁴³

Most esteemed friend

A far longer break than is proper has interrupted my correspondence with you this time, a period of intense work for me, as I had to work on the results of my Turkish expedition. It has also been a period of the most significant historical world events, which you have no doubt been aware of even in the antipodes, where they must have struck like the tsunami from Peru. Today

⁶³⁹ Heinrich von Haast writes in reference to this: "Fischer speculated in mining shares in the Thames goldfield, for in 1870 he sent some shares in the Hochstetter Gold Mining Co. to Hochstetter who was 'as much astonished as pleased'." H. F. von Haast, *The Life and Times of Sir Julius von Haast*, p. 8 note.

⁶⁴⁰ See also Hochstetter's letter to Fischer in which he writes: "Nun vor Allem meinen herzlichsten Dank für das überraschende Geschenk der 10 shares in einer Hochstetter Gold Mining Cie. es hat mich selten etwas so gefreut, wie diese Deine Liebenswürdigkeit, die mir bewies, daß ich in Neu-Seeland bei meinen Freunden noch nicht ganz vergessen bin.", Hochstetter to Fischer, dated Wien 19 January 1870, Nachlass Sammlung Luschan, Handschriftenabteilung, Staatsbibliothek zu Berlin – Preussischer Kulturbesitz.

⁶⁴¹ Franz Unger (1800-1870) was an Austrian botanist and palaeontologist, see earlier note. Although it was initially reported by the newspapers of the day that there may have been some suspicious circumstances surrounding his death, a post mortem examination subsequently showed that he had died of natural causes. Pers. comm. Dr A. Schedl, Vienna, dated 3 March 2006, to the Author.

⁶⁴² This is in reference to the *Transaction and Proceedings of the New Zealand Institute*, (Edited and published under the authority of the Board of Governors of the Institute, by James Hector, M.D., F.R.S.), of which the first volume, for the year 1868, was issued in May 1869.

⁶⁴³ Manuscript letter damaged, possibly charred by candle flame, with first part of date missing.

the news of the capitulation at Metz⁶⁴⁴ arrived and everyone is saying, ‘thank God’, as with this one may finally expect the end of this terrible war; for since Sedan⁶⁴⁵ the Germans have stopped enjoying the war, which the irresponsible French government has turned into a hideous racial war and will not allow the Germans to win the peace.

I stayed in Vienna throughout the summer and even during the holidays and diligently worked on Turkey. The first part with a large geological map of the Eastern part of European Turkey⁶⁴⁶ has been successfully completed, although it will take another four weeks before the work is published; however it will still be sent to you before the New Year. The second section will have to be published in the year 1870. I wrote a travel account of which one part was published in the journal of our Geographical Society⁶⁴⁷ and the other in *Das Ausland*.⁶⁴⁸ I am now busy with the construction of the topographical map, which contains a large amount of new information. I will send thee things to you once I have accumulated some more. I am also working on a pictorial publication; I could not avoid the urging by a friend in this matter. Geological pictures, 12 prehistoric and 12 from the present, in large folio format.⁶⁴⁹ If you know of anything nice from New Zealand, especially by way of photographs, which would suit the second section, then you would very much oblige me. I will definitely be including a picture of the hot springs, probably from Lake Rotomahana. I was most interested in the news of the eruption of Mt Tongariro.⁶⁵⁰ A gentleman in Napier sent me something about this. Is there still no new map of the North Island? I think I have written to you before that I would be very interested in one of these. I received the second volume of the *Transactions of the New Zealand Institute*, which I found was rich in interesting content and I ask you to write to Dr Hector with my best thanks.⁶⁵¹ But to this day the first volume has not arrived, and I do wish to own this first

⁶⁴⁴ Metz was a fortified town in the Moselle district of France. It was near Metz that the first and second German army won the victories of Colombey-Rouilly, Bionville and Gravelotte on 14, 16 and 18 August 1870, in consequence of which Bazaine was besieged in Metz. The final victory came when Bazaine capitulated/surrendered on 27 October 1870, together with his army of 173000 soldiers, 3 marshals and 4000 officers.

⁶⁴⁵ Battle at Sedan on 1 September 1870.

⁶⁴⁶ Hochstetter's map of Turkey: *Originalkarte der Central-Türkei nach Aufnahmen vom Jahre 1869 entworfen und geologisch ausgeführt von Ferdinand von Hochstetter* 1870. 1:420000, Gotha, Justus Perthes, 1872. In: Ferdinand von Hochstetter, "Die geologischen Verhältnisse des östlichen Theiles der europäischen Türkei", *Jahrbuch der Geologischen Reichsanstalt*, vol. 22, no. 4, 1872.

⁶⁴⁷ Hochstetter published the following articles on his expedition to Turkey in 1869 in the journal of the Geographical Society of Vienna: Ferdinand von Hochstetter, "Die Vorarbeiten zum Bau der türkischen Eisenbahnen", *Mittheilungen der Geographischen Gesellschaft*, vol. 13, no. 1, 1870, pp. 17-19; "Reise durch Rumelien im Sommer 1869: 1. Das östliche Thracien, von Constantinopel nach Adrianopel", *Mittheilungen der Geographischen Gesellschaft*, vol. 13, no. 5, 1870, pp. 193-212; "Das Becken von Ichtiman und der falsche Wid", *Mittheilungen der Geographischen Gesellschaft*, vol. 13, no. 7, 1870, pp. 289-293; "Reise durch Rumelien im Sommer 1869: 2. Adrianopel", *Mittheilungen der Geographischen Gesellschaft*, vol. 13, no. 8, 1870, pp. 350-358; "Reise durch Rumelien im Sommer 1869: 3. Von Adrianopel über Jamboli nach Burgas", *Mittheilungen der Geographischen Gesellschaft*, vol. 13, 1870, pp. 545-552; "Reise durch Rumelien im Sommer 1869: 4. Von Burgas am schwarzen Meere dem Balkan entlang nach Philippopel", *Mittheilungen der Geographischen Gesellschaft*, vol. 13, no. 13, 1870, pp. 585-606; "Reise durch Rumelien im Sommer 1869: 5. Philippopel", *Mittheilungen der Geographischen Gesellschaft*, vol. 14, no. 2, 1871, pp. 65-80; "Reise durch Rumelien im Sommer 1869: 6. Von Philippopel nach Samakov, das Ichtimanager Mittelgebirge und die Eisenindustrie von Samakov", *Mittheilungen der Geographischen Gesellschaft*, vol. 14, no. 4, 1871, pp. 161-180; "Reise durch Rumelien im Sommer 1869: 7. Ausflüge von Samakov auf den Vitosch (Sofia) und nach dem Rilo-Kloster", *Mittheilungen der Geographischen Gesellschaft*, vol. 14, no. 7, 1871, pp. 324-341; "Reise durch Rumelien im Sommer 1869: 8. Dubnica, Köstondil, Radomir, Trn, das Vlasina-Gebirge, Vranja, Leskovac, Niš", *Mittheilungen der Geographischen Gesellschaft*, vol. 15, no. 3, 1872, pp. 112-130.

⁶⁴⁸ Hochstetter published the following travel accounts of his journey through Turkey in *Das Ausland*: Ferdinand von Hochstetter, "Aus dem Inneren der europäischen Türkei: Reiseskizzen vom Jahr 1869: 1. Samakov", *Das Ausland*, no. 36, 3 September 1870, pp. 841-843; "Aus dem Inneren der europäischen Türkei: Reiseskizzen vom Jahr 1869: 2. Das Kloster im Rilo Dag", *Das Ausland*, no. 37, 1870, pp. 868-871; "Aus dem Inneren der europäischen Türkei: Reiseskizzen vom Jahr 1869: 3. Sofia und der Witosch", *Das Ausland*, no. 38, 1870, pp. 895-898; "Ein Gebirgsübergang zwischen Sofia und Vranja", *Das Ausland*, no. 39, 1870, pp. 916-919.

⁶⁴⁹ Ferdinand von Hochstetter, *Geologische Bilder der Vorwelt und der Jetztwelt*, Esslingen, Schreiber, 1873.

⁶⁵⁰ Haast wrote about this to Hochstetter in a letter of July 1870: "Eine grosse Eruption des Vulcanes Tongariro fand statt, welche Ende Mai anfang und gegen Anfang Juli ihre grösste Thätigkeit gezeigt hat", see "Sitzung 22 November 1870", *Verhandlungen der k.k. geologischen Reichsanstalt*, no. 15, 1870, p. 304.

⁶⁵¹ James Hector, ed., *Transactions and Proceedings of the New Zealand Institute 1869*, vol. 2, issued April 1870.

volume.⁶⁵² I ask you to write to Hector about this again. The volume can be included with any shipment to London to any bookseller, with the note ‘for Dr Hochstetter care of the court bookseller Braumüller & Sons in Vienna’, and then I am sure to receive it.

I am very sorry about what you wrote to me in your last letter of 31 July about the fate of the Hochstetter and Haast claims and that our friend Fischer lost so much over it.⁶⁵³ I am now pleased that the power of attorney did not allow me to invite my friends here to invest money in it, as a number of people would have gone in for it on my recommendation.⁶⁵⁴

We were also very pleased with the visit of your wife’s sister. I do not recall now whether I wrote to you that my wife gave me a baby girl in August, no. 6 in my family, with the name Elisabeth (Betsy).⁶⁵⁵ God be praised we are all in good health; except for my old ailment, all is in the best order. I have finally also become a full member of our Academy⁶⁵⁶ and a corresponding member of the London Geographical Society.⁶⁵⁷ Both distinctions pleased me to the highest degree.

I made a fine invention during a brief visit to my brother’s soda factory. Volcano models made of sulphur. One wins sulphur in a soda factory, sulphur from the residue of soda. The sulphur is melted in water under steam pressure of three atmospheres and by this process it becomes completely saturated with water vapour. If one then pours the sulphur into large deep vats, then it eventually hardens, during which process the water vapour in the sulphur is gradually released, and creates eruptions through the upper hardened crust. If one then guides the process a little bit one gets the finest model volcanoes with craters and lava flows, as if an artist had modelled them after nature. In one to one-and-a-half hours the most perfect volcanic cone is built up through eruptions that take place at intervals between half and three quarters of a minute, a cone of one to two feet at the base, and one third to half a foot high. By artificial piercing during the eruption one can represent old crater walls, and allow new eruptive cones to build up, however one likes. The thing is really grand and mimics the volcanic action in perfect miniature. Communicate this as a note from me in a society. I have made half a dozen of these models, which everyone considers to be artificial copies of nature. I imitate the ash fallout with a rain of colour pigment, so that the sulphur lava flows from the different eruptions are variously coloured.⁶⁵⁸

⁶⁵² This is in reference to James Hector, ed., *Transactions and Proceedings of the New Zealand Institute 1868*, volume 1, issued May 1869, which Hochstetter did eventually receive as he writes: “Bei meiner Rückkehr aus Rußland fand ich zu meiner Freude den mir fehlenden Bd. I eurer Transact. vor“. See Hochstetter letter to Haast no. 83 dated 30 November 1872.

⁶⁵³ Heinrich von Haast refers to this when he notes, “Later in the year, however, Hochstetter heard from Haast ‘of the fate of the Hochstetter and Haast claims and that our friend had lost much over it’.” H. F. von Haast, *The Life and Times of Sir Julius von Haast*, 1948, p. 8 note. According to the public notification by Thomas Gillies, Superintendent, the lease application by John D. Fitzgerald for the Hochstetter Gold Mining Company of a 15 year lease of 16½ acres was refused. See Thomas Gillies, “[Public Notification dated 22 April 1870]”, *Auckland Provincial Government Gazette*, vol. 19, no. 20, 22 April 1870, pp. 159-160.

⁶⁵⁴ Hochstetter had written to Fischer regarding this as follows: “Einige hundert Pfund habe ich unterdessen bei Bekannten bereits placirt, u. ich bin überzeugt, daß auf meine Empfehlung hin noch Mancher Lust bekommen wird.“, Hochstetter to Fischer, dated Wien 19 January 1870, Nachlass Sammlung Luschan, Handschriftenabteilung, Staatsbibliothek zu Berlin – Preussischer Kulturbesitz.

⁶⁵⁵ Elisabeth (Betsy) Wilhelmine von Hochstetter (1870-1938), was born on 27 July 1870.

⁶⁵⁶ Hochstetter, who was already a corresponding member, was nominated as a full member (Wirkliches Mitglied) of the Viennese Academy (Kaiserliche Akademie der Wissenschaften), on 11 Mai 1867 by Franz von Hauer, August Emanuel von Reuss and Moriz Hoernes, but not elected. He was then nominated on 12 May 1869, by Hauer, Reuss and Eduard Suess, but again without success. See Protokoll no. 382/1869, presented 13 May 1869, Archiv der Österreichischen Akademie der Wissenschaften Wien. While “finally”, as he writes in this letter, he was successfully elected after being nominated on 14 May 1870 by Reuss, Suess, Hauer and Haidinger. See “Wahlvorschlag”, Protokoll no. 396/1870, presented 15 May 1870, Archiv Österreichische Akademie der Wissenschaften in Wien. He was elected at the meeting of 25 May 1870, and his election confirmed by the Austrian Emperor on 21 August 1870.

⁶⁵⁷ Hochstetter was elected as a corresponding member of London Geographical Society in 1870.

⁶⁵⁸ For more details on Hochstetter’s model volcanoes see Ferdinand von Hochstetter, “Ueber Miniatur-Vulkane aus Schwefel”, *Das Ausland: Ueberschau der neuesten Forschungen auf dem Gebiete der Natur-, Erd- und Völkerkunde*, vol. 44, no. 5, 30 January 1871, pp. 106-10; and Hochstetter, “Über den inneren Bau der Vulkane und über Miniatur-Vulkane aus Schwefel; ein Versuch, vulkanische Eruptionen und vulkanische Kegelbildung im Kleinen nachzuahmen”, *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Classe*, vol. 62, pp. 771-779.

You will have read about the successful return of the Second Arctic Expedition in the newspapers. We arranged a happy feast for the Austrian members Dr Laube⁶⁵⁹ and Lieutenant Payer⁶⁶⁰ last Tuesday. Payer made grand discoveries on the East Coast of Greenland, mountains up to 14,000 feet in height. Dr Laube was on the *Hansa* which sank in the ice and spent 200 days on an Iceberg and travelled 300 German miles on it down the coast of Greenland, until they were able to rescue themselves at the Southern point of Greenland. The journey of an erratic boulder!

Apart from that I don't have much news. All interest is absorbed by the colossal war, even though one does not notice anything externally here. The fate of the French really is unbelievable. The whole original army of half a million soldiers, as far as it is not destroyed, has now been captured by the emperor, together with all the marshals, generals and officers, around 10,000 officers right down to the last man, 320,000 men together with all the military equipment of around 7,000 pieces of artillery etc. and still the French are not giving any peace; Paris will have to be bombed first. For a calmly thinking person it must seem that all of France has gone mad.

With warmest greetings from all of us,
Your loyal,
Ferdinand Hochstetter

80. Ferdinand Hochstetter to Julius Haast, Vienna 25 May 1871, MS 37 folder 186.

Vienna, 25 May 1871

Most esteemed friend

With a heart deeply moved I send you the news that my eldest daughter Georgiana Julie, your godchild, is no longer alive. She was torn away from us on 26 April after a short illness. A case of peritonitis, as the doctors say, which started so suddenly without warning symptoms with a shivering fit that the poor child was delirious within hours of lying down, and her vitality was completely broken within a few hours. From then on it was not actually an illness taking its course, but an ongoing struggle of the young life-energies against a deadly inner illness, which lasted for six days, until the poor soul passed away. This was most horrific for my poor wife and me. Now she lies in the Matzleinsdorfer cemetery in a tomb that will one day also hold me and all those dear to me. Never would I have thought that I would already be selecting my future resting place this year. We received so much sympathy from all sides, as the child, who was not yet ten years old, was everyone's favourite. She had developed so well that she was a great pleasure; she already spoke English and French and was cheerfulness and happiness itself, someone who cheered everyone up, so that despite the fact that we are fortunate to still have five, the terrible gap that has been torn into our hitherto undisturbed happy family circle is painfully felt. I am convinced that you and your wife will also give us your condolences.

You will therefore understand that I am in a depressed mood. In addition to this is the fact that I have not been feeling at all well for the past eight weeks; my whole digestive system is disturbed through too much sitting and writing and the doctors are urgently recommending that I undergo a cure in Carlsbad, which I have to go to whether I like it or not. I will therefore be spending the most part of my holidays in Carlsbad, and hope that this will have good effects. I now realise that I worked too much through the winter by finishing a big geological work, lectures on geology,⁶⁶¹ of nearly one thousand pages, so that once it is completely polished I will

⁶⁵⁹ Gustav Carl Laube (1839-1923), Austrian geologist and explorer.

⁶⁶⁰ Julius von Payer (1841-1915), Austrian Arctic explorer and discoverer of Franz-Josepf Land.

⁶⁶¹ The three words "Vorlesungen über Geologie" appear in the lower margin in the manuscript letter. This is in reference to Ferdinand von Hochstetter, *Vorlesungen über Geologie: I. Theil: Gesteinslehre Gesteinsbeschreibung & Gesteinsbildung mit 144 Zeichnungen im Text und 12 Tafeln gehalten am k.k. polytechnischen Institute zu Wien im Wintersemester 1870/71 von Prof. Dr. Ferdinand von Hochstetter Mit dessen Einverständniss Herausgegeben von seinen Hörern Max. Löwenthal, Nic. von Bernuth & Max. Eissler unter gefälliger Mitwirkung des Assistenten Herrn Franz Toulou & abs. Techniker Herrn Anton Prokesch*, Wien, Guberner & Hierhammer, [1871]; and Hochstetter, *Vorlesungen über Geologie: II. Theil: Geotektonik und Stratigraphie mit 113 Zeichnungen im Text und 32 Tafeln gehalten am k.k. polytechnischen Institute zu Wien im Sommersemester 1870/71 von Prof. Dr.*

be able to have it printed next winter. In addition to this there are too many honorary positions resting on me, which take up so much of my time that I am seriously yearning for peace and quiet. Tomorrow I start out with seventy of my students on a major fourteen-day excursion that will hopefully refresh and cheer me. We want to travel through Passau and Regensburg to Eger, then to Carlsbad, Teplitz, climbing the Milleschauer, and then on to Dresden, the Switzerland of Saxony, and return home via Prague, after some walks in the Silurian.

I have completed a major study on Turkey that is already partly published and will partly be published next winter. When the whole thing is finished, I will send it to you. You may be interested to know that the Sultan awarded the Order of the Medjidie to me for it.

I am extremely pleased that I can be back in Germany, and breathe German air, even if it is only for a few days, as here in Austria it is getting sultrier every day. A Slavonic "Arra" seems to be moving across Austria, and where that will lead to only the gods know. Whilst the mood elsewhere is most heightened, and after the incredible successes everyone is looking towards the brightest future, the mood in Austria is becoming increasingly pessimistic.

I have not had a letter from you for such a long time that I can hardly imagine why, so hopefully I will soon be pleased by good news from you and yours.

Sincere regards from my wife and from your faithful,
Ferdinand Hochstetter

81. Ferdinand Hochstetter to Julius Haast, Vienna 8 August 1871, MS 37 folder 186.

Vienna, 8 August 1871

Most esteemed friend

Your letter of 1 June reached me yesterday; please accept my best thanks for the same. I am just quickly writing to you in all haste, as I am leaving for St. Petersburg tomorrow, in order to undertake an expedition from there to the Ural region, from which I will only return in October.⁶⁶²

The instigation is an industrial one and the invitation to travel came quite unexpectedly. As a result I am unpleasantly rushed. Thank God all is well here. As soon as I get back, I will send you my latest works through A. O. Ottywell; the second part of the publication on Turkey is in print and the geological pictures will also be ready by then. In November I have to tutor our Crown Prince⁶⁶³ in natural sciences, I was not allowed nor could have turned down this honourable task.⁶⁶⁴ But unfortunately, as you can see from all this, I hardly get any time to myself. I received your essay on the moa-hunters in due course, and I had long since intended to work it up for our purposes, but unfortunately did not get around to it. I would therefore be very grateful if you could send me an essay written in German.

We are all very excited in anticipation of your shipments. The *Novara* volumes for the Wellington museum will be dispatched to the indicated address in the next few days.

With sincere regards,
Yours,
Ferdinand Hochstetter

Ferdinand von Hochstetter Mit dessen Einverständniss Herausgegeben von seinen Hörern Max. Löwenthal, Nic. von Bernuth & Max. Eissler unter gefälliger Mitwirkung des Assistenten Herrn Franz Toulou & abs. Techniker Herrn Anton Prokesch, Wien, Guberner & Hierhammer, [1871].

⁶⁶² Hochstetter's travels in the Ural Mountains. A number of Hochstetter's unpublished field diaries from this expedition are in the OR Dr. A. Schedl Collection, Vienna.

⁶⁶³ Kronprinz Rudolf of Austria (1858-1889).

⁶⁶⁴ Hochstetter took up his appointment as tutor to the Austrian Crown Prince Rudolf on 1 November 1872 and taught the first lesson on 5 November 1872. See Hochstetter letter dated 4 July 1872, Karton 1, Convolut II, Folge 229, also Folge 233-237, Selekt Kronprinz Rudolf, Hausarchiv, Österreichisches Staatsarchiv, Vienna.

82. Ferdinand Hochstetter to Julius Haast, Vienna 25 February 1872, MS 37 folder 186.

DEUTSCHE ZEITUNG.

Vienna, 25 February 1872

Most esteemed friend

You will be quite unable to comprehend the fact that you have not received a letter from me for such a long time. Please don't hold it against me that I still have not answered your letter of 2 September of last year, in which you expressed your condolences on the loss of our poor child,⁶⁶⁵ but I just don't know where my head is for work and more work. To bring you up to date briefly: in autumn of last year I spent four weeks in Carlsbad, yet it did not help.⁶⁶⁶ Then I went on a journey with my wife through our Alps to distract my thoughts a little, which was accompanied by the most wonderful weather, and really did us good. Since 22 September, when we returned, I have been sitting at my desk or in commission and committee meetings and am plagued. A work on the general outline of the earth sciences – that is geology – for our high schools is complete except for the last printed sheet, and my geological pictures in 24 folio plates will appear in the autumn. Now the most burning questions that are taking up my time are: 1. the Arctic Expedition. As president of the Geographical Society, I had to take on the matter, and you can well imagine how much effort, work and time it costs to raise 200,000 gulden here for an Arctic expedition. But thank God, the matter is now finished. The ship, to be named *Tegetthoff*, is being built with 120,000 deposited and the remaining 80,000 secured. Our Arctic explorers Payer and Weyprecht will be able to carry out their daring undertaking this year, and again reaffirm their courage and valour.

2. The Vienna International Exhibition.⁶⁶⁷ I am a member of the commission and now I have to sit through meeting after meeting, as I have to work in three sections. What is the New Zealand position in relation to the 1873 Vienna International Exhibition? Most of all I hope that the year 1873 and the International Exhibition will bring you and your dear wife to Europe and to us, and if the decision has not already been made, that you will do so after the receipt of this letter. We will take care of accommodation in Vienna. And furthermore I hope that New Zealand will be grandly and comprehensively represented. If you are able to have any influence on this then do so, and let me know what is being done in this regard. Enclosed is a clipping showing what the exhibition building is supposed to look like, not pretty, that's for sure, but practical and of colossal proportions in the Prater.

My congratulations on your youngest daughter⁶⁶⁸ (25 February 1871) whose birthday happens to be today – I am expecting a new family member at the end of May.

And now one favour: The Colonial Museum in Wellington (F. W. Hutton, Honorary Secretary) wrote to me about the *Novara* work. I have successfully put this to our ministry, so that the Colonial Museum will get all the missing volumes (Zoology, Ethnology, Botany etc) as a gift. The books went to London, I am not sure to which bookseller, but came back, as the person in question did not want to take on the shipment of the books to New Zealand. I ask you therefore to write a few lines to Wellington for me to Hector or the Colonial Museum in Wellington and let them know this and ask them to state an address in London to which the books can be dispatched, and ask at the same time for the *Transactions of the New Zealand Institute* volume 1 for me, which I unfortunately never received, and that I really miss. I will then send you my latest publications by the same channel.

⁶⁶⁵ Regarding the death of Hochstetter's eldest child, Georgiana Julie von Hochstetter, see Hochstetter letter to Haast no. 80 dated 25 May 1871.

⁶⁶⁶ Julius Haast quotes this passage when he writes: "In the Autumn of the same year (1871) he tried the thermal springs of Carlsbad for his throat complaint, but again in vain; and he writes now as if he had given up all hope of getting rid of it, though it interfered much with his public duties." Julius von Haast, "In Memoriam: Ferdinand Ritter von Hochstetter", *The New Zealand Journal of Science*, vol. 2, no. 5, September 1884, p. 208.

⁶⁶⁷ Vienna International Exhibition 1873 was officially opened by the Austrian Emperor Franz Joseph I at 12 noon on 1 May 1873 and closed to the public at 4 o'clock on 2 November 1873.

⁶⁶⁸ Julius and Mary von Haast's daughter Eva Veronica von Haast (1871-1909).

My letter writing paper carries the letterhead “Deutsche Zeitung”, which is a new newspaper that has appeared here since 1 January of last year.⁶⁶⁹ Every Saturday edition has a natural history supplement, for which I am the editor. The paper pays good fees and I would be very happy if you could send me news from New Zealand with your letters for my paper. I am certainly expecting you to send me something with your next letter and then something regularly, at least every three months.

Thank God we are at the end of February, and I am really looking forward to spring after a long hard winter in which we did not even see the sun for two months.

With best regards from my wife and my children,

Your loyal and humble friend,

Ferdinand Hochstetter

83. Ferdinand Hochstetter to Julius Haast, Vienna 30 November 1872, MS 37 folder 186.

Vienna, 30 November 1872

Most esteemed friend

Three letters from you, dated 1 June, 3 September and 23 September, are lying on my desk waiting to be answered, so I must finally take the time to reply to you. You already know why I have not written for so long, as in the meantime I have been in the Ural area and Siberia. A more strenuous tour than one might wish for, when one has to do it in such a short time – 1500 German miles in 61 days. Now I have the matter behind me, but also a huge mass of work hanging around my neck. It is good that you diligently looked after the Vienna International Exhibition, I have told our general director of the exhibition all about what you wrote concerning this, and Mr Featherston⁶⁷⁰ also wrote to ask me for assistance, which I have promised him as I am prepared to do anything for New Zealand, to my very end.⁶⁷¹ But I was very disappointed that you cannot come, as I was absolutely counting on seeing you once again in 1873 after such a long time. I was very pleased to find the first volume of your *Transactions* here for me on my return from Russia, and volume four has also recently arrived. I know few publications that are richer in content than yours and hopefully I will find time and space in the Christmas holidays to study it, especially your articles therein. I have long since given your article on the moas and moa-hunters to a young man to translate into German, but it seems he cannot cope with it, and I would very much have liked to have published it in the *Deutsche Zeitung*, but even with the best intentions I cannot find the time.

My work on Turkey would have reached you a long time ago if I had not always been waiting on the second part that is now appearing in the next few days, and then you will receive Turkey, physical geography and others, all at once.

My ‘Geological Illustrations’⁶⁷² will only appear in the spring, as the bookseller is taking a terribly long time over it.

Your cases for the Geological Survey have arrived. Hauer wrote to you about it, as he tells me; he is lying ill with sciatica. Director Fenzl has also told me that he is packing a large case of plants for the Museum in Christchurch. What a pity that we still do not have a general geological museum, where consignments like yours could be displayed. Like this the things go back in a box to await their day of redemption.

⁶⁶⁹ The *Deutsche Zeitung* was first issued on 17 December 1871. The first article by Hochstetter was published in the fifth issue of this new Viennese daily newspaper: Ferdinand von Hochstetter, “Feuilleton: Die Fahrt nach dem Nordpol”, *Deutsche Zeitung: Morgenblatt*, no. 5, 21 December 1871.

⁶⁷⁰ Issac Earl Featherston (1813-1876), doctor, politician and provincial Superintendent in New Zealand, who took up the appointment as New Zealand’s first Agent General in London in 1871.

⁶⁷¹ Featherston letter to Hochstetter dated 15 November 1872 and a translation of Hochstetter’s reply dated Vienna 19 November 1872, followed by Featherston’s counter reply to Hochstetter dated 27 November 1872, are published in Anon., “1873 New Zealand: The Vienna Exhibition (Papers relating to)”, H – 5, *Appendix to the Journals of the House of Representatives of New Zealand*, Wellington, 1873.

⁶⁷² Ferdinand von Hochstetter, *Geologische Bilder der Vorwelt und der Jetztwelt*, Esslingen, Schreiber, 1873.

I have unfortunately had very few pleasant days since my return from Russia. I am still suffering from the after-effects of a serious cold that I caught on the Kama near Usol'ye, and soon after my return two of my children became ill with typhoid; they are now out of danger, thank God, but are still lying in bed. So worries here and worries there and on top of that commitments and obligations that I can hardly cope with.

But I do not want to complain, as long as everyone is well again soon.

With sincere regards from me and my wife,

Yours faithfully,

Ferdinand Hochstetter

We are expecting the return of Richthofen⁶⁷³ from China any day now after an absence of twelve years.

84. Ferdinand Hochstetter to Julius Haast, Vienna 26 June 1873, MS 37 folder 186.

Vienna, 26 June 1873

Most esteemed friend

I am pleased to be able to write to you that the moa skeletons are standing upright before me, a truly magnificent sight. *Dinornis giganteus* stands 9 feet and 9 inches tall in Viennese measurements, and I am sure that nowhere in the world, *sit venia verbo* – if I am permitted to say so, there stands anything quite like it except with you in Christchurch. The task was a colossal one, but I was pleased to do it for you. I had every bone, vertebrae, skull and everything restored by a skilled plaster modeller, so the skeleton is now complete and the bones which were in an extremely brittle state are therefore protected from further decay. I set up *Dinornis giganteus* in stride like yours, and I will place *Dinornis giganteus* with the other two to complete a remarkable tableau. All four birds will be placed on a black painted pediment and placed together on a 1.5 foot high platform covered in a reddish brown cloth. On the same platform I will place the four stuffed kiwi, in between the skeletons, and the whole thing will have a large inscription stating: “The flightless birds of New Zealand, the extinct moas and the still living kiwi” Exhibited by Canterbury Museum Christchurch, New Zealand, Director Dr Julius Haast.⁶⁷⁴ The birds will also have their own individual labels. The birds will be placed in such a way that one may walk right around the group, and next to it in a prominent position will be your maps and photographs of the province. I have now spent four quiet weeks working on the bones and skeletons every day together with five other people, and I am no end pleased that I have just managed to have them finished before I go on a three week excursion to the Alps with the Crown Prince. The departure takes place next Monday, the 30th.⁶⁷⁵ As far as the cost of the taxidermy and mounting are concerned, I do not know yet; in retrospect Mr Featherston did not want to have the birds stuffed, as they were duplicates of a collection sent in by someone else, however I had already given them to be stuffed.⁶⁷⁶ For the mounting of the skeletons Mr Featherston gave me an unlimited credit.

⁶⁷³ Ferdinand von Richthofen, see earlier note, published the results of his 12 years of exploration in China as: *China: Ergebnisse eigener Reisen und darauf gegründete Studien*, Berlin, Reimer, 1877-1912, vol. 1-5 and atlas.

⁶⁷⁴ The catalogue lists the three moa skeletons exhibited by Haast as: 1. *Dinornis giganteus*, 2. *Dinornis didiformis*, 3. *Palapteryx elephantopus*. See “Appendix: Descriptive Catalogue of Exhibits sent from New Zealand to the Vienna Exhibition, 1873”, *Appendix to the Journals of the House of Representatives of New Zealand*, Wellington, 1873.

⁶⁷⁵ Hochstetter accompanied his pupil Kronprinz Rudolf on an educational trip, from 30 June 1873 to 16 July 1873. Amongst the places visited were: Marburg, Klagenfurt, Wörthersee, Hüttenberg, Lölling, Villach, Weissenfelder See, Tarvis, Bleiberg, Lienz, Winklern, Heiligenblut, Leoben, and from here back to Vienna via Bruck. Gerhard Holzer, “Ferdinand von Hochstetter: Privates Tagebuch aus den Jahren 1873-1884”, p. 4-5.

⁶⁷⁶ Haast on behalf of the Canterbury Museum exhibited 60 mounted specimens of New Zealand birds and 3 moa skeletons, while the other major collection of mounted bird skins referred to here was entered by James Brogden. See *Descriptive Catalogue of the Exhibits in the New Zealand Court of the Vienna Exhibition, 1873*, pp. 39-41. The Haast collection is listed in: “Appendix: Descriptive Catalogue of Exhibits sent from New Zealand to the Vienna Exhibition, 1873”, *Appendix to the Journals of the House of Representatives of New Zealand*, H – 5, Wellington, 1873. Note that the official catalogue and the catalogue that was published

As far as the rest of the New Zealand exhibition is concerned, I had a number of battles with Mr Bevan⁶⁷⁷ who was given the task from London of arranging it, without even knowing New Zealand. The exhibit did not go according to my taste. But your skeletons will make a major improvement and give the New Zealand section a lift, making it far more interesting.

Mr Lindsay⁶⁷⁸ of Edinburgh sent in a whole lot of trash including his geological collection, his sketches and maps, which are quite laughable, and all of this was placed in a prominent position. I openly expressed to Mr Featherston my dissatisfaction with the whole arrangement, and he writes to me that when he comes here early in July a number of things will still be changed.

I am in an incredible hurry today, therefore I ask you to please excuse my scribble. My wife had to go to Pystjan in Hungary⁶⁷⁹ to a spa due to a foot ailment. So I am hindered, and unfortunately I will have to leave my children by themselves next week.

I was unable to accept a position on the jury due to my journey with the Crown Prince, but communicated your matter to the applicable jury as an urgent recommendation.

With sincere regards yours,
Ferdinand Hochstetter⁶⁸⁰

85. Ferdinand Hochstetter to Julius Haast, Ischl 29 August 1873, MS 37 folder 186.

Ischl in Upper Austria, 29 August 1873

Most esteemed friend

You will have already found out from the newspapers even before you receive my letter that you were awarded the Medal for Merit for your exhibits.⁶⁸¹ This is what Hauer, who was a member of the jury for the section, reassured me anyhow. As I have to constantly be away from Vienna, I have not seen an official notification myself, but I do not doubt the fact and congratulate you with all my heart. The matter of the New Zealand exhibition certainly did not go the way I would have wished. Mr Bevan, who does not know New Zealand at all, was certainly not the right person, despite his best efforts, for the arrangement of the New Zealand section, which left much to be desired, nor for the representation of New Zealand's interests. Fortunately I still managed to get the skeletons finished with great effort before it closed. The jury had already been through the New Zealand section just the day before the skeletons were brought out. I therefore quickly wrote a letter to Hauer, who was a member of the jury, in which I asked him that he might request that the jury visit the New Zealand section again and especially acknowledge your exhibit, and fortunately this was then done, and it is only thanks to this that

in the *Appendix J of H*, are not the same; the Viennese catalogue is in three languages and the New Zealand catalogue is only in English and lists only items that were actually sent from New Zealand, therefore it does not include the exhibits sent by Lindsay from Edinburgh for example.

⁶⁷⁷ G. Phillips Bevan (1829-1889), agent for the Australian Colonies at the Vienna International Exhibition.

⁶⁷⁸ William Lauder Lindsay (1829-1880). The following exhibits by Lindsay are listed in the catalogue: under the heading "Botanical Specimens": "2 portfolios, containing 135 sheets of Specimens and 15 engraved plates"; under the heading "Geological Specimens": "I. Geological Series – 50 bottles of specimens. | 144 Specimens in an equal number of trays. | 1 Moa Bone." and under "Fine Arts": "Pictorial Series: 5 framed photographs | 1 framed photograph | 6 panoramic views | 14 Drawings and Sketches | 17 Geological and other maps." See *Descriptive Catalogue of the Exhibits in the New Zealand Court of the Vienna Exhibition, 1873*, pp. 39, 41-42. Lindsay was awarded an "Honourable mention" by the jury in Vienna, in "Group XXVI – Education, teaching and instruction." See "Papers relating to the Vienna Exhibition", H – 7, *Appendix to the Journals of the House of Representatives*, Wellington, 1874, p. 11

⁶⁷⁹ Bad Pystian in Hungary. Georgiana von Hochstetter and two of her daughters, Emma and Betsy, travelled from the Staatsbahnhof in Vienna on 18 June 1873. Gerhard Holzer, "Ferdinand von Hochstetter: Privates Tagebuch aus den Jahren 1873-1884", p. 4.

⁶⁸⁰ This last line appears in the left margin of the manuscript letter.

⁶⁸¹ Haast was awarded a 'Verdienst-Medaille' from the Vienna Universal Exhibition, the certificate states: "Weltausstellung 1873 in Wien | Die internationale Jury | hat | Herrn | Dr Julius Haast | Director des Canterbury-Museums in Christchurch, Neu-Seeland | (Britische Colonien) | Die Verdienst-Medaille | zuerkannt. Der Präsident der kaiserlichen Ausstellungs-Commission [signed] Wien, den 18. August 1873 | Der General Director [signed] Schwarz Senborn". MS 0171 Alexander Turnbull Library. This is listed as 'Medal for merit' under 'Group 1 – Mining, Quarrying, and Metallurgy', "Papers relative to the Vienna Exhibition", *Appendix to the Journals of the House of Representatives of New Zealand*, Wellington, 1874, H – 7, p. 10.

you were awarded the Medal for Merit. Thereby at least everything has been achieved for you that there was to achieve. I do not know whether any other New Zealand exhibitors were awarded medals, for as I said I was constantly absent from Vienna during the time of the judging period. I should have become a member of the jury myself, then I could have really made an intensive effort for New Zealand, but I had to refuse the jury position because I had to accompany our amiable Crown Prince on a fine journey to the Alps, and after I had only been back in Vienna for a few days at the end of July, I received the call to come here to Ischl with the Crown Prince, where I will now have to stay until the end of September.⁶⁸² So I am now completely distanced from all the International Exhibition matters. I brought my whole family here with me and rented a country house near Ischl, where we are living a peaceful idyllic life in the beautiful natural surroundings, and are all away from the cholera-stricken city of Vienna and feeling well.

With regard to the moa skeletons and the bird collection, I stick to my proposal that you should donate them to the Imperial museums and I will vigorously represent your interests. I still await your special instructions in this regard, which your next letter will probably bring me in reply to one of my earlier letters on this matter. Mr Featherston made 500 gulden available for the cost of the mounting of the skeletons and the stuffing and mounting of the bird skins, a sum that covered all the costs. The moa skeletons are much admired but little understood. In the newspapers I have only read short articles on them that say nothing. These things lie completely outside the horizon of our ordinary reporters, as you will see from the enclosed newspaper clipping, which is taken from our best and most thorough International Exhibition newspaper, and as far as I know is the first and only article that has appeared on New Zealand in any International Exhibition newspaper at all.

I had long since planned to write an in-depth article on New Zealand and especially your exhibits, but have not got around to doing so yet, despite my best intentions. If I don't write then nobody else here will think of writing about New Zealand, and Mr Bevan and his untidy arrangement have largely spoiled my inclination to do so, but I will definitely still write something on your moa skeletons.⁶⁸³

I cannot understand why Hauer did not write to you. But Hauer is a little lazy and does not care much about other people's interests. It is curious what Mr Lindsay exhibited by way of collections and maps in the New Zealand section of the exhibition. The maps are all copies, I even find my maps copied there, and the mineralogical and geological collection is just trash, small meaningless things. However nobody will notice this as Mr Bevan did not even hang the maps. I only just managed to get him to display your alpine map and your geological maps and sections half decently, as initially he had just pinned them to the trouser fabrics from Auckland. But your maps are the only ones one can see, and the Lindsay maps are not worth much in any case. When I am back in Vienna in October I will prepare a consignment of books for you and include my geological pictures and my lecture on the Ural area.⁶⁸⁴

I just received notification of a shipment from New Zealand to me weighing 66 pounds: "plans" to the value of £200, what might that be? Is this intended for the exhibition, as it is addressed to me at 'Vienna Exhibition'; that would be rather late. I am very curious.⁶⁸⁵

⁶⁸² Hochstetter travelled to Ischl on 10 August 1873 and his family followed on 17 August 1873 and he only returned to Vienna on 3 October 1873. Gerhard Holzer, "Ferdinand von Hochstetter: Privates Tagebuch 1873-1884", p. 7.

⁶⁸³ Ferdinand von Hochstetter, "Die ausgestorbenen Riesenvögel von Neuseeland", *Deutsche Zeitung: Weltausstellungs-Zeitung*, no. 633, 4 October 1873, p. 4.

⁶⁸⁴ Ferdinand von Hochstetter, *Geologische Bilder der Vorwelt und der Jetztwelt*, Esslingen, Schreiber, 1873; and *Ueber den Ural: Vortrag, gehalten am 28. April 1873 im Naturwissenschaftlichen Verein zu Wien*, Berlin, Lüderitz, 1873.

⁶⁸⁵ This is in regard to a letter addressed to "The New Zealand Commissioners of the Vienna Exhibition, Care of Dr. Ferdinand von Hochstetter, Vienna" from the Colonial Secretary Julius Vogel, dated Wellington 8 April 1873, states: "I have the honour to inform you that by the mail which leaves this week, two maps of this Colony have been forwarded to your address, care of Dr. Ferdinand Von Hochstetter, for exhibition at Vienna. | One map is geological, and the other topographical; and I have to request that you will be good enough to have them carefully mounted and varnished, and hung in some prominent position in the New Zealand Department of the Vienna Exhibition." See no. 20, H – 5, "Papers Relating to the Vienna Exhibition", *Appendix to the Journals of the House of Representatives of New Zealand*, Wellington, 1873.

Even though I am absent from Vienna I am nevertheless very busy. I am collecting a lot, and two days ago purchased a large collection of fossils from Hallstatt for 400 gulden. Perhaps I can let you have some of them, if you like.

In the next week I am expecting Baron von Richthofen here as he has kindly agreed to visit me, since he did not find me in Vienna.⁶⁸⁶ Richthofen was away in California, China and Japan for twelve years and has returned with the richest materials.

I close for now, stay healthy and don't forget your old friend,
Ferdinand Hochstetter

86. Ferdinand Hochstetter to Julius Haast, Vienna 22 June 1874, MS 37 folder 186.

Vienna, 22 June 1874

Most esteemed friend

I confirm the receipt of your letter of 9 April and hasten to reply, in order that you may not be long without a letter from me again. In the meantime you will have received my letter congratulating you on the Order of the Iron Crown 3rd class⁶⁸⁷ with the hereditary knighthood, and thereafter I sent the two powers of attorney you sent me to George Enys in London to ask for cases 4, 6 and 7. The three new moa skeletons will probably arrive here in a few weeks time. I just want to hereby express the fact that the annexation of the *Dinornis giganteus* to our museum would be desirable, without considering it a done thing. I will still wait for your final decision on this. It would be quite impossible for me to procure collections worth £600 for them, however if you allow me, an extremely busy person, a little more time, I will make an effort to put together whatever I can from my stores, and will try to also do as much collecting as I can during my stay in Ischl. I could get a fine rock collection for £15 to £20 for you.⁶⁸⁸

I have to go to Ischl again at the beginning of July and will probably stay there until the end of September to tutor the Crown Prince.

Please also write to me in your next letter the localities where the various skeletons we now have were found.

This time I can write to you the news about myself that in May His Majesty gave me the title and character of an Aulic Councillor,⁶⁸⁹ in connection with the excellent results of the examination the Crown Prince sat before His Majesty in natural sciences in May.

As a father of seven children, (on 24 May my fourth son Rudolf⁶⁹⁰ was born), I now have to aim for something more substantial to go with the title and honour. Perhaps I will have the

⁶⁸⁶ Richthofen visited Hochstetter in Ischl from 2 to 4 September 1873. Gerhard Holzer, "Ferdinand von Hochstetter: Privates Tagebuch 1873-1884", p. 6.

⁶⁸⁷ Haast was awarded the "Orden der eisernen Krone III Klasse" by the emperor of Austria on 11 March 1874. The official letter notifying him of this reads: "*Von Seiner kaiserlichen und königlichen Apostolischen Majestät Obersthofmeisteramte | an den Direktors des Canterbury Museums in Neu-Seeland, Herrn Dr Julius Haast, Ritter des kaiserlich-österreichischen Franz-Josephs-Ordens. | Über hierämtlichen allerunterthänigsten Vortrag haben Seine kaiserliche und königliche apostolische Majestät mit allerhöchster Entschliebung vom 11. d. M. Ihnen in Anerkennung Ihrer wissenschaftlichen Leistungen den Orden der eisernen Krone III. Klasse allergnädigst zu verleihen geruht. | Hiervon werden Sie unter Aufschluß des bezüglichlichen Notifikationsschreibens und der Ordens-Dekoration in Kenntniß gesetzt. | Mit derselben allerhöchsten Entschliessung haben Seine kaiserliche und königliche apostolische Majestät die Annahme der von Ihnen dem k.k. naturhistorischen Hofmuseum als Geschenk offerirten drei Moa-Skelete zu genehmigen geruht, für welche werthvolle Bereicherung, der gedachten Hofsammlung, der unterzeichnete k.k. Erste Obersthofmeister Ihnen hiemit den verbindlichsten Dank ausspricht. | Der k.k. Erste Obersthofmeister | Hohenlohe | Vom k.k. Obersthofmeisteramte | Wien, am 14 März 1874. Frh. v. Raymond | k.k. Hofrath.*" Haast family papers, MS 0171, Alexander Turnbull Library. This also contains a letter from the "K. & K. Oesterreichisch-Ungarische Botschaft in London" dated 31 March 1874, communicating the awarding and transmitting of the medal.

⁶⁸⁸ This sentence appears in the left margin of the manuscript letter.

⁶⁸⁹ Hochstetter was awarded the title and character of a "Hofrat" (Aulic Councillor) by the Austrian Emperor on 26 May 1874. The official notice states: "Se. k. und k. Apostolische Majestät haben mit Allerhöchster Entschliebung vom 26 Mai d. J. dem Professor der Wiener technischen Hochschule Dr. Ferdinand v. Hochstetter in Annerkennung seines verdienstvollen Wirkens auf dem Gebiete des Lehramtes und der Wissenschaft taxfrei den Titel und Charakter eines Hofrathes allergnädigst zu verleihen geruht." *Wiener Zeitung*, no. 126, 4 June 1874, p. 1.

⁶⁹⁰ Rudolf Julius von Hochstetter (1874-1943), Ferdinand and Georgiana von Hochstetter's eighth child and fourth son was born in Vienna on 18 May 1874.

prospect of one day becoming the director of a major museum, as you suggested in your last letter, if the court can be moved to create the position of director general for the natural history collections, and give this position to me; however this will only be decided in several years' time, and by then all sorts of things might still happen. In order that you are fully orientated with regard to my family I am sending you the photograph of 1874, on which only Rudolf is missing.⁶⁹¹

The publication of the topographical and geological map of New Zealand that was to happen here, and which I was prepared to oversee from here for the New Zealand government, has become a real burden, which is really putting me under pressure. After repeated correspondence with Dr Featherston, the approval had been given for the topographical map to be printed in half the format of the original and the geological map in about one eighth of the original as an insert in the corner of the main map. Our Military Geographical Institute had taken on the engraving of the map and publication of 1000 copies at a cost of 3800 gulden, if I remember rightly. The work had been in full progress for a whole month, when Dr Featherston telegraphed me that both maps were to be realised in the original size after all. The work that had started already cost 250 gulden, and was therefore all for nothing, and the maps in original size with 2000 copies of the topographical and 1000 of the geological map would cost 19,000 gulden (£1900) according to the new estimates by the Military Geographical Institute. I then wrote to Dr Featherston that I was not prepared to accept the responsibility with such high costs involved and asked him to have the maps published in London. This is how things stand now and a whole year has gone by uselessly. Perhaps you could write about this to Koch in Wellington,⁶⁹² so that he can tell the government about it. It is no fault of mine, and Dr Featherston had been in full agreement with the first arrangement.

Do write to me in your next letter what prospects there are in New Zealand for a German pharmacist, as I have an unhappy brother⁶⁹³ who is a pharmacist, who for many years operated his own pharmacy which he acquired through his wife, and now, after the most unfortunate marital circumstances imaginable have made a divorce necessary, is without family, without pharmacy and without any ties. My brother is a diligent and thoroughly honest pharmacist. Under what conditions could he take over a pharmacy? If you know of anything in this direction then I ask you to let me know in your next letter.

Do send us a photograph of your children one day. Your dear wife has hopefully completely recovered by now.

With warmest regards,
Yours faithfully,
Ferdinand Hochstetter

Your beautiful map of the Alps and the geological map of the Malvern Hills are lying here with me at your complete disposal.⁶⁹⁴

⁶⁹¹ Photograph of Hochstetter family, "Georgiana von Hochstetter and her six children", photograph by Heinrich Harmsen, 1874, PA2-0831, Alexander Turnbull Library.

⁶⁹² The two maps by A. Koch are listed as: "Topographical Map of New Zealand, on a scale of 12 miles to 1 inch, showing surface features, forests, railways, telegraphs, roads, and other public works, political and tribal boundaries, &c. Compiled from official information in the Public Works Department, by Auguste Koch" and "Geological Map of New Zealand, on a scale of 12 miles to 1 inch, showing the distribution of the formations, illustrated by 12 geological sections through different parts of the islands. Compiled by James Hector, M.D., F. R. S., Director of the Geological Survey of New Zealand, from official information in the Geological Survey Department, and drawn by Auguste Koch", See "Papers Relating to the Vienna Exhibition", H – 5, *Appendix to the Journals of the House of Representatives of New Zealand*, Wellington, 1873, p. 5.

⁶⁹³ Hochstetter's youngest brother, Christian Albert Hochstetter (1832-1895), was the pharmacist in Esslingen, who had married Mathilde Knapp (1833-1874) in Reutlingen on 20 February 1860.

⁶⁹⁴ The two maps mentioned here are numbers 3 and 4 out of 4 maps exhibited by Haast in the Vienna Exhibition in 1873. They are described as: "Reconnaissance Map of the Interior of the Province of Canterbury (the Southern Alps). Scale 4 miles to 1 inch" and "Geological Map of the Malvern Hills, Canterbury. Scale 1 mile to 1 inch", See Descriptive Catalogue of the Exhibits sent from New Zealand to the Vienna Exhibition, 1873, H – 5, *Appendix to the Journals of the House of Representatives of New Zealand*, Wellington, 1873, p. 9.

Dr J. Haast
New Zealand



12. Georgiana von Hochstetter and six children, photograph by Heinrich Harmsen, 1874.
(PA2-0831, Alexander Turnbull Library).

87. Ferdinand Hochstetter to Julius Haast, Vienna 10 November 1874, MS 37 folder 186.

Vienna, 10 November 1874

Most esteemed friend

As I predicted, I have as yet been quite unable to sort out your matters, as I only came back to Vienna at the end of September, together with our Arctic explorers who I had to receive in Hamburg,⁶⁹⁵ and then thereafter followed weeks of obligations in relation to the return of the Arctic explorers, before I then took up the position of chancellor⁶⁹⁶ where I spend from 9 to 2 o'clock everyday between mountains of files. Besides this I still have my lectures and the tutoring of the Crown Prince, hundreds of enquiries, speeches etc., so that I do not even find the time to attend to the most urgent personal matters and hope that you will therefore excuse me. Herewith you will find, as I am trying to deal with your matters as best as I can:

1. a letter from a skilled young taxidermist, certainly not a genius like Plonquet, but a man up to the task, and therefore I ask you for your decision. A really excellent person for your purposes would be M. Martin, taxidermist in Stuttgart, but after making a written enquiry, he is not available, as he is directing and setting up his own museum, and he recommends one of his students Fritz von Gruenenthal from Bregenz, who is 24 years old, and although he has a contract in St Petersburg starting in six months time, he would prefer to come to New Zealand.⁶⁹⁷

A third applicant has been announced to me by the taxidermist Schneider in Zurich.⁶⁹⁸ Please write to me by return mail which of the three you prefer: I for my part would place my trust in the one from Bregenz and secondly in the one from Vienna.⁶⁹⁹

2. I confirm receipt of a case of bird skins, Maori skulls, kiwi eggs, and a stone weapon, which I found here on my return to Vienna.

3. I have not cashed your promissory note for £30 yet, as I still wanted to wait for another letter from you, in regard to the large moa skeleton (*Dinornis maximus*), as to whether this is to go to America, in which case I would have waited for the sum of £150 from Professor Hitchcock,⁷⁰⁰ which you wrote about, and returned the note to you. If your next letter does not bring me a decision on this then I will cash the note to cover the costs of the knighthood diploma, the ordered letter writing paper, case, etc. I have kept the skeleton of *Dinornis maximus* packed up in the case at the Polytechnic Institute at your disposal and only announced to Count Hohenlohe⁷⁰¹ the arrival of the two smaller skeletons for the Imperial museum. I will have the freight charges of 70 gulden reimbursed when I hand over the two skeletons to the museum.

4. I could not write the letter of thanks to His Majesty in your name, as the award was not sent to you through me. You should have the letter of thanks handed to the Austrian Embassy in London; however I had your deed of declaration bond delivered to the chancery. The letter of thanks does not have to be anything more than a simple thank you with the additional remark that you already have to thank His Majesty for earlier acts of graciousness, and that you will always be pleased to be able to contribute to the enrichment of the Imperial museums.

5. I already sent your letter to Dr Featherston in London on 5 August, enclosed with your letter of 28 May.

⁶⁹⁵ Hochstetter left Ischl on 19 September 1874 to travel via Leipzig to Hamburg where he arrived 21 September 1874, and was able to welcome the returning Arctic explorers at their arrival on 22 September 1874. Gerhard Holzer, "Ferdinand von Hochstetter Privates Tagebuch 1873-1884", p. 12.

⁶⁹⁶ See Ferdinand von Hochstetter, "Geologie und Eisenbahnbau", *Reden gehalten bei der feierlichen Inauguration des für das Schuljahr 1874/75 gewählten Rectors der k. k. technischen Hochschule Dr. Ferdinand v. Hochstetter, o. ö. Professor der Mineralogie und Geologie, k. k. Hofrath, am 10. Oktober 1874*, Wien, Verlag der k.k. technischen Hochschule, 1874, pp. 21-56.

⁶⁹⁷ This paragraph appears as a note in the lower margin of the manuscript letter.

⁶⁹⁸ The taxidermist Gustav Schneider was in fact the "Conservator" of the Zoological Museum in Basel.

⁶⁹⁹ This paragraph appears as a fold-out note on a small piece of paper glued to base margin of the manuscript letter.

⁷⁰⁰ Charles Henry Hitchcock (1836-1919), American geologist.

⁷⁰¹ Konstantin Fürst zu Hohenlohe-Schillingfürst (1828-1896), Austrian statesman and "Obersthofmeister".

6. You are only entitled to describe yourself as 'Ritter von' after the receipt of your diploma of knighthood. The women describe themselves simply as 'von', and the sons, no matter how old, as 'Ritter von'; this is in response to your special enquiry.

In regard to your other enquiries and orders:

6. Regarding a suit of armour. It is hard to get good old suits of armour and they are expensive, but they are made very beautifully and relatively inexpensively in an iron foundry in the Harz Region, and depending on the finish cost 30 to 100 Thaler. Let me know if I should order one of these and at what price.

7. The last consignment of natural history specimens is for the Crown Prince according to your letter. I am just having the skulls prepared for his collection. But don't try too hard to send further shipments, as the collection of the Crown Prince is so restricted in space that I was still not able to integrate the birds from the exhibition in his collection. They are still with me in the Polytechnic Institute. In January the prince's apartments are going to be extended. Then they will hopefully find room. But I want to hand over the rare *Heterolocha* pair (Huia),⁷⁰² to the Imperial museum for payment of the freight costs of approximately 25 gulden, and keep one kakapo as a souvenir for myself, if you agree. I will await your reply in this regard, as there was already a kakapo included with the earlier shipment. I also want to retain the stone weapon as the Crown Prince does not collect this kind of thing.

8. I will send your maps to Dr Featherston in London with the request that he might forward these to you.

9. I have just had the arrival of a case containing *Meiornis casuarinus* announced from London. This will also be delivered to the Imperial museum.

10. I have already started packing a case containing books and publications for you, the sheets of paper filled with figures, case, letter writing paper and photographs etc. Also rocks and fossils, which I bought and consider as a counter gift for the kakapo, stone weapon and shells. I can only acquire the expensive items such as meteorites, diamond and gemstone models when the money from America arrives, as I need a sum of up to 200 gulden for the knighthood diploma.

Continued 17 November

11. Regarding the knighthood diploma.⁷⁰³ Last week I spent a whole morning driving from Pontius to Pilate and have to ask you for patience in this matter, which is not as simple as you imagine. It will happen but be patient. Firstly I had to have a copy of the Imperial decree made and secondly an Imperial petition is needed, as you are a foreigner and it is a very rare exception for a foreigner to be elevated to the Austrian knighthood. So I will now have to go to various persons to make this possible, and only once I have the Imperial resolution in hand, which on top of this also has to be accompanied by the permission of the English government (the matter first has to go to London). I believe, if I am not mistaken, that you are now a British subject,⁷⁰⁴ as I recall that you wrote to me once that you were now an 'English subject'. Only when this has been done will I be able to put in the application to the Ministry of Internal Affairs for the bestowal of a knighthood, the cost of which as I found out amounts to 200 gulden for a simple elevation of rank, that is Ritter von Haast, whereas a predicate such as 'Schlagentweit von Sakunlunski' costs 175 gulden more. I will put in the royal petition once I know whether I can do so in your name, as the signed letter papers you sent arrived all crinkled and were the wrong format for a royal petition so I could not use them.

Continued 22 November

⁷⁰² At this time (1873) the *Heteralocha Acutirostris*, Huia, was placed in the order *Picariae* and the family *Upupidae*, by Buller. See Walter Lawry Buller, *A History of the Birds of New Zealand*, London, John Van Voorst, 1873, p. 63.

⁷⁰³ For Haast's "Ritterstandsdiplom" (diploma of knighthood) see Haast family papers, "Certificate of Knighthood", MS papers 0037 folder 326B, Alexander Turnbull Library.

⁷⁰⁴ Julius Haast was naturalised in 1861. See "The proclamation for the naturalisation of German born Sir Julius von Haast", National Archives IA 1 1861/567, Archives New Zealand / Te Whare Tohu Tuhituhinga O Aotearoa.

12. You will receive the missing *Novara* volumes via Otago, as I will be sending a case with a complete set to the University of Otago in the next few days at their request, and I will enclose your volumes, as they do not fit into the case for you.

I will close this letter so that it may finally get away.

Most likely the son of the director of the Northern Railways, Stummer,⁷⁰⁵ who is an engineer and farmer, will leave for New Zealand in the next few days to have a look around and possibly settle there. If he introduces himself to you in Christchurch, which is very possible, then I ask you to give him good advice.

With sincere regards,

Yours faithfully,

Ferdinand Hochstetter⁷⁰⁶

88. Ferdinand Hochstetter to Julius Haast, Vienna 12 January 1875, MS 37 folder 187.

Vienna 12 January 1875

Most esteemed friend

I am pleased to be able to confirm the receipt of your letters of September and October, which tell me that I still might possibly have the opportunity to welcome you in Europe this year. They shall be really festive days for me, when I have you at my side once more. Today I mainly wanted to let you know that I had an audience with His Majesty on 16 December in regard to your knighthood business, and that I submitted a memorial to His Majesty asking for you, as a foreigner, to be raised to the Austrian knighthood as an exceptional case on the basis of the Order of the Iron Crown. His Majesty was very gracious and thought that it should be possible, except that an enquiry to England would be necessary as you are an English subject. This now seems to be taking a long time, as to this day I have not received a decision, but I am expecting a positive notification after which I will then immediately make a submission to the ministry for you to be raised to the status of a knighthood, as the ministry is only able to go ahead after His Majesty has made the matter possible by permission through a special act of grace. So this matter has flourished as far as is possible.

Then I wished to let you know that just before Christmas I sent a case to you through the agent Ottywell in London, who wrote to me today that the case has already been notified to him from Hamburg and that he will send it to New Zealand for you by the *Cicero* on 22 January.⁷⁰⁷ The case contains the volumes of the *Novara* work you were missing, which I did not pack in the case for Otago after all, letterwriting paper for you and your wife with knight's crown, ring case, sheets of paper filled with figures, my Geological Illustrations, two copies, one being for your museum, and then also a few fine specimens of Alpine ammonites etc. and minerals for your museum, 100 pieces of very nicely hammered trachyte etc., specimens from Hungary, and 40 thin cuts for microscopic observation, three meteorites etc.

⁷⁰⁵ Joseph Mauritius Stummer von Traunfels (1808-1891), professor at the Technical University of Vienna and director of the Nordbahn. Two of his four children were engineers but it has not been established which of the two travelled to New Zealand. They were the engineer Joseph Stummer (1839-1893) and the railway engineer Rudolf Stummer (1848-1928).

⁷⁰⁶ Letter written on a letter by Schädle, on "H. Schädle" letterhead paper dated Wien 16 October 1874. The original letter reads: "H. SCHÄDLE, | zoolog. Präparator | WIEN | VI. Gumpendorferstrasse 95. | Wien, 16. X 1874 | Euer Hochwohlgeboren! | Mit Gegenwärtigem erlaube ich mir Euer Hochwohlgeboren meine Adress zu übersenden, mit der ergebensten Bitte, davon gütigst Notiz nehmen zu wollen. | Für meine Geschicklichkeit u. Kenntniß in zoologischer Präparation, werden die, an das k.k. zoolog. Universitäts-Museum von mir abgelieferten Säugethiere u. Vögel wohl hinreichend Zeugnis geben, u. wird auch Herr Prof. Dr. S. Schmarda die Güte haben sein Urtheil darüber auszusprechen. | Da ich meine Arbeiten dermoplastisch behandle, so bin ich auch im Stande Gruppen sowohl großer als kleiner Thiere in natürlichen (activen od. passiven) Stellungen auszuführen. Als geübter Skeletteur ist es mir auch möglich, bei seltenen Thieren, von einem einzigen Exemplar den tadellos ausgestopften Balg u. das vollständige Skelett aufzustellen. | verte. | Indem ich mich Euer Hochwohlgeboren bestens empfehle, bitte ich Herrn Hofrath um gütige Berücksichtigung sehe Ihren ferneren Verfügungen bereitwillig entgegen und zeichne Hochachtungsvoll Euer Hochwohlgeboren | ergebenster | H. Schädle".

⁷⁰⁷ The *Cicero* 1130 tons, under Captain Raymond, sailed 1 February 1875 and arrived in Lyttelton on 18 May 1875. See "Arrival of the *Cicero*", *The Lyttelton Times*, 20 May 1875.

The more expensive acquisitions – gemstones, larger meteorites – we will postpone until your arrival here. I have cashed the note for £30 which you already sent me in August; the sum will be enough to cover the cost of the acquisitions in the case and for the knighthood diploma. The Crown Prince was very pleased with the exhibition birds and the skulls. I already had the two kiwis with the egg made up as a group and also had the kakapo placed under glass in a frame. The other birds were integrated into the collection amongst the other specimens. Unfortunately a lot of the skins were so bad that the taxidermist rejected them. As I already wrote to you, I kept back one kakapo, one kiwi and the stone tool, for which I have a better use later. *Dinornis giganteus* is lying in a case unopened at your disposal and will stay there until your arrival, I presume. If you don't have another use for it, it will then have a greater effect if you hand it over yourself when you come. Unfortunately the case with *Meiornis* seems to have disappeared – it had already been announced to me from Hamburg in November, but must have got lost between Hamburg and Vienna; I have written to Hamburg but not received a reply yet.

I received your Moa Point Cave essay⁷⁰⁸ and read it with great interest – a very important work; it is just a great pity that you had to endure so much annoyance over this matter. Don't worry about it, people will steal and cheat as much as they can. That is the way the world goes. Fight and counter-fight.

My period of teaching the Crown Prince finished at the end of 1874, but the friendly relationship continues.⁷⁰⁹

In my family all is well, thank God, and hopefully your dear wife is also better.

Warmest regards and see you again soon,

From the heart,

Yours,

Ferdinand Hochstetter

One photograph of the Crown Prince is also enclosed.⁷¹⁰

89. Ferdinand Hochstetter to Julius Haast, Vienna 31 January 1875, MS 37 folder 187.

K. K.

GEOGRAPHISCHE GESELLSCHAFT
IN WIEN.

Vienna, 31 January 1875

Dearest friend

I just want to let you know very briefly that on 28 of January I had another audience with His Majesty, and that the Emperor in his kindly manner personally informed me that he had fulfilled my wish, so that despite the fact that you are a foreigner an exception would be made and you would be raised to the status of Knight of the Austro-Hungarian Empire, on the basis of your Order of the Iron Crown. As soon as I have the written notification I will undertake the next

⁷⁰⁸ Julius von Haast, *Researches and Excavations carried on in and near the Moa Bone Point Cave, Sumner Road, in the Year 1872*, Christchurch, Philosophical Institute of Canterbury, 1874. This was later also published in the *Transactions and Proceedings of the New Zealand Institute*, but this was not issued until July 1875, some months after the date of this letter. See Julius von Haast, "Researches and Excavations carried on in and near the Moa-bone Point Cave, Sumner Road, in the Year 1872", *Transactions and Proceedings of the New Zealand Institute 1874*, vol. 7, July 1875, pp. 54-85.

⁷⁰⁹ Hochstetter finished his tenure as tutor to the Austrian Crown Prince Rudolf at the end of 1874, when he wrote his final report dated 31 December 1874. See Ferdinand von Hochstetter, "Zweiter Jahresbericht", Karton 1, Convolut II, Folge 245-250, Selekt Kronprinz Rudolf, Hausarchiv, Österreichisches Staatsarchiv, Vienna. Later correspondence is evidence of their ongoing friendly relationship. See for example letter from Kronprinz Rudolf to Hochstetter dated Reichstadt 8 July 1876 in which he writes about some rocks he has found and asks for an explanation of a particular phenomena relative to these, and the reply from his former tutor, Hochstetter, dated 10 July 1876 in which he explains the nature of the rocks and reports on experiments he has carried out to discover the qualities alluded to in the former's letter. See Selekt Kronprinz Rudolf, Karton 19, Folge 231-232, Hausarchiv, Österreichisches Staatsarchiv, Vienna; and Personalakte Hochstetter, Archiv, Technische Universität Wien.

⁷¹⁰ Note in right margin of second page of manuscript letter. This relates to the items packed in a case sent to Christchurch via Hamburg.

steps for the diploma and coat of arms etc., and by the time you arrive here everything will be sorted out. So this matter has now been assured.

Then yesterday the case arrived that I had already given up as lost, but had actually been sitting here quietly at the customs office without my knowing about it. Thus the case with *Dinornis casuarinus* and *Meiornis* has arrived, and I will now give the skeletons to the Imperial Zoological Museum as a present from you, with the exception of the large skeleton that was originally designated for America, which I will hold for your disposal until you arrive here.

What is this business about the capture of two live moas? (*The Star*, Christchurch, 2 October 1874)⁷¹¹

My brother Albert⁷¹² travelled to Valparaiso at the beginning of January so he will not be coming to New Zealand.

When you arrive here you will receive as many duplicates from the Imperial Zoological Museum as you want – at least the gentlemen have promised me all sorts of things.

With sincere regards from us all,
Your faithful friend,
Ferdinand Hochstetter

Dr. Julius Haast, Christchurch, N. Z.⁷¹³

90. Ferdinand Hochstetter to Julius Haast, Vienna 21 March 1875, MS 37 folder 187.

K. K.
GEOGRAPHISCHE GESELLSCHAFT
IN WIEN.

Vienna, 21 March 1875.

Most esteemed friend

The start of spring in snow. We have had, and are still having, a Siberian winter, while you have probably had hot weather. Yesterday your letter of 17 January gave me pleasure; I am replying to it quickly, so that my reply might still reach you before your departure. I already wrote to you in my last letter that the knighthood business is now all in order, and in the meantime you have surely received the official notification, and the other day, once the Coat of Arms question was settled, I engaged myself in the matter of getting the diploma made, for which the official tax amounted to 175 and fiscal stamp duty of 5 gulden. Other additional costs were 10 gulden for the design of the coat of arms, and special issuing approximately 20-30 gulden. As the gentlemen in the peerage archive also take months over the painting and writing, the diploma will not be ready in time to send it to you before you leave, so you will therefore be able to receive it in person. Did you receive your exhibition medal? The dispatching and distribution finally began in January this year. My Hamburg title of nobility is of course a mistake, because in Germany every 'von' is turned into a 'Baron'. You write that I should indicate my requirements. Now, at this moment there is nothing specific; stone weapons would be of great interest to me, and then I would like to know something about the skull of the Chatham Islander that you sent with the Maori one, what race he belonged to etc. Both gave the Crown Prince much pleasure and are being drawn at the moment, to still be included in the last volume of the Novara work which is just in press.⁷¹⁴

Couldn't you arrange it so that you will be in Paris for the Geographical Congress which is opening on 1 August? One could then once more exhibit your alpine map, which is still here

⁷¹¹ R. K. M. Smythe, "Reported Capture of Two Live Moas", *The Star*, Christchurch, no. 2050, 2 October 1874, p. 2.

⁷¹² Hochstetter's younger brother Christian Albert Hochstetter (1832-1895).

⁷¹³ Address in lower margin of first page of manuscript letter.

⁷¹⁴ Emil Zuckerkandl (1849-1910), "Cranien der Novara-Sammlung", in: *Reise der österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859 unter den Befehlen des Commodore B. von Wüllerstorff-Urbair. Anthropologischer Theil*, Wien, Staatsdruckerei, 1875.

with me; if I can arrange it I will do so. I don't know yet whether I can get to Paris myself, as the opening unfortunately coincides with our end of year, where I can hardly get away as the vice chancellor.

Mr Stummer, the son of one of our railway moguls, former professor at the Technical University in Vienna, will already have sailed halfway to New Zealand, and by the time you receive this letter have long since arrived. I am keen to see how he gets on in New Zealand.

With sincere regards and in eager anticipation of your arrival here,
Your faithful friend,
Ferdinand Hochstetter

91. Ferdinand Hochstetter to Julius Haast, Vienna 25 July 1875, MS 37 folder 187.

Vienna 25 July 1875

Dearest friend

I am in the possession of your kind letters of 14 January, 5 April from Melbourne, and 6 May. Just as much as I was pleased to hear the good news that your wife is now all well again, I was disappointed that you have again postponed your trip to Europe. I hasten to notify you of the fact that I just received your completed knighthood diploma yesterday, which I had been expecting every day for months. The diploma is grand and splendidly executed, which will surely astonish you and become an ongoing memento in your family for your children and children's children. I am just not quite satisfied with the description of the coat of arms, for despite my repeated elucidation the restored moa in the right panel of the shield has become 'an extinct wingless kiwi bird in natural colour'; apart from this everything is perfectly in order and correct and you may certainly be proud of this fine diploma, which is of course signed personally by His Majesty. Hereby the matter is now fully accomplished and I hope to your fullest satisfaction.⁷¹⁵ I was not quite able to fully cover the costs from the bill of exchange for £30 which you sent me at some stage. The portion not yet covered is in the enclosed bill and comes to 34 gulden 37

⁷¹⁵ The diploma of knighthood, „Ritterstandsdiplom“ is a seven page document, which states, „Wir Franz Joseph der Erste, | von Gottes Gnaden Kaiser von Oesterreich; Apostolischer Koenig von Ungarn; Koenig von Böhmen, Dalmatien, Croatien, Slavonien, Galizien, Lodomerien und Illyrien; Erzherzog von Oesterreich; Großherzog von Krakau; Herzog von Lothringen, Salzburg, Steier, Kärnten, Krain, Bukowina, Ober- und Nieder-Schlesien; Großfürst von Siebenbürgen; Markgraf von Mähren; gefürsteter Graf von Habsburg und Tirol, etc. | Haben Uns aus besonderer Gnade bewogen gefunden, mit Unserer kaiserlichen Entschließung vom 21. Jänner 1875 Unserem lieben Johann Franz Julius Haast geboren im Jahre 1824 zu Bonn am Rhein, k. großbritannischen Staatsangehörigen, Doctor der Philosophie, Director des Canterbury Museums zu Christchurch auf Neu-Seeland, Präsidenten des philosophischen Institutes von Canterbury, Regierungsgeologen der Provinz Canterbury auf Neu-Seeland, Ritter Unseres Franz-Josef Ordens, des Hessen Darmstädtischen Verdienstordens Philipp des Großmüthigen und des herzoglich Sächsischen Ernestinischen Hausordens, wirklichem correspondierenden und Ehren-Mitglied zahlreicher Akademien, | wissenschaftlicher Vereine und gelehrter Gesellschaften, als Ritter des Ordens der eisernen Krone dritter Classe, in ausnahmsweiser Anwendung der Ordensstatuten den Ritterstand zu verleihen und zu gestatten, daß Dr Johann Franz Julius Ritter von Haast sowie seine ehelichen Nachkommen sich der nach dem Gesetze mit dem Ritterstande verbundenen Rechte erfreuen und insbesondere sich des nachstehend beschriebenen Wappens bedienen dürfen, als: Ein von Blau und Roth längs getheilter Schild mit goldenem Schildeshaupt und schwarzem Schildesfuß. In dem rechten, von einer natürlichen bewegten See durchzogenen Felde ein aus dieser nach Innen aufsteigendes zackiges Küstengebirge, dessen unterster Kegel vulkanischen Rauch ausströmt, alles na | türlich und überstiegen von dem goldenen Sternbilde des südlichen Kreuzes im rechten Oberwinkel in schrägrechter Achsenstellung. Im linken Felde steht einwärts auf Sandboden ein flügelloser vorsündfluthlicher Kivi genannter Vogel in natürlicher Farbe. In dem Schildeshaupt wächst ein schwarzer roth bezungter Doppeladler hervor. In dem Schildesfuß erhebt sich ein verzimmerter Stollen, worin ein natürlicher gekleideter Bergmann auf dem linken Fuß knieend, vor einem Grubenlichte mit Schlägel und Eisen im Gestein arbeitet. Auf dem Hauptrande des Schildes ruhen zwei | gekrönte Turnierhelme, von dem rechtsseitigen hängen blaue mit Gold und vom linksseitigen rothe mit Silber unterlegte Decken herab. Jede Helmkrone trägt einen geschlossenen Adlerflug, vorne ist der zur Rechten von Gold über Blau und jener zur Linken von Roth über Silber, hinten aber jeder in seinen Tinkturen abgewechselt quer getheilt. Unterhalb verbreitet sich ein blaues Band mit der Devise: VITAM IMPENDERE VERO [To stake one's life for the truth] in goldener Lapidarschrift. Zur Beurkundung Dessen haben Wir gegenwärtiges Diplom mit Unserem kaiserlichen Namen eigenhändig unterzeichnet und Unser kaiserliches Majestäts-Siegel beifügen lassen. Gegeben und ausgefertigt mittelst Unseres lieben und getreuen wirklichen geheimen Rathes und Ministers des Innern Doctors Joseph Freiherrn Lasser von Zollheim Großkreuzes Unseres kaiserl. oesterr. Leopold-Ordens, Ritter Unseres Ordens der eisernen Krone erster Classe, etc. | in Unserer Reichs-Haupt- und Residenz-Stadt Wien am fünfzehnten Juni des Jahres Eintausen Achthundert fünf und siebenzig. [signed] Der Minister des Innern [signed] Nach Seiner kaiserlichen und königlichen Apostolischen Majestät Höchsteigenem Befehle: [signed].“ MS papers 37, Alexander Turnbull Library.

kreutzer. As your trip to Europe may be postponed to next year according to your last letter, I thought it best to send the diploma to you straight away. I sent it by mail to Mr Ottywell, agent for Canterbury, with the request that he might forward it to you. With regard to the packaging I would like to note: the diploma bound in red velvet with the attached large Imperial seal in a gilded bronze case lies well stowed in a tin case. This is how I received it from the ministry. I enveloped this case well and had it soldered into a tin case that may therefore be opened without danger of damaging the diploma. The whole is then also packed inside a wooden case, so I hope that it will reach you completely undamaged and provide you and your family a day full of happiness and celebration, on which you will kindly bear me in mind.

Your maps and the large moa skeleton are still here with me, regarding which I am still awaiting your further instructions. Concerning the moa skeleton, I would especially ask you not to make a hasty decision, and it would be best if you waited until you came here before you decide. I do not want to ask on behalf of our museum, as we now already have the six skeletons. I would instead think of Stuttgart or Berlin, and when I see Fraas in Stuttgart in the next days I will ask him what he can offer you in exchange. How do things stand with the taxidermist? I repeatedly received enquiries from the gentlemen whom I suggested to you.

Today I am in a considerable hurry, as I still have to deal with a mass of correspondence which is growing almost over my head. On top of that I have my chancellery, in which I have to handle 300 to 400 reports a day, until the 3000 to 4000 reports have all been processed. As soon as this matter is finished, which should be by 28th of the month, I am travelling to Paris for the Geographical Congress.⁷¹⁶ What a pity that we will now not meet each other there. Geographers and explorers from all countries and regions of the world will be gathered there from 1 to 15 August and I hope to meet many old acquaintances and make many new ones. I will be back on 18 August, and will then go to Graz with my wife on 19 September for the naturalists' convention.⁷¹⁷

Unfortunately I do not own the publications of the Mining Office, Brough Smyth,⁷¹⁸ and I would be very grateful if I could get these from Smyth, to whom I send my regards. Please tell him to send them through bookseller channels via England to the Imperial booksellers, addressed 'to the care of Braumüller & Sohn in Vienna' for me (for Dr H etc).

How do you like Mundy⁷¹⁹'s grand work on Rotomahana,⁷²⁰ for which I wrote the text? Hopefully you have come across it. Unfortunately I do not have a copy to send you. But the new edition of my little geology⁷²¹ and the photographs of the Imperial family that I bought for you will be enclosed with the diploma.

In my family all is well, thank God, and God willing all will continue well, even if my hopes of a directorial position at the Imperial Natural History Museum do not seem to be being realised. There will be nothing left for me but to remain a professor, with a salary of 3000 gulden and 7 children. *Nous verrons a dit l'aveugle* – we shall see, said the blind man.

So goodbye for now, stay healthy, give my regards to all and make sure we hear from you again soon.

In loyal friendship,
Yours,
Ferdinand Hochstetter

⁷¹⁶ The International Geographical Congress in Paris, 1 to 15 August 1875.

⁷¹⁷ The "Naturforscher Versammlung" referred to was the "48. Versammlung Deutscher Naturforscher und Ärzte in Graz, 1875".

⁷¹⁸ Robert Brough Smyth (1830-1889), chief officer of the Australian Board of Science and editor of the Mining Survey Reports.

⁷¹⁹ Daniel Louis Mundy (1826-1881), English photographer who worked extensively in New Zealand.

⁷²⁰ Daniel Louis Mundy and Ferdinand von Hochstetter, *Rotomahana: and the Boiling Springs of New Zealand*, London, Sampson Low Marston Low & Searle, 1875.

⁷²¹ Hochstetter, *Die Erde nach ihrer Zusammensetzung, ihrem Bau und ihrer Bildung: Ein kurzer Leitfaden der Geologie*, Prag, Tempsky, 1875.

92. Ferdinand Hochstetter to Julius Haast, Vienna 12 January 1876, MS 37 folder 187.

Vienna, 12 January 1876.

Most esteemed friend

First of all, I wish you and your dear wife a happy New Year with all of my heart; may you always be healthy and happy.

I received your draught of £20 drawn on London and have cashed it in. I will send the sum indicated to Darmstadt as soon as they write to me for it. The suits of armour from Ilseburg are the most perfect imitation that one could imagine. I have written to Ilseburg about the prices, but have not yet received a reply. I would not be able to get genuine old suits of armour.

Your maps from the Viennese International Exhibition are being dispatched to Mr Ottywell in London today, with the instructions to send these on to you. They are well stored, soldered into a tin box. As I have already written to you, the moa skeleton has long since gone to Beck & Pollitzer in London.⁷²² I am sending the report on the Paris Exhibition to Ottywell for you. Hopefully the knighthood diploma has long since reached you and gave you pleasure for Christmas or New Year.

What happened to the three meteorites that were definitely packed in the case for you is quite inexplicable to me. I am so sure that I sent these – they cannot be found anywhere here with me either – so I can only imagine that they must have got lost during the unpacking of the case, as they were only little pieces.

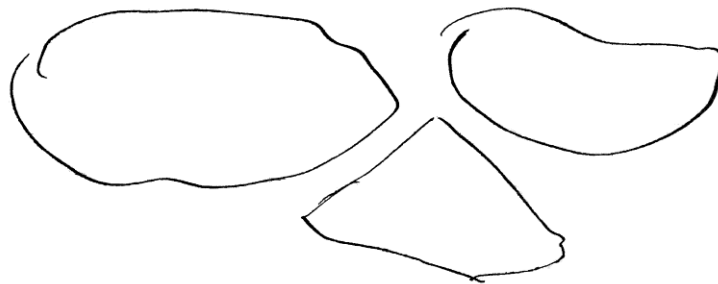


Figure 11: Three meteoric rock specimens

I probably stuck them in some special place in the case, perhaps between the pieces of wood that were there to protect the aragonite. Anyhow, I will be able to send you others. Meteorites are easy to come by, whereas meteoric irons are expensive – I do have a beautiful piece of meteoric iron on hand with fine Widmannstätten figuring, but it would cost 120 to 150 gulden

As far as the taxidermist is concerned, I only wrote to you about Mr von Kraventhal as he was recommended to me and had made contact. If it had come down to it, I would have probably selected someone completely different for you, with whom Mr Kerz in Darmstadt would have been agreeable, as we have a most excellent taxidermist here, but I would have caused him to lose his position if he had made it known that he wanted to go to New Zealand.

A few weeks ago the geological map of New Zealand, the one that was at the Vienna International Exhibition, reached me from London all finished. It is a very beautiful sheet and nicely executed, except that I am not happy with the colour scheme, it is too unconventional. I hear that Dr Hector is in London, but have not heard a single word from him. I hope that you will come soon, before it gets too late. Things are looking bleak here in Austria, a great depression after the so-called period of socio-economic upturn in the years of 1870 to 1873, and there is a terrible degree of poverty.

⁷²² Pollitzer, of Beck & Pollitzer, 211 Upper Thames Street, London.

My family is well and healthy, thank God, and while I am working I myself forget the other things that plague me. I am now writing about future Asian railways,⁷²³ for our Oriental Museum, a society with political-trade purposes, which is taking great pains over encouraging Austrians to look around outside and take part in the international commerce and world trade.

With sincere regards,
Your faithful friend,
Ferdinand Hochstetter

93. Ferdinand Hochstetter to Julius Haast, Vienna 15 May 1876, MS 37 folder 187.

Vienna, 15 May 1876

Most esteemed friend

Now I can finally send you the great news that the Emperor has appointed me to the position of director of the Imperial Natural History Museum. This Imperial museum will be a grand and unique building, which, although it has already grown out of the ground and over the first floor, will only be finished in three to four years time. All the existing Imperial natural history collections will be incorporated in it, that is the Mineralogical Museum and the Zoological Museum, but the new Imperial collection will also include a new geological-palaeontological department and an anthropological-ethnographical department. The emperor has given me the organisation of the whole museum, the general direction and the direction of the two new departments. I have hereby taken on a major difficult task for the eve of my life, but a task for which I bring love and devotion, by which I hope to achieve success. First of all there are the preliminary tasks and the working out of the plans for the exhibitions in the new building, and working out the new organisation. In the meantime I stay on as professor, until the building is finished and the work becomes more urgent and ongoing. Then I will lay down my professorship, in 1879 or 1880 I imagine. So we are working in the same direction at opposite ends of the globe, with the organisation and setting-up of museums. I am now asking you a favour and I will be in a better situation to fulfil your wishes. The director of this department, Steindachner,⁷²⁴ and I are particularly keen on acquiring marine mammals, fish and lizards, for the zoological collection, but also complementing and completing our moa collection. I am also looking for anything ethnographical and prehistoric, human skulls etc. are now doubly valuable to me, so do aim to put together for me whatever you can in the next few years. Steindachner offers complete skeletons of lions, tigers, giraffes, aurochs etc. and whatever else he has by way of duplicates, and I will have these things packed and placed ready for you. Do look for ethnographic objects from the South Sea Islands for me and the same from Australia etc.

I am very relieved that the diploma has finally reached you as you announced in your letter of 9 March, and as I hear your letter of thanks to His Majesty has also arrived.

Now with regard to the knight's suit of armour, I am herewith sending you the photographs of the suits of armour and a price list of art foundry wares from the factory, which contains things worth acquiring for an art museum, if one cannot have the originals. I am sending the photographs and the list via London and they may come one mail later than this letter. It will then be best if you order the things directly from the factory and indicate a company in either Hamburg or London who will look after the forwarding to New Zealand. The imitations are at least as good as the real suits of armour, which one cannot get however. Meteorites to the value of 120 gulden are also lying here for you, and I will send these together with the photographs to London if possible. The alpine map has long since gone to Ottywell for you.

I received the geological map of New Zealand and it has been very well executed. I wrote to Dr Hector three months ago to England under the address of Dr Featherston, New Zealand

⁷²³ Ferdinand von Hochstetter, "Die Asiatischen Zukunftsbahnen", *Oesterreichische Monatsschrift für den Orient*, no. 2, 15 February 1876, pp. 17-21; no. 3, 15 March 1876, pp. 34-41; no. 4, 15 April 1876, pp. 49-56; no. 5, 15 May 1876, pp. 65-70.

⁷²⁴ Franz Steindachner (1834-1919), Austrian zoologist who later became director of the Natural History Museum in Vienna.

General Agent, and sent him my photograph, the diploma of corresponding or honorary membership, I am not sure which at the moment, etc., but never received a reply.

Brough Smyth, Office of Mines, has sent me the publications which I received on 15 February of this year, but the seven maps announced in his letter have not arrived. I have not replied yet, as I was still waiting for the maps to arrive any day. I would be very grateful if you could let him know that I did not receive the maps. I will try to get a complete set of our *Novara* publications for him in exchange, as soon as we finish the work in a few months time.

In my family all is well, thank God. Shall I send cases to Ottywell in London for you? Or what is your address in London now? Do you never hear anything from Fischer in Sydney?

I close for today, as I am rushed. With warm regards from us all,

Your faithful friend,

Ferdinand Hochstetter

94. Ferdinand Hochstetter to Julius Haast, Vienna 24 August 1876, MS 37 folder 187.

K. K.

GEOGRAPHISCHE GESELLSCHAFT

IN WIEN

I., Universitätsplatz 2.

Vienna, 24 August 1876

Most esteemed friend

Please excuse my haste today, but if I am to write to you at all before my departure for Berlin, Copenhagen and Brussels etc. and Holland, then I have to do it quickly, but do it I must, as I have a few things to reply to.

1. Enclosed the quote from Köke⁷²⁵ for the geological map, 130 gulden Austrian currency, which is not quite £13.
2. The small case with the bird remains and the medal, which was enclosed with the shipment to Kraus, has not arrived yet, but I already thank you most sincerely in anticipation for the same and for your efforts in relation to the medal, which will certainly give me and my wife great pleasure.
3. I have already confirmed the receipt of the bill of exchange for £30. The newly sent meteorites have hopefully arrived. I really cannot imagine what happened to the earlier ones.
4. Kerz in Darmstadt has not made contact in regard to the payment of the 230 gulden yet. As soon as this happens I will send him the money
5. I am very much looking forward to the beautiful work by Gully⁷²⁶ in London, for which I owe you my thanks.
6. I have already written to you regarding the knight's suit of armour.
7. After receiving your letter of 28 June yesterday I immediately turned to the extraordinarily skilled taxidermist Grimm⁷²⁷ at the Museum in Bern and told him the content of your letter in regard to a taxidermist. I have not had a reply yet, but hope to be able to arrange everything on my journey as necessary.
If Grimm does not want to go, or cannot go, then I would not have any advice at this time, as I do not know any other suitable taxidermist that would suit you at the moment. Then you would probably still have to wait a while.
8. I will send the *Novara* publications next winter. Best regards to Mr Tancred.

⁷²⁵ Friedrich Köke (1823-1882), owner of the "Lithographische Anstalt von F. Köke in Wien".

⁷²⁶ John Gully (1819-1888), *New Zealand Scenery chromo-lithographed after Original Watercolor Drawings: By John Gully. With Descriptive Letterpress by Dr. Julius von Haast*, Dunedin, Henry Wise; London, Marcus Ward, 1877.

⁷²⁷ J. Grimm (died 1912), taxidermist at the Natural History Museum in Bern, Switzerland.

9. I have to wait until I return from my journey at the beginning of October before I can get the publications of the Zoological & Botanical Society for you.

10. After my return I will also send you the statement for the £50, first £20 and then £30, which you sent me.

I am going on my journey on museum business. You will have received my letter with requirements in this regard.

I am already right in the middle of the task and am accumulating as many collections, as I can. Yesterday I completed a deal for the purchase of a Solnhofen collection for 5000 gulden. I am very much counting on you as I will eventually be able to do a great deal of exchanging.

Hopefully your liver problems have left you completely and for good, if not then come to Carlsbad.

One week ago I returned from a thrilling and pleasant journey with my wife to my homeland and now I have to travel alone to the North. I have been invited by the King of Belgium⁷²⁸ to Brussels for a geographer's congress on 11 September, in which Africa will be discussed. The king has invited the Africa explorers and the presidents of the geographical societies to be guests in his palace. I am expecting to gain a great deal of inspiration from this international gathering. Have you heard of my Asian railways project? If not, then I will send you the book in autumn together with the rest.⁷²⁹

Warmest regards from my wife. We are all well, thank God.

With warmest regards,

Yours,

Hochstetter

Dr Julius Ritter von Haast, Christchurch.⁷³⁰

95. Ferdinand Hochstetter to Julius Haast, Vienna 27 October 1876, MS 37 folder 187.

Vienna, 27 October 1876

Most esteemed friend

Since my last letter of 24 August I have been travelling in Belgium, Holland, Denmark and Northern Germany, all on museum business, until the beginning of October. But I did not lose sight of your affairs and am today writing to you about the results.

1) I have made the order from Ilseburg amounting to 272 thaler and 22 silver groschen for you, and received the reply that the same will be promptly and carefully fulfilled for you. This order is covered by the remainder from the £20 + £30 = £50 that I still have in hand for you.

2) I confirm the receipt of a further £10, which were enclosed with your letter of the 21 August. The taxidermist will buy glass eyes, wire, tools etc. from this.

3) In accordance with your instructions to Mr W. H. Flower⁷³¹ in London (Royal College of Surgeons) I will draw £50 on you in the next few days or weeks, to send the taxidermist, whom I have finally found and engaged for you, to England and from there to board ship. You do not write how and by which ship I am to send the man. I will take a second class cabin on a passenger ship from London or Hamburg for him, but I am not sure if the sum will be sufficient for the whole journey from here to New Zealand. In any case I will then have no money left to pay the bill of the taxidermist Kerz in Darmstadt, which has still not been received and which I will pay as soon as it comes though.

⁷²⁸ King Leopold II of Belgium (1835-1909).

⁷²⁹ Ferdinand von Hochstetter, *Asien, seine Zukunftsbahnen und seine Kohlenschätze: Eine Geologische Studie*, Wien, Alfred Hölder, 1876. The "Vorwort" of this book is dated "Wien, den 30 April 1876", being Hochstetter's birthday.

⁷³⁰ Address at base of first page of manuscript letter.

⁷³¹ Sir William Henry Flower (1831-1899), zoologist who worked in the areas of structural anthropology and comparative anatomy.

4) After many futile attempts and a great deal of correspondence, as Grimm in Bern could or would no longer go, I think I have finally found a suitable man in A. Reischek,⁷³² taxidermist, whose card I enclose. He was very warmly recommended to me by an expert in the field. He is a strong and healthy young man of 30, whose work I found very pleasing. He has recently married, but is without children and wants to leave his wife⁷³³ here with her mother in the meantime, to perhaps let her follow later. He accepted your conditions, that is a yearly salary of £220 and free passage to New Zealand. I formed the contract with him today and he will leave as soon as he has liquidated his shop, met his obligations by fulfilling outstanding orders, and received a passport. His departure, according to him, cannot now take place before January, but he has promised it for the beginning of January; he is also inclined to commit himself for three years.

I now consider the matter as all settled, and only regret that you now have to wait longer than you had probably hoped. But anyone else would not have been able to free themselves from one day to the next either.

I am saving everything else for my next letter, which will follow in about fourteen days' time.

With best regards,

Yours,

Ferdinand Hochstetter

Dr v Haast, Christchurch.⁷³⁴

96. Ferdinand Hochstetter to Julius Haast, Vienna 3 November 1876, MS 37 folder 187.

Vienna, 3 November 1876

Dearest friend

On 27 October I wrote to you that I had engaged a taxidermist for you, namely Mr A Reischek, who has promised to travel from here at the beginning of January, and that I had made the order for you in Ilseburg.

Today I continue by writing to you that in the next few days I will be packing the *Novara* volumes for you and sending them to London, and will enclose everything destined for New Zealand under your address; you will then be able to repatriate the freight costs. I will also enclose the zoological publications and other things for you.

But the main reason for my writing today is to ask you, after receipt of this letter, to send to Australia to Mr Eugen von Guérard,⁷³⁵ artist in Gipps Street East Melbourne, £31 (thirty one pounds sterling) in my name as payment for the two pictures that I sold for him. I wrote to him simultaneously with this letter that he would receive the money through you.

I will credit the £31 on your account as received, so that at present I have in hand for you approximately 900 fl in Austrian currency, inclusive of these £31.

1) To pay for the order in Ilseburg 2) to pay the bill from Kerz, and 3) for the travel money of the contracted taxidermist. So I will not need to draw on you the full £50 from Mr Flower, but will just draw the amount needed according to the accounts after Reischek leaves, so that I am now covered for all events.

In a big hurry today,

With warmest regards,

Yours,

Ferdinand Hochstetter

⁷³² Andreas Reischek (1845-1902), Austrian ornithologist, naturalist, explorer and taxidermist.

⁷³³ Adelheid Reischek (1852-1908), the wife of Andreas Reischek.

⁷³⁴ Address at base of first page of manuscript letter.

⁷³⁵ Johann Joseph Eugen von Guerard (1811-1901), Viennese painter who worked in Australia and New Zealand.

Dr J v Haast⁷³⁶

97. Ferdinand Hochstetter to Julius Haast, Vienna 20 December 1876, MS 37 folder 187.

Happy New Year!

Vienna, 20 December 1876

Most esteemed friend

I confirm the receipt of your letters of 19 September and 23 October. I have placed the order with Dr Schuchardt⁷³⁷ in Görlitz. The items have already reached me and been paid for. The invoice from Ilsenburg has not arrived yet, however I will be paying 84 Reichsmark to the taxidermist F. Kerz⁷³⁸ in Darmstadt for the bird of paradise, *Paradisea apoda*⁷³⁹ ♂, you ordered from him, in the next few days, so that I now still have a total 700 gulden for you, including the £31 which you will have paid to my friend Guérard in Melbourne in accordance with my last letter of 3 November. I still have to pay:

The order from Ilsenburg of approximately 430 gulden

The Zoological & Botanical Society journal 25

Equipment for your taxidermist Reischek, the wire, tools, eyes etc. purchased as you requested, 160

Travel money for Reischek (£40) – 500

That is a total of approximately 1115 gulden

So in order to be fully covered, I will have to draw £40 from Mr Flower on you. Then I think there will still be something left to buy a few other things for you. Reischek will bring the final statement for you. Fortunately after overcoming a number of difficulties, as Reischek had not yet been fully released from his military service,⁷⁴⁰ we are now at the point where Reischek will be able to leave in January. He was here to see me again today and I will write a formal contract with him and he will commit himself for at least two years. But he insists on travelling by steamer via Suez, and told me that according to his researches the total cost of travel to Christchurch would come to 800 gulden; he would be prepared to pay 300 out of his own pocket, rather than spend 4 months at sea. I imagine that you will also be pleased to have the man two months earlier; he will then be coming to you by the end of March at the latest, if he leaves by the steamer from Trieste on 22 January at the latest. If a ship with a connection to the Australian mail route will be leaving 14 days earlier, then he will come by this one. I am certain that you will find a very good worker in Reischek and that you will gain in him a very decent man. He has completely liquidated his business here and sold everything, to be completely free. His wife is staying here with her mother in the meantime, as I already wrote to you. I will put the final statement in the form you requested, so that your private orders are kept separate from the museum orders, and both will be calculated separately. Finally my friend Krauss in Stuttgart has

⁷³⁶ Address at base of first page of manuscript letter.

⁷³⁷ Dr Theodor Schuchardt in Görlitz was described as a “Mineraliensammler” (collector of minerals). There are letters from Schuchardt to Hochstetter dated 6 August 1877, 21 January 1879 and 9 November 1880, Department of Archives and History of Science, Natural History Museum Vienna, Schachtel 4, Inventar Nummer 63.01-03.

⁷³⁸ F. Kerz was a taxidermist in Darmstadt.

⁷³⁹ The *Paradisea apoda*, known in German as “Der Große Paradiesvogel” or “Göttervogel”, is 45cm long and brightly coloured.

⁷⁴⁰ Reischek's military service certificate headed “Landwehr-Abschied” is dated 31 December 1878. This states: “K.K. Böhmisches Landwehr-Bataillon Klattau Nr. 36. | Landwehr-Abschied. | Vorschlagsgeselle 2. Cl. Andreas Reischek geboren im Jahre 1845 zu Schüttenhofen Bezirk Schüttenhofen Land Böhmen Religion Katholisch, Standes Ladiz, Läger, hat bei dem Jäger Baron No. u. Verpfl. Magoirin durch 10 Jahre 1 Monate 25 Tage als Jäger u. Geselle 2. Cl. ferner beim Landwehr Bataillon Nr. 36 als Geselle 2. Classe durch 2 Jahre [...], somit im Ganzen durch 12 Jahre 1 Monate 25 Tage treu und ehrenhaft gedient [...] Nachdem Vorschlagsgeselle Andreas Reischek der gesetzlichen Wehrpflicht vollkommen genügt hat, so wird derselbe mit 31ten Dezember 1878 aus dem Verbande der Landwehr entlassen und ihm im Grunde des §. 39 des Wehrgesetzes für seine Dienstleistung die gegenwärtige Urkunde ertheilt. Klattau, am 31. Dezember 1878. | Der k.k. Landwehr Bataill. Commandant [signed]”. The certificate has two later additional notes as follows: “Ingenannter hat den Feldzug im Jahre 1866 mitgemacht und ist berechtigt die Kriegsmedaille zu tragen K.K. Landsturm-Bezirks Commando No. 36. zu Pilsen am 21 Juli 1899 [signed]”, and “Die Jubiläums-Erinnerungs-Medaille zuerkannt und erfolgt. Linz, am 2. December 1898 K.k. Landwehr-Ergänzungsbezirke-Commando No. 2. [signed]”. Pingitzer Family Private Collection.

notified me that he has sent off to me the small case which you enclosed with the Stuttgart consignment, but it has not arrived yet. The cases for you will hopefully also still be going off to you in January via London. I might give a few things to Reischek for you if possible. You will get the *Novara* volumes, the Zoological & Botanical Society journals, the model crystals, model diamond and imitation gemstones you ordered from me, the Nordic stone tools, duplicates from Solnhofen, and from the Zoological Museum a lion and giraffe skeleton, together with skins for mounting etc.

I am very grateful that you have found a *Ceratodus* for us, but I am most keen on ethnographic objects and human skulls from the South Seas at the moment. I cannot put together ethnographic objects in exchange at the moment but will do so later when we come to setting up the collections for display, and I get an overview of our duplicates. I am expecting the geological map from you and will then have it executed for you immediately. We are all well and send you our warmest regards,

Your faithful friend,
Ferdinand Hochstetter

Always in a hurry and rushed, otherwise I would write more!

98. Ferdinand Hochstetter to Julius Haast, Vienna 24 January 1877, MS 37 folder 187.

Vienna, 24 January 1877

Dear friend

I am sending the following to you, soldered into a tin case, by the freight company Sockl in Vienna to the New Zealand Shipping Company Limited 34 Bishopsgate Street Wilton C. London.

Novara volumes:

1. Three volumes for you to complement the previous consignments
2. One complete set for the Canterbury Museum or Institute as you may decide.
3. Three volumes to complement the previous consignments for Otago University (W. H. Mansford,⁷⁴¹ Registrar).
4. One complete set for the New Zealand Institute in Wellington
5. For the New Zealand Museum in Wellington 3 volumes to complement the previous consignments.
6. For the Wellington Philosophical Society 3 volumes to complement previous consignments
7. One complete set for the Nelson Institute (for which I laid the foundation stone in 1859!)
8. 15 volumes for the Melbourne Public Library to complement previous consignments.
9. One complete set for the Melbourne Office of Mines. When you write to this office I ask you to please remark that although I received the books announced in the letter of 1 November 1875, I did not receive the maps, namely the Geological sketch map of the Cape Otway District; Geological sketch map of part of the Mitchell River Division of the Gippsland Mining District; Geological sketch map of the Parish of Beechworth; Geological Map of the Ballarat Goldfield; Geological map of the Sandhurst Goldfield; map showing the distribution of forest trees in Victoria; and therefore ask for these to be sent as well as any further publications.
10. 3 volumes for the Australian Museum in Sydney to complement earlier consignments.

I will place the costs of postage and packaging to London on your bill and ask you to get reimbursed for these costs from the recipients when distributing the books. I know I am causing you a fair bit of effort by this, but there is no other way, if I am to send these things to New Zealand and Australia at all.

⁷⁴¹ William Hemming Mansford (1820-1890), appointed registrar of Otago University in 1874.

Furthermore I am sending you:

11. One case with the volumes of the Zoological & Botanical Society up to the year 1876, only volumes 1, 2 and 5 are missing, which I could not get.
12. The glass models purchased for you from Schuchardt, if the taxidermist does not bring them in his luggage for you.

I am also letting you know that Dr Steindachner sent several cases with skeletons and skins to Pollitzer in London for you in January.⁷⁴²

The taxidermist Reischek is coming on the steamer that is leaving from Suez about mid February and will therefore reach you in mid-April. I have contracted him for £220 per annum with an increase of £30 starting from the third year on good performance. I gave him £40 travel money, that is more than you had indicated, namely more than £25, however he did not want to travel other than by second class on a steamer, in order to arrive in time before May. I told him that as he would not be fully covered by the £40, you would pay him the difference on his arrival, and I ask you to do so. I therefore did not mention the increase in salary by £30 in the first two years. The utensils etc. that he purchased are declared in the contract as property of Canterbury Museum, and these were more expensive than you had indicated and cost approximately £16. Reischek himself will bring the bills I paid for. In order to cover everything I will therefore be drawing £50 with Flower on you, instead of £40 as I wrote, and have already written to Flower about this.

I am also pleased to be able to confirm the receipt of the maps and sections and your letter with the bill of exchange for £58. I cashed the bill and have passed on the maps to be executed. They have been promised to me for May and I hope that they will not cost that much, so that I can also still have woodcuts made as soon as the photographs arrive.

Once the cases of books have been dispatched, I will pack a case with fossils from Solnhofen and a few prehistoric things for you.

I would very much like to get ethnographic things from the Solomon and Fiji Islands.

Unfortunately I still cannot send you ethnographic objects, this will only become possible when we get to mount the collection in 1880 and I gain an overview of what we have.

I have not heard whether the items from Ilseburg have been finished and sent to you yet, and will write about it in the next few days.

We are all well. All else through Reischek, who may be arriving sooner than my letter.

With warmest regards,

Yours,

Hochstetter

Postscript. The moa bones and medal have arrived and pleased me very much. The medal really is very fine and is giving me a great deal of pleasure. My best thanks for it.

99. Ferdinand Hochstetter to Julius Haast, Vienna 5 February 1877, MS 37 folder 187.

Vienna, 5 February 1877

Dearest friend

The bearer of this letter is at long last the taxidermist and conservator Reischek, whom you have undoubtedly long since been keenly expecting. I hope you will find in him a loyal,

⁷⁴² The inventory of this shipment by Steindachner with additions by Hochstetter shown in italics is as follows. “*Vom Zoolog. Hofmuseum abgegangen im Jan. 77 an Pollitzer & Cie London für Herrn Dr. von Haast 3 Kisten enthaltend: | Säugethiere | Häute | Felis leo fem (mit Schädel) | Camelopardalis giraffa | Rangifer tarandus | Bison europeus | Skelete | Felis leo fem | Camelopardalis giraffa | Rangifer tarandus jv. | Bison europeus | Vögel | Struthio Camelus eine Haut und ein Skelet | im Tausch mit dem Canterbury Museum | Wien 26 Ja. 77.*” MS papers 37 folder 238, Alexander Turnbull Library.

diligent, hard working and honest worker and that he may thereby win your favour.⁷⁴³ I can assure you that I did my utmost to find the most suitable man for you and I think that I have found him, and hereby commend him to your benevolence.

He brings you the glass items you ordered and purchased from Schuchardt, and the statement of account, from which you will perceive the necessary details, is enclosed together with receipts and the contract with Reischek. I closed the old statement, as the order in Ilsenburg has now also gone off to London, and am starting a new statement of account with the £58 you sent me for the printing of the maps, which will not cost more than half this sum, however. In order to cover the old invoices completely I have drawn the sum that Mr Flower in London still had on hand for you, being £49.12.10.

I enclose my most recent family photo of the year 1876 for you and a photograph of my wife.⁷⁴⁴ I do not have a photograph of myself at the moment.

In my last letter I wrote in detail about books etc. There are three shipments on the way for you:

1. Case containing the Novara volumes and the journal of the Zoological & Botanical Society.
2. The shipment by Steindachner.⁷⁴⁵
3. The shipment of foundry products from Ilsenburg.

Reischek will be able to tell you enough about us and will also mention our requirements of human skulls, prehistoric and historic ethnographic objects from the South Seas,⁷⁴⁶ especially Fiji, Melanesia and Marquesas; I do not have a single piece from the Marquesas Islands.

Now I say goodbye, with warmest regards from us all,

Yours faithfully,

Ferdinand Hochstetter

Private expenditures for Haast

Received 131 gulden 93 kreuzer

Note that according to the last statement of 182 gulden which I again enclose here, there was a balance of 34 gulden 7 kreuzer to cover. As I have now put 166 gulden 30 kreuzer on the new museum bill according to your instructions, this is charged here again, therefore I place 166 gulden 30 kreuzer less 34 gulden 37 in your private account as received.

Expenditures:

| | | |
|---|-----------|-----------------|
| 1875 Postage for the knighthood diploma | 4.28 | |
| for the zinc case and soldering it shut | 4.45 | |
| Received | 131 fl 93 | |
| Expenditure | 8.73 | |
| Balance | 123.20 | 31 January 1877 |

This balance of 123.20 has been placed on the statement for Canterbury Museum as received, so that the £58, which I received on 6 January 1877 for the costs of the geological map etc., stays intact for the new statement. H

⁷⁴³ The opening of this letter translated into English is quoted by Michael King in his biography on Reischek: "The bearer of this letter is at last the eagerly-awaited [taxidermist] Reischek. I hope that you will find him a loyal, hard-working efficient and honourable fellow worker, and that he will earn your favour well with these qualities." See *The Collector*, p. 35.

⁷⁴⁴ Photograph of Georgiana von Hochstetter by George Harmsen, 1877, PA2-0828, Alexander Turnbull Library.

⁷⁴⁵ For inventory list of contents of cases sent by Steindachner, see MS papers 37 folder 238, Alexander Turnbull Library.

⁷⁴⁶ This is one of the passages quoted in English translation by Michael King in his biography on Reischek: "Reischek will be able to tell you quite a lot about us and will once more remind you of the gaps in my collection, particularly in Maori skulls. Also in prehistoric ethnographic objects of the South Seas", See *The Collector*, p. 35. Note the translation introduces the specific reference to Maori skulls, which is not in the original, where the term "Racenschädel" is much broader and certainly not specific to Maori, even in this context where he is referring to ethnographic collections from the greater Pacific region.



13. Georgiana von Hochstetter, photograph by George Harmsen, 1877.
(PA2-0828, Alexander Turnbull Library).

100. Ferdinand Hochstetter to Julius Haast, Vienna 10 May 1877, MS 37 folder 187.

K. K.
GEOGRAPHISCHE GESELLSCHAFT
IN WIEN.

Vienna, 10 May 1877

Most esteemed friend

Today I confirm the receipt of your two letters of 9 March and 11 March this year and the bill of exchange for £30 drawn on London as well as the sketches and photographs. On 7 May, after I also drew £25 from the New Zealand Shipping Company according to your instructions, I now have for you:

| | |
|----------------|--|
| 6 January 1877 | £58 in bills on London |
| 4 May 1877 | £30 |
| 7 May 1877 | £25 drawn on the New Zealand Shipping Company. |
| Total | £113 |

Of this I have paid £6.12 to Lipp & Sohn in Stuttgart and 28 Mark to Dr Finsch⁷⁴⁷ in Bremen.⁷⁴⁸

I will now cover the costs of the geological maps and sections and the illustrations. The maps and sections will be finished in the next few days and the illustration ‘Canterbury Museum’⁷⁴⁹ has already been delivered and cost 51 gulden 50 kreuzer in Austrian currency. I sent a sample copy to you as printed matter and will pack the whole lot into a case for you once the maps and sections are ready, and send it to the New Zealand Shipping Company in London. I tried to send the packet with the ‘Canterbury Museum’ directly to you by mail, but the parcel came back from Trieste with the remark that it could only go as far as Melbourne and that the postage would cost approximately 30 gulden. So you can see that our postal system is still so ingenious that it is impossible to send things from here directly and I therefore have to send these items via London.

I don’t know at the moment how much of the above sum of £113 I will have left for the landscape illustrations, as the bill for the maps and sections has not reached me yet. But there might be somewhere between 800 to 900 gulden in Austrian currency left, so I hope to basically be able to fulfil your wishes, although I still have no idea how I am going to have the landscapes executed and what the cost per sheet will be. Nowadays such landscapes are being done here using collotype, a kind of photolithographic process, and that will most likely be not only the best but also the cheapest method. However, with regard to your wish regarding a German edition or a contribution to an illustrated newspaper, you have given me too little information regarding the number of copies in the edition, expected writer’s fee, and when the manuscript would be submitted etc., for me to do anything. One can hardly hope for the illustrated newspaper option at the moment, as the Russian-Turkish war is currently taking up all resources and space in these newspapers.

So there is nothing left for me to do, other than to order 520 copies of the maps and illustrations and landscapes for your English book. Then when you eventually send me the German manuscript with all the illustrations to go with it, and with your conditions in regard to the number of copies in the edition etc., then I will see that I find a bookseller for it, otherwise all effort would be wasted.

Now, at the time of my writing, Reischek will hopefully have long since arrived and I hope and wish that you like the man and that he performs his task well. All I know is that I did

⁷⁴⁷ Dr Friedrich Hermann Otto Finsch (1839-1917), German explorer, zoologist and ethnologist.

⁷⁴⁸ See invoice from Otto Finsch to Haast dated Bremen 12 December 1875, MS papers 37, folder 238, Alexander Turnbull Library.

⁷⁴⁹ This illustration with the caption, “Canterbury Museum, Christchurch New Zealand” became the frontispiece for Julius von Haast, *Geology of the Provinces of Canterbury and Westland, New Zealand: A Report comprising the results of Official Explorations*, Christchurch, Times office, 1879.

the best I could in this difficult matter and I just hope that all will go well now. Your wish that he might already arrive in March was obviously not fulfilled, but unfortunately that was not possible.

My best thanks for sending my friend Guérard in Melbourne the £31, he has already confirmed to me the receipt of the same. The sum falls into the period of the earlier statement which I gave to Reischek for you, and also the sum which I drew on Professor Flower in London.

Kerz has not sent a newer invoice. You write of approximately 240 gulden, which will then be subtracted from the above 800-900 gulden.

I was very pleased to hear that you are getting ethnographic objects of the South Seas and human skulls ready for me. Of course items from Fiji and Solomon Islands would be highly desirable. It is best to cut the long spears in half with a cut like this:⁷⁵⁰

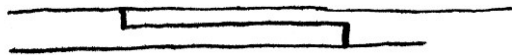


Figure 12: Cutting long wooden spears for transportation

But do also try to get items from the Marquesas Islands for me, as I wrote to you in my last letter, and from your prehistoric finds in New Zealand itself. I will then send you things from our lake dwellings. Unfortunately I have not sent the things from Solnhofen and the Nordic stone implements yet. I simply have too much to do. But I have now pretty much completed the plans for the arrangement and division of the Imperial Natural History Museum. In this a major step has already been completed

Meinecke⁷⁵¹ in Dresden, whom you mention as a possible co-worker, died last summer.

I will write to you separately regarding the printing of your illustrations, as soon as I have spoken with the institution doing them. My best thanks also for the two studio portraits, from which I see that you have grown just as grey as me, which is the way time goes. Reischek has brought our pictures for you. After a number of illnesses with me all are well again here, thank God. I had to go to Italy for a few weeks to rejuvenate myself and will go to the Alps with my students at Whitsun.

With warmest regards from us all,
Your faithful friend,
Ferdinand Hochstetter

101. Ferdinand Hochstetter to Julius Haast, Vienna 28 July 1877, MS 37 folder 187.

To Dr. v. Haast

Vienna, 28 July 1877

Dear friend

Finally I can let you know that a large heavy case has been sent off to London for you to the New Zealand Shipping Company. This case contains the following soldered into a tin case:

1. On top an ammonite from Hallstatt together with a few bronze items from the Celtic graves in Hallstatt, late Bronze Age.
2. A few books: Suess, the formation of the alps⁷⁵² and on gold, which I purchased for you as I thought that they would be very interesting to you, and also a few more issues from the Zoological & Botanical Society.
3. Your geological maps and profiles, 4 packets, each containing 510 copies for your book.⁷⁵³

⁷⁵⁰ The sentence inserted here appears as a footnote in the lower margin of the manuscript letter, together with the diagram suggesting how a spear might be cut for transportation purposes.

⁷⁵¹ Carl Eduard Meinicke (1803-1876), German zoologist in Dresden.

⁷⁵² Eduard Suess, *Die Entstehung der Alpen*, Wien, Braumüller, 1875.

4. Eight packets with collotype pictures and one lithograph for the illustrations of your book, 505 copies of each.⁷⁵⁴
5. One packet with 510 copies of the Museum in Christchurch in zincography also for your book.⁷⁵⁵
6. A wooden case with:
 - a. A few insects from the slates of Solnhofen, Upper Malm.
 - b. Mexican obsidian, old, worked by the Aztecs.
 - c. Norse stone tools from Holstein and Denmark, late Stone Age.
 - d. A bundle of arrows from Sudan (Negro arrows).

I could not put together more at the moment, but will do so as soon as I can get at the duplicates of the museum, once all the collections which are now lying packed up in the depot are brought out for display.

As you can see from the inventory, I only had 8 of the Alpine photographs and other master copies you sent me realised in print, and each of these in an edition of 510 copies. Of these I kept 3 for myself and always sent two to you by mail as soon as they were ready, so there are 505 in each packet, with a total cost of approximately 500 gulden. As the collotype is now the most modern, best and cheapest method of reproduction, I chose this method. Certainly the pictures would have come out better if the collotype plate could have been taken straight from a glass plate negative, but I only had the photographs on paper, and this explains the reduced quality in focus and strength of the collotypes. However these are still 100 times better than any lithographed sketches. I could not find an accomplished artist to complete the engravings after the photographs, and then the illustrations would also have become too expensive and I would have had to make you wait too long. Before I chose the collotype method I tried out all kinds of things, amongst what was available to me here, but the collotype was still always the best, relatively speaking. The maps came out quite well as did the museum, and I hope that you will be satisfied and that the case will reach you safely and undamaged. I could not send the prints by mail, as my first attempt in this direction failed completely and so there was nothing left for me to do but to send it all via London.⁷⁵⁶

I was very pleased to hear that you are satisfied with Reischek; please give him my best regards. His wife came to see me, she is well and has sent off a case of materials to you, and I have paid the bill of 160 gulden in Austrian currency – 162 fl 80 Kr. I do not recall the exact sum at the moment. I have paid everything according to your instructions and send you the enclosed statement from which you will see that you still have a credit balance of more than 200 gulden with me, which I will use according to your anticipated instructions.

Thank you for sending me the newspaper clipping on the tsunami in May. I will not work on the matter as I do not have time, but have given the material to the young Geinitz⁷⁵⁷ in Jena, who asked me for it, and I ask you to send me more if you are able to get material with more precise dates.

⁷⁵³ The maps and sections printed in Vienna for Julius von Haast, *Geology of the Provinces of Canterbury and Westland, New Zealand*, Christchurch, 'Times' office, 1879. These coloured maps and sections were lithographed and printed by F. Köke in Vienna and include: "Geological Map of the Provinces of Canterbury and Westland New Zealand by Julius von Haast PH.D. F.R.S. Provincial Geologist", and various geological sections.

⁷⁵⁴ The eight illustrations printed by Max Jaffé (1845-1939) in Vienna for Julius von Haast, *Geology of the Provinces of Canterbury and Westland, New Zealand*, Christchurch, 'Times' office, 1879. The one that is lithographed is the one with the title: "Francis Joseph Glacier, General view, Southern Alps", facing p. 103. Another of these views of particular interest is one with the title: "Head of the great Tasman Glacier" showing the Hochstetter Dome, this is from a photograph taken by E. P. Sealy. Seven of the eight mentioned here are landscapes while one is, "Skeleton of Aptornis otidiformis Owen".

⁷⁵⁵ This illustration with the title: "Canterbury Museum, Christchurch New Zealand" became the frontispiece of Julius von Haast, *Geology of the Provinces of Canterbury and Westland, New Zealand*, Christchurch, 1879.

⁷⁵⁶ Haast acknowledges Hochstetter for supervising the printing of the plates and illustrations when he writes: "To my friend, Professor Dr. F. Ritter von Hochstetter, in Vienna for superintending the printing of chromo-lithographed maps and sections", Julius von Haast, *Geology of the Provinces of Canterbury and Westland, New Zealand*, Christchurch, 1879, p. iv.

⁷⁵⁷ Eugen Geinitz (1854-1925), German mineralogist, geologist and professor at the University of Rostock.

The Letters of Ferdinand von Hochstetter to Julius von Haast

At the beginning of August I will be travelling to Tübingen for a celebration and will then go on a journey through Germany with my wife for museum purposes. In September we have the German geologists' convention here, so by then I will be back here too.

With my regards,
Your faithful friend,
Ferdinand Hochstetter

NB. I am in complete agreement with the distribution of the *Novara* volumes as you suggest in your letter of 8 April.⁷⁵⁸

To Dr. Julius von Haast, Canterbury Museum Christchurch⁷⁵⁹
Statement for the year 1877.

Received

| | |
|---|-----|
| 1. 6 January 1877 bill of exchange | £58 |
| 2. 4 May 1877 bill of exchange | £30 |
| 3. 7 May 1877 drawn on New Zealand Shipping Company | £25 |
| Total sum of £113 sold for 1369.50 gulden in Austrian currency. | |

Expenditures

| | |
|---|----------------|
| 1. Köke, edition of geological maps and sections | 310.42 |
| 2. Books, Zoological & Botanical Society journal, and Suess | 8.- |
| 3. Picture of Canterbury Museum edition | 54.- |
| 4. Adjustments to the photographs sent | 3.68 |
| 5. to Lipp & Sohn in Stuttgart £6.12 | 85.50 |
| 6. to Dr Finsch Bremen 28 Marks ⁷⁶⁰ | 7.92 |
| 7. to Mrs Reischek for materials for the Canterbury Museum | 162.80 |
| 8. To the company Jaffé ⁷⁶¹ for edition of 8 illustrations | 479.90 |
| 9. Case and tin lining | <u>9.50</u> |
| 10. Freight to London for the case still unknown | <u>1121.72</u> |

Balance remaining 247.78 gulden in Austrian currency.

Dr F. v. Hochstetter
Vienna, 29 July 1877

I can send you the invoices if you need them.

102. Ferdinand Hochstetter to Julius Haast, Vienna 19 October 1877, MS 37 folder 187.

Vienna, 19 October 1877

Most esteemed friend

I confirm the receipt of your letter of 21 August with the enclosed London bill of exchange for £25, which amount I will place on your new statement for you, after the balance of your previous instalments of 247 gulden 58 kreutzer was just enough to cover the various expenditures that I had for you and the taxidermist's invoice from Kerz that has now arrived. The New Zealand Shipping Company has also sent me the enclosed copy of the bill of lading from which you will see that the case with the maps and illustrations for your book went on the ship *Laju* to

⁷⁵⁸ Note in right margin of manuscript letter.

⁷⁵⁹ This is an attachment to the manuscript letter.

⁷⁶⁰ See earlier note regarding invoice from Otto Finsch to Haast dated Bremen 12 December 1875, MS papers 37 folder 238, Alexander Turnbull Library.

⁷⁶¹ The German photographer Max Jaffé (1845-1939) founded a "Kunstanstalt für Lichtdruck" in Vienna in 1876.

Christchurch in September.⁷⁶² The shipment will hopefully arrive safely. Of the Solnhofen things you especially mention in your last letter I was unfortunately only able to enclose very little, as I was no longer able to get at the duplicates. Everything is stored in the depot and will only see the light of day once more, when it is unpacked in the new museum. The museum is now finished up to roof level and will definitely be placed under roofing next year, 1878. But then the interior fitting and completion of the display cases and the whole moving in will take at least another two years, so one cannot think of moving in before 1881. But the work that still needs to be completed before then is such that I would not wish for the move to come earlier. Since 1 October I have now also taken over the direction of the Imperial Mineralogical Museum and am now working on the plans for the display scheme for the mineral collection that contains approximately 20,000 items. You can see from this how much work I have – and am still professor on top of all that. This year I have no fewer than 200 students in mineralogy and geology.

I have not written to you for a long time; this pause was due to my holidays, which I used for a journey to Germany accompanied by my wife. We travelled to Swabia, the Black Forest, along the Rhine and to Thuringia and inspected numerous museums. We came home in mid-September, which was followed by the German Geologists' Congress in Vienna.⁷⁶³ There were approximately 150 members there, the gathering was inspiring, and beautiful Vienna offered the guests many pleasant things, so that everyone was highly satisfied. My friend Richthofen stayed with us and I had no fewer than 76 guests for a garden party on the last day, which was a very merry occasion. I am sorry that you were not very pleased with our shipments and will tell Dr Steindachner on his return – he has been on one of his fish collecting expeditions for four months – but there is little I can do to influence the matter, as the zoologists are their own masters.

I still have not received Mr Gully's chromolithographs with the texts written by you.⁷⁶⁴ Do remind them in London about it when you get a chance.

I also received your earlier letters of 22 July and 30 June. My last one with the latest statement was sent on 29 July.⁷⁶⁵

Thank you for distributing the *Novara* volumes, the confirmations of receipt have already started coming in.

I still cannot send you my photograph as I first need to get myself photographed again and do not know when I will get to do so.

I am very pleased that you continue to be satisfied with Reischek. Give him my regards. I received the photograph of his displays.⁷⁶⁶

I am eagerly anticipating your ethnographic objects.

My family is well and healthy.

I will close with warmest regards and greetings for Christmas and the New Year, as this letter should just reach you by then.

Yours faithfully,

Ferdinand Hochstetter

Dr J. v. Haast, Christchurch.

⁷⁶² The *Laju* of the New Zealand Shipping Company was 560 tons under Captain McWhirter, sailed from London on 24 September 1877 and arrived 5 January 1878 at Port Lyttelton, bringing no passengers but a full load of cargo. See "Arrival of the *Laju*", *The Lyttelton Times*, 7 January 1878.

⁷⁶³ The "Allgemeine Versammlung der Deutschen Geologischen Gesellschaft" was held in Vienna from 27 to 29 September 1877.

⁷⁶⁴ John Gully, *New Zealand Scenery chromo-lithographed after Original Watercolor Drawings; With Descriptive Letterpress by Dr Julius Von Haast*, Dunedin, Henry Wise & Co; London, Marcus Ward & Co, 1877.

⁷⁶⁵ See previous letter dated 28 July 1877.

⁷⁶⁶ Photographs of Reischek's first displays of mounted animals for Canterbury Museum. See Nolden & Nolden, *Hochstetter Collection Basel: Part 2 – New Zealand Photographs & Prints*, pp. 178-179, (cat. no. 2.18.8 & 2.18.9). Copies held in Canterbury Museum published in James N. Bade, "Andreas Reischek", in: James N. Bade, ed., *The German Connection: New Zealand and German-Speaking Europe in the Nineteenth Century*, Auckland, Oxford University Press, 1993, p. 163.

103. Ferdinand Hochstetter to Julius Haast, Vienna 4 January 1878, MS 37 folder 188.

Vienna, 4 January 1878

Most esteemed friend

I have your letters of 22 September and 18 October to reply to and do not want to hesitate any longer to do so, in order that my New Year's greetings, which I send from my family to yours, may not grow old. I had the great pleasure of being able to spend the Christmas and New Year with reminiscences of New Zealand, as my friend Dr Fischer is here with his family at the moment. Just think – on New Year's day we celebrated the engagement of Fischer's daughter, Miss Therese, who was still a baby when we were in Auckland, in the Hotel Metropole, to a likeable German First Lieutenant, Mr Tröger, who was here over the New Year period. Fischer is fresh and happy, enthusiastic as always, so that I found him to be hardly changed, and he likes it here. He is diligently pursuing his medical studies and observations and wants to stay here for another few months. I also found his wife externally little changed, but she is ill and has to live quietly. I had a great deal of pleasure in seeing these good friends again who did so much for us, and to be able to receive them in my home. The Fischers send you their best regards.

And now on to business:

I paid your account of 200 Reichsmark with Dr Finsch in Bremen, so that now after subtracting the freight charges of sending the illustrations etc. to London for you there is still a balance of 145 gulden in the till. Reischek wrote to me today that he is doing a lot of work, but that he finds everything very expensive and that one cannot depend on anyone. Overall he does not seem very satisfied with the circumstances in New Zealand.⁷⁶⁷ I enclose a few lines to him in this letter.

I still cannot send you a photograph of myself. I don't find the time for a sitting, for more than ever work of all kinds is placing me under pressure, since I have become the director of the Imperial Mineralogical Museum and at the same time have to lead, steer and think. We are now up to the display cases and need something like thirty different shapes and the estimated cost is something like 300,000 gulden. It has not been decided from which funds the interior fittings are to be paid.

I am very keenly awaiting your ethnographic objects; don't forget the facsimiles of the rock paintings.⁷⁶⁸ I have recently been very interested in the nephrite question. Is there still no locality known where it originates from, and are pounamu pieces still being found? Fischer bought a boulder of New Zealand nephrite weighing 3 hundred-weight in London a few days ago for £136; it is on its way to Vienna and I want to buy it for our museum.⁷⁶⁹ Write to me about nephrite in New Zealand sometime, what you know about it. Are tikis and meres made of pounamu now rare and what do they cost?

⁷⁶⁷ This is one of the passages which Michael King quotes in English translation in his biography of Reischek: "Reischek has written to me ... that he is very much occupied with work, that he finds everything very expensive in New Zealand and that you can't trust anybody ... On the whole he does not appear to be greatly delighted by his affairs [there]...", Michael King, *The Collector*, p. 37.

⁷⁶⁸ Haast spoke on the Weka Pass rock paintings in his annual presidential address delivered on 5 April 1877, where he says: "I have thought it more expedient to speak of a few local subjects, of which the remarkable rock paintings in the Weka Pass Ranges, near the Waikari, and of which Mr. T. S. Cousins has made a conscientious copy for the Canterbury Museum, is without doubt, of the highest interest. I have much pleasure in exhibiting these drawings tonight". See Julius von Haast, "Address", *Transactions and Proceedings of the New Zealand Institute*, vol. 10, 1878, pp. 38 and 44-54.

⁷⁶⁹ Hochstetter's notes headed "Punamu von Neu-Seeland", include the following details on this greenstone specimen and acquisition: "Großer roher Block 123.31 Kilogr. im Gewicht die eine Seite mit natürlicher Oberfläche die andere Seite abgesprengt mit einem Bohrloch. | Von Dr Fischer in London gekauft um 137 Pf. Sterling oder 1646 fl Ö. W. durch Heinrich Ritter von Drasche im Febr. 1878. | Für Porto u. Versicherung des Nephritblockes an Gerich in London 114 fl Zus[ammen] 1760. | Der Block soll aus der Gegend von Hokitika an der Westküste der Südinsel stammen u. schon zu Ende der 50 Jahre nach der Nordinsel gebracht worden sein, wo er in Auckland von i engl. Capitän angeblich um £90 gekauft u. nach London mitgenommen worden sein, hier lag er unverkauft, bis ihn im Herbst 1877 Dr Carl Fischer zufällig in dem Magazin eines Antiquität. entdeckte u. nach Wien kommen ließ, wo er von Heinrich Drasche Ritter im Feb. 1878 für das Hof. Mineral. um den Preis von 1760fl (incl. Fracht)." Hochstetter manuscript notes on nephrite, OR Dr. A. Schedl Collection, Vienna.

In my family all is well except for a cough and a cold. Hopefully all is well with you now as you are having a wonderful summer.

With many regards from my wife and children,
Your faithful friend,
Ferdinand Hochstetter

I recently received a whole shipment of publications from Wellington, which were very interesting.

Dr J v Haast, Christchurch⁷⁷⁰

104. Ferdinand Hochstetter to Julius Haast, Vienna 10 April 1878, MS 37 folder 188.

To: Julius Ritter von Haast, Dr. phil., Director of Canterbury Museum in Christchurch, New Zealand.

Dearest friend

I am giving this letter for you to Mr Mulvany,⁷⁷¹ formerly general director and technical manager of the Rhenisch-Westphalian Mining Association. Mr Mulvany, based on the suggestion made to him in London about a prospective move to colonisation, has made the difficult decision to emigrate to New Zealand with his family in the month of May and hopes to start a new existence for himself in the antipodes on the basis of his diligence as an expert in the mining industry, after he lost his hitherto splendid position as a result of the liquidation of the mines of the association because of the general crisis that has set in. Mr Mulvany is an Englishman and a good friend of one of my cousins on the Rhine, who asked me for a reference for Mr Mulvany.

As I am too little known to the present leading personalities and have followed the development of the mining industries there too little, it is difficult for me to give Mr Mulvany the right addresses and advice from here.

I ask you therefore that if Mr Mulvany turns to you that you will please help him in every possible way with advice and assistance, and that you will help him with references. As far as I know Mr Mulvany wants to first go to Auckland, and you will probably receive this letter sent to you after his arrival. I then ask you to do whatever you can.

I received your last letter of 9 February and was pleased to hear that the case has arrived. I have looked after your order from Lipp & Sohn in Stuttgart. There is still a balance of 240 Reichsmark in the till. There is no great hurry in regard to the ethnographic objects, as long as I am sure to get something. In the meantime I will be thinking of you again.

God be praised, we are all well.

With warmest regards,

Yours,

Ferdinand von Hochstetter

Vienna, Ober Döbling, 10 April 1878.

105. Ferdinand Hochstetter to Julius Haast, Vienna 21 April 1878, MS 37 folder 188.

Vienna, 21 April 1878
Easter

⁷⁷⁰ Address in lower margin of first page of manuscript letter.

⁷⁷¹ Thomas John Mulvany (1821-1892), mining engineer and author of *New Zealand products and manufactures: suggestions as to the scope of proposed enquiry into best means of promoting and encouraging manufacturers and local industries in the colony*, Tauranga, G. V Stewart, 1880.

Dear friend

Tomorrow my wife and I are travelling first from here to Hruschau to my brother Theodor⁷⁷² for a baptism, and then on to Breslau and then to Berlin for the 50th anniversary of the founding of the Earth Sciences Society on 30 April. On the way back we will travel via Leipzig and Dresden. As I will therefore be away for three weeks, I still want to write to you beforehand that I received the letter from you and Montgomery⁷⁷³'s letter of 28 February, and found enclosed in the latter the London note for £70, not £75 as it says in both of your letters strangely enough. I note this especially as obviously there has been a mistake. So I only put down £70 as received. I will fulfil your wish in regard to metallurgical collections as best as I can, however the task is not an easy one, as one cannot buy these sorts of collections from dealers, and instead one has to order them oneself from the applicable mines. I therefore cannot guarantee that I will be able to put these things together before autumn. However I will be pleased to do it out of friendship for you and because of my attachment to New Zealand, although I don't know where my head stands for work and effort.

When I received your letters yesterday I was just writing letters of introduction for an excellent mining engineer, Mr Thomas J. Mulvany from Düsseldorf, who is emigrating to New Zealand with his whole family in May. I wrote to Sir George Grey,⁷⁷⁴ Dr Hector and of course first of all to you. Mr Mulvany⁷⁷⁵ was the general director of the Prussian Mining and Ironworks Association in Düsseldorf, which collapsed due to bad times. He wants to found a new existence for himself in New Zealand. Mulvany is an Englishman and might be someone suitable for your school of mines. Anyway, you are getting an authority on mining for New Zealand in him, although primarily for the coal and iron industry. I would be very pleased if you could be of help to the gentleman, whom I do not know personally, but was urgently recommended to me by my cousins on the Rhine.

For my friend Fischer, whom I am expecting here again in the next days, after he comes back from his journey through Italy, I got His Majesty's gold medal for arts and science, which I am very pleased about.⁷⁷⁶ I bought the nephrite boulder, a fine specimen weighing 3 hundred-weight which he found and bought in a shop in London, off him again for 2000 gulden. So now the Imperial Mineralogical Museum probably owns the largest piece of New Zealand nephrite.

From the enclosed statement you will see that I have carried out your orders. Lipp & Sohn in Stuttgart write to me that there are still 66 Marks to cover on your bill with them. Your account with me is exhausted down to 2 gulden.

I have introduced and recommended Mr Hamilton⁷⁷⁷ in Weimar to the Africa explorer Rohlfs.⁷⁷⁸

There is no hurry regarding ethnographic objects, as we will not get to set up and display them before three years from now, as long as I am sure to get the items. I am constantly occupied with prehistoric researches. In March I excavated an old urn burial ground on the Elbe near Aussig, and hope to still have a few other things done during this summer.

I must close, as my children, who want to look for Easter eggs in the garden, are calling me.

⁷⁷² Hochstetter's brother Theodor Friedrich Hochstetter (1837-1891), was the director of the "Österreichische Soda- und Schwefelsäurefabrik", in Hruschau, Moravia.

⁷⁷³ William John Alexander Montgomery (c. 1821-1914).

⁷⁷⁴ Hochstetter letter to Sir George Grey, dated 20 April 1878, Auckland Central Library.

⁷⁷⁵ Hochstetter letter to Haast no. 104 dated 10 April 1878.

⁷⁷⁶ A letter from the Oberstkämmerer Franz Folliot de Crenneville dated 15 April 1878 reads: "In Erwiderung auf die schätzbare Zuschrift vom 20 v. M. beehre ich mich, dem löblichen Praesidium mitzuthellen, daß Seine k. u. k. Apost. Majestät über meinen dießfalls erstatteten Vortrag mit Ah [Allerhöchster] Entschliebung vom 12. d. M. dem deutschen Arzte Dr Carl Fischer in Anerkennung seiner wissenschaftl. Verdienste die große goldene Medaille für Wissenschaft und Kunst a. g. [aller gnädigst] zu verleihen geruhten, welche der k.k. Obersthofmeister Amte dem die naturhistor. Hofcabinete unterstehen, auf dessen Ersuchen zur weiteren Verfügung übergeben wurde. | Wien am 15. April 1878. | Der k. k. Oberstkämmerer: [signed by:] Crenneville | An das löbliche Praesidium der Novara Comission in Graz". Archiv der Österreichischen Akademie der Wissenschaften in Wien.

⁷⁷⁷ Augustus Hamilton (1853-1913), succeeded Hector as director of the Dominion Museum in Wellington.

⁷⁷⁸ Gerhard Rohlfs (1831-1896), German explorer of Africa.

Sascha Nolden

With many regards also from my wife,
Yours faithfully,
Ferdinand Hochstetter

I ask you to confirm for Mr Montgomery the receipt of the bill for £70 and let him know that I will be pleased to fulfil his wishes.

Statement

For Dr Julius Ritter von Haast in Christchurch

Received

20 October 1877

Changed at London (60 days payable at sight) for £25, cashed for 293 gulden 75 kreuzer

Expenditures

18 December 1877 to Otto Finsch Bremen 200 Reichsmark = 120 gulden

2 January 1878 to courier Sockl case prepaid to London including insurance 24.45

14 April 1878 to Lipp & Sohn in Stuttgart 240 Reichsmark = 144.36

Fiscal duty and postage 2.75

Total 291.56

Balance remaining 2.19

Vienna, 20 April 1878
Hochstetter

106. Ferdinand Hochstetter to Julius Haast, Vienna 24 November 1878, MS 37 folder 188.

DER INTENDANT
des k.k. naturhistorischen
Hof-Museums

Vienna, 24 November 1878

Dear friend

In order not to leave you too long without news from me I will finally have to reply to your July letters. This summer I was busier than ever, despite not having to give lectures. First I was in Carniola for 4 weeks occupied with excavations, which produced excellent results, cave bears in the caves and very remarkable grave discoveries at prehistoric burial sites. Then I was in Bohemia, also for the purpose of prehistoric researches and finally in the Alps, where I excavated a series of skeletons to complement our prehistoric anthropological collection. Finally, at the end of October I still decided to go on a journey to Paris with my wife. We had the finest weather and great enjoyment in Paris, both from the really grand and interesting exhibition and the life in Paris itself, which my wife experienced for the first time. I came back very satisfied, as I was able to buy a number of things we were missing and as I was presented with a large ethnographical collection from the French Colonies by the naval ministry for our museum. On the way back we went via Lyon, Geneva, Bern, and Zurich, where museums were thoroughly inspected. Since 4 November we have been back at home and unfortunately I have to give lectures again now: mineralogy and geology, besides all the things I have to worry about for the museum and being fully occupied with the collections and other matters, so that I can hardly cope.

You lucky person, you have reached your goal with honours and are now grandly set up in your museum, as I see from the papers of September, and I sincerely congratulate you on this. Our two huge new museums, one for art and one for natural history have now been roofed over. But in both buildings the central dome and the interior fitting are still to be completed. I don't think that all this is going to be finished before 1881 and doubt whether we will get to the

installation of the collections before 1883. I regret to hear that Reischek does not want to stay in New Zealand any longer and already wants to return to Vienna in 1879. Do tell him that if he should be aiming for a position in the museum that he will still be in plenty of time if he comes in 1882. Unfortunately I do not have time to write to him today, but would like him to receive my best thanks for his letter of 16 March and that I am always pleased to hear about his achievements.

If despite all, he should already choose to come back now, then I ask him to make sure that he also brings ethnographic objects with him, especially from New Guinea and Sumatra.

Now with regard to the collection for the school of mines, I ask you to let Mr Montgomery know that I already have two heavy cases full, but several important collections which I ordered have not arrived yet, including gold from Hungary and Transylvania, silver and lead from Příbram, zinc-lead and copper from the Rhine etc.

It is unbelievable how long one has to wait. I do not believe therefore that I will be able to send off the shipment before spring, as I want to send the whole thing all at once. As I already wrote to you, the matter is more difficult than you think as everything has to be sought out separately. I have not received the collection promised by Mr Malvery yet either.

As soon as I have duplicates at my disposal I will not fail to put some aside for you.

My family is all well, thanks to God, and I am suffering from the usual catarrh and throat problems.

My friend Fischer is in Heidelberg and wants to spend the winter here again.

Could one get some of your prehistoric objects some time?

With warmest regards,

Yours,

Ferdinand Hochstetter

New Zealand was unfortunately not independently represented in Paris.

107. Ferdinand Hochstetter to Julius Haast, Vienna 4 May 1879, MS 37 folder 188.

K. K.

GEOGRAPHISCHE GESELLSCHAFT

IN WIEN

I., Universitätsplatz 2.

Vienna, 4 May 1879

Dear friend

I confirm the receipt of your letters of 13 January and 12 February and let you know that today the Austro-Hungarian corvette *Helgoland* under the command of Captain Joseph Pichler⁷⁷⁹ set out to sea from Trieste with the instructions to deliver the Austrian commission to Sydney for the Sydney Exhibition, and then to go on a side trip to New Zealand.⁷⁸⁰ I used this good opportunity to have the collection of mining products which I put together at the request of Mr Montgomery for the Canterbury College taken by the corvette. The collection is in seven cases marked N. Z. I/7 to N. Z. VII/7 and contains 14 individual suites from different mines, besides some individual pieces. I addressed the collection to you at the Canterbury Museum in the accompanying letter to the command of the corvette, and I want to draw your attention to the fact

⁷⁷⁹ Captain Josef Pichler, commander of the Austrian corvette, *S. M. Korvette Helgoland*. There is a letter from Pichler to Hochstetter dated Singapore, 21 January 1880, in the collections of the Department of Archives and History of Science, Natural History Museum Vienna, Schachtel 4, Inventar Nummer 53.01.

⁷⁸⁰ Julius von Haast writes, "In May, after a great deal of delay, and consequently of correspondence, he was at last able to send the first and principal portion of the metallurgical collections made for the Technological Department of the Canterbury Museum, packed in seven large cases, with the 'Helgoland', an Austrian man-o-war, bound for Sydney, with the Austrian Commissioners for the International Exhibition on board." Julius von Haast, "In Memoriam: Ferdinand Ritter von Hochstetter", *The New Zealand Journal of Science*, vol. 2, no. 5, September 1884, p. 214.

that in case N. Z. VI/6 in a separate box there is a complete skull and a paw of the cave bear, *Ursus spelaeus*, from the cave Vypustek near Kiritin in Moravia, which is for the Canterbury Museum. All the other contents of the cases, ores and mining products, are exclusively for the Canterbury College, and I therefore ask you to have the shipment forwarded to Mr Montgomery, to whom I will write about it in the next few days. Unfortunately I only heard about the corvette going to New Zealand too late, so that I had to go head over heels to send off the cases, – of which all except for no. VI were already standing here with me packed, – if they were still to get to Trieste on time before the corvette left.

I therefore had no time to pack a number of books and publications which I had intended for Mr Montgomery that are partly on the mining products from the areas where the collections originate and will therefore send them in the next few days as printed matter. In the rush I also did not get the time to put more together for you, except for the bear remains mentioned above, which I could have otherwise complemented considerably from my stores of bones. But these things will just come later at another opportunity.

The corvette might only come to New Zealand in August or September. She will probably go to Wellington first and if she does not go on to Lyttelton from there, which has not been decided yet, then the commander is under instructions to send the seven cases from Wellington to Christchurch. I was pleased to be able to use the opportunity presented by the corvette, because it makes the shipment cheaper and because I wanted to give the officers the opportunity to go through the Cook Strait and see the South Island, and because I wanted to give the Province of Canterbury and you the pleasure and honour of seeing an Austrian warship in Lyttelton Harbour, as the time of the *Novara* was long ago. If the corvette should come to Lyttelton, then this would give you the opportunity to give her anything that you might happen to have for us.

6 May

The last week of April was a week of festivities for Vienna like we have never seen before, on the occasion of the silver wedding of the Imperial couple. The procession, in which 10,000 people took part, was one of a kind. As the reports on this will no doubt also find their way to New Zealand in the English newspapers I will not describe it here.

The news of your last letter regarding *Notornis* was interesting; I hope that luck will be with you on your *Notornis* expedition.

I have not exhausted the sum of £70 sent to me by Mr Montgomery yet, the direct costs until now amount to approximately £40, so that I still have £30 in the account, which I will now either use to put together more collections and perhaps acquire some literature, or buy geological collections, which a school of mines also needs. Please speak to Mr Montgomery about this.

My sincerest congratulations on the completion of your book,⁷⁸¹ which is a very interesting summary of the physical geography and geology of Canterbury. I have received everything correctly up to page 352.

My friend Fischer has been back in Vienna for eight days, this time without his wife and daughter, but a little upset, as the engagement of his daughter was unfortunately broken off.⁷⁸²

With many regards also from Fischer who is with me at the moment,

Yours faithfully,

Ferdinand Hochstetter

⁷⁸¹ Julius von Haast, *Geology of the Province of Canterbury and Westland, New Zealand: A Report Comprising the Results of Official Explorations*, Christchurch, 'Times' Office, 1879.

⁷⁸² The engagement of Miss Therese Fischer to a Herr Tröger is mentioned in Hochstetter letter to Haast no. 103 dated 4 January 1878.

108 Ferdinand Hochstetter to Julius Haast, Vienna 1 December 1879, MS 37 folder 188.

Vienna, 1 December 1879

Most esteemed friend

I have left four of your letters unanswered, two from June, one from August this year and the last one from Sydney on 7 October, due to the pressure of business. But after having received the parcel with the copies of your *Geology of Canterbury* yesterday, I do not want to hesitate any longer with my reply. First of all my sincerest congratulations on the completion of your book, which makes a very good impression in every way. I have already distributed the specially addressed copies and of the two copies without a specified destination I put one in the library of the Geological Department of the Imperial Museum, as there is no point in using these copies in the way you indicated as this is not the done thing here. My best thanks for my copy.

Regarding a German edition, or rather a German book on New Zealand by you, I suggest you turn to Costenoble⁷⁸³ in Jena, who publishes this kind of work. I have no connection with Cotta any more, as no one from the old firm is alive any more, and there is nothing that could be done here.

I was very pleased to get your letter from Sydney. How much I would have liked to have gone on this tour with you and especially to have seen our friend Purchas again in this life. Also give my kind regards to Reverend Reid⁷⁸⁴ for me. In the meantime you will have received the programmes of the schools of mines, and I am looking into the other things as best as I can. I have already put together a small number of ores for again.

I was also very pleased to hear that my cases for the School of Mines reached Australia on the corvette *Helgoland* and that they have already been sent to New Zealand from there.

What a pity that the *Helgoland* will only visit Auckland and not the South Island.⁷⁸⁵ All my presentations in this regard were unfortunately in vain. The Sydney Exhibition⁷⁸⁶ must have been most grand and successful, according to all reports, and I am looking forward to hearing about whether you were able to get anything for us from Dr Cox's ethnographical collection. I am looking forward to the case that you gave the *Helgoland* for our museum. I have considerably increased our ethnographic collections this year through 3 large gifts of items from New Caledonia and Peru and a few lucky purchases of items from the South Seas, namely New Britain, also a few things from North America and a large amount from the excavations in Krain. But unfortunately everything still has to go to the depot, so that I cannot even sort out and use the duplicates. Next year the windows and floors for the museum are coming and we are now ordering the display cases.

My wife's and my best wishes for the approaching Christmas and New Year season. In my family all is well, thank God, my children are developing well and if I was not so terribly overloaded and rushed with work then everything would be all right.

With sincere regards to you and yours,

Your faithful friend,

Ferdinand Hochstetter

Dr Fischer is travelling back to Australia in January, he is still in London.

⁷⁸³ Hermann Costenoble (1826-1905), German bookseller and publisher in Jena.

⁷⁸⁴ Rev. Alexander Reid (1821-1891) had taken up the mission at Te Kopua on the Waipa River in 1858. Hochstetter met him on his exploratory journey of the Southern parts of the Province of Auckland in 1859.

⁷⁸⁵ The *Helgoland* did not in fact visit New Zealand at all in the end, as Haast writes, "However, the commander, Captain Pichler, on arriving in Sydney, received counter order, so he had to return to Trieste by the direct route via the Suez Canal, and thus had to forward our cases by one of the Union steamers. I regretted this very much, as I should have liked to see the Austrian flag fly once more in New Zealand waters." Julius von Haast, „In Memoriam: Ferdinand Ritter von Hochstetter“, *The New Zealand Journal of Science*, vol. 2, no. 5, September 1884, p. 214.

⁷⁸⁶ The Sydney Exhibition was opened by the Governor, Lord Loftus, on 17 September 1879.

109. Ferdinand Hochstetter to Julius Haast, Vienna 24 February 1880, MS 37 folder 188.

Vienna, 24 February 1880

Most esteemed friend

You gave me great pleasure by sending me the photographs of your family.⁷⁸⁷ At least I can now imagine what a family man you are. You and your wife do not look at all aged and the children seem to all be of a strong robust nature, so that you must surely enjoy them. Unfortunately I cannot send you my family in the same way at the moment. In the meantime you will have to make do with me, I enclose my latest photographic portrait for you, from which you will see that I have grown grey, and my family will be photographed for my birthday in April. Then I will fill the gap. I was very pleased to hear that you were satisfied with the mining collection, and I have another case full which I will send once I have completely exhausted the sum on hand.

I have already written to you about the receipt of the copies of your beautiful book. Of the two spare copies I placed one in the library of the geological section of the Imperial Museum and gave the other to Professor Toula⁷⁸⁸ as a review copy. Professor Toula is one of my most talented students and has reviewed it in the *Geographische Rundschau* that is published here, and will send you a copy of the review.⁷⁸⁹

The corvette *Helgoland* has not arrived yet; although she has been announced from Singapore, she is not expected here before the beginning of April.

Our friend Fischer from Sydney was here for the last time at New Year, and will be starting out on his homeward journey to Australia via the Cape together with his daughter at the beginning of March. Fischer and his family have had changing fortunes in Europe. His wife died in London in November; she suffered greatly from asthma. Miss Therese, whose engagement to a German naval officer we happily celebrated in Vienna in 1878, broke off the engagement, while my friend Fischer was very diligent and studied and learned a great deal at German universities and has now gained his diploma as a medical doctor from Würzburg University,⁷⁹⁰ after strict examination, and has also become a Fellow of the College of Surgeons in London, so that in this regard all his aims and wishes have been fulfilled.

I admired the man for his tenacity and energy and still almost youthful freshness.

I felt like a geriatric compared to him. He purchased apparatus and equipment of all kinds and also acquired a complete suite of house furnishings, as if he wants to start a completely new life in Sydney. According to what he says, and also in accordance with the judgement of Miss Therese, Vienna is the only city that they really liked in Europe.

Things went fairly badly for me during the winter. We had four months of Siberian cold and on two occasions the Danube was frozen over from the Bavarian to the Turkish border. The

⁷⁸⁷ This letter is in response to Haast's letter to Hochstetter dated Christchurch, 31 December 1879: "Christchurch auf | Neu Seeland | Decb 31. 1879 | Theuerster Freund. | Ich schreibe heute nur diese wenigen Zeilen, um Dir mitzutheilen, daß ich per Parcel Post ein Paketchen an Dich abgesandt habe, welches 7 Carte de visite Photos von uns allen enthält nebst einem Cabinet. D[itt]o von mir welche ich Dir mit den herzlichsten Glückwünschen zum Jahreswechsel von Heim zu Heim schicke. Nur schade, daß meine liebe Frau immer während der ihr so unangenehmen Operation ein so entsetzlich ernstes Gesicht macht; das ist sonst nicht ihr Character. Captn Pichler, der inzwischen wohl glücklich daheim angekommen ist, wird wohl sagen, daß sie gewöhnlich nicht so ernst drein schaut. | Herzlichen Dank für die Schriften der Bergschulen, welche uns höchst nützlich sein werden. Es dürfte indessen lange währen, bis irgend welche Schritte zu deren Eröffnung gethan werden können. | Hoffentlich kannst Du mir recht bald auch einmal eine neue Photographie von Dir schicken. Die letzte ist ca. 18 Jahre alt; oder willst Du uns nicht sehen lassen, daß auch Du ein bischen älter geworden bist? Bald werde ich mehr schreiben. | In treuer Freundschaft | Dein | J Haast", Heidi Kauffmann-Hochstetter Collection, copy held in Department of Archives and History of Science, Natural History Museum Vienna, Schachtel 6, Inventar Nummer 86.01.

⁷⁸⁸ Franz Toula (1845-1920), Austrian geologist and mineralogist, professor at the Technische Universität Wien.

⁷⁸⁹ Franz Toula, [review of Haast's, *Geology of Canterbury and Westland*], in: Carl Arendt, ed., *Deutsche Rundschau für Geographie und Statistic*, Wien, Hartleben, vol. 2, 1879/1880.

⁷⁹⁰ Dr Carl Frank Fischer graduated from the medical faculty at the University of Würzburg in the Summer Semester of 1879. According to the "Promotionsgebührenverzeichnis" (register of graduation fees) in the university archive, Signatur UWü ARS 1089, and a copy of Fischer's thesis is held in the library of the university. Personal communication from Dr Marcus Sporn, Universitätsarchiv der Julius-Maximilians-Universität Würzburg, dated 27 July 2006, to the author.

first ice flow went accompanied by destructive floods at the beginning of January and the second went off yesterday without causing any damage. Hopefully we will now soon get better, warmer weather. My legs have been plaguing me for months, which is obviously a nervous matter, twitching, stinging, burning sensations so that I cannot sleep and am very disturbed by this. Hopefully the spring will bring relief and the summer, with cold water therapy, complete improvement.

In your last letters you mention nothing of Reischek, so that I do not know whether he is still with you or whether he is already on his return journey.

Our museum matters are progressing slowly. Now we are finally getting on to the ordering of the display cases, but one can hardly think of moving in before 1884. This is a hard and difficult test of my patience, as I also have to be a professor until then, which is too much for me with my present state of health.

In my family all is well, thanks to God, my children are developing well.

With best regards from us all,

Yours faithfully,

Ferdinand Hochstetter

110. Ferdinand Hochstetter to Julius Haast, Vienna 10 May 1880, MS 37 folder 190.

Vienna, 10 May 1880

Dear friend

I have waited until today before replying to your last letter of 30 January, as I wanted to send you the enclosed birthday photograph⁷⁹¹ that my wife has taken of herself and the children for my birthday on 30 April each year. So you are once again up-to-date with me – my last letter contained my photograph – and my family. In the meantime the *Helgoland* has arrived with the huge case, which was unpacked 14 days ago. I thank you very much for the interesting things, which I can well use, even though the Fijian spears are duplicates, as I will use the duplicates as trophies. The bone tree is highly remarkable and the crocodile a fine piece.

There is now also a case standing ready for you again, which I will send as soon as I have added a few more things. I have already replaced the imitation gemstones, which went missing, and I still have a sum of 100 gulden in hand that I will turn into minerals and books for the School of Mines.

I would be very pleased if I could get the moa-hunter kitchen middens etc. and a few things from Australia. I will eventually send you duplicates once I have finished the mounting and displaying of our collections, especially African if you would like these, while at the moment it is unfortunately impossible and the museum is making slow progress. The exterior of the building, as such, is basically finished. But the completion of the interior, floors, walls, ceilings, windows, display cases, gas, water and heat ducts, will all together take at least another three years, so that I am almost running out of patience, especially as for months I have not been feeling well any more. The nerves in my hands and feet are torturing me and I don't know "Podagra and Chiragra" or whatever, while the doctor says sciatica, although he has not achieved anything with his lukewarm baths that I have now already been taking for months. I have completely stopped going on geological excursions and only with considerable effort am I still able to do the necessary walking around the city. So, it seems, one grows prematurely old through being constantly harassed with work.

Fortunately my children are developing very well and especially my eldest son Arthur is an extremely strong lad, who already dares to go on the keenest Alpine climbs.

In a few days I am travelling for two weeks to Bohemia, partly as a geological excursion with my students and partly for excavation purposes. As printed matter there follow a few small

⁷⁹¹ Photograph of Hochstetter's Family, "Georgiana von Hochstetter and her seven children", dated 30 April 1880, PA3-0093, Alexander Turnbull Library.

brochures. I would be pleased to get a few specimens of the tridymite. I close for today and wish you and all yours all the best.

Your ever faithful friend,
Hochstetter

In March the Geological Society in London elected me as a corresponding member⁷⁹² – this has taken a long time!



14. Georgiana von Hochstetter and seven children, photograph by Heinrich Harmsen, 1880. (PA3-0093, Alexander Turnbull Library).

⁷⁹² Hochstetter was elected as corresponding member of the Geological Society of London in 1880. Edward Suess wrote to Hochstetter in February to tell him that he had been nominated as a corresponding member and that the election would take place the following month. The letter reads: "Wien. 8. 2. 80 | Sehr geehrter Freund | Es freut mich Dir vertraulich mittheilen zu können, daß der Ausschuß der Brit. Geol. Society in Erfüllung einer alten Schuld endlich in seiner Sitzung von Mittwoch den 4. beschlossen hat, Dich als Foreign Corresp. vorzuschlagen. Die Wahl erfolgt erst in einem Monate. Mit den herzlichsten Grüßen. Dein ganz ergebener | E Suess". Edward Suess letter to Ferdinand von Hochstetter, dated Wien 8 February 1880, Department of Archives and History of Science, Natural History Museum Vienna, Schachtel 8, Inventar Nummer 112.01. This letter was first published in: Christa Riedl-Dorn and Johannes Seidl, "Zur Sammlungs- und Forschungsgeschichte einer Wiener Naturwissenschaftlichen Institution: Briefe von Eduard Suess and Paul Maria Partsch, Moriz Hoernes, Ferdinand Hochstetter und Franz Steindachner im Archiv für Wissenschaftsgeschichte am Naturhistorischen Museum in Wien", *Mensch – Wissenschaft – Magie: Mitteilungen der Österreichischen Gesellschaft für Wissenschaftsgeschichte*, 21, 2001 p. 35.

111. Ferdinand Hochstetter to Julius Haast, Vienna 25 July 1880, MS 37 folder 188.

*DIE INTENDANZ
des k.k. naturhistorischen
Hof-Museums.*

Vienna, 25 July 1880

Most esteemed friend

I confirm the receipt of your most recent kind letter of 18 May and let you know that I will be sending two cases marked H. v. H. no. 130 and 131 to you tomorrow with collections for the Canterbury School of Mines, freight prepaid to the manager of the New Zealand Shipping Company Limited in Bishopsgate Street, to whom I have already written, telling him to forward them to your address.

These cases contain collections as outlined on the enclosed sheet, and through the acquisition of which I have now exhausted the sum of £70, which was sent to me. I hope that these collections may also satisfy you, even if they are not all exclusively of a mining nature. This exception is especially true of the Silurian fossils, but I did not want to let the great opportunity that offered itself pass by.

You never wrote to me whether a Dr Josef Schneider from Vienna, who left in 1879 to travel to New Zealand, and to whom I gave a letter of reference for you, ever made contact. I gave this Dr Schneider a number of brochures and books for Mr Montgomery, being for the School of Mines, and for you, including Hauer's *Geologie*⁷⁹³ and Mojsisovics' *Dolomit-Riffe*,⁷⁹⁴ but I never heard whether you received these. It would be very displeasing if these works, eleven in total, had gone missing.⁷⁹⁵

On 1 August I will travel together with my wife to Berlin via Dresden, where there is a prehistoric exhibition, and from there I will be going to the ocean spa on the Island of Rügen. The nervous disorder in my feet has not improved at all unfortunately, so I can hardly walk any more. I am placing all my hopes in the ocean spa, and I am generally feeling overworked and need some time for rest and respite.

With many regards from all of us,
Your humble loyal,
Ferdinand Hochstetter

Contents of the two cases:

Case 131

| | |
|--|------------|
| 1. Ores and minerals from Bleiberg in Carinthia | 9 Sterling |
| 2. Ores and minerals from Bodenmai in the Bozzano forest | 10 |
| 3. Minerals from West Germany and Tyrol | 31 |
| 4. Minerals from the Melaphyr of Mt Kosukon near Turnau in Bohemia | 8 |
| 5. Fossilisations from the coal limestone of Spitzbergen | 16 |
| 6. Fossils and coals from the Coal formation in Pilsen Basin from Nürschan | 10 |
| 7. A case of gemstone imitations, acquired according to your order | 1 |

⁷⁹³ Franz Ritter von Hauer, *Die Geologie und ihre Anwendung auf die Kenntnis der Bodenbeschaffenheit der österr. ungar. Monarchie*, Wien, Hölder, 1875; 2nd edition, 1878.

⁷⁹⁴ Johann August Edmund Mojsisovics von Mojsvar (1839-1907), Austrian geologist who worked in the "Geologische Reichsanstalt" in Vienna from 1865 to 1900, holding positions including "Chefgeologe" and "Vizedirektor". Haast owned: Mojsisovics, *Grundlinien der Geologie von Bosnien Hercegovina: Erläuterungen zur geologischen Uebersichtskarte dieser Länder*, Wien, Hölder, 1880. See *Catalogue of the Books belonging to the late Sir Julius von Haast*, p. 7. But the work referred to here was Mojsisovics, *Die Dolomit-Riffe von Südtirol und Venetien: Beitr. zur Bildungsgeschichte der Alpen*, Wien, Hölder, 1879.

⁷⁹⁵ Julius von Haast makes a reference to this passage when he writes: "I may add a trait demonstrating once more Hochstetter's unselfish character. He sent me these publications and some other of his, together with an important work by an eminent Austrian geologist, through a German physician, who had requested Hochstetter to give him an introduction to me, intending to settle in New Zealand." Julius von Haast, "In Memoriam: Ferdinand Ritter von Hochstetter", *The New Zealand Journal of Science: Devoted to the furtherance of Pure and Applied Science throughout the Colony*, vol. 2, no. 5, September 1884, pp. 207-208.

8. Various gemstones and minerals 32 items

Case 130

162 specimens of Silurian fossils from Bohemia

Detailed inventories are enclosed with case 131, and all the pieces are also individually labelled.

112. Ferdinand Hochstetter to Julius Haast, Vienna 3 October 1880, MS 37 folder 188.

Letter of recommendation for Mr James Ledger

To Dr Julius Ritter von Haast,
director of Canterbury Museum
in Christchurch.

Vienna, 3 October 1880

Dear friend

On my return from a two-month journey to the North, via Berlin to Rügen, where I spent fourteen days in the ocean spa, then to Stockholm, where I associated a great deal with Nordenskiöld,⁷⁹⁶ and Copenhagen, I found your letter of 24 July here, for which I wish to thank you most sincerely. Although my health has not improved, the journey, on which my wife accompanied me of course, has refreshed me, and now I have started doing a Swedish gymnastics cure, from which I am expecting better results than from the electric cure and internal medicine.

Today I am occasioned to write to you indirectly, at the request of my father-in-law, regarding Mr James Ledger, a young engineer, who has already been in New Zealand for a whole year, and whom he has tried to contact without success. Mr James Ledger decided to immigrate to New Zealand on my instigation. He is the son of one of my father-in-law's best friends who was the director of the English gasworks in Lille. James Ledger received a thorough technical education and was employed in gasworks in Antwerp for two years and then in a large machine factory in London. He is supposed to be an extremely talented and in every way commendable young man. I therefore ask you to support him by both deed and counsel, and to do everything you can to help him to reach his goals. You will be doing me a big favour by this. We have already helped ambitious young men before, and perhaps we will succeed this time also.

You write in regard to a whale skeleton for our museum. We would be only too happy to receive one, and will gladly pay the freight from London to here. Regarding the ethnographic objects, I always keep you in mind, and I also hope to share prehistoric things with you, just as soon as we get to set up the displays, but this will hardly be happening for another two years. The museum is now externally finished, and since yesterday a huge bronze statue of the sun god has been beaming down from the top of the cupola.⁷⁹⁷ However the internal fitting-out is still going to take a long time. But in the end the museum is going to become the best on the Continent.

I close for today and send you the sincerest regards from us all.

Yours faithfully,

Ferdinand Hochstetter

113. Ferdinand Hochstetter to Julius Haast, Oberdöbling 25 November 1880, MS 37 folder 188.

Oberdöbling, 25 November 1880

⁷⁹⁶ Adolf Eric Baron von Nordenskiöld (1832-1901), Swedish geologist, mineralogist and Arctic explorer.

⁷⁹⁷ The Natural History Museum in Vienna was designed by Gottfried Semper, who gave the following description in 1874 for the ornaments for the cupola: "Als oberste Bekrönung die Kolossalstatue: Helios, der Sonnengott, als belebendem Princip in der Natur (Licht und Wärme)." This bronze statue by Johann Benk still stands on top of the cupola of the museum today. See Christa Riedl-Dorn, "Rund um das Museum: der Figurenschmuck an und auf der Außenfassade des Museums", in: Christa Riedel-Dorn, *Das Haus der Wunder: Zur Geschichte des Naturhistorischen Museums in Wien*, Vienna, Holzhausen, 1998, p. 269.

Most esteemed friend

I am writing in what has been a very sad week for me, for yesterday we buried my eldest brother Carl,⁷⁹⁸ who we viewed as the head of our family and who had always been my most loyal counsellor. He died after incredible suffering from kidney disease and leaves behind ten children.⁷⁹⁹ The lamentable widow is the sister of my wife.⁸⁰⁰

Today I am writing to you, after having received your letter of 8 October, in order to avoid making you wait any longer with uncertainty in regard to your enquiry about Egyptian mummies complete with coffin. This sort of thing never comes up for sale here, and I am quite unable to get you any, nor do I know any prices. Three years ago there were some for sale in Freiburg in Baden that belonged to a Mr Rosset. They were simple painted coffins, but not of the most beautiful sort, and if I remember rightly, Rosset was asking 600 Reichsmark for one. I therefore wrote to Freiburg straight away, and received the reply that there were only two coffins without mummies with the paintwork in passable condition still available, but as I know them I can hardly recommend their being worth acquiring. As the Egyptian government no longer allows the export of antiquities, it is now only possible to get these from private collections.

The dealers will certainly be asking enormous prices and you have to be cautious about forgeries. Director Steindachner told me that he has received notification of seven cases from you from London, with a freight charge of £20 to pay. As you did not announce these to me I am presuming that they are from Reischek, who wrote to me recently from Auckland. We have a very fine museum of industries here, in order to answer the question in your last letter. The director is Hofrat Dr Ritter von Eitelberger,⁸⁰¹ director of the Austrian Museum for Arts and Industries. The vice director is Regierungsrath Dr Falke.⁸⁰² Eitelberger is an old, ailing gentleman, so perhaps you had better just write to the director of the Austrian Museum for Arts and Industries.

I was very annoyed to hear that you did not receive the books from Dr Schneider, as the work by Mojsisovics⁸⁰³ is a very valuable one.

My foot complaint is unfortunately still not better, but luckily it is not getting significantly worse either.

My last shipment will presumably have reached you by now. I mean the shipment for the school of mines. I also wrote a letter of introduction to you for a young English gentleman by the name of Louis Ledger,⁸⁰⁴ who is currently residing in Canterbury, and I ask you again most urgently to help this young man, in whom my father-in-law Bengough, the director of the gas works here, takes a great interest, to found an existence in New Zealand.

With many greetings from house to house,

Your loyal,

Ferdinand Hochstetter

⁷⁹⁸ Carl Christian Friedrich Hochstetter (1818-1880), died in Vienna on 22 November 1880. See Anon., „Erinnerungsblatt an Karl Hochstetter“, *Mittheilungen der Geographischen Gesellschaft in Wien*, 1880, pp. 390-395.

⁷⁹⁹ The ten surviving children of Carl Hochstetter were, Carlos Christian August (1850-1899), Justine Karoline (1858-1918), Helene (1859-1930), Ferdinand (1861-1954), Alfred Justus (1862-1943), Maria (1864-1939), Robert Theodor August (1866-1930), Julie Charlotte (1868-1942), Luise Johanna (1869-1957) and Armin Vinzenz (1871-1949). See Otto Beuttenmüller, *Schwäbisches Geschlechterbuch*, vol. 8, Limburg an der Lahn, Starke, 1968, pp. 356-364.

⁸⁰⁰ Justine Elisabeth Hochstetter, nee Bengough (1837-1913), was the second wife of Hochstetter's eldest brother Karl Christian Friedrich Hochstetter and the sister of Hochstetter's wife Georgiana von Hochstetter, nee Bengough.

⁸⁰¹ Rudolf Ritter von Eitelberger [Edler von Edelberg] (1817-1886), Austrian art historian.

⁸⁰² Jakob von Falke (1825-1897), German art historian.

⁸⁰³ Edmund Mojsvar von Mojsisovics, (1839-1907), Austrian geologist, palaeontologist and alpinist.

⁸⁰⁴ Louis [sic] Ledger, presumably in reference to James Ledger. See Hochstetter letter to Haast no. 112 dated 3 October 1880.

114. Ferdinand Hochstetter to Julius Haast, Vienna 18 April 1881, MS 37 folder 189.

Vienna, 18 April 1881⁸⁰⁵

Dearest friend

I am in the possession of your two letters of 31 December and 28 January and still wish to thank you in retrospect for your good wishes for the New Year.

We were very pleased to get the news about Mr James Ledger, and my father-in-law wants to thank you most especially for your kind efforts. I was also just as pleased to hear that you were satisfied with my second shipment. I have already accumulated a few things for you which I will send sooner or later. The whale skeleton you announced will be most welcome to us. My congratulations on your appointment as German and Austrian Consul.⁸⁰⁶ There are no photographs of the Imperial Museum yet, but as soon as one exists I will send it to you.

In my office in the museum I have now put together a sample exhibit of our 'New Zealandiana', which fills a wall cabinet 2.5 metres high and 5.5 metres long. Grouped around a Maori bust,⁸⁰⁷ which was very well executed by a friend, are cloaks, weapons and numerous beautiful carvings; we have no fewer than a dozen greenstone tikis, but are missing a greenstone mere. I am therefore very interested in purchasing one of the two you write about, if they have the elegant shape of Te Heuheu⁸⁰⁸'s mere as illustrated in my book,⁸⁰⁹ and the price is no higher than £20, or at the most £25. I recently bought an Egyptian burial urn made of onyx marble with hieroglyphic inscriptions and the head of a sparrow-hawk for a lid, in good condition, for 100 gulden, and I am offering this to you; if you can use it for your museum I will send it to you at some stage.

The freight for the seven cases from Reischek was not as high as I wrote and only came to £12, which was obviously only the cost of freight from London to Vienna. Unfortunately Reischek packed his things so poorly that most of the zoological specimens, some of which Steindachner unpacked, are most likely ruined.

I envy you your trip to Melbourne and Tasmania; hopefully you had a great time. My health is still not getting better and I have therefore applied to be relieved of my professorial position and hope to be free by the end of April, in order to then be able to go straight to one of the cold water spas near Vienna to fix my nervous disorder, after the Crown Prince's wedding festivities are over. The best thing, as you say, would certainly be to rest for a year and to travel to New Zealand. I lack the time and means for this. I think I have already written to you that in January I set up a provisional working office in the museum, which is a first step, but it is likely that the actual setting up of displays will only be able to really begin in four years time, as the interior fitting is going so awfully slowly. I have found many duplicates amongst our excellent

⁸⁰⁵ This letter was dictated to Georgiana von Hochstetter, but proofed and signed by Hochstetter himself.

⁸⁰⁶ Haast was appointed "Konsul des Deutschen Reiches in Christchurch" on 22 July 1880, see official notice, "German Consul at Christchurch provisionally recognized", *The New Zealand Gazette*, 1880, p. 1475. The appointment was provisional until it had been approved by Queen Victoria. The decree approving appointment is dated "Our Court at St James, 18 January 1881", MS papers 37 folder 21, Alexander Turnbull Library. See also manuscript letter headed "Auswertiges Amt" dated "Berlin, den 26 Juli 1880" addressed: "An den Kaiserlichen Konsul Herrn Dr. von Haast Wohlgeboren Christchurch" signed on behalf of the German Reichskanzler. MS papers 37 folder 238, Alexander Turnbull Library; also certificate signed by the German Emperor Wilhelm, dated Bad Gastein 22 July 1880, MS papers 37 folder 21, Alexander Turnbull Library.

⁸⁰⁷ Maori bust by Hochstetter's friend Fräulein Marie von Miller zu Aichholz. Hochstetter wrote in a letter of introduction for her: "Diese Zeilen wird Ihnen eine liebe Freundin von mir, Fräulein Marie v. Miller zu Aichholz überbringen, welche einige Monate in Florenz zubringen will. [...] Fr. v. Miller ist selbst eine hervorragende Künstlerin in der Plastik, Ihrer Lebenswürdigkeit und Künstlerhand verdankt z. B. unser Museum die vorzügliche Maoribüste, welche Sie, wie ich glaube, seiner Zeit bei mir gesehen haben." Hochstetter letter dated Wien 16 December 1881, Österreichische Nationalbibliothek, Handschriftensammlung, 461/22-15.

⁸⁰⁸ Iwikau Te Heuheu Tukino III, (d. 1862), was the Maori Chief of the Ngati Tuwharetoa tribe, whom Hochstetter had met at Lake Taupo in 1859. See W. H. Oliver, ed., *The Dictionary of New Zealand Biography: Volume 1*, pp. 448-449.

⁸⁰⁹ See woodcut illustration, "Te Heuheu's Mere punamu. Streitaxt aus Nephrit", in Hochstetter, *Neu-Seeland*, p. 224.

Brazilian collection,⁸¹⁰ which I unpacked in the last few weeks, of which I will eventually be able to put many aside for you. I am still lacking good Australian material, especially stone tools, mummies and possum cloaks etc. and also good items from the Solomon Islands and clay containers from Fiji etc. Also good photographs of Maori would be very desirable. I am very annoyed that Dr Schneider has disappeared with my books for you.

Dr Schwarzbach⁸¹¹ from Auckland, who visited us this winter, was a very interesting and likeable acquaintance from New Zealand.

Reischek is still not back. In autumn, my health permitting, I will travel to the Geographers' Congress in Venice and the Geologists' Congress in Bologna.

Wife and children are all well, thank God. Arthur is approaching his matriculation examination.

With best regards from my family to yours, your loyal friend,
Ferdinand Hochstetter

115. Ferdinand Hochstetter to Julius Haast, Gallenegg 28 August 1881, MS 37 folder 189.

Gallenegg,⁸¹² 28 August 1881

Dear friend

I am writing to you from a small spa that lies quite remote from the world, in a beautiful area in the Carnic Alps. I have been here with my whole family for three weeks and we are enjoying the finest weather, and bathe in the large swimming pool, which is fed by the most crystal clear water at 24 degrees Celsius. The stay is doing me a great deal of good, although my main complaint, the nervous disorder, has not improved. I will be staying here until 12 September, as the boys then need to go back to school. I am occupying myself with the excavation of old Celtic burial sites in Watsch, which lies two hours from here, and I go on small excursions as far as one can go in a carriage.

Your letters of 30 May and 28 June reached me, the latter here. My best thanks for the same. I was very pleased to read that you are well and your museum is continuing to develop. Our collections are also growing daily, but it will be two to three years before we get to set it up, as the heating and ventilation systems are just being manufactured now, a hot water heating system, at a cost of 520,000 gulden.

I read your presidential address on the history of Canterbury Museum with great interest.⁸¹³ You can count on me putting aside as many duplicate objects for you as I can, just as soon as we get to setting up the collections.

I was very pleased about the news of the whale skeleton and the beautiful nephrite mere, which I am now counting on. The Viennese art dealer Neumann brought back a large ethnographic collection from Australia, but has given it all to the painter Gabriel Max⁸¹⁴ in Munich in exchange for paintings, it seems, so I could not get much of it. But in the meantime I am expecting rich collections from Central Africa and the Dutch Indies.

I have now definitely relinquished my professorial position at the Technical University. I have retired as a professor and am now only active as the director of the Imperial Natural History

⁸¹⁰ The Natural History Museum Vienna holds important Brazilian collections including those brought back by the Austrian expedition to Brazil made by Johann Natterer who spent 18 years in Brazil from 1817 to 1836, and also from the expedition of Erzherzog Ferdinand Maximilian from 1859 to 1860.

⁸¹¹ Bruno Schwarzbach-Beheim, was a German medical doctor who spent 6 years in Auckland.

⁸¹² Hochstetter writes regarding Gallenegg: "Ein mehrwöchentlicher Aufenthalt in den Herrn Alois Praschniker in Stein gehörigen kleinen Bade Gallenegg bei Sagor im Sommer 1881", Ferdinand von Hochstetter „Die neuesten Gräberfunde von Watsch und St. Margarethen in Krain und der Culturkreis der Hallstätter-Periode“, *Denkschriften der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Classe*, vol. 47, 1883, p. 162.

⁸¹³ Julius von Haast, "Origin and Early History of the Canterbury Museum: being the Annual Address", *Transactions and Proceedings of the New Zealand Institute 1881*, vol. 14, May 1882, pp. 503-516.

⁸¹⁴ Gabriel Cornelius von Max (1840-1915), Austrian painter and illustrator in Munich.

Museum. The two positions did get too much for me eventually, especially as the museum work increases daily.

As regards Dr Haacke,⁸¹⁵ whom I do not know personally, and I only recommended to you on the basis of other people's commendations, if he does not behave in a gentlemanly manner, then don't worry about him anymore. I want to give you my best thanks for everything you have done for Ledger.

I have not seen Reischek's ethnographic collections yet, but I am afraid that his zoological collections are all ruined. His wife has taken everything home.

I will close for now and will write again from Vienna.

With warmest regards from us all,

Your loyal,

Ferdinand von Hochstetter

116. Ferdinand Hochstetter to Julius Haast, Vienna 31 January 1882, MS 37 folder 189.

Vienna, 31 January 1882

Dear Friend

I have not written to you for a long time and still have to answer your letters of July and October. My health is partly to blame for this, as all the health treatment makes big demands on my time, with daily bathing and electric treatment, without actually being successful yet. On the other hand it is just that I am over-loaded with work, on top of which there were the jubilee celebrations of the Geographical Society in December,⁸¹⁶ which gave me an infinite amount of work, but it went very well, as you will see from the account that I will send you in the next few days. The Society also gave me a great personal honour on this occasion, by having my bust made by Tilgner,⁸¹⁷ one of our most outstanding artists in the area. This bust is to be reproduced on a smaller scale, to be sent to all those who contributed a subscription of at least ten gulden. I understand the committee also turned to you in this matter.⁸¹⁸

Now getting on to the various matters of business. In the draw of the Art Society none of your raffle tickets, being numbers 8789, 8790, 5512 and 5503, that I purchased according to your instructions were drawn, despite the large number of pictures being raffled, so nothing came out of it except four raffle tickets; these are quite pretty and I will enclose them with the next shipment to you. I would rather have wished to have been able to send you a nice picture. For the shipment to you I already have the Egyptian burial urn, Canopic jar, a very nice example, a few

⁸¹⁵ Dr Wilhelm Haacke (1855-1912), German zoologist.

⁸¹⁶ Held on 22 December 1881 to mark the 25 anniversary of the Geographische Gesellschaft in Wien of which Hochstetter was the president and Crown Prince Rudolf the patron.

⁸¹⁷ Victor Tilgner (1844-1896), Viennese sculptor, studied at the Viennese Academy of Fine Arts.

⁸¹⁸ See manuscript letter by von Lorenz, Guido Stache, and E Jettel, dated Wien 10 November 1881 and subscription list for Hochstetter bust: "Das unterzeichnete Comité beehrt sich, Euer Hochwohlgeboren anzuzeigen, daß in das Programm für die Feier des 25 jährigen Jubiläums der k.k. geographischen Gesellschaft (12. Dezember 1881) auch die Aufstellung einer | Büste des jetzigen Präsidenten der Gesellschaft | Hofrath Ferdinand Ritter von Hochstetter | neben den schon vorhandenen Büsten St. kaiserl. Hoheit des Protectors, dann des verewigten Haidinger, Gründers und ersten Präsidenten der Gesellschaft, in dem Bibliotheksraum der Gesellschaft aufgenommen würde. | Die Gesellschaft markirt in dieser Form bleibend in ihren Räumen die Erinnerung an die Feier ihres 25 jährigen Bestehens und gibt dadurch zugleich ein Zeichen der Anerkennung dem jetzigen, um ihr Gedeihen so sehr Verdienten, seiner uneigennütigen Aufopferungsfähigkeit für die Interessen der Gesellschaft und seines viel bekannten wissenschaftlichen Namens wegen seit 14 Jahren immer wieder an ihre Spitze gewählten Präsidenten. | Indem das Comité sich der angenehmen und sichern Hoffnung hingibt, sich bezüglich dieses Vorschlages mit den Ansichten und Wünschen aller Mitglieder in erfreulicher Übereinstimmung zu finden, richtet dasselbe an Euer Hochwohlgeboren die ergebenste Bitte, sich auf dem beifolgenden Bogen als Subscribent für die Bestreitung der Kosten dieser Portraitbüste gefälligst einzuschreiben und nach Möglichkeit auch im Kreise Ihrer Bekannten Subscribenten zu gewinnen. | Das Comité erlaubt sich beizufügen, daß das Modell der Büste von Tilgner ausgeführt werden soll, und es gibt sich überdies der Hoffnung hin, daß in dem Falle, als eine entsprechend hohe Summe durch die eingeleitete Subscription im Kreise der Mitglieder der k.k. geographischen Gesellschaft erzielt werden sollte, zum Mindesten diejenigen, welche sich zu einem Beitrag von 10f oder mehr verpflichten, mit einer Miniatur-Ausgabe der Original-Büste werden bedacht werden können. | Wien 10. November 1881 | D^{or}. Jos. R. v. Lorenz | k.k. Ministerialrath, als Obmann des Fest-Comitès | D^{or}. Guido Stache | k.k. Ober-Bergrath, Obmanns-Stellvertreter | D^{or}. E. Jettel | General-Secretär". MS papers 37, Alexander Turnbull Library.

fossils from Solnhofen and a few ethnographic objects from Central Africa, and I hope to be able to send the case by the spring.

Consul Schönberger,⁸¹⁹ who came back in December, wanted to give me a consignment of glassware to be included in the shipment to you, but I asked him to send it straight to you, as I did not want to accept the responsibility. He also presented to me two bills in your name to a total of approximately £20, which I also asked him to raise with you directly, as it is hard for me to make do without 200 gulden for an extended period of time.

I look forward with great anticipation to the consignment you announced. I am already looking forward to the beautiful mere. I only request that you send me a receipt for this, for accounting purposes. A receipt for £25, for one nephrite mere from New Zealand, which the undersigned received from the director of the Imperial Natural History Museum, and confirms herewith. Place, date and your signature.

This receipt, with which I can get the money, does not need to be stamped. I will then debit the raffles against this which cost 21 gulden, the Egyptian Canopic jar at 100 gulden, and will place remainder as credit at your disposal.

Unfortunately things are not progressing with our new museum, as the heating and ventilation systems have still not been started. Berlin will probably finish their new ethnographic museum before us, even though they only started building last year. The only consolation for me is that in the meantime the collections are steadily growing, mainly through donations, as our means for the acquisition of collections are very limited. With your order in mind, I recently inspected two ancient Egyptian wooden sarcophagi with mummies inside, which were offered to me by a dealer. The gentleman was asking £2000 for the two, which were not even in good condition and the mummies were completely robbed. Of course I just laughed at him.

In my family all is quite well, thank God, so I send warmest greetings from us all to you and all yours, in old friendship,

Yours,

Ferdinand Hochstetter

117. Ferdinand Hochstetter to Julius Haast, Vienna 4 April 1882, MS 37 folder 189.

Vienna, 4 April 1882

Most esteemed friend

I still have to answer your letters of 30 December and 25 January; I last wrote to you on 31 January.⁸²⁰

The case no. 7 per *Waimate* with the pounamu mere and other things that you announced in your letter of 30 December has not arrived yet. I am expecting the shipment any day now and am really excited in anticipation. I will look after the case for Professor Suess.

I will pay in the 24 raffles for 1882 of the Art Society, so that they will be in the draw for the end of the year. Hopefully you sent in the numbers of these raffles to Terke,⁸²¹ he said you did anyway; it is not necessary to pay it in before November, that is, before the draw, so you can also send me the numbers for added security.

I will conclude your statement of account after receipt of the case and then immediately put together the counter shipment, in order that the things may still be ready in May. I will also still wait for the completion of my bust so that it can go together with the shipment. Our geographical festival was indeed very stimulating and pleasant, especially thanks to the

⁸¹⁹ Victor von Schönberger (1844-1893), Austrian Consul in Australia, returned to Vienna in 1882. Author of *Bericht über die internationalen Weltausstellungen in Sydney etc*, Vienna, Österreich-Ungarischer Exportverein, 1882. There is a letter from Schönberger to Hochstetter dated 11 January 1882 in the collection of the Department of Archives and History of Science, Natural History Museum Vienna, Schachtel 4, Inventar Nummer 61.01.

⁸²⁰ Hochstetter letter to Haast no. 116 dated 31 Januar 1882.

⁸²¹ Terke, of the Wiener Kunstverein.

participation of the Crown Prince. I will not go into it any more here as you will have received the commemorative publication by now.⁸²²

Smaller copies of my bust are now being made and I will make sure that two copies are also enclosed for you. The spring has now happily passed by and despite my miserable condition, which does not seem to want to improve, I had to participate in various things, as we introduced our eldest daughter to society for the first time this year. In the holidays I want to go with my wife and children for some respite to visit my younger brother in Silesia, and I will probably spend May in my homeland at the spa in Cannstatt. There is a renowned nerve specialist there to whom I want to entrust myself. Perhaps the air of the old homeland will also help.

I received a letter from Reischek in February from Auckland.⁸²³ He writes in every letter that he will be coming soon, and yet he does not come back. His wife told me that he had lost all his savings in a lawsuit, and no longer owns anything. In that case I would feel very sorry for him.

I recently designed a scheme for the pictorial interior decoration of our museum. There are to be oil paintings on canvas, all six feet high and fitting the architecture of the rooms in width from three to twelve and thirteen feet wide; the paintings are to be positioned as frieze-like decorations on the walls right up high around the halls. There is room for 107 paintings on one floor. From New Zealand I am having the following executed:

The Franz Joseph glacier⁸²⁴
The Southern Alps⁸²⁵
Lake Rotomahana,⁸²⁶ and
an ethnographic scene of a Maori village.⁸²⁷

If you know of any good models for these that I do not own, then send them to me.⁸²⁸ You know what I have by way of pictures and photographs.⁸²⁹

⁸²² Festschrift programme: Anon., *Fest-Versammlung der k. k. Geographischen Gesellschaft anlässlich der Feier ihres Fünfundzwanzigjährigen Bestandes am 22. December 1881, 12 Uhr Mittags im Festsale der Kaiserl. Akademie der Wissenschaften*. [Vienna, 1881].

⁸²³ Reischek letter to Hochstetter dated Auckland 16 December 1881, Department of Archives and History of Science, Natural History Museum Vienna, Inv. Nr. 104.02.

⁸²⁴ This was painted by Adolf Obermüllner (1833-1898) and hangs in 'Saal VI' of the Natural History Museum in Vienna. The title is: "Kaiser Franz Josefs-Gletscher, Neu-Seeland" and is described by Hauer in the first guide to the museum as: "Nach einem Aquarell, welches der Entdecker dieses Gletschers, Herr J. v. Haast, Kaiser Franz Josepf überreichte. Dieser Gletscher kommt von den Höhen des imposanten Mount de la Beche in einer vom Eise ganz ausgefüllten Talmulde nach Westen herab und endet mit einer prachtvollen Wiswand in der Seehöhe von nur 214 m im Tale des Waiau River. Ungewöhnlich wirkt die üppige Vegetation von Baumfarnen, Buchen, Fichten, Batabäumen (Metrosideros), auch vereinzelt blühenden Fuchsiengbüschen, dann die Stämme umrankenden Schlinggewächsen, welche weithin die aus Glimmerschiefer bestehenden Gehänge an den Flanken des Eisstromes begleiten", Franz von Hauer, *Allgemeiner Führer durch das k. k. Naturhistorische Hofmuseum*, Wien, 1889. Cited in Riedel-Dorn, *Das Haus der Wunder*, p. 277.

⁸²⁵ This was painted by Adolf Obermüllner (1833-1898) and hangs in 'Saal VII' of the Natural History Museum in Vienna. The title of the painting is: "Südliche Alpen von Neuseeland", and described by Hauer as: "Die gewaltige, unsern europäischen Alpen vergleichbare, gletscherbedeckte Gebirgskette, welche die nördliche Hälfte der Südinsel von Neuseeland durchzieht, von der Westseite gesehen. Sie besteht in ihren höchsten Teilen aus kristallinen Schiefergesteinen und gipfelt in dem bei 4200 m hohen Mt. Cook." Franz von Hauer, *Allgemeiner Führer durch das k. k. Naturhistorische Hofmuseum*, Wien, 1889. Cited in Riedel-Dorn, *Das Haus der Wunder*, p. 277.

⁸²⁶ This was painted by August Schäffer Edler von Wienwald (1833-1916), and hangs in 'Saal 9', with the title: "Rotomahana. Neuseeland. Kieselsinterbildungen" and described by Hauer as: "Eine Darstellung der von den heißen Quellen Otukapuarangi gebildeten Kieselsinterterrassen am Rotomahanasee in der Provinz Auckland auf der Nordinsel von Neuseeland. Diese Terrassen, von Hochstetter in seinem bekannten Reisewerk über Neuseeland und später von D. L. Mundy in dem Werke 'Rotomahana' (London 1875) ausführlich beschrieben und abgebildet, existieren heute nicht mehr; sie wurden durch einen gewaltigen Vulkanausbruch am 10 Juni 1886 gänzlich zerstört.", Franz von Hauer, *Allgemeiner Führer durch das k. k. Naturhistorische Hofmuseum*, Wien, 1889. Cited in Riedel-Dorn, *Das Haus der Wunder*, p. 278.

⁸²⁷ This was painted by Alois Schönn (1826-1897), and hangs in 'Saal XVI' with the title: „Maori-Dorf, Neuseeland“ and described by Hauer as: „Die Ureinwohner der großen neuseeländischen Inseln die sich selbst Maori nennen, gelten körperlich und geistig als die höchstehenden Vertreter der autochthonen Bevölkerung Polynesiens. Waren sie auch Kannibalen bis tief in die erste Hälfte unseres Jahrhunderts, so trieben sie doch schon von Alters her Ackerbau, verfertigten kunstvolle Holzschnitzereien und Flechtarbeiten und lebten sesshaft in Dörfern beisammen, die meist stark befestigt waren.“ Franz von Hauer, *Allgemeiner Führer durch das k. k. Naturhistorische Hofmuseum*, Wien, 1889. Cited in Riedel-Dorn, *Das Haus der Wunder*, p. 281.

⁸²⁸ The paintings in the Natural History Museum in Vienna relating to New Zealand also include one of moas and this may have been suggested by Haast. The painting by Heinrich Otto (1832-1902), hangs in 'Saal X' of the Natural History Museum of

Farewell for now, with warmest regards from my wife and the children,
Yours,
Ferdinand Hochstetter

118. Ferdinand Hochstetter to Julius Haast, Vienna 7 July 1882, MS 37 folder 189.

*DIE INTENDANZ
des k.k. naturhistorischen
Hof-Museums.*

Vienna, 7 July 1882

Dear friend

Finally I can send you the good news of the successful arrival of your shipment of one case for our museum and one case for Professor Suess. Yesterday I unpacked the case, and was especially pleased with the greenstone mere; this really is a very fine piece which gave me much pleasure. Now I ask you to give me some more details on this:⁸³⁰

- 1) Where does the maker Mahia Tamate Tikao live, how old is he and how long did he work on the piece?⁸³¹
- 2) How and with what tools and materials did he polish the piece? Could one get the grindstone from him? That would certainly be interesting.

Just as welcome to me were the Moa hunter relics and the plaster casts. I just recently acquired a tiki in the same shape as the green plaster cast from a Mrs Lewis⁸³² I met in Cannstatt. Do write to me in your next letter where the original is, and whether this shape is a particular rarity, or whether it is characteristic of the work of a particular tribe. Thank you for the interesting shipment and addition to our collections.

I received your last letter of 16 April on 10 June in Cannstatt near Stuttgart, where I spent 5 weeks in the sanatorium at Wilhelmsbad in the company of my wife. Unfortunately the cure (electric treatment) was without success, and my condition has become worse rather than better, and I have to get used to the thought that I will never become completely healthy again. My only ambition is to maintain myself in the form I am in now.

I was very interested in what you wrote about our old friend Purchas – please give him my best regards – and about your Waikato tour. How much I would also like to see these areas again!

My next task will be to pack the case for you and send off the return shipment. I will send the case to Beck & Pollitzer prepaid to London and ask this company to convey these to you. I will fulfil your instructions in regard to the Art Society and send the statement of account and list of contents with my next letter.

Vienna, with the title: “Moa, Dinornis, von Neuseeland” and is described by Hauer: “Der Versuch einer Rekonstruktion der straußähnlichen, ausgestorbenen Riesenvögel.” Franz von Hauer, *Allgemeiner Führer durch das k. k. Naturhistorische Hofmuseum*, Wien, 1889. Cited in Riedel-Dorn, *Das Haus der Wunder*, p. 279.

⁸²⁹ For a fully illustrated inventory of Hochstetter’s collection of New Zealand photographs see: Nolden & Nolden, *Hochstetter Collection Basel: Part 2 – New Zealand Photographs & Prints*, Auckland, Mente Corde Manu, 2012.

⁸³⁰ Hochstetter presented a paper on the subject of these Maori pounamo implements to the Anthropologische Gesellschaft in Wien on 12 February 1884. See Ferdinand von Hochstetter, “Zwei neu angefertigte neuseeländische Mere aus Nephrit”, *Mittheilungen der Anthropologischen Gesellschaft in Wien*, vol. 14, 1884, pp. 25-26.

⁸³¹ Haast must have faithfully replied to these questions as Hochstetter was able to give the following details on Mahia Tamate Tikao, in a paper: Tikao lived in Wainui in Banks Peninsula, Canterbury, he was 68 years old and that he spent eight years working on this mere, together with another one acquired by a museum in Dresden, and that it was completed in 1881. See Hochstetter’s paper on Moari greenstone implements presented at the meeting of the Anthropologische Gesellschaft in Wien on 12 February 1884: Ferdinand von Hochstetter, “Zwei neu angefertigte neuseeländische Mere aus Nephrit”, *Mittheilungen der Anthropologischer Gesellschaft in Wien*, vol. 14, 1884, pp. 25-26.

⁸³² Hochstetter had ordered a copy of the English edition of his *New Zealand* from the publisher for Mrs Lewis. The postcard reads: “Cannstatt, Wilhelmsbad 9 Juni 1882. | Geehrteste Buchhandlung! Ich ersuche Sie, ein Exemplar meines New Zealand (englische Ausgabe) für meine Rechnung gefälligst an Mrs Arthur H. Lewis in Stuttgart (Pension Erpf, Neckarstrasse 48) gelangen zu lassen. | Mit vorzüglicher Hochachtung | Hofrath Dr. Ferd. v. Hochstetter | aus Wien”. See 4. Mappe, no. 96, Ferdinand Hochstetter to Cotta, Cotta-Archiv, Deutsches Literaturarchiv, Marbach am Neckar.

I received your receipt.
With best regards from my family to yours,
Your loyal friend,
Ferdinand Hochstetter

119. Ferdinand Hochstetter to Julius Haast, Vienna 10 August 1882, MS 37 folder 189.

*K. K. NATURHISTORISCHES HOFMUSEUM.
Anthropologisch-Ethnographische
Abtheilung.*

Vienna, 10 August 1882

Dear friend

I was away in Styria for some weeks occupied with excavations, so it is only today that I can let you know that on 18 July I sent four cases for you marked 4 1/4 to 4 4/4, freight paid as far as London, to Beck & Pollitzer, 211 Upper Thames Street. The cases contain:

- 106 various ethnographical objects from America and Africa (exchange)
- 1 ancient Egyptian canapé (Paris, 100 gulden)
- 29 fossils from Solnhofen slates
- 7 plant fossil remains in coal from Stradowitz in Bohemia (exchange)
- 4 Raffle tickets of the Austrian Art Society for the year 1881 (paid)
- 1 large Hochstetter bust (as ordered)
- 3 small Hochstetter busts.

More detailed inventories are enclosed with the objects. I hope that the shipment will reach you in good order and that you will be happy with it.

I will spend the summer here because my health condition spoils all the pleasures of travelling, as I am constantly tired and can walk very little.

I am now working on a history of our collections for a commemorative publication, and this task is giving me a great deal of work.⁸³³

In my family all are well and healthy – my children are spending the holidays with relatives in Graz and Salzburg, and so we are fairly much alone.

Yours faithfully,
Ferdinand Hochstetter

I mentioned the arrival of your shipment for Professor Suess and myself in my last letter.

120. Ferdinand Hochstetter to Julius Haast, Vienna 13 October 1882, MS 37 folder 189.

*K. K. NATURHISTORISCHES HOFMUSEUM.
ANTHROPOLOGISCH-ETHNOGRAPHISCHE ABTHEILUNG*

Vienna, 13 October 1882

Dear friend

I have received your last letter dated 28 July and hurry to let you know that yesterday I paid for the 28 raffles of the Austrian Art Society for the draw of 1882 that will take place in December. Unfortunately the same numbers that you had last year were not available. Your new numbers, which I will check immediately after the draw are: 6924, 6923, 2142, 1339. I am keeping the raffles on hand for you. The numbers of the other twenty-four raffles are numbers 2752 to 2775, as you already know, as these raffles were issued to you. I did not pay in anything

⁸³³ Ferdinand von Hochstetter, "Das k. k. Hof-Mineralienkabinet in Wien, die Geschichte seiner Sammlungen und die Pläne für die Neuauftellung derselben in dem k. k. naturhistorischen Hofmuseum", *Jahrbuch der Geologischen Reichsanstalt*, vol. 34, no. 2, 1884, pp. 263-298.

for the other raffles that you write about, as our account in regard to the greenstone mere for £27 is now down to £1 in your favour. Namely:

| | |
|---------------------|-----|
| Old Egyptian canapé | £10 |
| 4 raffles 1881 | £2 |
| 28 raffles 1882 | £14 |
| | £26 |

Unfortunately I cannot report anything positive in regard to my health.

Subjectively, I feel decidedly worse than in the previous year, even if the objective symptoms of the nervous disorder have not significantly changed. Fortunately I sleep well. But I am giving up my honorary appointments one after the other, as the committee meetings usually take place from 6 to 8 o'clock at night and I do not wish to drive into the city for a second time. Today I resigned from the management committee of the Austrian Art Society and will probably be relinquishing the presidency of the Geographical Society⁸³⁴ next, etc.

I will now unfortunately not be able to satisfy my yearning to see New Zealand once more, if my condition does not significantly improve. And I could only go on such a trip once the museum is finished, and that will hardly be the case before four or five years from now.

Hopefully our shipment for you has reached you safely.

My family is all well.

I would like to express to you again my special thanks for your invitation to Lyttelton.

With sincere regards from us all,

Yours faithfully,

Ferdinand Hochstetter

121. Ferdinand Hochstetter to Julius Haast, Oberdöbling 11 February 1883, MS 37 folder 189.

Oberdöbling, 11 February 1883

Dearest friend

I still have to reply to your two letters of October and November of last year and to thank you for the notes by Rev. Stack⁸³⁵ on nephrite that were of great interest to me. By the way, Stack must have used the same source as I did in regard to the Maori names for the different types of nephrite, as I already wrote about this but more precisely and in more detail in my publication on New Zealand pounamu⁸³⁶ in the year 1860, of which I unfortunately no longer have an off-print. I will use the other notes by Stack for a note in our anthropological journal. I ask you not to forget about the other materials for working on nephrite, even if I have to wait for a suitable shipment. Enclosed is a list of our moa skeletons; if you can compliment and increase these, then this will be a great achievement of yours, and your efforts, as with your famous whale skeleton will be received with the best of thanks. How long is the whale and what species is it? Do write this to me and also mention where it was stranded. By the time you get this letter it will presumably be floating. Also write to which address in London it is going, so that I may write to them in regard to the shipment from London to Vienna. I have been extremely busy lately with official and scientific work so my health is unfortunately not better. The nervous disorder that seems to stem from the spinal cord plagues me day and night, and as a result I have given up all my honorary positions, including the presidency of the Geographical Society that I held for

⁸³⁴ Hochstetter was later succeeded by Graf Wilczek as president of the Geographical Society of Vienna. See Hochstetter letter to Haast no. 121 dated 11 February 1883.

⁸³⁵ James West Stack (1835-1919), New Zealand missionary who contributed papers to the Canterbury Philosophical Society.

⁸³⁶ Ferdinand von Hochstetter, "Über das Vorkommen und die verschiedenen Abarten von neuseeländischem Nephrit (Punamu der Maoris)", *Sitzungsberichte der kaiserlichen Akademie der Wissenschaften: Mathematisch-naturwissenschaftliche Classe*, vol. 49, 1864, pp. 466-480.

fifteen years and that gave me a great deal of work. Count Wilczek⁸³⁷ has taken up the presidency in my stead and the society has appointed me as honorary president. I also stood down from the executive committee of the Austrian Art Society. Unfortunately yours and the other raffles for New Zealand did not win anything, and according to the directors the raffles were sent straight to New Zealand.

My father-in-law asks me to enquire of you about the young James Ledger again, as his relatives in England have not heard any news from him for more than one year. What has become of him? If you can find out anything then let me know.

We are having a fairly mild winter without snow after the rainstorms of the autumn, which resulted in the most terrible flooding, causing damage that is calculated at between 20 and 30 million gulden. Just as cheerless as our natural circumstances are the endless battles between the nationalities in our political situation. Yet in Vienna there was more dancing and rejoicing for the Shrovetide carnival than ever before, and as I have a grown-up daughter and son, the Shrovetide carnival was also lively for us, although I only made an appearance at one ball party myself.

I have just completed the manuscript of a geo-historical work,⁸³⁸ which was my preoccupation for Fasching.

The interior fittings of the museum, which will be splendid, are progressing so slowly that I doubt whether we will get to move in 1885, which is better for me, however I still have my hands full of work. The large wall paintings are now being completed, amongst which there is a view of the New Zealand Alps from the West Coast, based on a sketch by you that you sent me once, with the help of photographs. Unfortunately I do not have a perfect model for the painter. Lake Rotomahana and a Maori pa will also be painted. This is keeping me very busy, as there are going to be around one hundred of these pictures 6 feet high by 12 feet wide, and I have to find the materials for the artists.

In my family all is well, thanks be to God, and hopefully in yours the same.

With sincere regards from my family to yours,

Yours,

Ferdinand Hochstetter

I was very pleased to hear that my cases have arrived and hope that the contents were satisfactory.

122. Ferdinand Hochstetter to Julius Haast, Vienna 3 April 1883, MS 37 folder 189.

*K. K. NATURHISTORISCHES HOFMUSEUM.
ANTHROPOLOGISCH-ETHNOGRAPHISCHE ABTHEILUNG*

Vienna, 3 April 1883

Esteemed friend

I am very pleased to see from your letter of 21 January that the four cases arrived and that the contents met with your approval. Since my last letter to you I have been rather miserable, as I feel that my condition is getting worse and worse and is spoiling all my pleasure and enjoyment. We had a very cold March, and only now are the spring airs starting to make their presence felt. As soon as it gets warmer I will once again undergo a cold water cure.

Concerning the wishes of your brother-in-law, I can give you very little hope that anything can be done through me. One certainly cannot achieve anything here with a composition – perhaps with a minor German prince. Concerning the presentation of an

⁸³⁷ Graf Hans Johann Nepomuk von Wilczek (1837-1922), Austrian explorer, patron of the arts and sciences and president of the Geographical Society in Vienna.

⁸³⁸ Hochstetter, "Das k. k. Hof-Mineralienkabinet in Wien, die Geschichte seiner Sammlungen und die Pläne für die Neuauftellung derselben in dem k. k. naturhistorischen Hofmuseum", *Jahrbuch der Geologischen Reichsanstalt*, vol. 34, no. 2, 1884, pp. 263-298.

ethnological collection as a gift, I have often come across this kind of thing, but it is my experience that it is very difficult, if the collections do not represent a considerable value (10 to 20000 gulden), and if the person gifting the collections is not someone of great scientific merit, a famous person or an explorer. I have only had very discouraging experiences in this area lately, so that I would suggest to your brother-in-law that he should not spend much money to make an attempt here. I could in no way guarantee a satisfactory result, as many very valuable collections have, despite my intervention, only been acknowledged with a letter of thanks. In this regard I would also suggest a minor German court. I hope you will not take offence at my honesty.

I imagine that the whale skeleton will be floating by now, and I am very keen to receive it. I already let you know that I resigned from the Austrian Art Society. The whole executive committee resigned as a result of differences with the director.

I also wanted to let you know that a young Austrian naturalist, Dr R. von Lendenfeld,⁸³⁹ who was most warmly recommended to me and is described as a very likeable and diligent young man, is currently residing in Australia. I received a letter from him from Brighton in Melbourne dated 17 January this year,⁸⁴⁰ and he wants to come to New Zealand. He will be there by now and wants to go on major alpine expeditions, and will undoubtedly introduce himself to you. He is a zoologist by training and a good topographer and great alpinist. I do ask you to actively support him with your advice in his endeavours.

In my family all are well, thank God, and we send you and yours our sincere greetings.

Yours faithfully,

Ferdinand Hochstetter

123. Ferdinand Hochstetter to Julius Haast, Kaltenleutgeben 19 June 1883, MS 37 folder 189.

Kaltenleutgeben,⁸⁴¹ 19 June 1883

Dearest friend

I am sitting here in the health resort, two hours from Vienna, and writing to you by the hand of my wife, who is faithfully accompanying me, in answer to your last letters of April.

First of all my thanks for the dispatch of the whale skeleton and the related notes. This skeleton will definitely become a decoration of our museum and I have already allocated a special place for it. Until now I have not received a notification from London of its arrival, but am expecting it any day now. If only I had been able to go on the fine tour of the fiords on the west coast with you and Hector,⁸⁴² what a pleasure this would have been. I was very pleased to hear that you had settled your differences with Hector. I was most interested in the news regarding Dr Robert von Lendenfeld's ascent of the Hochstetter Dom,⁸⁴³ in my last letter I had introduced the young man to you, not thinking that he would already be in New Zealand, and was therefore most surprised to hear now of his and his wife's great achievements. In the last mail Lendenfeld wrote to me himself and sent me a sketch of the remarkable peak of the dome.⁸⁴⁴

As I hear from his mother though, he is already thinking of his return journey to Europe. I would rather have wished that Dr von Lendenfeld, as a well-educated zoologist and talented man, which he seems to be, might have found a footing in New Zealand. Would it not be possible to

⁸³⁹ Robert J. Lendlmayer von Lendenfeld (1858-1913), Austrian zoologist, explorer and mountaineer.

⁸⁴⁰ Lendenfeld letter to Hochstetter dated Christchurch 20 June 1883, OR Dr. A. Schedl Collection, Vienna.

⁸⁴¹ Letter dictated by Hochstetter to his wife Georgiana von Hochstetter.

⁸⁴² Haast and Hector left Port Chalmers on 7 February 1883 for a two week summer cruise of Fiordland on the *S.S. Tarawera*. See Sascha Nolden, Rowan Burns & Simon Nathan, *The Correspondence of Julius Haast and James Hector, 1862-1887*, p. 286.

⁸⁴³ Lendenfeld climbed the Hochstetter Dom on 25 March 1883 and reached the peak at 5.30pm. See, Robert von Lendenfeld, "Erste Besteigung des Hochstetter Dom, ca. 3600 M (Neu-Seeländer Alpen)", *Österreichische Alpen-Zeitung*, vol. 5, no. 116, 15 June 1883, pp. 161-163.

⁸⁴⁴ Lendenfeld's watercolour of the peak of the Hochstetter Dom is dated 25 March 1883 and respectfully inscribed to Hochstetter. See Sascha Nolden & Sandy B Nolden, *Hochstetter Collection Basel: Part 1 – New Zealand Paintings & Drawings*, Auckland, Mente Corde Manu, 2011, p. 59, (cat. no. 1.7.1).

accommodate him at a university there? It will be very difficult for him to find a suitable position here with the large number of young zoologists. I am really looking forward to getting more details of his ascent of the Hochstetter Dom. My sincere thanks for your kind invitation to come to New Zealand, unfortunately this nice idea is now unrealisable.

My health seems to be getting better here under the strict cure and energetic massages and I am not yet completely giving up all hope of my health being restored, but I am very sorry to hear that you have also been suffering; hopefully you have now fully recovered from your ear condition.

I was very pleased by your promise that I am to get the greenstone effigy, and that our collection of moa skeletons is to be supplemented by you – that will become the pride of our collections and a lasting memorial to your great activity in New Zealand and to your great friendship for me.

I am staying here for another two weeks, and then I have in mind to go back to the small spa Bad Gallenegg in Krain with my family in August, where I can direct prehistoric excavations in nearby Watsch. When, as I certainly hope, we get to set up our collections in one or two year's time, there will be many duplicates and Canterbury Museum will then be given first priority.

If Lendenfeld is still in Christchurch, then please give him my best regards and thanks for the things he sent me.

With best regards from my wife and me to your dear wife and to you, dearest friend,
I sign as your most honest humble,
Ferdinand von Hochstetter

124. Ferdinand Hochstetter to Julius Haast, Döbling 16 September 1883, MS 37 folder 189.

Döbling,⁸⁴⁵ 16 September 1883

Dear friend

My last letter to you was sent from Kaltenleutgeben on 18 June⁸⁴⁶ and I received your last letter of 14 June on 1 August, before I left to go to Gallenegg in Krain, where I spent five fine sunny weeks together with my family and from where we returned just a few days ago. First of all my congratulations on the fine award you received from the Queen of England,⁸⁴⁷ this pleased me very much. If you go on like this you will still make it to “Sir Jules”! Today I can give you the good news that seven large cases with whale bones, declared as whalebone, are now lying securely in our museum storage. They arrived on 20 August but have not been unpacked yet, as the storage space is so full of our new display cases that one cannot work in it at all at the moment. I am highly pleased that you also want to complement our moa collection and that these cases are now probably also on their way. Through these large gifts you are creating the most permanent memorial for yourself in our museum. I can only sincerely thank you for this. I also have to thank you for your repeated kind invitation to come to New Zealand. This fine idea is unfortunately unrealisable due to hundreds of reasons, no matter how much good I expect the sea voyage would do to improve my health, which is not getting better.

You ask me whether we still have room for further whale skeletons, to which I want to reply ‘no’ in the meantime, but once we start setting up the collections, hopefully by 1885, we will be able to see how things are.

The good news about you and your family made me and my wife very happy.

⁸⁴⁵ Letter dictated by Hochstetter to his wife Georgiana von Hochstetter.

⁸⁴⁶ In reference to Hochstetter letter to Haast no. 123 dated Kaltenleutgeben 19 June 1883.

⁸⁴⁷ Haast was made a CMG (Companion of the Order of St. Michael and St. George) in 1883. See letter signed by Queen Victoria dated 24 May 1883 appointing Haast to the Order of St Michael and St George, MS papers 37 folder 21, Alexander Turnbull Library.

The two albums from Lendenfeld that he mentioned in his letter arrived today, and tomorrow the copy and letter intended for the Crown Prince will go to Laxenburg,⁸⁴⁸ where the prince is currently staying. Our wonderful Crown Prince will undoubtedly get great pleasure from the fact that his name has been immortalised in the New Zealand Alps.⁸⁴⁹ I ask you to let Mr von Lendenfeld know this and I will write to him as soon as I hear from the Crown Prince. I will then also answer Lendenfeld's other questions.

I am now getting to a matter that is close to my heart, as it concerns my niece Clara Hochstetter,⁸⁵⁰ the daughter of my brother the university gardener who died two years ago in Tübingen. She is a very diligent and good girl and has already been in England and Scotland as a governess in the service of various influential families, where she held this position and made herself very popular. She has therefore become a complete Englishwoman and has now made the keen resolve together with a friend to immigrate to New Zealand, in order to found an educational institution for girls there.

I wrote to her that she should not simply undertake the journey to New Zealand on luck alone but at least wait for your reply to this letter. I also wrote to her that she should aim, first of all, to find a position as a governess in New Zealand, in order to initially be able to check out the situation for her next goal. Now, dear friend, what do you think of the matter?

Which city do you consider the best suited for the plan, and could you perhaps recommend my niece as a governess to a family known to you? I will be extraordinarily grateful if you can give me advice in this matter for my niece.

In our museum the artistic interior decorations are now being worked on, and approximately twenty large oil paintings have already been completed for the decoration of the geological and ethnographical halls, including the view of the Southern Alps seen from the West Coast, which was painted very well by the painter Obermüllner,⁸⁵¹ based on a sketch that you had sent me at some stage. These paintings are giving me a great deal of work, as I have to supply the painters with the materials, but it is also giving me a great deal of satisfaction. The completed paintings are currently displayed in our grand international electric exhibition, where they are exhibited under electric light, and are much admired. The Franz Joseph Glacier, Lake Rotomahana and a Maori village are also still going to be painted.

I was very pleased that Lendenfeld has found an appointment as lecturer,⁸⁵² even if only a modest one, and that he owes this to you.

You will have received my prehistoric essay on the discoveries at Watsch in Krain; our excavations this year were accompanied by the best of success, and I hope to be able to put together a collection of Celtic bronzes and clay containers for you when we come across duplicates as we set up the display of the collections.

With warmest regards from my family to yours,

Your loyal,

Ferdinand Hochstetter

⁸⁴⁸ Laxenburg, Niederösterreich, near Schwechat south of Vienna. The imperial royal family had a number of palaces here including the 'kaiserliches Lustschloß' "Franzensburg" situated on an artificial island in the 400 hectares of parkland.

⁸⁴⁹ The Rudolph Glacier in the Southern Alps was named by Robert von Lendenfeld after Rudolph, Crown Prince of Austria and son of Emperor Franz Josef. See Reed, *The Reed Dictionary of New Zealand Place Names*, p. 447.

⁸⁵⁰ Clara Franziska Viktoria Hochstetter, (1853-1925), was the daughter of Hochstetter's older brother, Wilhelm Christian Hochstetter (1825-1881), who had been the university gardener at the University of Tübingen.

⁸⁵¹ Adolf Obermüllner (1833-1898), Viennese romantic landscape painter who painted the oil painting of the Franz Josef glacier in New Zealand based on the sketches by Julius von Haast, for the Natural History Museum Vienna. See, Christa Riedl-Dorn, *Das Haus der Wunder*, p. 195-196.

⁸⁵² Lendenfeld was appointed lecturer in natural science at Lincoln College of Agriculture. He wrote to Hochstetter: "Ich danke Ihnen bestens für Ihre freundliche Empfehlung an meinen Freund und Gönner Dr. v. Haast. Ich habe in Folge derselben hier eine Professur erhalten, welche Anstellung es mir ermöglicht meine wissenschaftlichen Arbeiten an den Küsten von Neuseeland fortzusetzen." Lendenfeld letter to Hochstetter dated Christchurch 20 June 1883, OR Dr. A. Schedl Collection, Vienna.

125. Ferdinand Hochstetter to Julius Haast, Vienna 2 November 1883, MS 37 folder 189.

*K. K. NATURHISTORISCHES HOFMUSEUM.
ANTHROPOLOGISCH-ETHNOGRAPHISCHE
ABTHEILUNG.*

Vienna, 2 November 1883

Dearest friend

I received your letters of 24 August and 8 September and am very grateful for the moa skeletons you want to send to complement our collection. The matter of the vertebrae is most unfortunate, but I cannot make up my mind to send the vertebrae of the earlier skeletons back to you for correction. We will find a solution one way or another once we get to set them all up in the new museum after the new skeletons have arrived. The bear skeleton you wished for has already been dispatched to you, according to Director Steindachner; it is the skeleton of a menagerie bear from Schönbrunn and the same skeleton that I used when mounting our cave bears. It is well suited for this purpose.

I reported to the Lord High Chamberlain's office in regard to your gift of the whale skeleton and in return I was instructed to send you the enclosed letter of thanks signed by the Prince himself, but you will not think much of this.⁸⁵³ I cut off the back page, so that the letter would not become too heavy. The visit of Sir John Hall,⁸⁵⁴ who came here the day before yesterday from Dresden to see our famous electric exhibition,⁸⁵⁵ gave me a great deal of pleasure. He brought me your letter of 30 January. He spent last night with us in Döbling and is today inspecting the attractions of Vienna under the guidance of my son Arthur: the grand Parliament Building, the new Town Hall with the historical exhibition in it from the time of the Turkish siege in 1683 etc. Our museum impressed him so very much that he thought that you would be jealous if he told you about it. Unfortunately we are still unable to set up the collections, which will only be possible in 1885.

Sir John Hall, who just left my office a few minutes ago, sends you his best regards. Unfortunately he did not bring his family. Yesterday we talked a great deal together about New Zealand and you, and I am only sorry that my health does not permit me to go around Vienna with him myself. Unfortunately I am not at all better; now it is not only my feet, but the legs and hands that are plaguing me. A journey to New Zealand is unfortunately not possible, I could not travel alone, my wife would have to come too, but it is unthinkable to leave seven children, who are all still going to school, by themselves, and to leave two ancient grandparents, whom we adore and who are going to celebrate their golden wedding anniversary next year. I have to accept my sad fate the way it is.

Sir John Hall made a very pleasant impression on me and I was happy to be able to chat about New Zealand again.⁸⁵⁶

⁸⁵³ The letter of thanks dated 17 November 1883 and signed by Count Hohenlohe reads: "Euer Hochwohlgeboren | hatten die Güte dem k.k. naturhistorischen Hof-Museum abermals eine Bereicherung durch Übersendung des Skeletes eines Bartenwals aus der Südsee zuzuwenden. | Der unterzeichnete k.k. Erste Obersthofmeister sieht sich angenehm veranlasst, Euerer Hochwohlgeboren für diese neuerliche werthvolle Spende den verbindlichsten Dank auszudrücken. | Wien, am 17 Oktober 1883. [signed] Hohenlohe | An Seine des Herrn Professors Dr Julius Ritter von Haast in Christchurch auf Neuseeland, Hochwohlgeboren." MS papers 0171, Alexander Turnbull Library.

⁸⁵⁴ Sir John Hall (1824-1907), Canterbury politician and Premier of New Zealand. Hall had already written to Hector asking for a letter of introduction to Hochstetter many years earlier, in a letter dated, Christchurch 15 February 1873, in which he wrote: "Please not to forget the promised letter of introduction to Hochstetter." MS letter held in Hector Papers, MU000094, box 2, Item 42, Mr Hall, Archive, Te Papa National Museum of New Zealand.

⁸⁵⁵ This was the "Internationale Elektrische Ausstellung in Wien 1883". See *Illustrierter Führer durch die Internationale Elektrische Ausstellung in Wien 1883*, Wien, A. Hartleben, 1883; also Franz Klein, ed., *Bericht über die internationale elektrische Ausstellung Wien 1883*, Wien, Niederösterreichischer Gewerbeverein, L. W. Seidel & Sohn, 1885. See also Hochstetter letter to Haast no. 124 dated Döbling 16 September 1883.

⁸⁵⁶ Heinrich von Haast wrote: "In November, 1883, Sir John Hall paid him [Hochstetter] a visit and was able to give him the intimate details about Haast's life and progress for which he thirsted." *Life and Times of Sir Julius von Haast*, p. 867.

At the same time as your last letter I also received a letter from Dr von Lendenfeld, in which he again asks about an associate professorship at an Austrian university. I ask you to give him my best regards, but to also say to him, as I have already said in my last letter to him, that I can do absolutely nothing for him in this matter. That has to be done through a professorial committee and Lendenfeld must, if this is his ambition, turn to the college of professors in Graz. But I do not think that the matter is going to be as easy as Mr von Lendenfeld imagines; especially with the extreme competition amongst young zoologists and with the extraordinary frugality of the Ministry of Education. But I do advise him to apply for an extension of his leave in regard to his military service obligations in plenty of time, for otherwise he will be completely barred from returning to his homeland.

With warmest greetings,
Yours faithfully,
Ferdinand Hochstetter

126. Ferdinand Hochstetter to Julius Haast, Döbling 4 April 1884, MS 37 folder 190.

Döbling,⁸⁵⁷ 4 April [1884]

Dearest friend

I am writing to you by the hand of my son Arthur,⁸⁵⁸ who recently passed his first medical examination with distinction, as I have been bed-ridden for the past three weeks and may not move my right foot; a corn on the second toe got so much worse, without my noticing, that it developed gangrene and I am now to lose the toe. I have one of the best surgeons in Vienna for the case, but he does not want to operate, so I have to patiently wait for the natural healing process to get rid of the dead toe. You can imagine how I feel, as I will probably have to lie here for many weeks still before I can leave the room again. All this comes on top of my nervous disorder, which is plaguing me anyway.

I received your kind letters of 3rd and 23 November as well as the one of 27 December, and am looking forward to the arrival of the moa shipment in eager anticipation.

It is quite impossible for me to now remove the vertebrae from the skeletons already mounted here. Perhaps something could be done when we get to setting them up again in the new museum.

I was extraordinarily surprised by what you wrote to me about Dr von Lendenfeld; unfortunately there is nothing I can do for the young man here, and if he does not find a position in Sydney then I am afraid that he will find himself in an awkward situation.

I was very pleased that you met Baron von Hübner,⁸⁵⁹ he is certainly a very intelligent man, and I am keenly looking forward to what he will eventually write about New Zealand.

In our museum the interior fitting is progressing slowly. The halls in the first floor, in which the zoological collection will be housed, are now ready, so that the setting up of the display cases can begin. By autumn all the cases will hopefully have been erected, and then the displaying of the collections can begin straight away. On the other hand, the ground floor, in which the mineralogical, geological and ethnological collections will go, will only be ready for the display cases to be set up at the beginning of winter. The oil paintings commissioned for the ground floor, a total of approximately fifty, are nearly all finished, but a second series of about the same number of paintings still has to be ordered, if the halls are all to be decorated in the same way. So far New Zealand is represented by four pictures: firstly, the Alps as seen from the

⁸⁵⁷ Letter by Hochstetter dictated to his eldest son Arthur von Hochstetter.

⁸⁵⁸ Haast wrote in reference to this letter, the last he received before the news of Hochstetter's death reached him: "The last letter I received from him before the telegraphic announcement of his death arrived here dictated on the 4th April, when already three weeks in bed, to his son Arthur, who, as he proudly informs me, has just passed his first medical examination (rigorosum) with distinction". See Julius von Haast, "In Memoriam: Ferdinand Ritter von Hochstetter", *New Zealand Journal of Science*, vol. 2, no. 5, September 1884, p. 218.

⁸⁵⁹ Alexander Graf von Hübner (1811-1892), Austrian diplomat, traveller and travel writer.

West Coast based on a sketch by you, secondly, the Emperor Franz Joseph glacier based on the photographs sent to me by you, thirdly, Rotomahana and fourthly, a Maori village in an idealised composition.

For the second series of images I still plan the Milford Sound, if I can get a suitable sketch or photograph from you, from which one can have such a painting executed.⁸⁶⁰ Unfortunately the court building committee declined my application to have photographs taken of the finished paintings, in a fit of unforgivable meanness, but I will at least have the New Zealand paintings photographed at my own expense, and hope to be able to then send you these at some stage.

Your requirements in regard to the skeleton of a stag and wild boar etc. have long been passed on to Dr Steindachner by me, and he has promised me all sorts of things, but unfortunately the man, who lives entirely for his fish, is not very reliable.

In a few days time two of my works will be finished, which I will then send you straight away: the first is about the Imperial Mineralogical Museum and the geological and mineralogical collections in their projected new display arrangements,⁸⁶¹ and this should be of interest to you.

In the next few days we will be having the International Ornithological Congress here, with an associated exhibition, and our Crown Prince is taking an active part, and in April all the Arctic explorers are coming here, while meanwhile I have to lie in bed and cannot participate in anything!

My family is all very well, thank God. With warmest greetings from my family to yours,
Yours faithfully,
Ferdinand Hochstetter.

127. Ferdinand Hochstetter to Julius Haast, Döbling 10 June 1884, MS 37 folder 190.

Döbling,⁸⁶² 10 June 1884

Dearest friend

Today I can let you know that the cases with the moa skeletons have arrived. Unfortunately I am not in a position to be able to be present at the unpacking, as I have been bed-ridden since 16 March. I have already written to you about the earlier stages of my tale of suffering in my letter of 4 April,⁸⁶³ if I remember rightly.

The gangrenous toe on my right foot has of course long since been removed, but the incurable demon has also attacked the tendons in this toe, so incisions had to be made in the sole of the foot and in the instep, and I am lying to this day with these wounds which simply will not heal.

I am in the hands of some of our best surgeons, but they cannot say how long this will still take either. My condition that I have complaining of for four and a half years has finally been diagnosed as diabetes, and even though the diabetes has improved considerably due to a strict change in diet, in which I must avoid all things containing sugar and starch, this illness is the

⁸⁶⁰ Haast referred to this request when he wrote: "He also wished photographs and sketches for the artist, who has been commissioned to paint a panoramic view of Milford Sound. These of course I sent at once, but they would just arrive when my friend had closed his eyes for ever." Julius von Haast, "In Memoriam: Ferdinand Ritter von Hochstetter", *The New Zealand Journal of Science*, vol. 2, no. 5, September 1884, p. 218.

⁸⁶¹ Hochstetter, "Das k. k. Hof-Mineralienkabinet in Wien, die Geschichte seiner Sammlungen und die Pläne für die Neuauftellung derselben in dem k. k. naturhistorischen Hofmuseum", *Jahrbuch der Geologischen Reichsanstalt*, vol. 34, no. 2, 1884, pp. 263-298.

⁸⁶² Letter by Hochstetter dictated to his wife Georgiana von Hochstetter. This is the final letter from Hochstetter to Haast, which only reached him early in August, after the news of Hochstetter's death had come by telegraph on the 21 July. Haast wrote: "I had thus given up all hope of hearing again from my poor friend, when in the beginning of this month (August) a letter of his arrived dated the tenth of June. It seemed to me like a voice from the grave; and as this is doubtless the last direct news I shall receive from him, I shall give some extracts from this letter, dictated to his wife, but signed by him in his usual way". He then gives excerpts from the letter in translation. See Julius von Haast, "In Memoriam: Ferdinand Ritter von Hochstetter", *The New Zealand Journal of Science*, vol. 2, no. 5, September 1884, p. 219.

⁸⁶³ Hochstetter letter to Haast no. 126 dated 4 April 1884, dictated to his eldest son Arthur.

main reason why my foot is not healing. I have to keep the foot stretched out and must move it as little as possible, so that I am completely stuck in my bed, in which I am now lying for the thirteenth week. Fortunately, the condition of my general health is good enough for me to be able to read and occupy myself, and the loyal care and nursing of my dear wife helps me to get over the rest.

One of these days I will send you photographs of the wall paintings which I had painted for the museum; it just happens to be that some of the photographs of the New Zealand pictures are still missing. The court building committee did not approve the pictures to be photographed in large format as I had applied for, so there was nothing for me to do but to have some of the main ones photographed at my own expense (on a smaller scale).⁸⁶⁴

The arrangement of the museum has now gradually begun; the botanical section in the second floor is already completely set up. The display cases in the zoological section are being set up in the first floor and the mineralogical, geological and ethnographical will be started in the next year. But it will still take another three to four years before we are finished. Fortunately everything is so well organised and my young curators and assistants are such good and reliable people that everything is progressing well even without my personal intervention on site.

I received an enthusiastic letter from Reischek about his stay on Little Barrier Island,⁸⁶⁵ and as he writes to me he is now in the fiords in the South Island. I am wondering how he can still bear it and that he finds the means for further ventures, but am afraid that his expectations will not be fulfilled.

I was quite annoyed about Lendenfeld; he wrote to me that he now hopes to find something in Sydney, where he has been supported in the most kindly manner by our friend Fischer.

With warmest greetings from my family to yours,
Your faithful friend,
Ferdinand Hochstetter.

128. Georgiana Hochstetter to Julius Haast, Döbling 11 October 1884, MS 37 folder 191.

Döbling,⁸⁶⁶ 11 October 1884

Esteemed friend

My hand, lamed through a paralysed heart, can hardly manage to put on paper the words that I have called out to you in spirit.⁸⁶⁷ What a dreadful tragedy has overtaken me and my poor

⁸⁶⁴ Idiosyncratic use of slash and colon to indicate brackets ‘/:’ has been transcribed in Georgiana von Hochstetter’s letter to Haast in this present edition as round brackets ‘()’.

⁸⁶⁵ Andreas Reischek letter to Hochstetter dated Auckland, 5 January 1883, Department of Archives and History of Science, Natural History Museum Vienna, Schachtel 8, Inventar Nummer 104.01-04.

⁸⁶⁶ Haast wrote the following letter to Georgiana von Hochstetter, dated Christchurch 24 July 1884, in response to the telegraphic announcement of Hochstetter’s death, which reached him on 21 July 1884: “Christchurch, New Zealand| 24 July 1884 | Most honoured Friend | A few days ago the telegraph brought us the shattering news of the death of my dearest most precious friend, and although not altogether unexpected, it was nonetheless so terrible that I can hardly cope. | I never had a brother but I feel that I could not have loved one more than I loved your late husband. | And therein must lie your sole comfort, that he loved you with his big faithful heart and that you and the children were everything in this world to him and that he has left his children with a highly respected name, which is indelibly present in both hemispheres. Therefore, have courage, most honoured friend, have courage and always think back to the happy years that you were granted to experience together. A gracious providence will protect you and the children and make sure that everything will come to fruition in accordance with the intentions of the late father and husband. | Unfortunately, I live so far distant from you all that I am only able to send my most deeply felt wishes for your well being across the world’s oceans, but in spirit I am always with you and if there is any way in which I can do something that might be agreeable to you, then I am at your disposal like a brother. Hopefully you will write to me as often as you can to let me know how you and the children are. | In the meantime I have started compiling an obituary for the local newspapers from his numerous letters, and I will send you a copy by the next post. | My dear wife and the children, who all share with me my grief, ask me to convey to you and yours their most deeply felt condolences. | Today I am not able to add anything further as my heart is too heavy and words cannot express that which I am feeling. | Your true and humble friend | Julius von Haast”. Translation by Sascha Nolden of manuscript letter held in the OR Dr. A. Schedl Collection, Vienna.

⁸⁶⁷ Haast mentions that he received the news of Hochstetter’s death by telegraph on 21 July 1884, in Julius von Haast, “In Memoriam: Ferdinand Ritter von Hochstetter”, *The New Zealand Journal of Science*, vol. 2, no. 5, September 1884, p. 202.

children, how immeasurably unhappy I am now without him, without my beloved, adored husband, who for twenty-three years was my all, my spiritual alter ego. His life was mine; his feelings were mine, my doing and not doing, my thinking and aspirations for him, with him, through him. Now I am alone, orphaned, forsaken, how grateful I am that he left for me his, our seven children, otherwise how could I live – it is hard enough as it is.

My husband still received your kind letter of 13 May on 14 July with great joy; he had no premonition of the fact that he would not be replying to it anymore. Your two following letters reached me when I was already alone, broken-hearted; a discouraged existence, living and yet dead.

You heard from his last report that my poor husband had been bound to his bed since mid May with a gangrenous toe. The surgeon (an authority of Vienna University) whom we called on in this case was much surprised at the instance of gangrene and said that there must be a connected internal ailment, as without reason this kind of thing never happened. He researched this and we had a urine test done and the result was that my dearest was a diabetic. 7% sugar was found! The doctor realised what the problem was; we drastically changed his diet and hoped for the best. We consulted specialists in this illness and all agreed with the surgeon that my beloved husband had not, as so many doctors had claimed for so long, been suffering from a condition of the spinal cord, called tabes, but the earlier-mentioned illness, which must have been in him for many years, and they could see from this that his circulation and arteries must be completely destroyed.

Just imagine, dear friend – none of the many doctors that treated my beloved thought of this illness and no one requested an analysis. If they had done this in time my happiness would have been saved!

That a small pressure wound should become gangrenous proved to the doctors how seriously the illness had already damaged his system, and all, as they later admitted to me, held the gravest concern for his precious life.

I hoped and hoped and nursed and relied on my love and thought this *must* hold him.

His mind was fresh to the last hour, but physically he was weakening and would not, and could not eat anymore – without however feeling any pain in his sore and by then much better foot or anywhere else. He would always say to the many who visited him: “If it was not for the stupid foot, which always has to remain still, I could get up and walk away, as I am otherwise quite well; I feel like a shot and wounded boar”.

Around 14 July breathing difficulties started to set in, which got worse from then on; the doctors said it was a minor matter of the lungs, but he just laughed about it and said it was just due to a lack of exercise of the lungs, called his children and several times a day he would sing student and other happy songs with them, after which his breathing really did improve each time. That helped him to strengthen his resolve and it is thanks to this that my dearest beloved passed away without foreboding or mental anguish.

In the evening of the 17th the breathlessness was already severe and after the doctor had listened to my beloved and calmed him, he indicated for me to follow him out of the room and once outside he prepared me for the worst.

That I was able to survive this hour and the terrible tragedy that was to follow and still be alive today is still incomprehensible to me.

Both his lungs were filled with water, he spent most of the last night sitting on a chair, our Arthur and I by his side. Despite everything he seemed to have no premonition, as he said to me several times: “this is a silly matter with the breath, but it just gets stuck in the throat”; we had to continuously fan him air. In the morning he still took his usual milk and ask me to help him as I had done gladly and often since he became ill, to turn over; our children were all around us, except our sixteen-year-old Egbert, who was on a climbing expedition in the mountains; I embraced him and turned him over and at that moment he breathed out his precious life – in my arms!

With him I lost my entire happiness, our children a precious and loyal father and you, most honoured friend, a beloved and honoured but also loving friend.

My beloved husband admired you and esteemed you and always referred to you as his best friend. When he received one of your letters it was always a joyful day for him and it was with great interest that he always followed your work and in fact everything that had to do with you and New Zealand. How happy he still was about the last shipment of moa remains. He did not get to see these anymore. But *how great* his happiness would have been, not even to mention my own, if you had come to visit us in May, as had been your fine plan, how happy this would have still made my beloved.

In this world one should *never* postpone something one has resolved to do.

Your kind letters of 3 June and 3 July to my beloved, as well as the one from the 24 July to me, reached me in due course. The parts concerning the museum have been passed on to the gentlemen concerned and you will receive the appropriate reply from them directly. I am returning with thanks herein the landscape pictures which you or your wife kindly made available to my precious husband, as the glacier painting is already finished; these have become dispensable.

Please accept my and my children's best thanks for the warm words of condolence offered in friendship; do continue to bear us in your old proven friendship, as it would seem to me almost impossible not to hear something of New Zealand and Haast, after it was his favourite subject throughout these many happy years. Do write to me from time to time and keep me up-to-date with what you are doing, how you are keeping and your family, I beg you, and if you should prefer to correspond in English or French, as you may well have lost much of your German, not that one would notice this from your letters at all, I just mention it, to make you feel at home in corresponding with me, I will gladly receive the one like the other.

In a few days' time I will send you a book, as I have put in print the travel accounts which my dearest wrote from the Novara for a local paper twenty five years ago, in book form, as a memorial publication,⁸⁶⁸ and hope that this book will do justice, both to its author and as a representation of my love and devotion. Its exterior will be simple and modest, as my friend himself always was.

The notice of our tragedy as well as the *Deutsche Zeitung* I sent you were hopefully received in due course.

If you yourself or your dear family ever want anything from us or Vienna, then we hope that you will not forget us, as we all hope and wish that the friends of our husband and father will also stay our friends in the future.

With sorrowful impatience I am looking forward to your memorial words.

I have passed on the address of your new shipping agent to Hofrat von Hauer.

My children join me in sending you, dear friend, our regards and to your dear wife and your children, in humble friendship your unhappy friend,

Georgiana von Hochstetter

Professor Dr. J. von Haast
Christchurch, New Zealand

⁸⁶⁸ Ferdinand von Hochstetter, *Gesammelte Reise-Berichte von der Erdumsegelung der Fregatte „Novara“ 1857-1859*, Mit einer Einleitung und einem Schlusswort von V. v. Haardt, einem Portrait Ferdinand v. Hochstetter's in Heliogravure und einer Uebersichtskarte der Reise-Route, Wien, Edward Hölzel, 1885.

129. Georgiana Hochstetter to Julius Haast, Döbling 27 November 1884, MS 37 folder 191.

Döbling 27 November 1884

My esteemed dear friend

My bleeding heart was deeply moved to receive your kind letter of 22 September and at the same time the booklet, the content of which proved how much you loved and honoured my dearly beloved 'Fernand', your loyal friend, and how much you also felt the loss, which you lament with me.

In spirit I reach out my hand to you in friendship, may it express to you more than words can express, how much, and how warmly I wish to thank you, for all the evidence of true loyal friendship and intimate feelings of friendship in memory of my precious dear husband.

If it was not too immodest, then I would very much like to ask you for a few more copies of the fine memorial publication, but not so beautifully bound, just simple, as it is the contents that are so valuable, and our children would wish to have a copy for their collections of all the publications concerning their father. Please excuse the immodesty, but your kind offer is to blame, and is it not an understandable sentiment of his children?

I am sorry that you have had to wait so long for much yearned-for news; unfortunately I could not find the courage to write to you earlier and only wrote to you on 11 October. But this was a long letter with photographs enclosed⁸⁶⁹, which you will have received in due time, if not, then please let me know, so that I may send you a copy of it, as it contained much information concerning the sorrowful subject that has filled my whole being. By this point in time you will have received the various newspapers, obituaries and death notices etc., which I myself, or others at my request have addressed to you, and also a book, "Collected Travel Accounts etc." which I sent to you, has crossed paths with the copy of your obituary that you sent. This is a sign that our thoughts have met repeatedly. When I published the book I was following an indescribable urge to distribute something amongst his friends and admirers that carries his name and his image, and I hope to have met some of the expectations of his friends in this way.

To me the book seems like the incarnation of the lament of one who is despairing. Yesterday I spoke to our dear old friend Professor Eduard Suess, the ideal of a man, who was very fond of my 'Fernand'. He had just received your letter and your booklet and expressed himself in the highest terms about it.

Although he will write to you himself shortly, he asked me to convey to you his best regards and to say how pleased he was to get your consignment and that he will be pleased to give you the information you asked for concerning the bust of my dearest. But in future *I* would like to ask you to give me things to do, I am not a ponderous awkward old lady and would be pleased to stay in contact with those who meant so much to my beloved; I know all the gentlemen of science in Vienna and on the other hand I know my Fernand's library, which is my treasure house, and the cabinet with the title "Bibliotheka Hochstetteriana" – "Nova Zealandica", is my main monument of reverence, just as it was his favourite collection.

So, again, show me that you will allow some of your great friendship for my adored husband to pass on to his second half, by writing to me often and keeping me up-to-date with what you are doing, in both your family and scientific life so that you will let me and my children help if you want or need something from here.

By fulfilling this, my wish, you will be doing my heavily suffering heart a favour, giving me a little consolation and contributing toward lifting my sunken, formerly so high, spirits. How much courage I will need to raise seven children, alone, without him.

With heartfelt greetings to you and your dear wife,
Georgiana von Hochstetter

⁸⁶⁹ This appears as a footnote in the manuscript letter.

130. Georgiana Hochstetter to Julius Haast, Döbling 8 October 1885, MS 37 folder 191.

Döbling, 8 October 1885

Esteemed friend

You may be surprised at the fact that you have not heard from me for so long, but with my extensive correspondence, I have to restrict myself to only writing to people when I have something in particular to communicate.

In the first half of the period of my not writing to you this was the case, but then in the past few months I had so much to deal with, that it had to suffice to send my thoughts in your direction, to greet you there unnoticed.

The fact that you have been on my mind is evident from the enclosed duplicate of an invoice, being the miniature medals chain ordered for you, which was sent to W. Kennaway's address for you on 15 September, and the jeweller had the sum paid out to him by Mr Kranz in Bonn according to your instructions. The enclosed invoice in duplicate is only for your information; the original is with the case.

The small chain will surely please you; I had it made exactly like the one belonging to my beloved, please don't rearrange the medals on it, as they are hung in the exact order of rank, the Austrian Order of the Iron Crown is the highest, and therefore should hang towards the top button, while towards the bottom there follow those of lower rank. Your kind letters of 19 December, 1 February and 27 June reached me in due course, and your valuable consignment of booklets for the children was gratefully received; please accept our best thanks for your kindness.

I was pleased to hear about your honourable and pleasant assignment in London; this will cause you some bother, but I hope it will all be crowned for you.

Shall I say that I am looking forward to your visit? I cannot and you feel this with me: How very pleased *we* would have been.

Your last letter of 27 June reached me in Millstatt in the Villa von Luschan, the summer residence of my son-in-law.⁸⁷⁰ No doubt you received the notification of the wedding of our daughter Emma.⁸⁷¹

This summer brought me an engagement and wedding in such quick succession that my head and heart were full. It was rather difficult for me to give away our eldest daughter, my friend, but we mothers are not allowed to be selfish and must not place anything in the way of our daughters' happiness. I am fortunate enough to be able to calmly look towards Emma's future happiness, as far as we humans are able to see, as she loves her husband dearly and he adores his young wife, whom he has known since she was five years old. Dr Felix Ritter von Luschan has been amongst our best friends for the past fifteen years, just as his late parents were.

He is a medical doctor but his professional studies are in anthropology, archaeology and ethnography. Even though he is only 31 years old he already has a notable reputation in the scientific world, and became well known through his exploratory expeditions in Asia Minor.

In the past year he received an honourable calling to the position of assistant to the director of the new Ethnological Museum in Berlin, and accepted the same, to be from now on the right-hand man of his boss Professor Bastian.⁸⁷²

I would very much have liked to have seen him, and our child, establish themselves here in Vienna, but I myself encouraged him to follow this calling, as such rich and interesting study materials as those in Berlin are not to be found anywhere else.

The protestant wedding was celebrated in the Villa, very quiet and simple, in consideration of my wishes, away from the trouble of the big city, where Dr Luschan and we

⁸⁷⁰ Felix Edler von Luschan (1854-1924), Austrian ethnologist, professor and director of the "Königliches Preussisches Museum für Völkerkunde" in Berlin.

⁸⁷¹ Emma Alexandra Theodora von Hochstetter, later von Luschan (1864-1941), married Felix von Luschan in Millstadt on 22 July 1885.

⁸⁷² Adolf Bastian (1826-1905), German ethnologist and founding director of the Museum für Völkerkunde in Berlin.

ourselves have so many social connections that we would not have been able to avoid on this occasion.

A special consolation for me is the fact that my 'Fernand' would also have happily blessed this union, as he liked Dr von Luschan very much and honoured him as a colleague and a man of science.

But for me it was a bitter burden on my heart to have to survive this happy day so alone and orphaned.

All our children are well and very busy and convey to you their best regards.

But I myself send my fondest greetings to you, dear friend and your dear wife, most sincerely, as yours truly,

Georgiana von Hochstetter

131. Georgiana Hochstetter to Julius Haast, Döbling 1 December 1886, MS 37 folder 191.

Döbling, 1 December 1886

Esteemed friend

I have not yet thanked you for your kind greetings of 29 October, from which I see to my great satisfaction, that you are all well and enjoying the best of both colonial and European honours. First of all allow me to most sincerely greet you as the newly knighted 'Sir'!⁸⁷³

I recently had the pleasant opportunity to hear all about you and the magnificent exhibition from our dear old friend Dr Fischer, which narrative only increased my homesickness all the more, for what a thrill it would have been if my beloved and I might have been able to see all these interesting things in my fatherland.

Everyone in our family is also well and busy; by the time you come to Vienna our Arthur will already be a medical doctor, as he is just sitting his last examination. Heinrich and Egbert will greet you as military personnel, since they began their years of voluntary service in October.

I hope that you and your dear ones are enjoying the beautiful South and wish that you may celebrate Christmas under palm trees, 'May you, after a merry Christmas, begin a happy New Year!'

Together with our children, I send you our most sincere regards, dear friends, in humble devoted friendship,

Yours,

Georgiana von Hochstetter

132. Georgiana Hochstetter to Julius Haast, Döbling 8 March 1887, MS 37 folder 191.

Döbling, 8 March 1887

Esteemed friend

I am so sorry to read in your most valued letter of 27 February, that you have had to go through such a severe winter. The European winters are all the more severe compared to those in the South Seas and unfortunately take no consideration for the lucky spoilt people from over there.

When my thoughts were seeking you out, they found you in the enjoyment of your full energies, enjoying all that this side of the world has to offer.

For now I hope with optimism that the hours of being unwell are now a matter of the past and that the sojourn in beautiful Italy has done you well. If you had ever considered spending time in the Riviera to while away the winter, then you may thank your sciatica for keeping you away. Just think, our eldest daughter Betsy had just returned from there, when the action of the natural elements put it all in danger!

⁸⁷³ Sir Julius von Haast was appointed Knight Commander of the Most Distinguished Order of Saint Michael and Saint George on 28 June 1886. See letter signed by Queen Victoria, dated 28 June 1886, MS papers 37 folder 21, Alexander Turnbull Library.

With an extraordinary melancholy feeling I look forward to the date you indicated, and still cannot grasp the fact, cannot believe, that you are coming now, and not earlier when the sun was still shining on high!

Of the local hotels, if you want to live first class, I can recommend the Hotel Imperial or Grand Hotel, less formal and very good is the Hotel Metropole or Hotel de France. All these hotels are located in the central city and in big city terms are not far from our home. One does tend to drive generally and if one needs a constitutional walk, then it is just the right distance.

To your dear wife and yourself, dear friend, I wish fine spring days.

With sincere regards and a handshake from your old unbeknown friend,
Georgiana von Hochstetter.

Arthur is already a doctor and registrar in a surgical hospital.⁸⁷⁴

133. Georgiana Hochstetter to Julius Haast, Döbling 10 May 1887, MS 37 folder 191.

Döbling, 10 May 1887

Dear Friends

Forgive me, dear lady, for addressing these greetings to you in German, a selfish feeling made me do so, as I did not want to forgo the pleasure of approaching you today with a sisterly 'Du', and in English this does remind one rather of the Quakers!⁸⁷⁵

Our sincerest heartfelt thanks for your kind letters from Berlin and Bonn; they were received by us with jubilation.

Our couple also wrote to us highly pleased at the newly-won friends and still under the lasting impression of the hours spent together. How much I would have liked to have been in your midst!

We still cannot get over the fact that we did not get to know Eva, while at the same time I feel that your children could never be strangers to me, with my loving heart, and in my mind's eye I see them in you and unbeknown I consider them as one of ours.

I feel for you how tired and weary you must be from your European tour, and with all my heart I wish that the quiet days of the travel across the water may be pleasant and happy ones for you, and give you new strength and good courage, aware of your great shared happiness in unity, to step back into your dear homeland and find all your dear ones there in good health. In the meantime I will be anxiously awaiting the news of your safe arrival. Our good parents, siblings and all our children send you their sincere regards and best wishes for your approaching journey. Betsy and Gretl⁸⁷⁶ thank Eva for her letter and reserve the right to greet their new friend on home soil.

My best thanks to you, precious pair, for your love and warmth; I am well aware that I owe this to my beloved and this feeling makes me proud and enlivens my orphaned heart.

In spirit I hold you close and in his manner I call out to you: Glückauf, my dears!

In loyal friendship, sincerely yours,
Georgiana von Hochstetter

⁸⁷⁴ Arthur Ferdinand von Hochstetter graduated Dr. med. from the University of Vienna on 22 January 1887.

⁸⁷⁵ This is in reference to the Quakers' tradition of using the archaic form of address – "thou".

⁸⁷⁶ Margarethe (Gretl) von Hochstetter (1872-1954), Ferdinand and Georgiana von Hochstetter's fourth daughter.

ARCHIVAL DESCRIPTIONS OF THE MANUSCRIPT LETTERS

Alexander Turnbull Library, Wellington

Haast family papers MS 0037: Letters by Ferdinand and Georgiana von Hochstetter to Julius von Haast.⁸⁷⁷

MS 0037 folder 180:

2. 10 October 1859, Sydney [1 folded sheet of type 1 letterhead 290 x 220 mm = 4 pages]
3. 25 October 1859, Melbourne [1 folded sheet of type 1 letterhead 290 x 221 mm = 4 pages (2 blank)]
4. 16 November 1859, Melbourne [1 folded sheet of type 1 letterhead 287 x 223 mm = 4 pages]
5. 7 December 1859, Mauritius [1 folded sheet of type 1 letterhead 287 x 220 mm = 4 pages]
6. 7 March 1860, Esslingen [1 folded sheet of type 2 letterhead 264 x 210 mm = 4 pages (1 blank)]
7. 13 March 1860, Wien [1 folded sheet of type 3 letterhead, 289 x 223 mm = 4 pages]
8. 7 April 1860, Wien [1 folded sheet of type 4 letterhead 283 x 223 mm = 4 pages]
9. 11 June 1860, London [1 folded sheet of plain paper 290 x 221 mm = 4 pages]
10. 20 October 1860, Wien [1 folded sheet of plain paper 290 x 221 mm = 4 pages]
11. 1 March 1861, Wien [1 folded sheet of type 5 letterhead 290 x 224 mm = 4 pages; and half sheet plain paper 146 x 224 mm = 2 pages]
12. 4 May 1861, Wien [1 folded sheet of type 6 letterhead 290 x 230 mm = 4 pages]
13. 23 May 1861, Wien [1 folded sheet of plain paper 207 x 130 mm = 4 pages]
14. 16 June 1861, Wien [1 folded sheet of type 5 letterhead 290 x 223 mm = 4 pages]
15. 18 August 1861, Wien [2 folded sheets of type 1 letterhead 276 x 217 mm = 8 pages; and 1 sheet 138 x 217 mm = 2 pages. Diagram of geological section in red pencil]
16. 20 September 1861, Wien [1 folded sheet of type 7 letterhead 278 x 218 mm = 4 pages]
17. 25 October 1861, Wien [1 folded sheet of type 7 letterhead 274 x 217 mm = 4 pages]
18. 19 November 1861, Wien [1 folded sheet of type 7 letterhead 290 x 220 mm = 4 pages; 1 sheet plain paper 134 x 211 mm. Note the geological table is on page 3 in original manuscript letter.]
19. 18 December 1861, Wien [1 folded sheet of type 7 letterhead 274 x 211 mm = 4 pages; and 1 sheet plain paper 144 x 222 mm]

MS 0037 folder 181

20. 18 January 1862, Wien [1 folded sheet of type 7 letterhead 275 x 217 mm = 4 pages]
21. 21 February 1862, Wien [1 folded sheet type 7 letterhead 275 x 217 mm = 4 pages; 1 sheet plain paper 138 x 217 mm = 2 pages]
22. 20 March 1862, Wien [1 sheet of type 7 letterhead 137 x 217 mm = 2 pages]
23. 18 April 1862, Wien [1 folded sheet of type 7 letterhead 275 x 217 mm = 4 pages; 1 sheet 137 x 217 mm = 2 pages (1 blank)]
24. 16 May 1862, Wien [1 folded sheet of type 7 letterhead 271 x 217 mm = 4 pages (1 blank)]
25. [17 June 1862], undated letter [1 folded sheet of type 7 letterhead 274 x 217 mm = 4 pages; 1 sheet of plain paper 147 x 226 mm = 2 pages]
26. 12 July 1862, Wien [1 folded sheet of type 7 letterhead 274 x 213 mm = 4 pages]
27. 18 August 1862, Wien [1 folded sheet of type 7 letterhead 272 x 213 mm = 4 pages (1 blank)]
29. 16 October 1862, Wien [1 folded sheet of type 7 letterhead 275 x 213 mm = 4 pages]
30. 17 November 1862, Wien [1 folded sheet of type 7 letterhead 275 x 213 mm = 4 pages]

MS 0037 folder 182

31. 14 January 1863, Wien [1 folded sheet of type 5 letterhead 286 x 221 mm = 4 pages (1 blank)]
32. 16 February 1863, Wien [1 folded sheet of type 7 letterhead 274 x 213 mm = 4 pages]
33. 15 March 1863, Wien [1 sheet of type 5 letterhead 143 x 226 mm = 2 pages]
34. 26 April 1863, Wien [1 sheet of type 5 letterhead 143 x 226 mm = 2 pages]
35. 19 June 1863, Wien [1 folded sheet of plain paper 292 x 229 mm = 4 pages]
36. 17 July 1863, Wien [1 folded sheet of type 5 letterhead 285 x 226 mm = 4 pages (1 blank)]
37. 16 August 1863, Wien [1 folded sheet of type 5 letterhead 285 x 226 mm = 4 pages]
38. 18 October 1863, Wien [1 folded sheet plain bluish paper 269 x 212 mm = 4 pages]
39. 20 December 1863, Wien [1 folded sheet of type 5 letterhead 286 x 226 mm = 4 pages]

MS 0037 folder 183

40. 9 February 1864, Wien [1 folded sheet of type 5 letterhead 285 x 226 mm = 4 pages]
41. 16 March 1864, Wien [1 folded sheet of plain paper 292 x 229 mm = 4 pages]
42. 13 May 1864, Wien [1 folded sheet of plain paper 292 x 229 mm = 4 pages]
43. 12 June 1864, Wien [1 folded sheet of type 5 letterhead 286 x 226 mm = 4 pages; 1 sheet 142 x 226 mm = 2 pages (1 blank)]
44. 16 July 1864, Wien [1 sheet of type 5 letterhead 143 x 226 mm = 2 pages]
45. 21 September 1864, Wien [1 folded sheet of type 5 letterhead 285 x 226 mm = 4 pages]
46. 21 October [1864], Wien [1 sheet of type 5 letterhead 143 x 226 mm = 2 pages]
47. 20 November 1864, Wien [1 sheet of type 5 letterhead 143 x 226 mm = 2 pages]
48. 19 January 1865, Wien [1 folded sheet of type 5 letterhead 285 x 226 mm = 4 pages]
49. 20 March 1865, Wien [1 sheet of plain paper 142 x 229 mm = 2 pages; 1 sheet 142 x 229 mm]

⁸⁷⁷ The numbering of letters refers to the numbering in this edition; for description of letterhead types see "Editorial Conventions" above.

The Letters of Ferdinand von Hochstetter to Julius von Haast

= 2 pages]

50. 20 May 1865, Wien [1 folded sheet of plain paper 285 x 227mm = 4 pages]
51. 16 August 1865, Wien [1 folded sheet of plain paper 281 x 227 mm = 4 pages]
52. 20 September 1865, Wien [1 sheet of plain paper 140 x 227 mm = 2 pages]
53. 16 November 1865, Wien [1 folded sheet of type 8 letterhead 271 x 212 mm = 4 pages]
- MS 0037 folder 184
 54. 20 January 1866, Wien [1 folded sheet of plain paper 289 x 228 mm = 4 pages (2 blank)]
 55. 14 February 1866, Wien [1 folded sheet of plain paper 289 x 228 mm = 4 pages]
 56. 19 February 1866, Wien [1 sheet of plain paper 144 x 228 mm = 2 pages]
 57. 17 May 1866, Wien [1 folded sheet of plain paper 287 x 220 mm = 4 pages (1 blank)]
 58. 19 July 1866, Wien [1 folded sheet of type 12 letterhead 285 x 220 mm = 4 pages (1 blank)]
 59. 22 August 1866, Wien [1 folded sheet of type 12 letterhead 285 x 220 mm = 4 pages]
 60. 22 October 1866, Wien [1 folded sheet of type 9 letterhead 291 x 228 mm = 4 pages (1 blank)]
 61. 20 November 1866, Wien [1 folded sheet of plain paper 289 x 229 mm = 4 pages]
 62. 21 December 1866, Wien [1 folded sheet of plain paper 284 x 220 mm = 4 pages (1 blank)]
 63. 20 February 1867, Wien [1 sheet of plain paper 143 x 220 mm = 2 pages]
 64. 16 March 1867, Wien [1 sheet of plain paper 146 x 230 mm = 2 pages]
 65. 27 April 1867, Paris [1 folded sheet watermarked "LACROIX FRERES" 267 x 208 mm = 4 pages (2 blank)]
 66. 3 July 1867, Wien [1 folded sheet of plain paper 288 x 228 mm = 4 pages (1 blank)]
 67. 18 August 1867, Wien [1 sheet of plain paper 140 x 211 mm = 2 pages (1 blank)]
 68. 24 September 1867, Wien [1 folded sheet of plain paper 268 x 208mm = 4 pages]
 69. 14 December 1867, Wien [1 folded sheet of plain paper 289 x 226mm = 4 pages]
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 70. 17 February 1868, Wien [1 sheet of plain paper 140 x 212 mm = 2 pages]
 71. 10 April 1868, Wien [1 sheet of plain paper 145 x 228 mm = 2 pages]
 72. 20 May [1868] [1 sheet of plain paper 142 x 89 mm = 2 pages (1 blank)]
 73. 4 July 1868, Wien [1 folded sheet of plain paper 289 x 228 mm = 4 pages (1 blank)]
 74. 30 October 1868, Wien [1 folded sheet of plain paper 292 x 226 mm = 4 pages]
 75. 27 December 1868, Wien [1 folded sheet of plain paper 291 x 226 mm = 4 pages]
 76. 3 May 1869, Wien [1 folded sheet of plain paper 293 x 226 mm = 4 pages]
 77. 29 July 1869, Constantinopel [1 folded sheet of plain paper 292 x 227 mm = 4 pages (1 blank)]
 78. 25 March 1870, Wien [1 folded sheet of type 10 letterhead 292 x 228 mm = 4 pages (1 blank)]
 79. October 1870, Wien [1 folded sheet of plain paper 286 x 230 mm = 4 pages]
- MS 0037 folder 186
 80. 25 May 1871, Wien [1 folded sheet of 3mm black border mourning paper 288 x 228 mm = 4 pages]
 81. 8 August 1871, Wien [1 folded sheet of plain paper 287 x 229 mm = 4 pages (pages 2 and 4 blank)]
 82. 25 February 1872, Wien [1 folded sheet of type 13 letterhead 286 x 231 mm = 4 pages (1 blank)]
 83. 30 November 1872, Wien [1 folded sheet of plain paper 288 x 229 mm = 4 pages (1 blank)]
 84. 26 June 1873, Wien [2 sheets of plain paper 144 x 227 mm = 4 pages]
 85. 29 August 1873, Ischl [1 folded sheet of plain paper 275 x 216 mm = 4 pages]
 86. 22 June 1874, Wien [1 folded sheet of plain paper 289 x 227 mm = 4 pages]
 87. 10 November 1874, Wien [1 folded sheet of "H. Schädle" letterhead 295 x 233 mm = 4 pages, with one fold-out flap 128mm x 42mm; 1 sheet of plain paper 136 x 215 mm = 2 pages]
- MS 0037 folder 187
 88. 12 January 1875, Wien [1 folded sheet of plain paper 289 x 228 mm = 4 pages (1 blank)]
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 90. 21 March 1875, Wien [1 folded sheet of type 14 letterhead 286 x 228 mm = 4 pages]
 91. 25 July 1875, Wien [1 folded sheet of plain paper 292 x 226 mm = 4 pages]
 92. 12 January 1876, Wien [1 folded sheet of plain paper 290 x 228 mm = 4 pages (1 blank)]
 93. 15 May 1876, Wien [1 folded sheet of plain paper 291 x 226 mm = 4 pages]
 94. 24 August 1876, Wien [1 folded sheet of type 15 letterhead 290 x 237 mm = 4 pages]
 95. 27 October 1876, Wien [1 folded sheet of plain paper 289 x 227 mm = 4 pages]
 96. 3 November 1876, Wien [1 folded sheet of plain paper 289 x 227 mm = 4 pages (2 blank)]
 97. 20 December 1876, Wien [1 folded sheet of plain paper 289 x 227 mm = 4 pages]
 98. 24 January 1877, Wien [1 folded sheet of plain paper 291 x 226 mm = 4 pages, 1 blank; 1 sheet 144mm x 226mm = 2 pages]
 99. 5 February 1877, Wien [1 folded sheet of plain paper 289 x 228 mm = 4 pages, 1 blank; 1 sheet 145mm x 226mm = 2 pages (1 blank)]
 100. 10 May 1877, Wien [1 folded sheet of type 14 letterhead 456 x 287 mm = 4 pages (1 blank)]
 101. 28 July 1877, Wien [1 folded sheet of plain paper 288 x 226 mm = 4 pages]
 102. 19 October 1877, Wien [1 folded sheet of plain paper 288 x 226 mm = 4 pages]
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 103. 4 January 1878, Wien [1 folded sheet of plain paper 291 x 225 mm = 4 pages]
 104. 10 April 1878, Wien [1 folded sheet of plain paper 289 x 225 mm = 4 pages (1 blank)]
 105. 21 April 1878, Wien [1 folded sheet of plain paper 288 x 225 mm = 4 pages]
 106. 24 November 1878, Wien [1 folded sheet of type 16 letterhead 264 x 201 mm = 4 pages]
 107. 4 May 1879, Wien [1 folded sheet of type 15 letterhead 297 x 231 mm = 4 pages]
 108. 1 December 1879, Wien [1 folded sheet of plain paper 289 x 228 mm = 4 pages (1 blank)]
 109. 24 February 1880, Wien [1 folded sheet of plain paper 291 x 230 mm = 4 pages (1 blank)]

Sascha Nolden

111. 25 July 1880, Wien [1 folded sheet of type 17 letterhead 259 x 202 mm = 4 pages (1 blank)]
112. 3 October 1880, Wien [1 folded sheet of plain paper 288 x 228 mm = 4 pages (1 blank)]
113. 25 November 1880, Oberdöbling [1 folded sheet of plain paper 288 x 228 mm = 4 pages (1 blank)]
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114. 18 April 1881, Wien [1 folded sheet paper of plain paper 192 x 229 mm = 2 pages; 1 sheet 144 x 229 mm = 2 pages (1 blank)]
115. 28 August 1881, Galleneegg [1 folded sheet of plain paper 291 x 227 mm = 4 pages (1 blank)]
116. 31 January 1882, Wien [1 folded sheet of plain paper 290 x 227 mm = 4 pages]
117. 4 April 1882, Wien [1 folded sheet of plain paper 289 x 227 mm = 4 pages (1 blank)]
118. 7 July 1882, Wien [1 folded sheet of type 17 letterhead 254 x 207 mm = 4 pages (1 blank)]
119. 10 August 1882, Wien [1 folded sheet of type 18 letterhead 291 x 230 mm = 4 pages (2 blank)]
120. 13 October 1882, Wien [1 folded sheet of type 19 letterhead 257 x 201 mm = 4 pages (1 blank)]
121. 11 February 1883, Oberdöbling [1 folded sheet of plain paper 290 x 228 mm = 4 pages]
122. 3 April 1883, Wien [1 folded sheet of type 19 letterhead 257 x 201 mm = 4 pages (1 blank)]
123. 19 June 1883, Kaltenleutgeben [1 folded sheet of type 11 letterhead 259 x 200 mm = 4 pages]
124. 16 September 1883, Döbling [1 folded sheet of plain paper 289 x 228 mm = 4 pages]
125. 2 November 1883, Wien [1 folded sheet of type 20 letterhead 289 x 229 mm = 4 pages]
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126. 4 April [1884], Döbling, [1 folded sheet of type 21 letterhead 262 x 200 mm = 4 pages; 1 sheet 131mm x 200mm = 2 pages (1 blank)]
127. 10 June 1884, Döbling [1 folded sheet of type 22 letterhead 262 x 200 mm = 4 pages]
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28. 18 September 1862, Hruschau [1 folded sheet of type 7 letterhead 274 x 213 mm = 4 pages]
128. 11 October 1884, Döbling [2 folded sheets of type 23 on 6mm black bordered mourning paper 255 x 204 mm = 8 pages; 1 half sheet 127 x 204 mm = 2 pages]
129. 27 November 1884, Döbling [1 folded sheet of type 23 letterhead on 6 mm black bordered mourning paper 255 x 204 mm = 4 pages]
130. 8 October 1885, Döbling [2 folded sheets of type 24 letterhead on 10mm black bordered mourning paper 230 x 177 mm = 8 pages]
131. 1 December 1886, Döbling [1 folded sheet of type 24 letterhead on 10mm black bordered mourning paper 256 x 204 mm = 4 pages]
132. 8 March 1887, Döbling [1 folded sheet of type 24 letterhead on 11mm black bordered mourning paper 256 x 204 mm = 4 pages]
133. 10 May 1887, Döbling [1 folded sheet of type 24 letterhead on 11mm black bordered mourning paper 256 x 204 mm = 4 pages]
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1. [c. 14 August 1859, Nelson], [1 folded sheet of plain paper 224 x 177 mm = 4 pages (2 blank)]

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⁸⁷⁸ In order to assist identification geographical entries feature present-day country locations in round brackets and present-day spellings of place names in square brackets.

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