e and Letters of John Muir by William Frederic Badè — John M

Copyright, 1924, by Houghton Mifflin Company

Table of Contents

John Muir Writings	1
The Life and Letters of	1
<u>John Muir</u>	2
by William Frederic Badè	2
<u>1924</u>	2
Contents	2
<u>Illustrations</u>	2
Bibliographic Information	3
Preface	3
Volume I	4
Chapter I	4
The Ancestral Background	
Chapter II Life on a Wisconsin Farm 1849-1860.	14
Chapter III As a Questioner at the Tree of Knowledge	26
Chapter IV The Sojourn in Canada 1864-1866	
Chapter V From Indiana to California 1866-1868	
Chapter VI Following the Sheep 1868-1869.	58
Chapter VII First Yosemite Years 1869-1870	
Chapter VIII Yosemite, Emerson, and the Sequoias	
Chapter IX Persons and Problems L	92
<u>II</u>	106
Chapter X Yosemite and Beyond 1872-1873	121
Volume II	
Chapter XI On Widening Currents 1873-1875.	134
Chapter XII "The World Needs the Woods" 1875-1878	147
Chapter XIII Nevada, Alaska, and a Home 1878-1880	163
Chapter XIV The Second Alaska Trip and the Search for the Jeannette 1880-1881	176
<u>I</u>	176
<u>II</u>	184
Chapter XV Winning a Competence 1881-1891	194
Chapter XVI Trees and Travel 1891-1897	
Chapter XVII Unto the Last	
<u>I 1897-1905</u>	231
<u>II 1905-1914</u>	247
Chapter XVIII His Public Service	

John Muir Writings

The Life and Letters of

John Muir

by William Frederic Badè

1924

Contents

Preface

Volume I

- I. <u>The Ancestral Background</u>
- II. Life on a Wisconsin Farm 1849-1860
- III. <u>As a Questioner at the Tree of Knowledge</u>
- IV. The Sojourn in Canada 1864-1866
- V. From Indiana to California 1866-1868
- VI. Following the Sheep 1868-1869
- VII. First Yosemite Years 1869-1870
- VIII. Yosemite, Emerson, and the Sequoias
- IX. Persons and Problems
- X. <u>Yosemite and Beyond 1872-1873</u>

Volume II

- XI. On Widening Currents 1873-1875
- XII. <u>"The World Needs the Woods" 1875-1878</u>
- XIII. Nevada, Alaska, and a Home 1878-1880
- XIV. The Second Alaska Trip and the Search for the Jeannette 1880-1881
- XV. <u>Winning a Competence 1881-1891</u>
- XVI. <u>Trees and Travel 1891-1897</u> <u>Unto the Last</u>
- XVII. <u>I. 1897-1905</u> <u>II. 1905-1914</u>
- XVIII. His Public Service

Illustrations

- Sketch of John Muir's cabin at the base of Yosemite Falls (chapter 7)
- <u>Pine-crested summit above Yosemite Valley</u> (chapter 8)
- John Muir's home in a mill in Yosemite Valley (chapter 8)
- John Muir 1890 (frontispiece, volume II)
- Louie Wanda Strentzel (Mrs. John Muir) (chapter 13)
- Self Portrait of John Muir in his letter of Feb. 23, 1887 to Miss Janet Douglass Moores (chapter 15)
- The Upper Ranch Home of John Muir about 1890 Wanda Muir on the Porch (chapter 16)

- Shishaldin Volcano, Unimak Island, Alaska (chapter 17)
- <u>Wapama Falls (1700 feet) in Hetch-Hetch Valley</u> (chapter 17)
- <u>Map of Yosemite Valley, 1972.</u> From Samuel Kneeland's <u>Wonders of Yosemite</u> (Boston, 1872). (Not published in *Life and letters*).

The Life and Letters of

John Muir

by

William Frederic Badè

Boston and New York Houghton Mifflin Company MDCCCCXXIV

Copyright, 1924, by Houghton Mifflin Company All Rights Reserved The Riverside Press Cambridge, Masschussetts Printed in the U.S.A.

Bibliographic Information

Badè, William Frederic (1871-1936). *The life and letters of John Muir* (Boston and New York: Houghton Mifflin Company, 1924). 2 v. fronts., ports., illus. 22 cm. LCCN a 25000247.

Scanned and converted to HTML by Dan E. Anderson, 1999.

[Forward to Preface]

Preface

Twenty years after the first companies of forty-niners arrived in California, a unique type of Argonaut landed in San Francisco, crossed the Coast Range and the San Joaquin plain, and, passing through the gold-diggings, went up the Merced until he reached Yosemite valley. Not the gold of California's placers and mines, but the plant gold and beauty of her still unwasted mountains and plains, were the lure that drew and held John Muir. Forty-six years later, in the closing days of fateful 1914, this widely traveled explorer and observer of the world we dwell in faced the greatest of all adventures, dying as bravely and cheerfully as he had lived.

Not only from his large circle of devoted personal friends, but from among the thousands who had been thrilled by his eloquent pen, arose insistent demands for a fuller presentation of the facts of his life than is available in his incomplete autobiography, *The Story of My Boyhood and Youth*, and in his other published works. When the present writer, at the request of Mr. Muir's daughters undertook to edit some of his unpublished journals and to prepare his life and letters, he had no adequate conception of the size and complexity of the task. The amount of the manuscript material to be examined made it vastly more time-consuming than was at first anticipated.

Throughout his life John Muir carried on a prolific and wide-ranging correspondence. His own letters were written by hand, and, with the exception of an occasional preliminary draft, he rarely kept copies. In calendaring the many thousands of letters received from his friends, a systematic effort was made to secure from them and their descendants the originals or copies of Muir's letters for the purposes of this work. The success of this effort was in part thwarted, in part impeded, by the Great War. To the many who responded, the writer expresses his grateful acknowledgments. The Carr series, with some exceptions like the Sequoia letter, was obtained from Mr. George Wharton James, to whose keeping the correspondence had been committed by Mrs. Carr. The preponderance of letters addressed to women correspondents is partly explained by the fact that Muir's men-friends did not preserve his letters as generally as the women. It should be added, also, that several valuable series were lost in the San Francisco earthquake and fire of 1906.

At the time of his death Muir had in preparation a second volume of his autobiography. Though very incomplete, it was found so important that it seemed best to incorporate it in the present work, whose form of presentation and selection of materials had to be accommodated somewhat to make this possible. It is chiefly in the letters, however, that the reader will find revealed the charm of Muir's personality and the spontaneity of his nature enthusiasms.

In conclusion, the writer desires to acknowledge special obligations to William E. Colby for frequent suggestions and assistance in verifying facts, to Elizabeth Gray Potter for working out a valuable and convenient system of arrangement and indexing for the collection of Muiriana, and to his wife, Elizabeth LeBreton Badè, for much practical help and advice.

William Frederic Badè Berkeley, California September 23rd, 1923

Volume I

Chapter I

The Ancestral Background

Delving one day among miscellaneous papers that had been brought to me from the silent and deserted home of John Muir in the Alhambra Valley, near Martinez, California, I found a sketch of his life which led me to hope that a difficult part of my biographical task had been made easy. Just then my eye caught the laconic comment, "A strange, bold mixture of Muirs!" penciled across the manuscript in his own familiar flowing hand. Apparently the sketch had been sent to Muir by the admiring author, who, finding himself in need of an ancestry worthy of his subject, had made short shrift of facts to get one. Taking a survey of Muirs available in biographical reference works, he selected as father for John Muir a distinguished Scotch Sanscritist of the same name, gave him as an uncle an equally eminent Scotch Arabist, and for good measure added, as a younger brother, a well-known Scotch chemist. Given the conviction that genius must spring from genius, the would-be biographer had done his best to provide his hero with an adequate pedigree.

But while John Muir's origin was humbler than this invention, the mixture of elements need abate nothing either in strangeness or in boldness. Although unfortunately it is not possible to trace back far the tangled thread of his descent, one feels instinctively that marked ancestral traits and faculties must have gone into the making of a personality so unusual and so fascinating. His name he appears to have taken from his paternal grandfather, a Scotchman by the name of John Muir. Beyond the latter our knowledge of this line of Muirs ceases, and it may be doubted whether a search of Scotch parish records, even, would reveal more than another bare name.

Of this ancestral John Muir we know only that he was a soldier by profession; that he married an English woman by the name of Sarah Higgs; that she bore him two children—Mary and Daniel; that his wife died when the second child was only nine months old; and that he followed her to the grave three months later. The orphaning of Mary and Daniel Muir at so tender an age may account for the fact that the American family tradition of the Muirs has little to report about John Muir, the soldier, and his wife Sarah Higgs Muir, except the tragedy of their untimely deaths. All knowledge of their birthplaces and parentage, tastes, accomplishments, and dispositions is lost in oblivion.

Our detailed knowledge of the family really begins with Daniel Muir, the younger of the two orphans and the only male link in the Muir pedigree atthis point. He it was who in due time became the father of John Muir, the naturalist, and to the latter's brief sketch of his father's life, written as an obituary notice, we owe practically all our extant information about the early life of Daniel Muir. The latter was born in Manchester, England, in 1804. His sister Mary Muir was his senior by about eleven years, and when their parents had died she "became a mother to him and brought him up on a farm that belonged to a relative in Lanarkshire, Scotland." From an aged daughter of Mary Muir, Grace Blakley Brown, the writer ascertained the fact that the above-mentioned farm was situated at Crawfordjohn, about thirty-five miles south-east of Glasgow. If it is true, as alleged, that it was one of his mother's people to whom the farm belonged, we are probably not far wrong in supposing that John Muir, the elder, also came from this region, and met Sarah Higgs in Crawfordjohn.

How much importance one may attach to ante-natal influences exerted upon one's forbears by the physical characteristics of a country is a debatable question. "Some of my grandfathers," John Muir once wrote in playful mood to a friend, "must have been born on a muirland, for there is heather in me, and tinctures of bog juices, that send me to Cassiope, and, oozing through all my veins, impel me unhaltingly through endless glacier meadows, seemingly the deeper and danker the better." Did he have in mind some family tradition of a Scotch Highland ancestry? We do not know; but if any of his ancestors came from the country of Lanark there is aptness in the hyperbole. The parish of Crawford consists chiefly of mountains and moors. Coulter Fell, Tinto, Green Louther, Five Cairn Louther, and other summits in the immediate vicinity of Crawfordjohn rise grandly out of the high moorlands that constitute most of the area in the eastern and southern parts of the county. Hard by the village flows Duneaton Water, one of the numerous rushing, songful streams that feed the River Clyde. The highest inhabited land in Scotland is said to lie at Leadhills, on the banks of Glengonner Water, not many miles south of Crawfordjohn.

In any case, it was amid these surroundings, according to John Muir's sketch, that his father "lived the life of a farm servant, growing up a remarkably bright, handsome boy, delighting in athletic games and eager to excel in everything. He was notably fond of music, had a fine voice, and usually took a leading part in the merry song-singing gatherings of the neighborhood. Having no money to buy a violin, when he was anxious to learn to play that instrument, he made one with his own hands, and ran ten miles to a neighboring village through mud and rain after dark to get strings for it."

In the course of time his sister Mary married a shepherd-farmer of Crawfordjohn by the name of Hamilton Blakley, whereupon her new home became also that of Daniel Muir. A Scottish peasant's life in a country village, remote from populous centers, must have afforded only narrow opportunities for education and self-improvement. John Muir was accustomed to ascribe the rigidity of his father's prejudices and convictions to the deficient quality of his early education. But it must be admitted that the making of a violin by a boy, who had grown up amid the handicaps of such surroundings, indicates the possession on his part of uncommon native resources of skill and ingenuity. An achievement of this kind suggests the probability that there were other products of his manual craftsmanship, and the remarkable inventive power and "whittling" skill which his son John developed as a young man doubtless were not unconnected with his father's example and ability. "While yet more boy than man," continues the sketch, "he suddenly left home to seek his fortune with only a few shillings in his pocket, but with his head full of romantic schemes for the benefit of his sister

and all the world besides. Going to Glasgow and drifting about the great city, friendless and unknown, he was induced to enter the British army, but remained in it only a few years, when he purchased his discharge before he had been engaged in any active service. On leaving the army he married and began business as a merchant in Dunbar, Scotland. Here he remained and prospered for twenty years, establishing an excellent reputation for fair dealing and enterprise. Here, too, his eight children were born, excepting the youngest who was born in Wisconsin." It is strong evidence of his energy and love of adventure that he closed out his business in Dunbar in 1849 and "emigrated to the wilds of America" at the mature age of forty-five years. His original intention was to go to the backwoods of Upper Canada, but he was diverted from this purpose by fellow emigrants who told him that the woods of Canada were so dense and heavy that an excessive amount of labor was required to clear land for agriculture. From Milwaukee he made his way by wagon into the central part of southern Wisconsin, where he bought, cleared, and brought under cultivation, successively, two large farms. They were situated about ten miles from Kingston and were known respectively as the Fountain Lake and the Hickory Hill farms.

[When the second one also was]. . . thoroughly subdued and under cultivation, and his three sons had gone to seek their fortunes elsewhere, he sold it and devoted himself solely to religious work. As an evangelist he went from place to place in Wisconsin, Canada, and Arkansas, distributing books and tracts at his own cost, and preaching the gospel in season and out of season with a firm sustained zeal.

Nor was this period of religious activity restricted to those later years, for throughout almost his whole life as a soldier, merchant, and farmer, as well as evangelist, he was an enthusiastic believer and upholder of the gospel and it is this burning belief that forms the groundwork of his character and explains its apparent contradictions. He belonged to almost every Protestant denomination in turn, going from one to another, not in search of a better creed, for he was never particular as to the niceties of creeds, but ever in search of a warmer and more active zeal among its members with whom he could contribute his time and money to the spread of the gospel.

Though suffering always under the disadvantage of an imperfect education, himself overtasked, but by sheer force of will and continuous effort overcame all difficulties that stood in his way. He was successful in business and bestowed much of his earnings on churches and charities.

His life was singularly clean and pure. He never had a single vice excepting, perhaps, the vices of over-industry and over-giving. Good Scripture measure, heaped up, shaken together, and running over, he meted out to all. He loved little children, and beneath a stern face, rigid with principle, he carried a warm and tender heart. He seemed to care not at all what people would think of him. That never was taken into consideration when work was being planned. The Bible was his guide and companion and almost the only book he ever cared to read.

His last years, as he lay broken in body, waiting for rest, were full of calm divine light. Faith in God and charity to all became the end of all his teachings, and he oftentimes spoke of the mistakes he had made in his relation toward his family and neighbors, urging those about him to be on their guard and see to it that love alone was made the guide and rule of every action. . . . His youthful enthusiasm burned on to the end, his mind glowing like a fire beneath all its burden of age and pain, until at length he passed on into the land of light, dying like a summer day in deep peace, surrounded by his children. On his mother's side John Muir was descended from the old Scottish stock of the Gilderoys whose deeds won a place in the Border lore of Scotland. There is, for instance, the fine old ballad "Gilderoy," but the possibility that its thirteen stanzas may celebrate a member of this branch of the family must remain as remote as it is romantic. In a manuscript copy of the ballad, made for John Muir years ago by a Scotch relative of the Gilroy line, the opening stands run as follows:

"Gilderoy was a bonnie boy, Had roses till his shoon; His stockings were of sillken soy, Wi' garters hanging coon; It was, I ween, a comely sight, To see see trim a boy; He was my joy and heart's delight, My winsome Gilderoy.

"Oh! sic twa charming een he had, A breath as sweet as rose; He never ware a Highland plaid, But costly silken clothes. He gained the love of ladies gay, Nane e'er to him was coy. Ah! wee is me! I mourn this day,

For my dear Gilderoy!" etc. In Thompson's *Orpheus Caledonius* (1733) the hero of the poem is represented as contemporary with Mary, Queen of Scots. But a later authority, describing this Gilderoy as "the Robin Hood of Scottish minstrelsy," identified him with the leader of a band of freebooters that three centuries ago roamed over the Highlands of Perthshire until both he and his band fell victims to the Stewarts of Atholl in 1638.

According to a Muir family tradition John's maternal great-grandfather, James Gilderoy, had three sons who took respectively the names Gilderoy, Gilroy, and Gilrye. Inquiry of descendants in Scotland has failed to bring to light the first of these. But a James Gilderoy[Also spelled "Gildroy" and "Gilroy" in contemporary documents.] was resident at Wark in Northumberland, on the Border, in 1765. He is known to have had at least two sons—John and David. The former, born in 1765, took the Gilroy form of the family name and was alternately a professional gardener and a "land agent." David who was born July 15th, 1767, is the "grandfather Gilrye" of Muir's *The Story of My Boyhood and Youth*. Both boys appear to have gradually moved northward along the border, and an old Scotch family Bible, in the possession of a granddaughter of John Gilroy, invests with the importance of an event the arrival of David Gilrye at Dunbar, Scotland, on December 20th, 1794.

David was no longer in the first flush of youth when he settled in Dunbar. He was twenty-seven years old, and in his years of wandering, if we knew something about them, we probably should find no lack of hardship and adventure. Love of gardens and of landscapes, not improbably, gave direction sometimes to his footsteps, for John Muir more than a century later told how his earliest recollections of the country were gained on short walks in company with Grandfather Gilrye, who also loved to take him to Lord Louderdale's gardens. There is something pleasingly suggestive in the picture of seventy-five-year-old David Gilrye leading his three-year-old grandson into the paths that were to bring fame to the one, and rescue from oblivion to the other.

Perhaps it was Margaret Hay who confided to her Bible the date of David's arrival at Dunbar. She had good reason to remember the event, for six months later he led her to the altar and made her his wife. Through Grandmother Gilrye, John Muir thus shared the good Scotch blood of the Hays, a numerous clan, that has produced men and women of distinction both in Europe and in America. A relative of Margaret Hay is said to have suffered martyrdom in the days when the Covenanters were hunted down for their sturdy opposition to "popery and prelacy."

A numerous offspring came to enliven the household of David and Margaret Hay Gilrye—three sons and seven daughters. But death, also, was a tragically persistent visitor. All the sons and three of the daughters died between the ages of seventeen and twenty-six—a fearful toll of life exacted by the white plague. Since

two other daughters had died at a tenderer age, only Margaret, the eldest, and Ann, the seventh of the Gilrye sisters, lived to survive their parents and round out a good old age. The tragedy of such a series of untimely deaths is likely to have had an intensifying influence upon the religious sensibilities of the family. In 1874, when her sister Margaret died at the ripe age of seventy-eight, Ann Gilrye, then the wife of Daniel Muir, described herself as "the last remnant of a numerous family." "My mother," she wrote to her son John, "was just seventy-eight years old when she died, and my father eighty-eight. My parents have mouldered in the dust over twenty years, but Christ is the resurrection and the life, and if we believe in him our souls will never die."

Daniel Muir, coming to Dunbar as a recruiting sergeant, met there his first wife by whom he had one child. She was a woman of some means and enabled him to purchase his release from the army in order to engage in the conduct of a business which she had inherited. Their happiness together was of brief duration, for both she and the child were snatched away by a premature death, leaving him alone.

It seems to have been early in 1833 that Daniel, now a widower with a prospering business, became a familiar caller in the Gilrye family—now also sadly depleted in number. Margaret had been married thirteen years earlier to James Rae and had established her own home. It was Aunt Rae's precious lily garden that later excited the childish admiration of little Johnny Muir and made him wonder whether, when he grew up, he "should ever be rich enough to own anything like so grand." Twenty-year-old Ann and her sixteen-year-old brother David were the only ones left under the parental roof. All the rest were lying side by side in the Dunbar churchyard, whither also the last male scion of the family was to be carried the following year.

On the 28th of November, 1833, Ann Gilrye became the wife of Daniel Muir, and moved across the street into the old house which John Muir has described in his boyhood recollections. A lively brood of children soon came to make their home there. Margaret, Sarah, John, David, Daniel, Mary, and Anna were born there in the given order, Joanna being the only one who was born in Wisconsin. John Muir, third in succession and the eldest boy, was born on the 21st of April, 1838.

The bond of affectionate intimacy which always existed between him and his mother would make a characterization of her from his pen of more than ordinary interest. But we have to content ourselves with one sentence from a fragmentary autobiographical sketch. "She was a representative Scotch woman," he wrote, "quiet, conservative, of pious, affectionate character, fond of painting and poetry." To this we may add the interesting information, contained in one of his letters, that his mother wrote poetry in her girlhood days.

It is quite apparent from her letters that she shared with him that aesthetic appreciation of nature which is so characteristic an element in his writings. While most of her letters concern home affairs and are full of maternal solicitude for his health and comfort, they are seldom without that additional touch which reveals kinship of soul as well as of blood. Referring to descriptions in one of his early California letters, she writes, "Your enjoyment of the beauties of California is shared by me, as I take much pleasure in reading your accounts."

Underneath the maternal solicitude for his health and safety one may also detect at times the Scotch Covenanter's concern for his spiritual welfare. "Dear John," she writes in 1870, "I hope your health is good—so that you will be able really to enjoy and admire all the vast magnificence with which you are daily surrounded. I know it is far beyond any conception of mine, but we can unite in praising and serving our Heavenly Father who is the maker and supporter of this wonderful world on which we live for a time. But time is short, and we must live forever. I trust we have a good hope, through grace, of spending eternity in mansions of glory everlasting."

The glacial studies with which her son began to busy himself during the seventies must have tried at times her Covenanter faith in so far as it involved a conception of the age and origin of the world different from that which she had learned in her youth. But she continues to write cheerfully about summers and autumns that

make rambles in the woods a deepening joy. "The trees and flowers and plants looked more beautiful to me than ever before. . . . I presume you are quite busy with your studies writing your book. I feel much interested in all that interests you, although in many of your studies you leave me far behind. Yet I rejoice in all your joy, and hopes of future advancement. . . . You were much talked about and thought about at our last Christmas gathering. Many were the kind wishes and loving thoughts wafted to the valley of Yosemite." Almost to the last year of her life she was accustomed to go to the woods in April in order to gather and send to him with her birthday wishes a few of his favorite Wisconsin spring flowers. These little acts reveal, even more than anything she said, the poetic strain in her blood which kept fresh for her and her eldest boy, until he was nearly sixty and she over eighty, the vernal blossoms they had picked together long ago.

Very different was the attitude which Daniel Muir assumed toward the interests and enthusiasms of his son. Being an extreme literalist as far as the Bible was concerned, he could not look without suspicion upon his scientific studies, because they went "beyond what was written." Whenever he saw an issue arising between his traditional interpretation of the world's origin according to Genesis on the one side, and the facts of geology and glaciation on the other, he was accustomed to say, "Let God be true and every man a liar." John's passion for exploration, and the adventures incidental thereto, he regarded as little less than sinful. That there were different levels of development within the Bible, involving the displacement of earlier and cruder ideas of God and the world by higher and more intelligent ones, never entered his mind. Nor did it ever occur to him, apparently, that the facts of nature are likewise a part of the manuscripts of God, and that he who endeavors to read them accurately may be rendering his fellow men a religious as well as an intellectual service. He sincerely believed that his son was cheating the Almighty in devoting his time to such interests and enjoyments. "You are God's property," he wrote to him once. "You are God's property, soul and body and substance—give those powers up to their owner!" Even the most painstaking naturalist, he maintained, could not discover anything of value in the natural world that the believer did not see at one glance of the eye. These views went hand in hand with a naive credulity that accepted unquestioningly the pious marvels related in the tracts which he was distributing, and of which he kept sending selected ones, with comments, to his son John.

Perhaps the reader will receive a clearer and truer impression of the differing attitudes of his father and mother toward his nature studies if we offer at this point a typical letter of Daniel Muir in which the underscored words are indicated by italics. A note on the envelope, in John's handwriting, says "written after reading the account of my storm night on Shasta."

Portage City March 19th, 1874

My Very Dear John

Were you as really *happy* as my wish would make you, you would be permanency so in the best sense of the word. I received yours of the third inst. with your slip of paper, but I had read the same thing in *The Wisconsin*, some days before I got yours, and then I *wished* I had not seen it, because it harried up my feelings so with another of your hair-breadth escapes. Had I seen it to be *God's work you* were doing I would have felt the *other* way, but I knew it was not God's work, although you seem to think you are doing God's service. If it had not been for God's boundless mercy you would have been cut off in the midst of your folly. All chat you are attempting to show the *Holy Spirit* of God gives the believer to see at one glance of the eye, for according to the tract I send you they can see God's love, power, and glory in everything, and it has the effect of turning away their sight and eyes from the things that are seen and temporal to the things that are not seen and eternal, *according to God 's holy word*. It is of no use to look through a glass darkly when we have the *Gospel*, and *its fulfillment*, and

when the true practical believer has got the Godhead in fellowship with himself all the time, and reigning in his heart all the time. I know that the world and the church of the world will glory in such as you, but how can they believe which receive honor one of another and seek not the honor that cometh from God only John 5, 44. You cannot warm the heart of the saint of God with your cold icy-topped mountains. O. my dear son come away from them to the spirit of God and His holy word, and He will show our lovely Jesus unto you, who is by His finished work presented to you without money and price. It will kindle a flame of sacred fire in your heart that will never go out, and then you will go and willingly expend it upon other icy hearts and you will thus be blessed infinitely in tribulation and eternally through Jesus Christ, who is made unto us of God wisdom, righteousness, sanctification, and redemption. I Cor. 1, 30, 31. And the best and soonest way of getting quit of the writing and publishing your book is to burn it, and then it will do no more harm either to you or others. And then, like Paul, look to the cross of Christ and glory in it, and as in the sight of God and in Jesus Christ, my only Lord and Master, I hereby say Amen to it.

I expect, my God willing, to leave Portage City for Hamilton, Toronto, on the last day of this month. I bought a house last October there and without my family, at present, I mean to go in the way of God's providence to spend all my time in His service and wholly by His grace to glorify Him. I shall be glad to hear from you there any time. I will get your letters at the post-office there.

We are all well. Your dear mother sends her love to you.

Your affectionate father in Christ Daniel Muir The meaning of the last paragraph of the letter will be found in some, disquieting news contained in a letter of Mrs. Daniel Muir, Sr., under date of February 26th, 1872. "We were surprised," she writes, "to hear your father say that he has decided to sell the Hickory Hill farm, and everything he has on it, by auction. So he is at present engaged in putting up bills of sale, the sale to take place on Tuesday, the 5th of March. He says he will not decide on where he will go until the sale is over." The purpose he had in view in coming to this sudden decision is revealed in one of John's letters to his brother David. Daniel Muir's religious fanaticism had in John's view reached a point where it was necessary to ask his brother and his brother-in-law to interfere in the interest of their sisters and their mother.

To David Gilrye Muir

Yosemite Valley March 1st, 1873

Dear Dave:

I answer your letter at once because I want to urge you to do what you can in breaking up that wild caprice of father's of going to Bristol and Lord Muller. You and David Galloway are the only reliable common-sense heads in our tribe, and it is important, when the radical welfare of our parents and sisters is at stake, that we should do all that is in our power.

I expected a morbid and semi-fanatical outbreak of this kind as soon as I heard of his breaking free from the wholesome cares of the farm. Yet I hoped that he would find ballast in your town of some Sabbath-school or missionary kind that would save him from any violent crisis like the present. That thick matted sod of Bristol orphans, which is a sort of necessary evil induced by other evils, is all right enough for Muller in England, but all wrong for Muir in America

The lives of Anna and Joanna, accustomed to the free wild Nature of our woods, if transplanted to artificial fields and dingy towns of England, would wilt and shrivel to mere husks, even if they were not to make their life work amid those pinched and blinking orphans.

Father, in his present feeble-minded condition, is sick and requires the most considerate treatment from all who have access to his thoughts, and his moral disease is by no means contemptible, for it is only those who are endowed with poetic and enthusiastic brains that are subject to it.

Most people who are born into the world remain babies all their lives, their development being arrested like sun-dried seeds. Father is a magnificent baby, who, instead of doe dozing contentedly like most of his neighbors, suffers growing pains that are ready to usher in the dawn of a higher life.

But to come to our work, can you not induce father to engage in some tract or mission or Sabbath-school enterprise that will satisfy his demands for bodily and spiritual exercise? Can you not find him some thicket of destitution worthy of his benevolence? Can you not convince him that the whole world is full of work for the kind and willing heart? Or, if you cannot urge him to undertake any independent charity, can you not place him in correspondence with some Milwaukee or Chicago society where he would find elbow room for all his importance. An earnest man like father, who also has a little money, is a valuable acquisition to many societies of a philanthropic kind, and I feel sure that if once fairly afloat from this shoal of indolence upon which he now chafes, he would sail calmly the years now remaining to him. At all events, tell mother and the girls, that whether this side the sea or that, they need take no uneasiness concerning bread

John Muir

Their efforts were successful. A new home was established in Portage, Wisconsin, and from there Daniel Muir went alone on prolonged evangelistic trips to Canada and parts of the central West. Laid low by old age and a broken limb, he died in Kansas City, at the home of one of his daughters, in 1885. His last years were calm and peaceful as John had foreseen. Eleven years later his wife also followed him into the land of the leal.

Into this parental and ancestral background, sketched in its more significant outlines, was born at Dunbar, Scotland, April 21st, 1838, the subject of this biography. Fleeting glimpses of his earliest childhood reveal Johnny Muir as a vivid, auburn-haired lad with an uncommonly keen and inquiring pair of blue eyes. His boyhood in Scotland extended over only the first eleven years of his life (1838-49), but the fifty and more pages which he devotes to memories of these years in his autobiography reveal the deep impression they made upon his mind. His school education began early before he had completed his third year. But even before that time he had, like his fellow Scotchman Hugh Miller, learned his letters from shop Signs across the street. In this as in other matters Grandfather Gilrye was his earliest teacher and guide.

Scotch pedagogical methods in those days were an uncompromising tyranny. So much is clear from Muir's feeling allusions to the inevitable thrashing, in school and at home, which promptly followed any failure to commit assigned lessons to memory. The learning of a certain number of Bible verses every day was a task which his father superimposed upon the school lessons, and exacted with military precision. "By the time I was eleven years old," wrote the victim of this method, "I had about three-fourths of the Old Testament and all of the New by heart and by sore flesh. I could recite the New Testament from the beginning of Matthew to the end of Revelation without a single stop." Records both written and oral testify to John's phenomenal feats of memory in reciting chapters from the Bible and the poetry of Robert Burns.

Whatever may be thought of the wisdom of this educational method, there can be no doubt that it resulted in forming the boy's literary taste and in giving him a rare training in the use of English undefiled. The dignity and rich quality of his diction, and his arrestingly effective employment of Biblical metaphors disclose the main sources of his literary power in familiarity with the King James Version, the only one available in his boyhood.

The severest kind of pedagogical weather was encountered when he left the old Davel Brae school for the grammar school. Old Mungo Siddons, who presided over the former, seems to have been a man possessed of human sympathies, for he managed to make himself gratefully remembered for the gooseberries and currants,

at least, with which he sweetened the closing exercises when vacation days arrived. But Mr. Lyon, the master of the grammar school, was a disciplinarian of the most inflexible kind. "Under him," Muir writes, "we had to get three lessons every day in Latin, three in French, and as many in English, besides spelling, history, arithmetic, and geography. Word lessons in particular, the wouldst-couldst-shouldst-have-loved kind, were kept up, with much warlike thrashing, until I had committed the whole of the French, Latin, and English grammars to memory, and in connection with reading-lessons we were called on to recite parts of them with the rules over and over again, as if all the regular and irregular incomprehensible verb stuff was poetry."

Some of the textbooks he used have survived the accidents of time and travel and furnish illuminating examples of the severe demands that were made upon children in the Dun bar grammar school. One of these is Willymot's *Selections from the Colloquies of Corderius*, which he began to study when he was nine years old, and which would be a severe tax on the wits of most Freshmen of our day. It must have seemed little less than mockery to the pupils that the "Argumentum" of the very first "Colloquium" calls it an *"exemplum ad parvulos blande et comiter in schola tractandos, ne severitate disciplinae absterreantur.*" "Kind and gentle treatment of youngsters lest they be frightened away by severity of discipline"—that was no serious concern of schoolmaster Lyon. "Old-fashioned Scotch teachers," wrote Muir in describing his school days, "spent no time in seeking short roads to knowledge, or in trying any of the new-fangled psychological methods so much in vogue nowadays. There was nothing said about making the seats easy or the lessons easy. We were simply driven point-blank against our books like soldiers against the enemy, and sternly ordered 'Up and at 'em. Commit your lessons to memory.' If we failed in any part, however slight, we were whipped; for the grand, simple, all-sufficing Scotch discovery had been made that there was a close connection between the skin and the memory, and that irritating the skin excited the memory to any required degree."

Though John was compelled at this time to store his memory with many things which in his mature judgment were mere "cinders and ashes," the mental discipline at least was a permanent gain. His knowledge of French was sufficient to open for him the treasures of French literature. A considerable section of his library was composed of French works on travel, exploration, and natural science. The Latin he had acquired so drastically from Corderius' *Colloquies* and Turner's *Exercises to the Accidence*, etc., proved useful in botanical and paleontological studies. Besides, the habit, formed early, of committing to memory choice passages from English literature was kept up by him till far into middle life and was commended to his children as a valuable means of education. In a letter to his daughter Wanda, on the occasion of his first visit to Dunbar, forty-four years after he had left his native town, he wrote: "You are now a big girl, almost a woman, and you must mind your lessons and get in a good store of the best words of the best people while your memory is retentive and then you will go through life rich. Ask mother to give you lessons to commit to memory every day, mostly the sayings of Christ in the gospels, and selections from the poets. Find the hymn of praise in *Paradise Lost*, 'These are thy glorious works, Parent of good, Almighty!' and learn it well."

If in these formal elements of John's early education profit and loss were often doubtfully balanced, it was not so with the lessons he learned from Nature. He would have agreed with Henry Adams that life was a series of violent contrasts which gave to life their relative values. Winter and summer, cold and heat, town and country, school and vacation, force and freedom, marked two widely different modes of life and thought. What is more, they all registered their effects in the sum total of what we call education. On the one hand was the wintry, storm-beaten town with its restraint, confinement, and school discipline; on the other, the country with its penetrable hedges, daisied fields, bird-song, and nest hunting expeditions. There, in particular, were skylarks and mavises, the most universally beloved of all the birds of Scotland. John tells how he and his companions used to stand for hours on a broad meadow near Dunbar listening to the singing of the larks; or how they lay on their backs in competitive tests of keensightedness, each trying to outdo the other in keeping a soaring singer in sight.

Among the sublimer aspects of Nature that made an indelible impression upon the boy's mind were those of the stormy North Sea. Answering the letters of some Los Angeles school children in 1904, he tells how the

school which they described brought to mind the two schools which he attended when he was a boy in Scotland. "They," he wrote, "were still nearer the sea. One of them stood so near that at high tide on stormy days the waves seemed to be playing tag on our playground wall, running up the sandy shore and perhaps just touching the base of the wall and running back. But sometimes in wild storms the tops of the waves came flying over the wall into the playground, while the finer spray, carried on the wild roaring flood, drenched the schoolhouse itself and washed it fresh and clean. These great roaring storms were glorious sights. But we were taught to pity the poor sailors, for many ships were driven ashore on the stormy coast almost every year, and many sailors drowned. From the highest part of the playground we could see the ships sailing past, and often tried to guess whence they came, where they were bound for, and what they were carrying." The numerous drawings of ships that decorate the fly-leaves of John's schoolbooks may be regarded as tell-tale of what he saw from the windows and the playground of the Davel Brae school.

But there were many other thrilling experiences for the by-hours of a boy like Johnny Muir. He drank in by every pore the sombre wildness of the rugged seashore about his native town, explored the pools among the rocks where shells, seaweeds, eels, and crabs excited his childish wonder when the tide was low, and found adventurous recreation by climbing the craggy headlands. Yet most impressive of all was the roar of North Sea tempests that, mingling sea and sky, hurled mountainous waves against the black headland crowned by the ruins of Dunbar Castle. All this he saw and felt and explored with intense delight.

How ineffaceably these scenes and early experiences engraved themselves upon his memory is revealed by a passage in one of his notebooks. He was a day's journey from the Gulf of Mexico, on his thousand-mile walk through the South, when he suddenly caught a whiff of the sea, borne upon the wind. It was "the first sea-breeze," he writes, "that had touched me in twenty years. I was plodding along with my satchel and plants, leaning wearily forward. . . when suddenly I felt the salt air, and before I had time to think, a whole flood of long-dominant associations rolled in upon me. The Firth of Forth, the Bass Rock, Dunbar Castle, and the winds and rocks and hills came upon the wings of that wind, and stood in as clear and sudden light as a landscape flashed upon the view by a blaze of lightning in a dark night."

It is not surprising that John Muir, reflecting upon his Scotch boyhood, should in his later years have reamed to regard the natural environment of Dunbar as a source of a valuable part of his early education. The heroic origins of the town are lost in dim traditions that reach back at least a thousand years. Not the least of its romantic associations are represented by such names as Black Agnes of Dunbar, Joanna Beaufort, Earl Bothwell and Mary, Queen of Scots. Just southeast of the town was fought the Battle of Dunbar in which Cromwell won a decisive victory over Leslie. All this, no less than the legends, superstitions, and folklore, which clung like moss about the surviving ruins of other days, could not but exert a strong influence upon the imagination of this active-minded boy.

But the fields and woods exerted by far the strongest attraction upon him. In spite of sure and severe punishments he and his companions regularly managed to slip away into the country to indulge their love of that open "wildness" which, he says, "was ever sounding in our ears. Nature saw to it that besides school lessons and church lessons some of her own lessons should be reamed, perhaps with a view to the time when we should be called to wander in wildness to our hearts' content. Oh, the blessed enchantment of those Saturday runaways in the prime of spring! How our young wondering eyes revelled in the sunny, breezy glory of the hills and sky, every particle of us thrilling and tingling with the bees and glad birds and glad streams! Kings may be blessed; we were glorious, we were free,—school cares and scoldings, heart thrashings and flesh thrashings alike, were forgotten in the fullness of Nature's glad wildness. These were my first excursions,—the beginnings of lifelong wanderings."

Chapter II Life on a Wisconsin Farm 1849-1860

One evening in 1849, when John and his younger brother David were studying their next day's lessons at Grandfather Gilrye's fireside, their father brought the information that they would start together for America the next morning. It was wildly exciting news, for it not only meant delivery from the tyranny of schoolmasters, but a life of adventure in a world full of untrodden wildernesses. Their grammar school reader had already kindled their imaginations with stories of American animal life, especially such as had come from the pen of the Scotch ornithologist Alexander Wilson and the American naturalist John James Audubon. News of the recent discovery of gold in California had run like wildfire over Europe and was the talk of the hour also in Dunbar. It is no wonder that the expectations engendered by such tales, together with the prospect of release from bitter school tasks, rendered the two lads "utterly, blindly glorious."

The only bitter strain in all this sweetness was the necessity of parting from Grandfather and Grandmother Gilrye. And yet they hardly realized what it meant to their grandparents to be left alone in their darkening old age, never to see their grandchildren again. The rosy anticipations of childhood left no room for the thought that their beloved grandparents might be near their own time of departure—in their case for "the land of the leal." In three years, as it turned out, both of them were gone. For the time being, however, Grandfather Gilrye exercised some control over the situation by insisting that his daughter and the younger children must not be exposed to the hardships of pioneering in a new country before a comfortable house had been built for their reception. Hence it was decided that only John, David, and Sarah were to accompany their father to America.

In those days large numbers of Scotch emigrants went to the wilds of Upper Canada and Daniel Muir also set out with the intention of joining some Canadian settlement of his compatriots. On shipboard, however, the majority opinion favored the States, especially Wisconsin and Michigan, where according to common report the forests were less dense and consequently more easily cleared. These advantages were bound to weigh heavily with a man who feared to delay the reunion of his family by the choice of a difficult homestead. Before the end of the voyage he had decided in favor of the western United States, resolving to be guided in his final choice by what he might learn on his westward journey. On reaching Buffalo, the reported preeminence of Wisconsin as a wheat-producing State left no further doubt in his mind. From Milwaukee his cumbersome luggage was transported by wagon for a hundred miles over miry roads to the little town of Kingston, where a land-agent helped him to homestead a quarter-section of land amid sunny open woods beside a small lake.* A shanty was hastily erected and the household goods stowed away in it until a more permanent frame house could be built. Before winter came the house was ready for occupancy, and in November, 1849, Mrs. Muir and the rest of the family arrived from Scotland.

The wild nooks about Fountain Lake, and especially the lake itself, at once took a unique place in John's affections. Its beautiful waterlily pads, its bordering meadows full of showy sedges, orchids, and ferns, the great variety of fish, and the abundant population of ducks and muskrats which it harbored, excited his unbounded curiosity and admiration. It was in this lake that he became an expert swimmer, though on one occasion he nearly lost his life through a momentary lack of self-possession, and punished himself for it afterwards in characteristic Scotch fashion by rowing out into the middle of the lake and diving into deep water again and again, shouting, "Take that!" each time as he did it.

The raptures produced in eleven-year-old John by this sudden transplanting from the North Sea coast of Scotland to this lake and the flowery oak-openings of Wisconsin made an ineffaceable impression and even in retrospect taxed to the utmost his powers of description when he was past three-score and ten. "This sudden plash into pure wildness baptism in Nature's warm heart—how utterly happy it made us!" he writes in his

boyhood reminiscences: "Nature streaming into us, wooingly teaching her wonderful glowing lessons, so unlike the dismal grammar ashes and cinders so long thrashed into us. Here without knowing it we still were at school; every wild lesson a love lesson, not whipped but charmed into us. Oh, that glorious Wisconsin wilderness! Everything new and pure in the very prime of the spring when Nature's pulses were beating highest and mysteriously keeping time with our own! Young hearts, young leaves, flowers, animals, the winds and the streams and the sparkling lake, all wildly, gladly rejoicing together!"

But it was not to be all joy, this wilderness life. The golden mantle of boyish illusions was soon to be lifted from stern realities. For when the serious work of subduing this wilderness into a farm began, John found frequent occasion to remember the prophecy of Grandfather Gilrye as in boyish exuberance John tried to tell him about all the wonderful things he and David were going to see and do in the new world. "Ah, poor laddies, poor laddies," he said in a trembling voice, "you'll find something else ower the sea forbye gold and sugar, birds' nests and freedom fra lessons and schools. You'll find plenty of hard, hard work." Fortunately few forms of work are all toil and drudgery to a pngted lad, and the environment permitted some undesigned good to spring from the iniquity of child labor.

So it happens that the noble part which domestic animals play in the development of an impressionable boy, in this case a future naturalist, is vividly and touchingly reflected in John's recollections of his four-footed fellow laborers on his father's farm. Foremost among them were the oxen which in pioneer days did service on Western farms instead of horses or mules. He shrewdly observes that the experience of working with them enabled him and his brother to know them far better than they should had they been "only trained scientific naturalists." To Muir one ox was not like another, mere animated machines which all reacted alike to any given stimulus or situation. For he had seen one ox learn to smash pumpkins with his head while others awkwardly tried to break into them with their teeth. "We soon reamed," he writes, "that each ox and cow and calf had individual character."

Later, when the oxen were displaced by horses, he remarked the same difference of sagacity and temperament in them. One was intelligent, affectionate, and teachable, the other balky and dull. Readers of his boyhood memoirs will also recall his sympathetic description of Jack the Indian pony; of its fearlessness, playfulness, and gentleness. The farm was evidently the place where he reamed to appreciate what he called the "humanity" of animals and man's kinship with them. This sympathetic attitude made it easy for Muir to observe evidence of animal intelligence not only in his humble companions-in-labor on the farm, but when he came to study animals in their wild state he was prepared to look there also for differences of intelligence; and not alone between various types of animals, but between individuals of the same species. In other words, to him much the most interesting thing about an animal was its mind and the use to which it put the same. On this point he differed widely with John Burroughs who seemed to become a more and more outspoken champion of the mechanistic theory of animal behavior which explains the actions of animals in terms of "blind instinct." "Blind" seemed to be coextensive in meaning with "unreasoning," thus reducing the actions of all individuals of a given species of animal to the particular brand of instinct characteristic of the species. On one occasion when Burroughs and Muir, meeting at the house of a mutual friend in Berkeley, discussed this issue, Muir in the judgment of those present scored heavily against his opponent. And this was due not to his superior conversational and argumentative powers, but to fact-seasoned conclusions matured amid the observations of a lifetime. It was refreshing and amusing to hear him go after the so-called animal psychologists and behaviorists with their "problem boxes," etc., bent on making out, in some cases at least, that animals are nothing but "machines in fur and feathers." On the other hand he had no sympathy with the professional observers of wonders who found it profitable not to distinguish between the imagination of the wild and their own wild imaginations.

Now that so competent and well-informed a naturalist as William T. Hornaday has presented the personal observations of a lifetime in his book *The Minds and Manners of Wild Animals*, and has set forth therein a point of view substantially in accord with that of John Muir, we may expect the mechanistic interpreters of

animal "behavior" to vacate the stage for a time. It ought to be added that Muir as early as 1867 confided to his notebook his belief that one of the greatest hindrances to a fruitful study of the intelligence and individual characteristics of animals was the average human beings insufferable self-conceit; that his egotism magnifies his lordship of creation until he is incapable of seeing that animals "are our earth-loom companions and fellow mortals." To the fact that the lord-of-creation idea has an abused Biblical origin he attributed the fact that the "fearfully good, the orthodox," are the first "to cry 'heresy' on every one whose sympathies reach out a single hair's breadth beyond the boundary epidermis of our own species. Not content with taking all of earth, they also claim the celestial country as the only ones who possess the kind of souls for whom that imponderable empire was planned." To this same effect is an eloquent passage in *The Story of My Boyhood and Youth* where he touchingly describes the death of his favorite horse Nob, over-driven by his father in going to a church meeting. After remarking that "of the many advantages of farm life for boys one of the greatest is the gaining of a real knowledge of animals as fellow mortals," worthy of respect and love, he adds: "Thus godlike sympathy grows and thrives and spreads far beyond the teachings of churches and schools, where too often the mean, blinding, loveless doctrine is taught that animals have neither mind nor soul, have no rights that we are bound to respect, and were made only for man to be petted, spoiled, slaughtered, or enslaved."

That John Muir survived the relentless severity with which his father held him to adult labor when he was a mere boy probably was due less to his physical vitality than to the buoyancy of his temperament. Called at six in the morning in winter-time, he had to begin the usual chores of feeding horses and cattle, fetching water from the spring at the foot of the hill, bringing in wood and sharpening tools—all before breakfast. Immediately afterwards began the heavier work of the day, such as wood-chopping, fencing, fanning wheat, and various other tasks, indoors and out. The only means of warming the house was the kitchen stove, and even in this he was not allowed to kindle a fire before hastening to the chores. With Spartan fortitude he had to squeeze his chilblained feet into wet socks and soggy boots frozen solid. No wonder that in the memoirs of his boyhood he remembered with regret how great heart-cheering loads of oak and hickory were hauled with misguided industry into waste places to rot instead of being laid up for use in a desperately needed large fireplace. It was a very unusual boy who amid this senseless aggravation of the natural hardships of pioneer farm life could find it in his heart "to enjoy the winter beauty—the wonderful radiance of the snow when it was starry with crystals, and the dawns and sunsets and white noons, and the cheery, enlivening company of the brave chickadees and nuthatches."

The summer chores and field labor were different, but not less exacting. The day began earlier and lasted longer. Among detached jottings under the heading of "Farm Work" in one of his notebooks I find the following:

We had to work very hard on the farm in summer, mowing, hoeing, cradling wheat, hauling it to the barns, etc. No rest in the shade of trees on the side of the fields. When tired we dared not even go to the spring for water in the terrible thirst of the muggy dog-days, because the field was in sight of the house and we might be seen. . . . We had to make ourselves sick that we might lay up something against a sick day, as if we could kill time without injuring eternity. The incessant anxiety and strain of some is a well-nigh incurable disease. . . . A stitch in time saves nine, so we take a thousand stitches to-day to save nine tomorrow.

John being the eldest boy, the greater part of the hard work of the farm naturally fell to him. This included the splitting of rails for the zigzag fences, mostly from trees so knotty and cross-grained that the making of a hundred rails a day involved the expenditure of much energy and not a little skill. It was fatiguing work, so much so that his father, after trying rail-splitting with him for a day or two, left it all to John.

A form of labor which he remembered with special aversion was the hoeing of corn before the days of cultivators. Under his father's relentless drive the haying and harvest season bore down hard upon the growing boy. A natural ambition to excel made him vie with the hired men in mowing and cradling, and at the

age of sixteen John was accustomed to lead the line. He was no doubt right in thinking that this very severe labor so far exceeded his strength that it checked his growth. But there was no one in those days to warn him of the dangers of overwork, least of all his father. The latter's unnatural severity, toward his children made so indelible an impression that when John recorded the memories of his boyhood he treated with great frankness an aspect of family life which ordinarily autobiographers veil in silence. But since he had, as will appear later, a humane purpose in exposing to public view this aspect of his early home experience, it is clearly a biographer's duty not to ignore a situation already created, though some might question the filial propriety of introducing it in the first place.

What John describes as "the old Scotch fashion of whipping for every act of disobedience or of simple, playful forgetfulness" was continued by Daniel Muir in the Wisconsin wilderness. Most of the whippings fell upon John and were "outrageously severe, and utterly barren of fun." But in telling about the occasion on which he was to receive a beating for having lost his father's ox-whip by tying it to the dog's tail, John makes no concealment of the fact that he was often a wilful and exasperating boy. For when he had escaped a thrashing because David, commanded to find a switch, had brought an unmanageable burr-oak sapling, he engaged in the same sort of mischief the moment his father was out of sight.

But the whippings, however severe, were less serious in their consequences than the excessive grind of work demanded. "Even when sick," writes John, "we were held to our tasks as long as we could stand. Once in harvest-time I had the mumps and was unable to swallow any food except milk, but this was not allowed to make any difference, while I staggered with weakness and sometimes fell headlong among the sheaves. Only once was I allowed to leave the harvest-field when I was stricken down with pneumonia. I lay gasping for weeks, but the Scotch are hard to kill and I pulled through. No physician was called, for father was an enthusiast and always said and believed that God and hard work were by far the best doctors."

Though more excessively industrious than any of his neighbors, Daniel Muir was by no means peculiar in his addictedness to the vice of over-industry. It was a common failing of settlers from England and Scotland, and John Muir doubtless was right in attributing it to their suddenly satisfied land-hunger and the desire to keep their large farms as neat and well tilled as the little garden patches which they had left behind them overseas. But, whatever the cause, there was no doubt about the frenzied manner in which the Muir household was held to the tasks of the farm. To quote John's memoirs again:

We were all made slaves through the vice of over-industry. . . . It often seemed to me that our fierce, over-industrious way of getting the grain from the ground was too closely connected with grave-digging. The staff of life, naturally beautiful, often-times suggested the grave-digger's spade. Men and boys, and in those days even women and girls, were cut down while cutting the wheat. The fat folk grew lean and the lean leaner, while the rosy cheeks brought from Scotland and other cool countries across the sea faded to yellow like the wheat.... We were called in the morning at four o'clock and seldom got to bed before nine, making a broiling, seething day seventeen hours long loaded with heavy work, while I was only a small stunted boy; and a few years later my brothers David and Daniel and my older sisters had to endure about as much as I did. In the harvest dog-days and dog-nights and dog-mornings; when we arose from our clammy beds, our cotton shirts clung to our backs as wet with sweat as the bathing-suits of swimmers, and remained so all the long, sweltering days. The losses sustained by John, both in bodily vigor and in intellectual growth, under the severe farm regime of his father were the subject of frequent reflection by him in afteryears. "Pondering on the number who have died and crumbled into dust," he writes in one of his journals, "the farmer may say that he is farming the dust of his ancestors and compelling these ancestors to take refuge in turnips and apples.... We might live free, rich, comfortable lives just as well as not. Yet how hard most people work for mere dust and ashes and care, taking no thought of growing in knowledge and grace, never having time to get in sight of their vast ignorance."

This wearing labor of cleaning and setting in order the Fountain Lake farm continued uninterruptedly for eight years. By that time it had been fully brought under the plough, fenced and provided with stables for cattle and horses. The original rude burr-oak shanty had been replaced with a more roomy frame house. Its former site on the hill overlooking the lake now is marked only by a depression and by a few stones that may have formed part of the foundation. In 1856 Sarah Muir was married to David Galloway, who bought the Fountain Lake farm [It has It has changed ownership several times since then and been subdivided. David Galloway sold it to James Whitehead and he in turn to Samuel Ennis. In 1920 the particular tract on which the Muir house stood I was owned by Howard McGwinn.] from his father-in-law. Thus Sarah succeeded her mother as mistress of the Fountain Lake home, where a warm welcome always awaited John when he returned from his wanderings.

The elder Muir, after relinquishing the farm to his son-in-law, bought half a section of uncleared land about four miles southeast of the original homestead. This new farm was situated twelve and a half miles northeast of Portage and four miles from the Fox River. The summit of a gentle slope covered with an open stand of fine hickory trees was selected as a site for a new house. Its erection in 1857 marked the beginning of another period of hard and exhausting labor. John at this time was nineteen years old and somewhat stunted in his growth, but he prided himself on his physical hardihood and his ability to endure all that was put upon him.

The Hickory Hill house was a simple two-story frame structure, which is still in existence, though veneered with brick and shorn of a lean-to shown in Muir's sketch published in *The Story of My Boyhood and Youth*. It is surrounded by wide-spreading box elders, willows, and apple trees which are said to date from the days of the Muirs. The local tradition is rendered plausible by the age and size of the trees. Especially striking among them is a willow near the well around which by dint of sober necessity the life of the farm revolved. For unlike the first farm, there was on it "no spring or stream or meadow or lake." Yet water was indispensable and to John was assigned the task of finding it.

Long before he struck water by sinking a ninety-foot shaft he had entered experience of those "who passing through the valley of weeping make it a well." After the first ten feet he struck a stratum of fine-grained stone through which he laboriously chipped his way for eighty feet with mason's chisels. Day after day for months he chipped away from dawn until dark. His father, apparently entirely ignorant of the dangers of choke-damp, would lower him by means of a bucket in the morning and draw him up again with the loosened chips at noon. Immediately after the noonday meal he was lowered again and left until night. One morning, as he was putting some left-over chips into the bucket with which he had just been lowered, he began to sway and sink under the effect of carbonic-acid gas that had settled at the bottom of the shaft during the night. His father, alarmed by his silence, and finding that John was not in the bucket when he heard his feeble-voiced request to be taken out, roused him from his stupor sufficiently by his shouted commands to make him get into the bucket. He was unconscious and all but suffocated when he reached the surface. But after a few days of rest and recovery he was lowered again, with some precautions against choke-damp, to chip down another ten feet, when water was struck. That was more than sixty years ago and ever since then the well has furnished an adequate supply of water for the farm. But one shudders to reflect how much of the imperishable wealth of the human spirit might have been sunk forever in that Wisconsin well.

In the month of August, 1858, during the Hickory Hill farm period, there occurred an event which made a deep impression upon John's memory. It was the death of a poor feeble-minded man who on account of his physical frailty, and some engaging social accomplishments, was both pitied and beloved among the neighbors. Many deemed him an entertaining singer of folk-songs and he had a pngt of impromptu rhyming. It was generally reported and believed in the neighborhood that his brother, a blacksmith preacher with whom he was making his home, often beat him and forced him to work beyond his strength, and that one morning he pitched forward and died on a pile of stovewood which he was chopping.

When fifty-five years later Muir was writing the story of his boyhood, the incident was still vivid in his memory and he gave a peculiarly moving account of it such as he only could write when his feelings were

deeply stirred. Appearing first in the *Atlantic* it fell under the eye of the blacksmith preacher's son, a boyhood friend of John's of whom he had lost all trace. While no names were given he recognized in the person pilloried by Muir none other than his own father, and wrote John a dignified, friendly letter, pointing out certain mistakes and the fact that it conveyed an erroneous impression concerning his father's character. "I desire in conclusion," said the writer, "to emphasize the respect and admiration I have always entertained for you, beginning with the day we met where the road from your Father's place intersected with what was known as the 'River road,' following the holidays of '63 and '64, when in company we walked twelve miles to Portage and I listened to your conversation, your life and experience at the University to which you were returning. The advice and counsel given caused you to enter into and become a potent factor in my life. Though you did not know it, and have forgotten the circumstances with me it remains an abiding memory and in the years that followed proved a stimulus and incentive to untiring effort. I mention this to assure you that my esteem and faith in you remain unchanged, and that you may also know father was not the blot upon the landscape of that glorious wilderness you believe and have pictured him to be." Muir's reply is of unusual interest and biographical value, because it reveals ruling motives of his life and furnishes the reason why he disregarded customary reserve in presenting the disciplinary side of his boyhood training.

Martinez, California February 13th, 1913

Dear Friend:

Your painful letter came to me in my lonely library writing den while hard at work on an Alaska book which should have been written a score of years ago. Seldom, if ever, have I received a letter that has given me so much mingled pleasure and pain—pleasure in hearing from a friend of my boyhood, and learning from you, the best and final authority, that the reports on the use of the Solomonic rod in your father's household, gleaned half a century ago from neighbors, including my sisters, brothers, and brothers-in-law were to say the least, grossly exaggerated; and pain from having been led to write by my lifelong hatred of cruelty that which has given you pain.

I never did intentional injustice to any human being or animal, and I have directed my publishers to cancel all that has so grievously hurt you. For a full understanding of the matter I wish to inform you that the four articles that have appeared in the November, December, January, and February numbers of the Atlantic were taken from the manuscript of a book entitled, My Boyhood and Youth, being the first volume of my autobiography, soon to be published. I corrected the last of the galley proofs several weeks ago and wrote the publishers that they need not send me the page proofs since their proof-readers were so careful and able. I have not seen any of them, and am unable to tell how far the work has progressed. Possibly part or all of this first volume may be stereotyped, or even printed. If not printed, the unfortunate page will be cut out of the plate at whatever cost. [His correspondent disclaimed all desire to have the offending account omitted, so it has been allowed to stand.] And at the worst, only a comparatively small first edition may have been printed, and the part that has caused so much trouble will not appear in the ten or twenty following editions. I have good reason, as doubtless you know to hate the habit of child-beating, having seen and felt its effects in some of their worst form in my father's house; and all my life I have spoken against the habit in season and out of season. But you make a great mistake in taking what I have written as a judgment or history of your father's character, as I hope to show in another volume. You doubtless know that character is made up of many particulars, and that it is grossly unfair to try the whole general character of any man by one particular, however striking and influential it may be. I was far from doing so in sketching the evil of child-beating from which we both have so bitterly suffered.

When the rod is falling on the flesh of a child, and, what may oftentimes be worse, heartbreaking scolding falling on its tender little heart, it makes the whole family seem far from the Kingdom of Heaven. In all the world I know of nothing pathetic and deplorable than a broken-hearted child, sobbing itself to sleep after being unjustly punished by a truly pious and conscientious misguided parent. Compare this Solomonic

treatment with Christ's. King Solomon has much to answer for in this particular, though I suppose he may in some measure be excused by the trying, irritating size of his family.

Your father, like my own, was, I devoutly believe, a sincere Christian, abounding in noble qualities, preaching the Gospel without money or price while working hard for a living, clearing land, blacksmithing, able for anything, and from youth to death never abating one jot his glorious foundational religious enthusiasm. I revere his memory with that of my father and the New England Puritans—types of the best American pioneers whose unwavering faith in God's eternal righteousness forms the basis of our country's greatness.

Come and see me, and let us become better acquainted after all these eventful years.... You must now be nearing three score and ten. I will be seventy-five in a few months, and in the sundown of life we turn fondly back to the friends of the Auld-lang-syne. So I am now doing, and am wishing that you may be assured that I am,

Faithfully your friend John Muir

In accordance with a fairly common custom among God-fearing pioneers of earlier days morning and evening family worship was regularly observed in the Muir household. But how easily morning prayers may become a devastating substitute for a day of real religion was apparently exemplified glaringly in both these households. Under such circumstances children often react sharply, not only against the external forms, but also against the substance of religion. The religious convictions of a shallower nature than John Muir's would never have survived the bigotry and rigor of his father's training. The latter, soon after moving to the Hickory Hill farm. conceived the notion of devoting all his time to Bible study, leaving to John and his brother David all the heavy work of the farm. John in the meantime, after much brooding, had evolved the plan of a clock which, when attached to his bed, would set him on his feet at any desired time in the morning. Having thought it out clearly he employed his meager spare time, and any odd moments he could snatch from work, to carve and whittle this novel clock in wood. To keep it hid from his father he concealed it in a spare bedroom upstairs. One day, however, his father accidentally discovered it and the bad news was promptly conveyed to John by one of his sisters. He had good season to fear that his father would immediately commit his machine to the fire, for the employment of even his scant spare time upon such tasks was severely disapproved by his father. But nothing happened until some days later when his father introduced the subject at dinner time. "John," he inquired, "what is that thing you are making upstairs?" Meal-times to Daniel Muir were sacramental occasions when no light conversation was permitted, and where every one was expected to cultivate an attitude of mind more befitting the Lord's supper than a family meal. Neither the time nor the subject boded any good for John, so in confusion and despair he replied that he did not know what to call it. But after some heckling John suggested that it might be called "an early-rising machine."

To appreciate the effect of this remark upon the elder Muir we must remind the reader that during the preceding winter John had been getting up at one o'clock to gain time for reading and for the construction of a miniature self-setting sawmill. His father had involuntarily given occasion for this extravagantly early rising, for one evening when ordering John to bed at eight o'clock as usual, as he was lingering a few minutes in the kitchen to read church history, he added conciliatingly that if he was set on reading he might get up in the morning as early as he liked. John rose at one o'clock that very night, feverishly and pathetically elated over the possession of five hours of time that were his own. The cold would not let him read, so during the winter he invested his new "time-wealth" in contriving and making all kinds of mechanical inventions. His workshop was in the cellar underneath his father's bedroom and he must often have disturbed his sleep. But having given his word he stood to it with Scotch fortitude although he remonstrated against the unreasonable use which John was making of the permission granted. It does not seem to have occurred to him that a boy so eager to learn was entitled to some margin of leisure for self improvement during normal working hours.

Such in brief was the background of the occasion on which Daniel Muir the sacramental silence of the noonday meal with an inquiry about the strange contrivance John was whittling. To learn that it "might be called an early-rising machine" was almost too much even for his gravity. But he quickly recovered his usual solemnity of face and voice and asked in a stern tone, "Do you not think it very wrong to waste your time on such nonsense?" John meekly replied that he did not think he was doing any wrong. "Well," replied his father, "I assure you I do; and if you were only half as zealous the study of religion as you are in contriving and whittling these useless, nonsensical things, it would be infinitely better for you. I want you to be like Paul, who said that he desired to know nothing among men but Christ and Him crucified.

Such attempts to set religion at variance with the boy's innocent and commendable desire to develop by his own efforts his manual skill and mechanical ingenuity would have broken the spirit of most lads similarly situated. It is a typical instance of how religiousness, warped out of all semblance to real religion by bigotry and ignorance, may do grievous harm to its victims. But though he experienced a sense of injury and rebellion at the time, he lacked the knowledge and maturity to unravel the complex of fictitious dilemmas which his father propounded. Fortunately, the difficulties thrown in his way only increased his tenacity of purpose and in later years he saw the way out clearly enough. "Strange to say," he wrote in *The Story of My Boyhood and Youth*, "father carefully taught us to consider ourselves very poor worms of the dust, conceived in sin, etc., and devoutly believed that quenching every spark of pride and self-confidence was a sacred duty, without realizing that in so doing he might at the same time be quenching everything else."

Luckily, as all his readers know, he escaped the type of reaction which under like circumstances has carried other strong characters into lifelong antagonism to religion. It had no such effect upon John. Indeed, one letter at least, which survives from this period of his boyhood, shows that he did his best to be an Apostle Paul to his own youthful generation, writing long, appealing letters to other boys of the vicinity, urging them to make a "decision for Christ." Their own letters are laden with phrases about the glories of heaven, the shortness and uncertainty of life, the appalling length of eternity, and the importance of being prepared for the fearfully searching inquiries of the day of judgment. Much of this is no doubt a part of the conventional religiousness of the time, fanned into flame seasonally by camp meetings and traveling evangelists. It must, however, be reckoned among the actions and reactions that went into the making of John Muir.

The invention and construction of his first wooden clock was, as we have seen, the outgrowth, in part, of a desire to secure more time for reading. "You say in your letter," writes a friend in March, 1858, "that time to stow wisdom-bins is precious." So it was for a boy who by his own testimony, had to consider himself fortunate if he got five minutes' reading after supper before his father would notice the light and order him to bed. "Night after night," he writes, "I tried to steal minutes. . . and how keenly precious those minutes were, few can nowadays know. Father failed perhaps two or three times in a whole winter to notice my light for nearly ten minutes, magnificent golden blocks of time, long to be remembered like holidays or geological periods."

In this connection the following entry, taken from one of his notebooks, tells more between the lines than in them, being a reflection of the remembered intensity with which the lad pursued his aims. "Many try to make up time," he writes, "by wringing the slumber out of their pores. Not so when I was a boy, springing out of bed at one o'clock in the morning, wide-awake, without the shadow of a yawn. no sleep left in a finale fiber of me humane and bright as a tiger springing on its prey."

John mentions his fifteenth year as the probable time when he began to relish good literature with enthusiasm. Certain it is that about the time of the family's removal to Hickory Hill farm this enthusiasm was a steady flame. One can only guess at the length of the strides he might have made could he have had the advantages of a first-class school. But such an opportunity was not to fall to his lot. Between the time of his departure from Scotland and the year in which he entered the University of Wisconsin he obtained only two months of additional schooling. Where this was received is uncertain, but it probably was in the old Fox River School

No. 5 which then stood in a patch of dense forest not far from the first farm. In an undated letter of the fifties, evidently from a schoolmate, the writer expresses the wish that they might meet again "at the schoolhouse and speak pieces and sing our old 'Press Onward' song as we used to last winter." The same correspondent wonders what has become of the teacher, whether he still occasionally thinks of his pupils and the merry times they used to have. "I wish we might meet him again in the old schoolhouse and hear him call us to order and listen to some of his wonderful speeches."

Among John's papers of this period is the manuscript of a juvenile poem of some length entitled "The Old Log Schoolhouse," and a memorandum, apparently of the same date as the poem, declares that it was "written in 1860." Since that was the year in which he left home, it is quite possible that it refers to the above-mentioned school. Of more interest than the local color in these lines of blank verse is the young author's ability to detach himself from his environment and to indulge in seriocomic criticism of its defects and crudities. First comes a word-picture of the school, as follows:

Old log schoolhouse, warped, and gnarled, and leaky; Opening thy crooked ribs and seams and knots To rain and snow and all the winds of heaven To keep thee sweet and healthy! Many a storm Hath played wild music beating on roof and gable, Loosely boarded, telling all the weather, As if some wondrous instrument thou wert, Speaking aloud, through all times and seasons, Thy parts of speech so strangely varied, mixing With stranger speech within, called English grammar. While yet the trunks of which thy walls are built Stood on the hills with outspread leaves and branches, A shelter, then, thou wert for gladsome birds, That made sweet music ring about their nests. And still a noisy nest thou art and shelter For callow, birdlike children soft and downy, Logs woven about them, piled and jointed, Crossed like sticks and straws, and roughly plastered With clay and mud like nests of mason robins.

An enumeration of what the old school has heard within its walls includes some humorous arithmetic and the hatchet of George Washington that

Hath hacked small readers voices and the nerves Of teachers, in tones strident, rough, and rusty, In lessons never-ending, never-mending With grammar, too, old schoolhouse, thou hast suffered, While Plato, Milton, Shakespeare, have been murdered, Torn limb from limb in analytic puzzles And wondrous parsing, passing comprehension, The poetry and meaning blown to atoms sacrifices in the glorious cause Of higher all-embracing education.

"Players, preachers, showmen, singers, sinners" have all taken their-turn in shaking the school's old oaken ribs, but never have its walls rung with stranger sounds than Class-meeting converts' speeches; low, tearful, Sobbing promises to walk the narrow way Henceforward, and prayers for light and strength, Conscious of weakness and they know not what. Not so the brawny fighting backwoods brother. With jaw advanced, and bulging muscles rigid, He shouts and stamps and makes thy old logs rattle With rough defiance, calling 'Hither come Ye men or devils, come all together, Ye who would bar the narrow way to heaven. Armed for the fight with Christ, my Captain, leading, I fear no foe earthborn or from the pit. Come on! come on!' as though he were addressing Some foe in sight, yet maybe semi-conscious The foe was far away, and like to stay far.

Every ism and doxy hath been sounded On every key within thy patient walls Old schoolhouse; blasts of strong revival, Enough to blow thy dovetailed logs asunder, While souls were being saved, and pulled, and twisted All out of shape, till they no longer fitted The frightened bodies that to each belonged. Playing at judgment day in lightsome humor, Calling, 'Ho! all ye saints that love the Lord, Rise up now quickly and take these benches On the right side there. And now ve sinners Cross over to the left, and stand in row, And be ye separate as sheep and goats That I may count ye, and get the true statistics To give the Master and myself some notion How fare these flocks supernal and infernal In this section of his backwoods pastures.' Then halting suddenly to blow his nose And spit, and bite some fresh tobacco, He waves his hand and cries, 'Now all be seated, And mix up as ye will, but pray remember When all your hardened cases come to trial In the upper court, I fairly warned ye To settle here with me as Heaven's agent, To get a ticket by the gospel route, The only route through our denomination."

In conclusion the young poet foresees the time when the schoolhouse will have fallen under the doom of "dust to dust. . . perchance to sift and drift in vapor, far and wide o'er hill and dale and grassy plain, to take new forms of beauty." And on this passage down the ages "with Nature" he bids it a fond farewell.

To the discerning reader these excerpts will reveal at once the fact that he was saturated with the rhythm of Miltonic verse, that he was developing his critical faculty and his sense of word values, and that he had achieved a considerable degree of mental independence in a strongly repressive environment.

These gains had obviously not been accomplished by the only two months of additional schooling which he received between the ages of eleven and twenty-two, for he had during this period been wholly dependent upon his own efforts for his further education. What ways and means did he employ?

In his memoirs Muir has told how in one summer he worked through a higher arithmetic without assistance by using the short intervals of time between the noonday meal and the afternoon start for the fields. Algebra, geometry, and trigonometry were taken up in the same manner. Even the shorthand of that day excited his practical interest. But a broad training in literature and science was more difficult to secure in a backwoods farming community because of the lack of suitable books. Such raw materials of English literature as the neighborhood afforded were faithfully used by him. Through acquaintanceship and correspondence with boys on neighboring farms he arranged for the exchange of such books as their homes afforded. Reading became a consuming passion with him, and he seems to have had a marked preference for poetry of which he was accustomed to learn favorite passages by heart, rolling them like sweet morsels under his tongue. Nor were the practical aspects of such study neglected, for in extant correspondence with his young friends they acknowledge the receipt of rhymed letters and poems. Interestingly enough one of the poems was an elegy on the death of an enormous tree whose felling on a neighboring farm had been described to him by one of his correspondents as a very laborious task.

John has named the age of fifteen as the time when the realm of poetry began to open to him like the dawn of a glorious day, and to the same period of his youthful development he assigns the "great and sudden discovery that the poetry of the Bible, Shakespeare, and Milton" is a source of "inspiring, exhilarating, uplifting pleasure." When the book supply of the neighborhood was exhausted he had to find other ways of meeting his intellectual wants. Farm products in the backwoods were mostly taken in trade and money was scarce. But by careful saving of pennies and small sums which John secured in one way or another he managed to buy such longed-for books as were not ruled out by the rigid censorship of his all-Bible father. In the course of a few years he was able to count among his treasures "parts of Shakespeare's, Milton's, Cowper's, Henry Kirk White's, Campbell's, and Akenside's works, and quite a number of others seldom read nowadays." Wood's *Natural History*, and the once famous *Ancient History* of the French historian, Charles Rollin, seem also to have made memorable additions to the furniture of his mind.

Included in the slender stock of books accessible to him among the neighbors were the novels of Sir Walter Scott. But these he had to read in secret because his father strictly forbade the reading of novels as a sinful indulgence. The latter was, however, induced to buy Josephus's *Wars of the Jews* and d'Aubigne's *History of the Reformation*, and John vainly did his best to get him to buy Plutarch's *Lives*, until he contrived to circumvent paternal prejudices by suggesting that the old Greek writer might throw valuable light upon the food question. For Daniel Muir had taken up vegetarianism and was seeking to convince his family that the Creator never intended man to eat flesh. It mattered little to John that the old pagan could render no decision on the subject of man's proper diet. The main point, as he says, was that "so at last we gained our glorious Plutarch."

John's father, as indicated in the opening chapter, was a type of the old traditionalist for whom the Bible's authoritativeness was all of one piece and, like many another biblical literalist, he became an easy victim of his own theory. Blinded by his presuppositions, his Bible study plunged him only into deeper mental confusion. John, possessing a thorough knowledge of the Bible himself, was quick to take advantage of the weakness of his father's bibliolatry After the Plutarch had been secured, he went to the rescue of his mother against his father's vegetarian fad by pointing out that when the Lord commanded the ravens to feed Elijah in hiding by the brook Cherith "the ravens," according to the Scriptures, "brought him bread and flesh in the morning, and bread and flesh in the evening." That ended the discussion. Daniel Muir acknowledged himself mistaken, for the Bible was his final arbiter in everything, and since the ravens were divinely commanded bring flesh to the prophet it could not be otherwise than legitimate food.

A similar argument ensued when John was caught reading Thomas Dick's The Christian Philosopher. This book, by a Scotch contemporary written in a popular and engaging style, was very influential in its time. The aim of the author, in his own words, was "to illustrate the harmony which subsists between the system of nature and the system of revelation, and to show that the manifestations of God in the material universe ought to be blended with view of the facts and doctrines recorded in the volume of inspiration." John, to his great disappointment, found that the word "Christian" in the title was not sufficient to overcome in his father's mind the suspicions aroused by the word "Philosopher." Timothy, he reminded John, had been warned to avoid "oppositions of science falsely so called," and the Colossians had been warned, "Beware lest any man spoil you through philosophy and vain deceit." John ventured to defend philosophy and science on the ground of their practical usefulness, but his father insisted that the Bible contained the science and philosophy needed for the conduct of life. "But your spectacles," interposed John, "without which you cannot read the Bible, cannot be made without some knowledge of the science of optics." "Oh!" replied his father, "there will always be plenty of worldly people to make spectacles." "Here, again, John found an opportunity to score on his father's literalism by quoting from Jeremiah a passage referring to the time when "all shall know the Lord from the least of them to the greatest of them," "and then," he asked, "who will make the spectacles?" But this time his l" refused to acknowledge his discomfiture and ordered him to return the book to its owner. Daniel Muir remained inflexibly hostile to anything that savored of a "harmony" or compromise between "nature" and "revelation" such as this book offered. John's mind, however, was beginning to trend in precisely that direction, and while for the time being he respected his father's ban of the book, he also records the fact that he "managed to read it later."

An estimate of the influence and importance of the farm period upon Muir's future career would not be complete without considering what he did cellar workshop. If the propriety of linking his love of reading with his love of "whittling" were not already sufficiently justified by the practical use to which he put his wooden clock, his own title "Knowledge and Inventions" for chapter seven of *The Story of My Boyhood and Youth* would satisfy the need of further warrant for so doing. By means of the early-rising attachment, which he perfected more and more, his clocks not only measured but created time and opportunity for him, so that knowledge and inventions were jointly furthered by the skill of his hands.

The invention of the self-setting sawmill and the wooden clock was speedily followed by other mechanical contrivances. One of these was a hickory clock shaped like a scythe to symbolize the scythe of Father Time. the handle bore the legend "All flesh is grass," and the pendulum in the form of a bunch of arrows, suggested the flight of time. This clock excited much admiration both at home and among the neighbors. It indicated the days of the week and the month as well as the diurnal time, and was still capably performing its functions fifty years later.

The success of this contrivance encouraged him to invent a still more ambitious clock, one with four dials, like a town clock, designed to be placed on the peak of the barn roof so that it could be read from the fields. But before it was finished his father stopped him, interposing the objection that it would attract too many people to the barn. Neither would he for the same reason allow him to put it in the top of an oak tree near the house where the two-second fourteen-foot pendulum would have had room to swing. He was, therefore, regretfully compelled to lay away the work uncompleted.

Another invention was a large thermometer with a dial on which the expansion and contraction of an iron rod, multiplied about thirty-two thousand times by a series of levers, was indicated by means of a hand operating against a counter-weight. So sensitive was it to variations of temperature that in cold weather the dial hand would move upon the approach of a person. This instrument was regarded as a great wonder by all the neighbors and extant letters show that a Mr. Varnel was seriously thinking of acquiring the right to manufacture it commercially.

While all the world now knows John Muir as a naturalist, his gifts and capacities in that sphere were as yet unrevealed and unrecognized. It was his skill and ingenuity as an inventor that focused the eyes and the interest of his rural friends upon him. They encouraged him to think that he would have no difficulty in securing employment in some machine shop, especially if he took some of his inventions to the Wisconsin State Agricultural Fair. The suggestion appealed to him, and when the Fair was convened in Madison, in the autumn of 1860, he reluctantly prepared to leave the parental roof. The diffident, bashful, home-loving youth, who now stood hesitatingly at the opening of a fateful new chapter of his life, bears little resemblance to the dauntless explorer and world traveler which he was ultimately destined to become.

Chapter III As a Questioner at the Tree of Knowledge

When John Muir left home in September, 1860, the political outlook of the country was far from hopeful. The speeches and debates of Lincoln and Douglas had made clear to the average citizen that some decisive action must soon be taken with respect to slavery; that, as Lincoln had said in 1858, "either the opponents of slavery will arrest the further spread of it, and place it where the public mind shall rest in the belief that it is in course of ultimate extinction; or its advocates will push it forward, till it shall become alike lawful in all the States, old as well as new—North as well as South." In May, 1860, Lincoln was nominated for the Presidency by the Republican National Convention assembled in Chicago, and was elected by an overwhelming popular vote the following November. A few weeks earlier Governor W.H.Gist of South Carolina had written a letter to each of the cotton States inviting their cooperation in case South Carolina should resolve to secede. The replies were favorable, and before Lincoln was inaugurated in March, 1861, at least seven Southern States had adopted ordinances of secession.

Such were conditions in the world beyond Hickory Hill farm when John Muir went forth with scrip and purse to find his fortune. His purse contained nothing but Grandfather Gilrye's farewell pngt of a gold sovereign and a few dollars which he had earned by raising grain on a patch of abandoned ground. His scrip was the strangest with which a lad ever went forth from the parental roof—two large clocks whittled out of wood, and a thermometer made out of an old washboard, all tied together in a bundle for convenient transportation on his back. His brother David drove him to Pardeeville, a place he had never seen, though only nine miles distant from his home, and left him with his queer bundle on the station platform. For an account of the sensation which he immediately created with it in the little country town, and afterwards on the train and in Madison, the reader is referred to the vivid closing chapter of *The Story of My Boyhood and Youth*.

Experience promptly disproved his father's prediction that once out in the world he would soon meet with severer taskmasters than he had known in the person of his father. On the contrary, he met with marked kindness wherever he went, a fact which warrants the inference that he possessed engaging personal qualities. As his friends had anticipated, the originality and novelty of Muir's inventions immediately opened all doors for him at the fair of the State Agricultural Society in Madison. Three days before it opened a local newspaper, under the caption of "An Ingenious Whittler," commented on his clocks and predicted that few articles in the exhibit would attract as much attention as these products of Mr. Muir's ingenuity.

During the preceding year the Society had held its meeting and fair at Milwaukee and Lincoln delivered on this occasion an address in which he set forth his conception of industrial education among a free people. In the phrase "free labor" he embodied his idea of contrast with the time when educated people did not value manual skill because they scorned to perform manual labor, regarding it as the lot of the uneducated. This divorce between education and creative toil, he maintained, cannot be approved in a democracy. Curiously enough the Scotch lad who the following year was to come under the notice of the same Agricultural Society through products of his manual skill might almost have stood as a concrete illustration of the following

passage in Lincoln's address. "Free labor," he said, "argues that as the Author of man makes every individual with one head and one pair of hands, it was probably intended that heads and hands should cooperate as friends, and that that particular head should direct and control that pair of hands. As each man has one mouth to be fed and one pair of hands to furnish food, it was probably intended that that particular pair of hands should feed that particular mouth, that each head is the natural guardian, director and protector of the hands and mouth inseparably connected with it: and that being so, every head should be cultivated and improved by whatever will add to its capacity for performing its charge. In one word, free labor insists on universal education."

John had found a novel way of making his hands serve his head educationally and vice versa. His exhibition of the educational use to which he had been accustomed to put his clocks by harnessing them to his bed brought him the acquaintanceship of Mrs. Jeanne C. Carr, wife of Professor Ezra Slocum Carr, then Professor of Natural Science and of Chemistry at the University of Wisconsin. She was a native of Vermont, an uncommonly pngted woman, and passionately devoted to the study of plants. The Secretary of the State Agricultural Society, desiring to secure a premium for Muir's inventions, asked Mrs. Carr to report them to the proper committee, since they were not easy to classify under the Society's specifications. She, therefore, accompanied the Secretary to a part of the grounds where John Muir was engaged in exhibiting a practicable cooperative relation between brains and beds. An improvised bedstead, covered with a few blankets, was mysteriously connected with a home-made wooden clock. The latter, when set for a desired rising time, would tilt up the bed and set the sleeper on his feet upon the footboard. To aid him in his demonstrations Muir had secured the enthusiastic assistance of two small boys, one of them the son of James Davie Butler, Professor of Greek in the University of Wisconsin, and the other a son of Mrs. Carr. The lads pretended to be asleep until the contrivance set them on their feet amid the cheers of the spectators who were attracted quite as much by the young inventor's artless and humorously enthusiastic explanations as by the novelty of the mechanism. When some time later Professor Carr reported at home Muir's attendance upon his lectures at the University the two lads, hoping for a course of jack-knife studies, eagerly invited their ingenious friend to their respective homes where he became a frequent and much appreciated guest.

The manner in which Muir became a student at the University of Wisconsin a few months after the close of the fair need not be retold here, since he has done it himself in his published memoirs. The intervening months were spent at Prairie du Chien whither he went at the invitation of a Mr. Wirad who offered him employment in his machine-shop. The opportunity proved a disappointment, though his intercourse with the Pelton family at the Mondell House, where he gave service for his board, became the starting-point of a lifelong friendship, not without profit to the art of letters as will appear later. In short, John was not to win success at a canter. This was impressed upon him even during the first exciting weeks in Madison. A youth whose father had refused to promise assistance in need, and whose paltry hoard of savings was soon spent, had need of all his wits. "A body has an extraordinary amount of longfaced sober scheming and thought to get butter and bread," he writes, in a nostalgic letter to his sister Sarah before the close of the Fair. "Practice economy in all that you do."

"See that all that you do is founded upon Scripture," was the response he got from his father—surely a futile admonition to a penniless, struggling, homesick lad a month after he has left home! "The folks think it funny that you never date your letters, nor write your name at the end," complains his brother David, in allusion to a habit which John was long in outgrowing.

In January 1861, his mother acknowledges a letter from Madison, expresses surprise that he has left Prairie du Chien, and desires to know what he wants to study. She is still further surprised when a month later she learns that he is "batching at the University." She hopes his health, which has not been good lately, will not suffer under the new mode of living. He is having a hard time and she thinks his father will assist him a little, but does not know when. Meanwhile he must not be discouraged but make the best of his circumstances. Two months later his father does send him ten dollars with the admonition to be temperate, to love God more than

making machines, and not to forget the poor destitute heathen! John, meanwhile, had no choice but to be temperate, for he occasionally had to cut his expenses for food to fifty cents a week. Daniel Muir's strangely perverted piety was equal to four "protracted meetings" a week and liberal gifts of money to vague and distant causes, while his own son was starving to obtain an education. "Let me know," he wrote, in sending the ten dollars, "when you are in great distress and I will try what I can do." The paternal letters are affectionate in tone at the beginning and the end, but this does not disguise the singular and baffling stolidity with which he holds out to John a doubtful possibility of assistance when his troubles shall have assumed the proportions of really great distress. With religious exhortation he was liberal enough, for practically every letter, from the first to the last, is a farrago of pious admonition.

When Muir came to the University of Wisconsin there was attached to the institution a preparatory department that served the purpose of a modern accredited high school. John began his studies in this department, but his proficiency and maturity were such that he was admitted to the Freshman class in a few weeks. After a summer of farm work at home he returned to Madison in the autumn of that year, occupying again his old room in North Hall. The expenses of tuition, books, and board, though extremely reasonable when judged by present standards, speedily reduced him to financial straits again, and he decided to earn some money by teaching a country school, a makeshift to which many students resorted, alternating their terms of study with terms of school-teaching. John, however, did not wish to interrupt his studies, so he arranged to carry forward his University studies by night work during the spring term of 1862. A fellow student of the previous year, Harvey Reid, who had to discontinue his University work on account of similar difficulties, applauded his decision to teach. "Not only will it be of benefit to yourself," he wrote, "in giving you a thorough review of the common English branches, but the profession of teaching needs your kindness of heart, depth of principle, and courage in the right, to aid in making the youth of our country what a free people ought to be." The following letter exhibits him in his new role as teacher and "district school philosopher":

To Mr. and Mrs. David M. Galloway

McKeeley's District, Oak Hall, Wisconsin February 9th, 1862

Dear Sarah and David

I got your letter a good long while ago, but I have been so busy I have hardly known where I was. Mother wrote me that you were all pretty well. I am well as usual; the blessings attending district school-teaching do not seem to yield the injurious consequences which I had anticipated. The Monday morning that I commenced I did not know where to look, nor what to say, nor what to do, and I'm sure I looked bashful as any maid. A mud-turtle upside down on a velvet sofa was as much at home. I heard a scholar declare that the teacher didn't seem to know bran, but all moves with regularity and ease now.

I couldn't get my clocks out with me at first, and, as I had not a watch, I set to work and made a clock to keep time until I had an opportunity of getting my other one from Madison. It cost about two hours' work and kept time by water passing in a fine jet through a three cent piece. I have a big wheel set on the wall which tells the different classes when and how long to recite, and a machine, too, for making me a fire in the morning at any hour I please, so that when I go to the old log schoolhouse these cold biting mornings, I find everything warmed and a good fire. I sometimes think of a "fixin" to box the boys' ears, for at first the cry of "He don't half whip," came loud and angrily from all parts of my parish, and, indeed, I did think it an awful thing to skelp the little chaps, even though so many did give proofs in rich abundance at times of being mischief to the end of the toes. My voice would shake for hours after each hazel application. But now they cause precious little agitation or compunction of soul. My scholars, however, nearly all mean to behave themselves. They are neither good nor bad, certainly not such children as Pollock speaks of, so good and guileless as to seem "made entire of beams of angels' eyes."

Sarah, how would you like to have a new home every five or six days? I often wish I could come home among you all a day or two, but, by the bye, you told Mrs. Parkins that you were coming down some day. I hope you will. The sleighing is good now. Ask for Oak Hall, which is about ten miles from Madison, south, then ask for McKeeley's district, or if you don't wish to come to school I will be in Madison any day you set. You had better come to school, though, and I will give you a lecture. I lecture every Saturday evening on Chemistry or Natural Philosophy, sometimes to sixty or seventy. You know it does not require much sapience to be a district school philosopher. Dave hasn't visited my school, nor I his. But I saw him once, and he said he was infinitely happy among his generous Dutch. He has singing schools, and sabbath schools, and writing schools. I hope Maggie and John are happy, and the wee body. May you all be always blest. Good-bye.

John Muir

His term of school-teaching came to an end early in March and a sheaf of letters acknowledging gifts and expressing affectionate appreciation of the training received survive to tell of the deep impression he made upon his pupils. He now devoted his entire time to his university work, improvised a chemical laboratory in his room in North Hall, and continued to indulge his inventive proclivities. Muir's room, in fact, speedily became a show place, a museum, to which both professors and students were accustomed to bring visitors, particularly on Saturdays and Sundays.

One delicate bit of mechanism that especially attracted the attention and admiration of Mrs. Carr was an apparatus for registering the growth of an ascending plant stem during each of the twenty-four hours. The plant he had selected for this purpose was a Madeira Vine (*Boussingaultia baselloides*) which was growing luxuriantly in his sunniest window. A fine needle threaded with the long hair of a woman fellow student made the record upon a paper disk divided into minute spaces with great exactness. One of his wooden clocks applied and controlled the motive power. An invention in lighter vein was what he called his "loafer's chair." It was a wooden chair with a split bottom over which an awkward crosspiece had been nailed in front, apparently to cure the split, but really to make the sitter spread his knees. As soon as the supposed loafer settled down on the chair and leaned back, he pressed a concealed spring which fired a heavily charged old pistol directly under the seat. The leaps of the victims are said to have been worth seeing. These and other contrivances made John's room such a place of wonders to Pat the janitor that for decades afterwards he was accustomed to relate its marvels and point it out to newcomers.

In the autumn of 1916 the writer secured from surviving fellow students at the University of Wisconsin some personal impressions and recollections of John Muir as a student in Madison. Among those consulted were J. G. Taylor, Philip Stein, and Charles E. Vroman, and they all agreed in describing Muir as an extraordinary type of student. The account of Mr. Vroman, who became Muir's room-mate upon entering the University in the spring of 1862, is given as nearly as possible in his own words:

My acquaintance with John Muir began when a tutor, John D. Parkinson, took me in tow and led me to the northeast corner room of North Hall on the first floor. It was my first impression that the tutor was showing me a part of the college museum, for it was a strange-looking place to be the room of a college student. The room was lined with shelves, one above the other, higher than a man could reach. These shelves were filled with retorts, glass tubes, glass jars, botanical and geological specimens, and small mechanical contrivances. On the floor around the sides of the room were a number of machines of larger size whose purposes were not apparent at a glance, but which I came to know later. A young man was busily engaged sawing boards and presently the tutor introduced him as John Muir. I was much younger than he and was entering the preparatory department, but it was the beginning of a close and delightful college friendship. When telling me stories of his early life, or reading Burns, he often dropped into a rich Scotch brogue, although he wrote and spoke English perfectly. The

only books which I remember seeing him read were his Bible, the poems of Robert Burns, and his college textbooks. It was a very hard and dreary life which he had been compelled to live on his father's farm, but in spite of all he was the most cheerful, happy-hearted man I ever knew.

Muir boarded himself during his stay at the University, as did other students. His fare was very simple, consisting chiefly of bread and molasses, graham mush, and baked potatoes. Being on good terms with Pat, he had access to the wood furnaces in the basement where he could boil his mush on the coals and bake his potatoes in the hot ashes. For exercise he played wicket, walked, and swam. Muir's course of study, while irregular, corresponded closely to what was then called the modern classical. The last two years of his course were devoted to chemistry and geology. There were no laboratory facilities in the University at that time, so Muir built a chemical laboratory in his own room. He was by common consent regarded as the most proficient chemical student in the college. In disposition Muir was gentle and loving—a high minded Christian gentleman, clean in thought and action. While he was not a very regular attendant at church, he read his Bible regularly, said his morning and evening prayers each day, and led the kind of life which all this implies. He was, however, in no respect austere or lacking in humor, but bubbling over with fun, and a keen participant in frolics and college pranks, especially when Pat the janitor needed to be taken down. The summer of 1862 Muir spent for the most part at the old Fountain Hill farm with his sister and brother-in-law. The following letter written after his return to Madison reflects the then prevailing uncertainty regarding the continuance of the University. It had no Chancellor at this time and was seriously short of funds. The affairs of the University were administered by the faculty under the chairmanship of Professor John W. Sterling, whose unselfish devotion and unquestioned ability entitled him, in the opinion of the most distinguished alumni, to be made Chancellor. But the strangely myopic regents of this period let him do the work of holding the University together from 1859 to 1867 without even the title of Vice-Chancellor and without extra salary.

On July 2nd, 1862, President Lincoln signed the Morrill Act, which marks one of the greatest advances in the history of American education. By this Act each State was given for educational purposes thirty thousand acres of land for each of its Senators and Representatives in Congress. The conditions attached to the grant were easily fulfilled, but the authorities of the University of Wisconsin allowed four years to elapse before they effected the reorganization that entitled them to claim the benefit of the Act. Even the prospect of this aid, however, had a heartening effect upon the little group that kept the University alive in hope of better times.

Muir's letter is of interest, too, because it shows that he was training himself in the art of crayon sketching, an art in which he was later to gain great proficiency, and one that proved invaluable to him in the keeping of his exploration journals.

To Mr. and Mrs. David M. Galloway

Madison, Autumn, 1862

Dear Brother and Sister:

Perhaps you begin to think it long since I wrote last. After leaving the sheaves and thrashing machine, the merry sound of our old bell made me all crazy with joy. I think I love my studies more and more, and instead of the time for dismissing them coming nearer, as one term after another passes, it seems to go farther and farther away.

We live in changing times, and our plans may easily be broken, but if not I shall be seeking knowledge for some years, here or elsewhere.

Our University has reached a crisis in its history, and if not passed Successfully, the doors will be closed, when of course I should have to leave Madison for some institution which has not yet been wounded to the

death by our war demon.

If John Reid can spare me money I shall not teach this winter, for though it seems an easy way of making a hundred dollars every winter, yet the time for acquiring as much as I desire would in that way be too much prolonged. That money will likely be spent, as the Catholics say, for the benefit of my soul.

Those pictures are framed and I need not tell you that they are prized a good deal. Our tutor takes a great liking to the lake, and wishes it in his room. If more time could be spared for drawing I would send you a picture once or twice in a while, as I know you have a taste for them

This war seems farther from a close than ever. How strange that a country with so many schools and churches should be desolated by so unsightly a monster. "Leaves have their time to fall," and though indeed there is a kind of melancholy present when they, withered and dead, are plucked from their places and made the sport of the gloomy autumn wind, yet we hardly deplore their fate, because there is nothing unnatural in it. They have done all that their Creator wished them to do, and they should not remain longer in their green vigor. But may the same be said of the slaughtered upon a battle field? If you might be successful you would go far to bring the millennium to get love into those leopards and lambs, would you not?

But good-bye, I wish God's blessing for yourselves and little ones. Come and see me if you can, as possibly I may have to go farther from home.

Give me a letter, each of you soon. John Muir

It was to be expected that a young man of Muir's sensitive nature and rigid religious training would find the Civil War an agonizing problem. Camp Randall, where about seventy thousand men were drilled and mobilized in the course of four years, was situated half a mile west of the University and within full view of the campus. Often he went there to look after the comfort of friends or to bid them farewell.

Fragments of an extensive correspondence show that he became a tender and solicitous religious adviser to numerous enlisted men who craved this service. Among them are former students of the University whose names, apparently, were lost from the alumni records. The fearful toll of life exacted by unsanitary conditions in the military camps weighed heavily upon his mind and probably had something to do with his long-cherished purpose to enter the profession of medicine.

One day in the spring of 1863 his fellow student, M. S. Griswold, accidentally detained him for a moment on the steps of North Hall with questions about a locust blossom that he picked from a branch overhead. It was a fateful moment for Muir. He professed to know nothing about botany, so Mr. Griswold proceeded to tell him about the family relationship of the locust tree, and before the conversation was ended, Muir had caught an entrancing vision of a science new to him. "This fine lesson," he wrote in his memoirs, "charmed me and sent me flying to the woods and meadows in wild enthusiasm. . . . I wandered away at every opportunity, making long excursions round the lakes, gathering specimens and keeping them fresh in a bucket in my room to study at night after my regular class tasks were reamed; for my eyes never closed on the plant glory I had seen." By such chance occurrences are the destinies of men determined. Had it not been for this new enthusiasm coming into his life he would undoubtedly have entered the medical profession. The following letter is the first to reflect the consequences of his new passion. The "Somewhere much farther away" refers to incipient plans to enter the Medical School of the University of Michigan.

To Mr. and Mrs. David M. Galloway

Madison, June 1st, 1863

Dear Sarah and David:

Unless hindered by circumstances not seen now, I shall be at Watson's Thursday, [June] 18th. I am sorry that you have not been able to visit me, as I will not return to Madison, but will go somewhere much farther away, so that you will not be so able to reach me, as now.

I cannot do anything toward analyzing your plant, Sarah, without the flower. I mean to be happy for a few days around Fountain Lake in collecting specimens for my herbarium. I returned last Saturday evening from a long ramble of twenty-five miles through marshes, mud, and brushwood with a heavy basketful of flowers, weeds, moss and bush-twigs, having made five or six visits besides, and pressed thirty specimens or more. So you need not cry over my sober face. I am not so feeble you see.

You would like the study of Botany. It is the most exciting thing in the form of even amusement, much more of study, that I ever knew. Very unlike the grave tangled Greek and Latin, but I will see you soon. Good-bye.

Affectionately yours J. Muir

[P.S.] I had almost forgotten, Sarah, to tell you that I was elected judge one of the debating clubs a short time ago, also President of the Young Men's Christian Association. You say that you expect something great by and by! Am not I great now?

Within a week he withdrew the appointment to be met at Watson's, saying that he was going on a long botanical and geological tour down the Wisconson River valley and into Iowa. "I am not so well as I was last term," he writes "I need a rest. Perhaps my tour will do me good, though a three or four hundred mile walk with a load is not, at least in appearance, much of a rest "He went with two companions and an account of the excursion was subsequently communicated to Miss Emily Pelton, then of Prairie du Chien, in a series of letters predated as if they had been written "during the ramble," but actually written six months later, just before he went botanical tour into Canada.

To Miss Emily Pelton

Fountain Lake, February 27th, 1864

Dear Friend Emily You speak in your last letter of the pleasure which a letter written during the ramble would have given, but it is not yet too late.

"Backward, turn backward, O Time, in your flight!"

Recess in the Bluffs near McGregor, Iowa July 7th, 1863

Dear Friend Emily

This evening finds us encamped near McGregor. We have spent a toilsome day, but it has not been without interest. In the morning we were directed to a romantic glen down which a little stream sought a path, turning the mosses to stone as it went, and watering many interesting flowers. "The road that leads to it," said the man, "lies close along the river brink. It is not very far and a log house marks the glen's narrow entrance." We remarked that in following our directions, when we had inquired more particularly about the exact position of the log house after we had proceeded some distance on our way, the person we inquired of gave us some very curious glances which we could not understand. As we proceeded on our way we

Chapter III As a Questioner at the Tree of Knowledge

could not withstand the temptation to climb the bluffs that beetled so majestically overhead, and after many vain attempts we at last found a place where the ascent was practicable. We had to make many a halt for rest, and made as much use of our hands as of our feet, but the splendid view well repaid the toil.

After enjoying the delightful scenery and analyzing some specimens which we gathered on our way, we began to wish ourselves down again, as the afternoon was wearing away and we wished to visit the glen before night, but descending was still more difficult, and we several times reached an almost unstoppable velocity. We found the first specimen of Desmodium in this vicinity and several beautiful Labiatae.

After traveling a good way down the river we began to fear that we had already passed the object of our search, but, when the sun's rays were nearly level and we had just emerged from a mass of low leafy trees, we were suddenly struck with the most genuine astonishment at the unique and unexpected sight so full before us. We expected that a log house in such a place would be a faultless specimen of those pioneer establishments with outside chimney, the single window, and door overrun with hop vines or wild honeysuckle, the dooryard alive with poultry and pigs, and the barnyard at hand with its old straw-stack and street of dilapidated stables and sheds, with cows, dirty children, and broken plows sprinkled over all.

But judge, Emily, of our surprise when, upon a piece of ground where the bluffs had curved backward a little from the river, we at once saw the ruinous old house with four gaudily dressed females in an even row in front, with two idle men seated a little to one side looking complacently upon them like a successful merchant upon a stock of newly arrived goods. Not a broken fence, dirty boy, or squealing pig was to be seen, but there on such a background the old decaying logs and the dark majestic hills on which the soft shades of evening were beginning to fall—there, in clothes which had been dipped many times in most glaring dyes, sat the strange four. It was long before I could judge of the character of the establishment, but I saw at once there was something very strange about it, and instinctively fell behind my companion. He was equally ignorant, but boldly marched forward and asked for the glen where fossils were found. This was a subject of which they knew but little. They told us that the path went no further, that the hills were unclimbable, etc. We then took the alarm, gained the summit of the bluffs after an hour's hard labor, built our campfire, congratulated each other on our escape, and spoke much from the first chapter of Proverbs.

You will perhaps soon hear from us again. Truly your friend J. M.

To Miss Emily Pelton

Camp below the junction of the Wisconsin with the Mississippi July 8th, 1863

Dear Friend Emily

When morning had dawned after our evening log house adventure, we found ourselves upon the brink of one of the highest points overhanging the river. It seemed as though we might almost leap across it. The sun was unclouded, and shone with fine effect upon the fleecy sea of fog contained by its ample banks of bluffs. Later it flowed smoothly away as we gazed and gave us the noble Mississippi in full view.

Breaking the spell which bound us here so long, we leisurely proceeded to explore the pretty glen which we had passed before in the dark. Here we spent some hours of great interest and added some fine plants and fossils to our growing wealth, and soon found ourselves upon the shore of the great river. The genuine calm of a July morning was now master of all. The river flowed on, smooth as a woodland lake, reflecting the full beams of the dreamy light, while not on all the dark foliage which feathered its mountain wall moved a single breeze. We stood harnessed and half asleep with the settled calm, looking wishfully upon the cool waters,

when suddenly the thought struck us, "How fine it would be to purchase a boat and sail merrily up the Wisconsin to Portage." We would read and work the oars by turn as our heavy packs would be stowed snugly away beneath the seats, and every few miles we would land at an inviting place and gather new spoils. And so in a few minutes we had our effects packed snugly, as I have described, in a pretty boat, and were joyfully floating on the bosom of the Father of Waters.

But, alas, how vain our large hopes of promised bliss! We reached the mouth of the Wisconsin River and soon our bright faces grow less and less bright till gloomy as a winter's day, as we paddle with all our might, shooting bravely on against the current at the fearful velocity of ten rods per two hours. At last, completely exhausted, we give up, for a moment, in despair and are instantly returned to the Mississippi by the boiling current. But we were not yet beaten, for holding a council of war against the bustling stream, we determined to "Try, try again."

So, landing, we procured a pair of boards, by the necessitous act of self-appropriation, and proceeded to make two pair of oars. They were nearly made before dark. We found a new camping ground and sought repose with hearts again trimmed with fresh hope. . . .

I shall write you again and give you the result of to-day's labor. I wish you would write immediately on receiving this. Address Wauzeka [Wisconsin.] I shall pass near that place in a few days. Truly your friend

To Miss Emily Pelton

J. Muir

Farmhouse near Wright's Ferry July 9th, 1863

Dear Friend Emily:

We started, in good spirits again, this morning, with our long oars manufactured by our hatchet. We applied them to our little boat and soon were again at the mouth of the Wisconsin which came tumbling down rapid and restless as ever. At each pull of the oars our little fairy almost leaps from the water, but we were now in the very midst of the boiling waters. We shoot now to this side, now to that, making very acute angles, and almost capsizing several times. Again we pull harder than ever—again are baffled. We are drenched thoroughly with streaming sweat but we have strength remaining and have already conquered fifteen or twenty rods. The combat is prolonged amid splashing and boiling, now drifting back, now gaining a few rods, now fast on a sand-bar on this side, now aground on the other, fill the victory was again wrenched from us, and, drawing our boat up on a large sand bank we disembarked, laid our packs at our feet, and with uncovered heads, thus addressed the culprit boat, each in turn:

"O Boat, heretic and perverse, why persist in this obstinate and unprofitable determination of opposition to the reasonable demands of thy lords and masters?... Shame be thy portion! Thou art small and light as a baby's cradle, but obstinate and unsteerable as Noah's ark.... Depart from my service to that of another upon thy parent whom thou seemest to love, and may'st thou serve her better than thou hast served me."

This said, a card was nailed upon a conspicuous place and directed to Mrs. Goodrich [Note by Mrs Emily Pelton Wilson: "A friend he met in our house in Prairie du Chien."], Dubuque, Iowa, and two three cent stamps placed on it as it was overweight. Then pushing it into the current we watched it a few minutes as it sailed away, now appearing and now lost, as it passed the willows upon the bank. Then we again placed our old companion packs, and soberly marched away with unequal steps through the tall grass, like good AEneas with his Penates when cast upon Queen Dido's coast.

After a very wearisome walk over wet places and fallen trees we reached the house where I now write. We did not intend to stop here, but only called for our fifth meal, as we had but one yesterday, and we wished to make

a fair average. But the old lady of the mansion gave us so good a welcome that we entered and she made us supper. She has invited us to stay all night. She, we had observed from the first, was possessed of a lasting fund of everyday benevolence, and just a few minutes ago she told us her reason. "I have," she said, "a son who was some years in New Mexico. Many times he was refused shelter from storm and compelled to pass long nights in rain and sleet. I was determined that *though I should be occasionally imposed upon* I should never refuse the rites of hospitality *to any*." This, I think, is as noble a sentiment as ever came from mortal lips, and if I live, she shall know some time that I have not forgotten her. My companion, as I write, is listening to the narration of this son's adventures. This is the only place where we have met with a really cordial reception.

Good-bye. You may hear from me again when I reach a convenient point.

Write soon. [John Muir] Apparently the trio of young naturalists had difficulty in finding the wherewithal to satisfy their healthy outdoor appetites. The following narrative poem, which accompanied the foregoing letters to Miss Pelton, describes the difficulties they encountered while searching for a breakfast:

IN SEARCH OF A BREAKFAST

Dedicated to the "Patron of all those luckless brains, Which to the wrong side leaning, Indite much metre with much pains And little or no meaning."

The early breeze of morning falls Upon the trembling chamber walls, The hour of evening, one by one, Retreat before the joyful sun. Our heroes' task of resting o'er, They leave their ever-open door And yawn, and stretch, and view the sky With looks and garments much awry; Then seek, with faltering steps and slow The bustling stream that winds below, Where, like wet poultry after rain, That trim disordered plumes again, They wash, and rave, and dress their hair, And for the breakfast search prepare.

All harnessed now, in rambling style, With bounding glee they march a while; The gen'rous grass and twigs bestow Their dewy honors as they go, Till we might deem the stranger three All night had drifted in the sea. Minutely now each sheltered shade, Soft sedgy pool and waving glade, Is searched throughout with patient eye, If stranger plant they might descry. If such be found, no golden treasure May bring so much of honest pleasure. But smoke curls on that mountain brow, And breakfast is the question now.

The house is gained—with air half bold Their tale of morning hunger's told; They ask no bun of prickly taste, No pie complex with frosty paste, No fiery mixture striped with candy, No slimy oysters boiled in brandy, But bread and milk, at any time Purchased with a paper dime. But ah! How marred was breakfast then. How lost the plans of "mice and men"! For bread—"I've none," good mother cries, "Because my risings did not rise. I've biscuit, but a pair at most, And as for milk, the cow is lost. But, three miles farther on your way You'll come to Dick and Simon Day."

With tardy steps they leave the door And more a hungered than before, And slow, the lengthened miles they tread Which lead to Simon's timber shed. With growing emphasis they tell How 'neath a cotton sheet they dwell, And 'mid the hills all daylight hours Roam near and far for weeds and flowers. But growling want still pressing sore Compels to seek the farmer's door, And add with deeply serious brow, How much they feel of hunger now.

But Simon has no bread to spare, The milk is soured by sultry air. But Jacob Wise at Fountain well "Has heaps of cows, and milk to sell." Then from a fallen log they rise And gravely steer for Farmer Wise. Meanwhile the day of sultry June Approaches fast the hour of noon. Our heroes, faint and fainter still, Toil on with braced unfaltering will, Till on a ridge of thistly ground The home of Master Wise is found, And, waxing bold, our starving men Bestow their tale of want again. But Jacob with commanding air Presents on each a Yankee stare, And slowly, in dull angry tone,

Assures them they "had best be gone."

But stanchly fixed with needful will, Till fed with milk and bread their fill, And, wiser grown, they know their task And kindly divers questions ask: How long beside this darkened wood His house and handsome barn have stood? How old himself and curly dog? How much had weighed his fattest hog? How great the price of meadow hay? How far from here his clearing lay? These chords so struck resounding well, With kindling eye he'll warely tell How first this woodland farm he found When all was Indian hunting ground. And coons and herds of fallow deer Were tame as sheep or broken steer, And howling wolf and savage yell Mixed all the echoes up the dell.

Thus poulticed he, inflamed before, Is calm as Boss, and all her store Uncreamed, with bread and Sally's pie, Bestows with kindly beaming eye. "Nor aught," said he, "will I deny To honest folks as good as I; But strolling men of Wiley looks, A peddlin' clothes and dirty books, Howe'er so lamed or big they be Much comfort ne'er shall get from me."

The following letter, bearing no indication of place or date, probably was written toward the end of July, 1863, shortly before he left Madison to assist his brother-in-law in harvest work on the Fountain Lake farm. If so, it describes, perhaps, the last botanical excursion he made from Madison.

To Mr. and Mrs. David M. Galloway

[Madison July, 1863]

Since writing last we have been on many a hill, and walked "o'er moors and mosses many o," but the best of all our rambles was one which was completed last Friday. We took the train from here Thursday morning for Kilbourn, a small town on the Wisconsin River towards LaCrosse, rambled all day among the glorious tangled valleys and lofty perpendicular rocks of the famous Dells, stayed over night in Kilbourn, and voyaged to Portage next day upon a raft of our own construction. The thousandth part of what we enjoyed was pleasure beyond telling. At the Dells the river is squeezed between lofty frowning sandstone rocks. The invincible Wisconsin has been fighting for ages for a free passage to the Mississippi, and only this crooked and narrow slit has been granted or gained.

At present all is peace, but the river, though calm, does not appear contented. Only a few foam-bells are seen, but they float with an air of tardy settled sullenness past the black yawning fissures and beetling, threatening rock-brows above. But when winter with its locking ice has yielded to the authoritative looks of the high summer sun, just at the darkest of the year before any flowers are overhead or any of the rock ferns have unrolled their precious bundles, then the war is renewed with the most terrific, roaring, foaming, gnashing fury. Fierce legions come pouring in from many an upland swamp and lake, in irresistible haste, through broken gorge and valley gateways. All in one they rush to battle clad in foam—rise high upon their ever-resisting enemy, and with constant victory year by year gain themselves a wider and straighter way.

Kilbourn station is about two miles below the Dells. We went to the riverside and at once began to find new plants. The banks are rocky and romantic for many miles both above and below the Dells. On going up the river we were delightfully opposed and threatened by a great many semi-gorge ravines running at right angles to the river, too steep to cross at every point and much too long to be avoided if to wish to avoid them were possible. Those ravines are the most perfect, the most heavenly plant conservatories I ever saw. Thousands of happy flowers are there, but ferns and mosses are the favored ones. No human language will ever describe them. We traveled two miles in eight hours, and such scenery, such sweating, scrambling, climbing, and happy hunting and happy finding of dear plant beings we never before enjoyed.

The last ravine we encountered was the most beautiful and deepest and longest and narrowest. The rocks overhang and bear a perfect selection of trees which hold themselves towards one another from side to side with inimitable grace, forming a flower-veil of indescribable beauty. The light is measured and mellowed. For every flower springs, too, and pools, are there in their places to moisten them. The walls are fringed and painted most divinely with the bright green polypodium and asplenium and mosses and liverworts with gray lichens, and here and there a clump of flowers and little bushes. The floor was barred and banded and sheltered by bossy, shining, moss-clad logs cast in as needed from above. Over all and above all and in all the glorious ferns, tall, perfect, godlike, and here and there amid their fronds a long cylindrical spike of the grand fringed purple orchis.

But who can describe a greenhouse planned and made and planted and tended by the Great Creator himself. Mrs. Davis wished a fernery. Tell her I wish she could see this one and this rock-work. We cannot remove such places to our homes, but they cut themselves keenly into our memories and remain pictured in us forever.

[John Muir]

Muir had lingered in Madison after the close of the University session, partly to botanize amid its lovely natural surroundings, partly because of his attachment for the place where his eyes had been opened to a greater world of knowledge and of beauty. But the time of departure finally came. "From the top of a hill on the north side of Lake Mendota," he writes in the closing paragraph of *The Story of My Boyhood and Youth*, "I gained a last wistful, lingering view of the beautiful University grounds and buildings where I had spent so many hungry and hopeful days. There with streaming eyes I bade my blessed Alma Mater farewell. But I was only leaving one University for another, the Wisconsin University for the University of the Wilderness."

Chapter IV The Sojourn in Canada 1864-1866

When John Muir left the University of Wisconsin in June, 1863, he had number of warmly worded letters of introduction from Madison friends who wished to smooth his way at the University of Michigan. "You will find in him the greatest modesty joined with high moral and religious excellence," wrote one of them to James R. Boise, then Professor of Greek in the latter institution. How far these plans for the definite choice of a profession had progressed is apparent also in the fact that friends addressed letters to him at the Medical School and evinced surprise when they were returned unclaimed. "A draft was being made," he wrote in explanation to one them, "just when I should have been starting for Ann Arbor, which kept me at home."

Meanwhile his fellow student, James L. High, later a distinguished lawyer in Chicago, wound up his affairs at Madison and made a report in November "Our class," he wrote, "numbers only five, viz., Wallace, Spooner, Salisbury, Congar, and myself. Leahey has gone into the army, and Lewis is a senior at Union College, New York. So, as you see, we are small in numbers, but we are making a brave fight of it nevertheless. The Societies are doing unusually well this term. Yours numbers about twenty-five members, and ours over forty." Then follows an account of his efforts to collect small loans which Muir had made to fellow students. The society referred to as "yours" was the Athenae Literary and Debating Society of which he was one of the founders.

Returning from his botanical rambles in July, John spent the autumn and winter on the old Fountain Lake farm which, some time in 1856, had passed into the hands of his brother-in-law, David Galloway. "With study and labor I have scarcely been at all sensible of the flight of time since I reached home," he writes at the end of February to his friend Emily Pelton. "In my walks to and from my field work and in occasional rambles I, of course, searched every inch of ground for botanical specimens which, preserved in water, were analyzed at night. My task was seldom completed before twelve or one o'clock. I was just thinking to-day that soon the little anemones would be peering above ground."

But even at this time, when the new sap was barely beginning to swell the buds, the young naturalist was pluming his wings for a long flight. "I have enjoyed the company of my dear relatives very much during this long visit," he adds, "but I shall soon leave them all, and I scarcely think it probable that I shall be blest with so much of home again." As for the study of medicine, he merely remarks that he had "by no means given up all hope of still finding an opportunity to pursue this favourite study some other time." But that time never came. Two days later, on March 1st, 1864, he announces, in a parting note to the same friend, "I am to take the cars in about half an hour. I really do not know where I shall halt. I feel like Milton's Adam and Eve—'The world was all before them where to choose their place of rest."

It would be impossible now to trace any part of the intricate route which finally led him to Meaford, County Grey, Canada West, were it not for one of those fortunate incidents which sometimes occur to gladden the heart of a biographer. In editing Muir's journal and notes written during his "thousand-mile walk to the gulf" the writer began to realize how much easier it would be, at critical points, to follow his wanderings if one had his herbarium specimens with the identification slips, giving date and place of collection. But no part of the herbarium gathered during the sixties seemed to have survived the wanderings of this modern Ulysses.

In looking over some correspondence with Mrs. Julia Merrill Moores, one of his early Indianapolis friends, the writer found reason to suppose that Muir had left for safekeeping at her house some of his belongings when he went South in 1867. Though she had passed on long ago the clue seemed worth following, and a search in Indianapolis proved successful beyond all expectations. For the attic of her son, Charles W. Moores,

yielded up large parts of the long forgotten herbarium which Muir had gathered during the years from 1864 to 1867.

Since no letters or notebooks of Muir from the period between March and October, 1864, have been found, the little identification slips, though not precise in giving geographical localities, furnish important clues to his movements. In April he was already wading about in Canadian swamps, and by the month of May he had penetrated northward as far as Simcoe County. On the 18th of that month he started—on a three weeks' ramble through Simcoe and Grey Counties, walking an estimated distance of about three hundred miles through the townships of Guillimbury, Tecumseh, Adjala, Mono, Amaranth, Luther, Arthur, Egremont, Proton, Glenelg, Bentinck, Sullivan, Holland, and Sydenham. "Much of Adjala and Mono," he notes, is very uneven and somewhat sandy; many fields here are composed of abrupt gravel hillocks; inhabitants are nearly all Irish. Amaranth, Luther, and Arthur abound in extensive Tamarac and Cedar swamps, dotted with beaver meadows. I spent seven and a half hours in one of these solitudes extraordinary. Land and water, life and death, beauty and deformity, seemed here to have disputed empire and all shared equally at last. I shall not soon forget the chaos of fallen trees in all stages of decay and the tangled branches of the white cedars through which I had to force my way; nor the feeling with which I observed the sun wheeling to the West while yet above, beneath, and around all was silence and the seemingly endless harvest of swamp. Above all I will not soon forget the kindness shown me by an Irish lady on my emerging from this shadow of death near her dwelling."

Of memoranda made on this ramble there survives only the following additional note:

It was with no little difficulty that my object in seeking "these wilds traversed by few" was explained to the sturdy and hospitable lairds of these remote districts. "Botany" was a term they had not heard before in use. What did it mean? If told that I was collecting plants, they would desire to know whether it was cabbage plants that I sought, and if so, how could I find cabbage, plants in the bush? Others took me for a government official of some kind, or minister, or pedlar.

One day an interesting human discovery is made and recorded thus: "Found Dunbar people, much to my surprise, far in the dark maple woods; spent a pleasant day with them in rehearsing Dunbar matters."

During July he was botanizing north of Toronto in the Holland River swamps, and on highlands near Hamilton and Burlington bays. In August he is again about the shores of Lake Ontario and in the vicinity of Niagara Falls. A "wolf forest," mentioned on several slips, is doubtless the place on the southern shore of Lake Ontario where one night he had an adventure with wolves. That as well as other incidents form the subject bathe following fragmentary autobiographical sketch which fortunately covers this period of Canadian wanderings in some detail:

After earning a few dollars working on my brother-in-law's farm near Portage, I set off on the first of my long lonely excursions, botanizing in glorious freedom around the Great Lakes and wandering through innumerable tamarac and arbor-vitae swamps, and forests of maple, basswood, ash, elm, balsam, fir, pine, spruce, hemlock rejoicing in their bound wealth and strength and beauty, climbing the trees, reveling in their flowers and fruit like bees in beds of goldenrods, glorying in the fresh cool beauty and charm of the bog and meadow heathworts, grasses, carices, ferns, mosses, liverworts displayed in boundless profusion.

The rarest and most beautiful of the flowering plants I discovered on this first grand excursion was *Calypso borealis* (the Hider of the North). I had been fording streams more and more difficult to cross and wading bogs and swamps that seemed more and more extensive and more difficult to force one's way through. Entering one of these great tamarac and arbor-vitae swamps one morning, holding a general though very

crooked course by compass, struggling through tangled drooping branches and over and under broad heaps of fallen trees, I began to fear that I would not be able to reach dry ground before dark, and therefore would have to pass the night in the swamp and began, faint and hungry, to plan a nest of branches on one of the largest trees or windalls like a monkey's nest, or eagle's, or Indian's in the flooded forests of the Orinoco described by Humboldt.

But when the sun was getting low and everything seemed most bewildering and discouraging, I found beautiful Calypso on the mossy bank of a stream, growing not in the ground but on a bed of yellow mosses in which its small white bulb had found a soft nest and from which its one leaf and one flower sprung. The flower was white and made the impression of the utmost simple purity like a snowflower. No other bloom was near it, for the bog a short distance below the surface was still frozen, and the water was ice cold. It seemed the most spiritual of all the flower people I had ever met. I sat down beside it and fairly cried for joy.

It seems wonderful that so frail and lowly a plant has such power over human hearts. This Calypso meeting happened some forty-five years ago, and it was more memorable and impressive than any of my meetings with human beings excepting, perhaps, Emerson and one or two others. When I was leaving the University, Professor J. D. Butler said, "John, I would like to know what becomes of you, and I wish you would write me, say once a year, so I may keep you in sight." I wrote to the Professor, telling him about this meeting with Calypso, and he sent the letter to an Eastern newspaper [*The Boston Recorder*] with some comments of his own. These, as far as I know, were the first of my words that appeared in print.

How long I sat beside Calypso I don't know. Hunger and weariness vanished, and only after the sun was low in the west I plashed on through the swamp, strong and exhilarated as if never more to feel any mortal care. At length I saw maple woods on a hill and found a log house. I was gladly received. "Where ha ye come fra? The swamp, that awfu' swamp. What were ye coin' there?" etc. "Mony a puir body has been lost in that muckle, cauld, dreary bog and never been found." When I told her I had entered it in search of plants and had been in it all day, she wondered how plants could draw me to these awful places, and said, "It's God's mercy ye ever got out."

Oftentimes I had to sleep without blankets, and sometimes without supper, but usually I had no great difficulty in finding a loaf of bread here and there at the houses of the farmer settlers in the widely scattered clearings. With one of these large backwoods loaves I was able to wander many a long wild fertile mile in the forests and bogs, free as the winds, gathering plants, and glorying in God's abounding inexhaustible spiritual beauty bread. Storms, thunderclouds, winds in the woods—were welcomed as friends.

Only once in these long Canada wanderings was the deep peace of the wilderness savagely broken. It happened in the maple woods about midnight when I was cold and my fire was low. I was awakened by the awfully dismal wolf-howling and got up in haste to replenish the fire. Some of the wolves around me seemed very near, judging by their long-drawn-out howling, while others were replying farther and farther away; but the nearest of all was much nearer than I was aware of, for when I had succeeded in producing a blaze that lighted up the bushes around me, and was in the act of stooping to pick up a branch to add to the blaze, a large gray wolf that had been standing within less than ten feet of me rushed past so startlingly near that I threw the limb at the wolf. This put an end to sleep for that night. I watched and listened and kept up a good far-reaching blaze, which perhaps helped to keep them at bay. Anyhow I saw no more of them, although they continued their howling conversation until near daylight.

I had to stop again and again in all sorts of places when money gave out, accepting work of any kind and at any price, and with a few hard-earned dollars, earned at chopping, clearing, grading, harvesting, going on and on again, thus coming in contact with the people and learning something of their lives.

Among the farmers in the region between Toronto and the Georgian Bay I found not a single American. They were Scotch, English, and Irish, mostly Scotch. Many of them were Highlanders who had been driven from their little farms and garden patches in the glens by the Duke of Sutherland when he cleared his estates of these brave home-loving men to make room for sheep. Most of the old folks, by the time of my visit, had gone to rest in their graves, and the farms they had so laboriously cleared were in the possession of their children, who were living in good brick houses in comparative affluence and ease.

At one of those Highland Scotch farms I stopped for more than a month, working and botanizing. The family consisted of the mother, her daughter, and two sons. Here I had a fine interesting time. Mrs. Campbell could hardly have been kinder had I been her own son, and her two big boys [In a marginal note Muir gives their names as "Alexander and William," with a question sign. In letter of a correspondent, marked "W. E. Sibley of early Canada botanical days," occurs the following sentence: "I saw D. and A. Campbell and was at their house. They were all quite well and said they intended writing to you." (February 28, 1865.)], twenty and twenty-five years of age, were also very kind and fonder of practical jokes than almost anybody I ever met. In the long summer days I used to get up about daylight and take a walk among the interesting plants of a broad marsh through which the Holland River flows. I had not been feeling very well and motherly Mrs. Campbell was somewhat anxious about my health. One morning the boys, finding my bed empty and knowing that I must have gone botanizing in the Holland River swamp, and knowing also the anxiety of their mother about my health, put a large bag of carpet rags, that was kept in the garret, in my bed and pulled the blankets over it. When Mrs. Campbell met the boys before breakfast and inquired for John, they with solemn looks replied that "Botany," as they called me, was sick. When she anxiously inquired what ailed me they said they didn't know because they could not get me to speak; they had tried again and again to arouse me but I just lay still without saying a word as if I were dead, though I seemed to be breathing naturally enough. Mrs. Campbell, greatly alarmed, first called me from the foot of the stairs, and, getting no reply, walked half way up and again called, "John, John, will you not speak to me?" The continued dead silence corresponded with the boys' cunning story and made her doubly anxious, so she climbed to the bed and shook as she supposed my shoulder, saying, "John, John, will you not speak?" Finally, pulling down the cover, she cried in glad relief, "Oh, those boys again, those boys again!"

Soldiers from the British army occasionally deserted and hid in the woods and swamps. For a certain deserter a considerable reward was offered and the Campbell boys told the officers that they had seen a suspicious character creeping out of the woods and swamps of the Holland River early in the morning, and that they thought he must be getting food from the neighbors and hiding in the swamp. A watch was, therefore, set and when they captured me I had some difficulty in explaining that I was only a botanist.

Here is another of the practical jokes of these irrepressible Highlanders: on frosty moonlight nights in winter when the sleighing was good, many of the young men from the neighboring village of Bradford took their girls out sleigh-riding. The Campbell boys dressed themselves in white bed sheets and, just before the sleigh-riding began at dusk, they climbed to the roof of a schoolhouse which stood at the crossroads, a mile or so from their farm, and commenced vigorously trying to saw off the chimney with a fence rail. Their reward was in hearing the boys and girls scream and rush back to the village. The people in that neighborhood were devoted believers in good old-fashioned ghosts.

These boys were capital story-tellers. One of their neighbors had a nose thus described by the elder of the two, "Mr. So-and-so has a big nose. Oh! a very big nose! So big and heavy that it shakes when he walks; and his shaking nose shakes his whole body, and makes the ground shake, and you would think there was an earthquake!"

Farther west were large wooded areas still perfectly wild, on the edges of which homeseekers were laboriously plying their heavy axes, making clearings for fields. At first only a few acres would be slashed down—oak, ash, elm, basswood, maple, etc., of several species. On account of the closeness of the growth these trees were tall and comparatively slender, and the roots formed a net-work that covered the ground so

closely that not a single spot was to be found in which a post-hole could be dug without striking roots. These beautiful trees were simply slashed down, falling upon each other and covering the ground many trees deep, cut usually in winter and left to dry.

As soon as the branches were dry enough to burn well, fire was set and they were consumed, leaving only the blackened boles and heavier branches. These were then chopped into manageable lengths of from ten or twelve to fifteen feet, and the neighbors were called to a logging bee. Plenty of whiskey was said to make the work light. The heavier logs were drawn by oxen alongside of each other; the next heavier drawn alongside were rolled up on top of the large ones by means of hand-spikes, the next on top of the Second tier, and so on, and the smaller tops and heavy branches were peaked on top of all. A fire was then started on top of these piles which ate its way downward. Soon all the clearing was covered with heavy, deep, glowing fires and the thickest logs after smouldering for days were at last consumed. Next the ashes were leached, boiled down and roasted for potash, which found a market in Europe, and yielded the first saleable crop of the farm.

Next, pains were taken to scrape little hollows between the roots where a few potatoes could be planted, without any reference to placing them in rows. Occasionally separate little pits were made among the roots for a few grains of wheat, which was cut with a sickle and thrashed with flails. Perhaps a sack of grain, for the family bread, could thus be raised from an acre or so.

Gradually the roots nearest the surface decayed and were laboriously chopped and grubbed out, wheat sown and covered with very small strong V-shaped harrows, which bounced about among the stumps. Still larger roots and some of the smallest stumps were grubbed out of the way, and at last the big stumps were laboriously dug out or pulled out with machines worked by oxen. These first small clearings were enlarged from year to year, but a whole lifetime was usually consumed before anything like an ordinary size farm was brought under perfect cultivation and fitted for the use of reaping and sowing machines.

Besides the difficulty of clearing away these dense woods, the first small farms, opening the ground to the light, were subject to late and early frosts, on account of the ground being so covered with humus and leaves that it could absorb but little heat. While surrounded with a dense forest wall the winds could not reach them with heat brought from afar, and the day temperature fell rapidly.

One morning when I was on my way through the woods I came to a little clearing where there was a crop of wheat beginning to head. Frost had fallen on it the night before, and a poor woman was walking along the side of the field weeping, wiping her eyes on her apron, and crying "Oh! the frost, the frost, the weary frost. We'll hae na crop this year and we had nane the last. We'll come to poverty. We'll come to poverty." After a great part of the forest was cleared, the stumps removed, the humus plowed under, and the soil opened to the sunshine and equalizing winds these frosts disappeared.

In the spring, when the maple sap began to flow, all the young people had merry, merry times, shared by their elders who remembered their own young days. The sap was boiled in the woods, and when sugaring off at a certain stage it made wax which was cooled in the snow. A big fire was made and the evening spent around it eating maple "wax," and, later on in the "sugaring off," the sugar also. Other amusements were meeting for song singing and general merry-making, but dancing was seldom indulged in, being frowned on by their pious elders.

Most of the settlers were pious and faithfully attended church. All were exceedingly economical on account of the necessity, long continued, of saving while making a living in the wilderness. There was good reason for the scarcity of Americans in that community because of the far greater ease with which a living could be made on the prairies and oak openings of the Middle and Western States.

When I came to the Georgian Bay of Lake Huron, whose waters are so transparent and beautiful, and the forests about its shores with their ferny, mossy dells and deposits of boulder clay, it seemed to be a most

favorable place for study, and as I was also at this time out of money again I was eager to stay a considerable time. In a beautiful dell, only a mile or two from the magnificent bay, I fortunately found work in a factory where there was a sawmill and lathes for turning out rake, broom, and fork handles, etc. During the winter months of his sojourn in this dell near Meaford he had the companionship Of his youngest brother, Daniel, who also was seeking employment in Canada at this time. A wee letter, one by two inches in size, dated Meaford, October 23rd, 1864, and addressed in playful mood to his sister Mary, gives an account of the people in this "Hollow" where they found employment. "Our family," he writes, "consists, first of all, of me, a most good man and big boy. Second, Daniel, who is also mostly big and three or four trifles funny. Third, Mr. William Trout, an unmarried boy of thirty summers, who, according to the multiplicity of common prognostications, is going to elect a lady mistress of Trout's Hollow some day. Fourth, Charles Jay, a bird of twenty-five, who is said to coo to a Trout.... This Jay and last mentioned Trout are in partnership and are the rulers of the two Scotch heather Muirs." He also mentions Mary and Harriet, two very capable sisters of William Trout, one of them the housekeeper and the other a school-teacher. "We all live happily together," continues the letter. "Occasionally an extra Trout comes upstream or a brother Jay alights at our door, but they are not of our family." The fears of his sister, lest they work too hard, are met by the declaration that they are working neither hard nor long hours; that they "are growing fatter and fatter, and perhaps will soon be as big as Gog and Magog."

Mr. Trout, who was still living in 1916, at my request furnished me with an account of the coming of the Muirs to Meaford. It seems that John and Daniel occasionally traveled independently in their search for work, meeting by arrangement at stated times and places, or, if they had lost connection, found each other again by means of letters from home. One midsummer day in 1864 Daniel appeared in search of work at the Trout sawmill. He remained there six weeks until his brother John had been located through home communications. The two then resumed their botanical journeyings until the approach of winter.

Scenting a possible chance to exercise his inventive genius, John was persuaded that the Hollow might be a good place in which to pass the long Canadian winter. One evening in autumn, 1864, they both arrived at the mill, outlined their plans, and were engaged to assist in building an addition to the rake factory. John's mechanical ability soon proved so advantageous for his employers that they entered into a contract with him to make one thousand dozen rakes and thirty thousand broom handles.

When John Muir made his rake and broom handle contract with us [wrote Mr. Trout], he also made a proposition to be given the liberty of improving the machinery as he might determine, and that he should receive therefore half the economical results of such improvement during a given period. An arrangement of this kind was entered into, and he began with our self-feeding lathe which I considered a nearly perfect instrument for turning rake, fork, and broom handles and similar articles. By rendering this lathe more completely automatic he nearly doubled the output of broom handles. He placed one handle in position while the other was being turned. It required great activity for him to put away the turned handle and place the new one in position during the turning process. When he could do this eight broom handles were turned in a minute. Corresponding to this lathe I had on the floor immediately above him a machine that would automatically saw from the round log, after it was fully slabbed, eight handles per minute. But setting in the log and the slabbing process occupied about three eighths of the time. This, with keeping saws and place in order, cut the daily output to about twenty-five hundred. John had his difficulties in similar ways and at best could not get ahead of the sawing. It was a delight to see those machines at work. He devised and started the construction of several new automatic machines, to make the different parts of the hand rakes, having previously submitted and discussed them with me.

Daniel returned to Wisconsin after a time, but John continued at Meaford for about a year and a half. During the spring and summer he pursued his favorite study of botany with increasing enthusiasm and industry.

Sundays and the long summer evenings were invariably devoted to the plants and the rocks. The lack of a comprehensive manual of the Canadian flora was, of course, a serious disadvantage and many herbarium sheets bear testimony to difficulties he encountered. They also testify to expeditions, made in 1865 of which no other record remains, for here, among numerous specimens from the "garden of J. Lufthorn" and the forests of Owen Sound and Georgian Bay, are trophies from the "Devil's Half Acre, forty miles northeast from Hamilton" and from the vicinity of Niagara Falls.

In Canada, as at the University of Wisconsin, Muir was his own severest taskmaster. His bed, mounted on a cross axle and connected with an alarm clock, was so contrived that it set him on his feet at five o'clock. If he happened to lie in it diagonally he sometimes was thrown out sharply on the floor. "The fall of John's bed," according to Mr. Trout, "was a wake-up signal for every one in the house. If we heard a double shock, caused by a roll-out, we had the signal for a good laugh on John, of which he had further jolly reminders at the breakfast table." His conversational powers already made him a marked member of any company, and he was never loath to engage in a friendly argument at meal time. But a book was always kept within reach for snatches of reading, and his studious habits kept him at work till far into the night.

His young sisters at this time had in him an interesting correspondent. Apparently they did not give him sufficiently detailed information about home affairs to satisfy his curiosity, for he complains to one of them that, while her letter gave pleasure, "it was not great enough in any of its dimensions, minute enough in its details, or sufficiently knick-knacky in its morals." "Here," he writes, "is a form for a small letter from your locality, though as regards style I by no means commend it to your exact imitation."

Hickory Dale, 1000 ft. above the sea January 1st, 1865

Dear John:

We are pretty well, but are fast growing weary of the many changes which now seem to be of daily occurrence. We now live in a room made in the upper part of the barn next the orchard.

We reach it by an outside stair. It is hard carrying up the wood and water. Once I slipt and fell with an armful of burr oak firewood and sprained my weeping sinew. The cattle live in the house now—the cows in the cellar, the horses on the first floor, and the sheep upstairs. Nan will not go past the cellar door, but we do the best we can.

The apple trees are dug up and planted upon the cold rocky summit of the observatory where I am sure they will not grow well. The cattle do not stand the severe weather well this winter. They stand drawn together like a dog licking a pot.

Aunt Sally is married, and Lowdy Grahm has the whooping cough. Write soon or sooner.

From your Sis Mary

P.S. Carrie Muir has enlisted and David is very angry.

There, Mary, you should put some grit and bone of that kind in your letters. I scribble that nonsense only to show you that these small matters which occur in the neighborhood and which you do not think worthy of note are still of interest to us when so far from home... Affectionately

To his friend Emily Pelton he writes under date of May 23rd, 1865:

John

We live in a retired and romantic hollow. . . Our social advantages are, of course, few and, for my part, I do not seek to extend my acquaintance, but work and study and dream in this retirement. . . Our tall, tall forest trees are now all alive, and the ocean of mingled blossoms and leaves waves and curls and rises in rounded swells farther and farther away, like the thick smoke from a factory chimney. Freshness and beauty are everywhere; flowers are born every hour; living sunlight is poured over all, and every thing and creature is glad. Our world is indeed a beautiful one, and I was thinking, on going to church last Sabbath, that I would hardly accept of a free ticket to the moon or to Venus, or any other world, for fear it might not be so good and so fraught with the glory of the Creator as our own. Those miserable hymns, such as

"This world is all a fleeting show For man's delusion given," do not at all correspond with my likings, and I am sure they do not with yours.

The following letter, addressed to three of his sisters, is of interest because it exhibits his love of fun from another angle. The proposed sale of the Hickory Hill farm was not consummated at this time. The Fountain Lake farm, however, to which he had become so deeply attached, was sold about this time by his brother-in-law, David Galloway.

Trout's Hollow, C.W. *December* 24*th*, 1865

Dear Sisters Mary, Anna, and Joanna:

I feel that I owe you a long apology for not replying to your long good letters. I have been exceedingly busy, but this is not a sufficient excuse. My bed sets me upon my feet at five, and I go to bed at eleven, and have to do at least two days' work every day, sometimes three. I sometimes almost forget where I am, what I am doing, or what my name is. I often think of you and wish with all my might that I could see and chat with you. Were it not that I have no time to think, I would grow homesick and die in a day or two. My picture of home is in my room, and when I see it now I feel sorry at the thought of its being sold. Fountain Lake, Oak Grove, Little Valley, Hickory Hill, etc., with all of their long list of associations, pleasant and otherwise, will soon have passed away and been forgotten.

I was glad to hear that Dan was visiting so long with you. I suppose that he told you many a surprising and funny tale of Canada. I think that he can make and enjoy a joke very well indeed. I had a letter from him, and he says that he has plenty of money, clothes, and hope for the future.

I wish you were here. You would find queer things. We have queer trees, queer flowers, queer streams, queer weather, queer customs, and queer people with queer names. One man is called Lake, another Jay, Eagle, Raven, Stirling, Bird. Mr. Jay married Miss Raven a few weeks ago. One day at the table we were speaking about names and Mr. Trout said that "Rose" was a fine name, and I said that Muir was better than Trout, or Jay, or Rose, or Eagle, because that though a Jay or Eagle was a fine bird, and a Trout a good fish, and Rose a fine flower, a Scottish Muir or Moor had fine birds, and fine fishes in its streams, and fine wild roses together with almost every other excellence, but above all "the bonnie bloomin' heather." We may well be proud of our name.

Another story. One Sunday I returned from meeting before the rest and was in the house alone reading one of the "Messengers" mother sent, when a little bird flew into the house and the cat caught it. I chased the cat out of the house, and through the house, till I caught her, to save the bird's life, but she would not let it go, and I choked her and choked her to make her let it go until I choked her to death, though I did not mean to, and they both lay dead upon the floor. I waited to see if she would not receive back one of her nine lives, but to my

grief I found that I had taken them all, so I buried her beside some cucumber vines in the garden. When the rest came home I told what had occurred, and Charley Jay, who is as full of wit and jokes as the pond was of cold water one night, said, "Now John is always scolding us about killing spiders and flies but when we are away he chokes the cats," and they kept saying "poor kitty," "poor puss," for weeks afterwards to make me laugh.

I will write you all a long letter some day.

[John Muir] The more serious side of his nature and the aspirations he cherished at this time come to expression in a letter which marks the beginning of a long and remarkable correspondence with Mrs. Jeanne C. Carr, whose acquaintance with John Muir, as stated in an earlier chapter, began when he exhibited his wooden clocks at the Wisconsin State Fair in 1860. How much her friendship was to mean to the budding naturalist appears clearly even in the earliest of his letters to her.

From the time of Chancellor John Hiram Lathrop's resignation in July, 1859, to the choice of Paul A. Chadbourne as head of the University of Wisconsin eight years later, Professor John W. Sterling was virtually president. When John Muir failed to return to the University in the autumn of 1864 the faculty, knowing how eager he was to continue his studies, invited him to return as a free student and Professor Sterling was instructed to communicate this decision to him. Whether this invitation was for the autumn of 1864 or 1865 is not entirely clear. Unfortunately the letter never reached him and the opportunity could not be improved. This is the letter of which he writes that he "waited and wearied for it a long time."

Trout's Mills, near Meaford September 13th, [1865]

Dear Mrs. Carr:

Your precious letter with its burden of cheer and good wishes has come to our hollow, and has done for me that work of sympathy and encouragement which I know you kindly wished it to do. It came at a time when much needed, for I am subject to lonesomeness at times. Accept, then, my heartfelt gratitude—would that I could make a better return.

I am sorry over the loss of Professor Sterling's letter, for I waited and wearied for it a long time. I have been keeping up an irregular course of study since leaving Madison, but with no great success. I do not believe that study, especially of the Natural Sciences, is incompatible with ordinary attention to business; still, I seem to be able to do but one thing at a time. Since undertaking, a month or two ago, to invent new machinery for our mill, my mind seems to so bury itself in the work that I am fit for but little else; and then a lifetime is so little a time that we die ere we get ready to live.

I would like to go to college, but then I have to say to myself, "You will die ere you can do anything else." I should like to invent useful machinery, but it comes, "You do not wish to spend your lifetime among machines and you will die ere you can do anything else." I should like to study medicine that I might do my part in lessening human misery, but again it comes, "You will die ere you are ready to be able to do so." How intensely I desire to be a Humboldt! but again the chilling answer is reiterated. Could we but live a *million* of years, then how delightful to spend in perfect contentment so many thousand years in quiet study in college, so many amid the grateful din of machines, so many among human pain, so many thousands in the sweet study of Nature among the dingles and dells of *Scotland*, and all the other less important parts of our world! Then *perhaps* might we, with at least a show of reason, "shuffle off this mortal coil" and look back upon our star with something of satisfaction.

I should be ashamed—if shame might be in the other world—if any of the powers, virtues, essences, etc., should ask me for common knowledge concerning our world which I could not bestow. But away with this *aged* structure and we are back to our handful of hasty years half gone, all of course for the best did we but know all of the Creator's plan concerning us. In our higher state of existence we shall have time and intellect for study. Eternity, with perhaps the whole unlimited creation of God as our field, should satisfy us, and make us patient and trustful, while we pray with the Psalmist, "So teach us to number our days that we may apply our hearts unto wisdom."

I was struck with your remarks about our real home as being a thing of stillness and peace. How little does the outer and noisy world in general know of that "real home" and real inner life! Happy indeed they who have a friend to whom they can unmask the workings of their real life, sure of sympathy and forbearance!

I sent for the book which you recommend. I have just been reading a short sketch of the life of the mother of Lamartine. These are beautiful things you say about the humble life of our Savior and about the trees gathering in the sunshine.

What you say respecting the littleness of the number who are called to "the pure and deep communion of the beautiful, all-loving Nature," is particularly true of the hard-working, hard drinking, stolid Canadians. In vain is the glorious chart of God in Nature spread out for them. So many acres chopped is their motto, so they grub away amid the smoke of magnificent forest trees, black as demons and material as the soil they move upon. I often think of the Doctor's lecture upon the condition of the different races of men as controlled by physical agencies. Canada, though abounding in the elements of wealth, is too difficult to subdue to permit the first few generations to arrive at any great intellectual development. In my long rambles last summer I did not find a single person who knew anything of botany and but a few who knew the meaning of the word; and wherein lay the charm that could conduct a man, who might as well be gathering mammon, so many miles through these fastnesses to suffer hunger and exhaustion, was with them never to be discovered. Do not these answer well to the person described by the poet in these lines:

"A primrose by the river's brim, A yellow primrose was to him, And nothing more."

I thank Dr. Carr for his kind remembrance of me, but still more for the good patience he had with so inapt a scholar. We remember in a peculiar way those who first give us the story of Redeeming Love from the great book of revelation, and I shall not forget the Doctor, who first laid before me the great book of Nature, and though I have taken so little from his hand, he has at least shown me where those mines of priceless knowledge lie and how to reach them. O how frequently, Mrs. Carr, when lonely and wearied, have I wished that like some hungry worm I could creep into that delightful kernel of your house—your library—with its portraits of scientific men, and so bountiful a store of their sheaves amid the blossom and verdure of your little kingdom of plants, luxuriant and happy as though holding their leaves to the open sky of the most flower-loving zone in the world!

That "sweet day" did, as you wished, reach our hollow, and another is with us now. The sky has the haze of autumn and, excepting the aspen, not a tree has motion. Upon our enclosing wall of verdure new tints appear. The gorgeous dyes of autumn are too plainly seen, and the forest seems to have found out that again its leaf must fade. Our stream, too, has less cheerful sound and as it bears its foambells pensively away from the shallow rapids in the rocks it seems to feel that summer is past.

You propose, Mrs. Carr, an exchange of thoughts for which I thank you very sincerely. This will be a means of pleasure and improvement which I could not have hoped ever to have been possessed of, but then here is the difficulty: I feel that I am altogether incapable of properly conducting a correspondence with one so much above me. We are, indeed, as you say, students in the same life school, but in very different classes. I am but

an alpha novice in those sciences which you have studied and loved so long. If, however, you are willing in this to adopt the plan that our Savior endeavored to beat into the stingy Israelites, viz. to "give, hoping for nothing again," all will be well, and as long as your letters resemble this one before me, which you have just written, in genus, order, cohort, class, province, or kingdom, be assured that by way of reply you shall at least receive an honest "Thank you."

Tell Allie that Mr. Muir thanks him for his pretty flowers and would like to see him, also that I have a story for him which I shall tell some other time. Please remember me to my friends, and now, hoping to receive a letter from you at least *semi-occasionally*, I remain,

Yours with gratitude John Muir

Brought up in the strictest tenets of traditional orthodoxy, John Muir's scientific studies gradually forced him to reconstruct the factual basis of his religious beliefs. Darwin's *Origin of Species* had appeared in 1859, and a fierce conflict was raging between champions of the theory of special creation and what now came to be known as the theory of organic evolution. Even at the university he had become aware of the chasm that was opening between the old biblical literalism and the more comprehensive interpretations of religion. A certain prominent clergyman of Madison, who was an advocate of a neighboring sectarian college, had often assailed what he was pleased to call the atheistic views of certain members of the faculty. Without relaxing his hold on the essentials of his Protestant faith, John Muir's sympathies were unmistakably enlisted on the side of liberalism. He promptly and quite naturally adopted the view that the Bible is not authoritative in the realm of natural science, but that in its explanations of the facts and phenomena of the universe it exhibits the same gradual unfolding of human knowledge which has marked man's progress in other spheres of thought.

It is not easy to trace the steps by which he broke away from the narrow Biblicism of his training, but he would from this period onward have subscribed at any time to the statement of Louis Agassiz that "a physical fact is as sacred as a moral principle." Lyell, who since 1830 had prepare the way for Darwin by showing that the world is very old and the outcome of a long development, excited Muir's enthusiastic interest. Later he became a warm friend of J. D. Hooker and Asa Gray, two of Darwin's earliest supporters.

Nathaniel S. Shaler, who passed through the same period of readjustment as Muir, confessed [*The Interpretation of Nature* (1896), Preface, p. iv.] that his first contact with natural science in his youth and early manhood had the not uncommon effect of leading him far away from Christianity and that in later years a further insight into the truths of nature had gradually forced him back again to the ground from which he had departed. It is interesting to find that Muir, probably in spite of his upbringing, had no such experience. He saw that the alleged antagonism between natural science and the Bible was due to the accumulated lumber of past generations of faulty Bible teaching. By promptly discarding the crudities of this teaching and adopting a more rational historical interpretation of the Bible he saved his faith both in religion and in science.

In a letter from "The Hollow," written to Mrs. Carr toward the end of January, 1866, we get a glimpse of his mental workings. To the statement that she was writing her letter in the delicious quiet of a Sabbath evening i the country, "with cow bells tinkling instead of steeple chimes, the drone and chirp of myriad insects for choral service, depending for a sermon upon the purple bluffs and flowing river," he responds as follows:

I was interested with the description you gave of your sermon. You speak of such services like one who appreciates and relishes them. But although the page of Nature is so replete with divine truth it is silent concerning the fall of man and the wonders of Redeeming Love. Might she not have been made to speak as clearly and eloquently of these things as she now does of the character and attributes of God? It may be a bad sympton, but I will confess that I take more intense delight from reading the power and goodness of God from "the things which are made" than from the Bible. The two books harmonize beautifully, and contain enough of

divine truth for the study of all eternity. It is so much easier for us to employ our faculties upon these beautiful tangible form than to exercise a simple, humble, living faith such as you so well describe as enabling us to reach out joyfully into the future to expect what is promised as a thing of tomorrow.

On another occasion, in describing to a friend his discovery of Calypso borealis, he wrote:

I cannot understand the nature of the curse, "Thorns and thistles shall it bring forth to thee." Is our world indeed the worse for this thistly curse? Are not all plants beautiful, or some way useful? Would not the world suffer by the banishment of a single weed? The curse must be within ourselves.

He was at this time in the full flush of his inventive activity and working hard to complete the contract into which he had entered with his employers.

I have been very busy of late making practical machinery [he writes]. I like my work exceeding well, but would prefer inventions which would require some artistic as well as mechanical skill. I invented and put in operation a few days ago an attachment for a self-acting lathe which has increased its capacity at least one third. We are now using it to turn broom handles, and as these useful articles may now be made cheaper, and as cleanliness is one of the cardinal virtues, I congratulate myself on having done something, like a true philanthropist, for the real good of mankind in general. What say you? I have also invented a machine for making rake teeth, and another for boring for them, and driving them, and still another for making the bows, still another used in making the handles, still another for bending them—so that rakes may now be made nearly as fast again. Farmers will be able to produce grain at a lower rate, and the poor to get more bread to eat. Here is more philanthropy, is it not? I sometimes feel as though I was losing time here, but I am at least receiving my first lessons in practical mechanics and as one of the firm here is a millwright and as I am permitted to make as many machines as I please and to remodel those now in use, the school is a pretty good one.

The thirty thousand broom handles were all turned and stored in every available place about the factory for final seasoning when one stormy night about the first of March, 1866, the building took fire. There was no means of fire control and soon the sawmill and factory with all their laboriously manufactured contents were reduced to a pile of ashes. Since there was no insurance, the owners having lost practically everything, John Muir made as equitable a settlement as possible, taking notes bearing neither interest nor date of payment. He always took pride in the thought that his employers justified his confidence, for every cent was ultimately paid. Leaving some of his books to his Sunday School class of admiring boys, and some of his textbooks on botany to friends whom he had interested in this study, he turned his face toward the States. The motives which influenced him to go to Indianapolis and what he found there are the subject of autobiographical notes which follow in the next chapter.

How warm a place he had made for himself in that Meaford circle of friends we learn from a sheaf of kindly letters that followed him southward on his departure soon after the fire. "Was there ever more freedom of speech, thought, and action felt on earth than in that Hollow?" wrote one of the Trout sisters. "We were all equal; every one did as he chose. Ah me! I hope that the happy days will return; that we may be there again, and that you might be one of our number for at least a short time. The circle would be incomplete without you." "John," wrote another, "you don't know how we missed the little star you used to have in the window for us when we would be coming home after night, and the cheerful fire. And not least, we missed the pleasant welcome you had for us."

But the disaster which led John to resume his wanderings also scattered the members of the Meaford circle far and wide over Canada and the United States. In more than the literal sense he had put a star in the window for many of them, and for several decades grateful letters tell of their progress in the new interests which he had brought into their lives. One of the last to survive was William H. Trout, and with a paragraph from the last letter that Muir wrote to him, in 1912, we conclude the account of his Canadian sojourn:

I am always glad to hear from you. Friends get closer and dearer the farther they travel on life's journey. It is fine to see how youthful your heart remains, and wide and far-reaching your sympathy, with everybody and everything. Such people never grow old. I only regret your being held so long in mechanical bread-winning harness, instead of making enough by middle age and spending the better half of life in studying God's works as I wanted you to do long ago. The marvel is that in the din and rattle of mills you have done so wondrous well. By all means keep on your travels, since you know so well how to reap their benefits. I shall hope to see you when next you come West. And don't wait until the canal year. Delays are more and more dangerous as sundown draws nigh.

Chapter V From Indiana to California 1866-1868

A little more than a month after the destruction of the mill in Trout's Hollow, John Muir had arrived at Indianapolis, Indiana, for early in May, 1866, he writes from there to his sister Sarah as follows:

I never before felt so *utterly homeless* as now. I do not feel sad, but I cannot find a good boarding place, to say nothing of a home, and so I have not yet unpacked my trunk, and am at any moment as ready to leave this house for a march as were the Israelites while eating the passover. Much as I love the peace and quiet of retirement, I *feel* something within, some restless fires that urge me on in a way very different from my real wishes, and I suppose that I am doomed to live in some of these noisy commercial centers.

Circumstances over which I have had no control almost compel me to abandon the profession of my choice, and to take up the business of an inventor, and now that I am among machines I begin to feel that I have some talent that way, and so I almost think, unless things change soon, I shall turn my whole mind into that channel.

But even at this time, if one may judge from another passage in the same letter, the prospective physician or inventor had not nearly so good a backing in his feelings as the naturalist. "The forest here," he writes, "is almost in full leaf I have found wild flowers for more than a month now. I gathered a handful about a mile and a half from town this morning before breakfast. When I first entered the woods and stood among the beautiful flowers and trees of God's own garden, so pure and chaste and lovely, I could not help shedding tears of joy."

The considerations that influenced him to go to the capital of Indiana are best told in his autobiographical narrative which is resumed at this point:

Looking over the map I saw that Indianapolis was an important railroad center, and probably had manufactories of different sorts in which I could find employment, with the advantage of being in the heart of one of the very richest forests of deciduous hard wood trees on the continent. Here I was successful in gaining employment in a carriage material factory, full of circular saws and chucks and eccentric and concentric lathes, etc. I first worked for ten dollars a week, without board of course. The second week my wages were increased to eighteen a

week, and later to about twenty-five a week. I greatly enjoyed this mechanical work, began to invent and introduce labor-saving improvements and was so successful that my botanical and geological studies were in danger of being seriously interrupted.

One day a member of the firm asked me, "How long are you going to stay with us?" "Not long," I said. "Just long enough to earn a few hundred dollars, then I am going on with my studies in the woods." He said, "You are doing very well, and if you will stop, we will give you the foremanship of the shop," and held out hopes of a partnership interest in the money-making business. To this I replied that although I liked the inventive work and the earnest rush and roar and whirl of the factory, Nature's attractions were stronger and I must soon get away.

A serious accident hurried me away sooner than I had planned. I had put in a countershaft for a new circular saw and as the belt connecting with the main shaft was new it stretched considerably after running a few hours and had to he shortened. While I was unlacing it, making use of the nail-like end of a file to draw out the stitches, it slipped and pierced my right eye on the edge of the cornea. After the first shock was over I closed my eye, and when I lifted the lid of the injured one the aqueous humor dripped on my hand the sight gradually failed and in a few minutes came perfect darkness. "My right eye is gone," I murmured, "closed forever on all God's beauty." At first I felt no particular weakness. I walked steadily enough to the house where I was boarding, but in a few hours the shock sent me trembling to bed and very soon by sympathy the other eye became blind, so that I was in total darkness and feared that I would become permanently blind.

When Professor Butler learned that I was in Indianapolis, he sent me a letter of introduction to one of the best families there, and in some way they heard of the accident and came to see me and brought an oculist, who had studied abroad, to examine the pierced eye. He told me that on account of the blunt point of the file having pushed aside the iris, it would never again be perfect, but that if I should chance to lose my left eye, the wounded one, though imperfect, would then be very precious. "You are young and healthy," he said, "and the lost aqueous humor will be restored and the sight also to some extent; and your left eye after the inflammation has gone down and the nerve shock is overcome—you will be able to see about as well as ever, and in two or three months bid your dark room good-bye."

So I was encouraged to believe that the world was still to be left open to me. The lonely dark days of waiting were cheered by friends, many of them little children. After sufficient light could be admitted they patiently read for me, and brought great handfuls of the flowers I liked best.

As soon as I got out into Heaven's light I started on another long excursion, making haste with all my heart to store my mind with the Lord's beauty and thus be ready for any fate, light or dark. And it was from this time that my long continuous wanderings may be said to have fairly commenced. I bade adieu to all my mechanical inventions, determined to devote the rest of my life to the study of the inventions of God. I first went home to Wisconsin, botanizing by the way, to take leave of my father and mother, brothers and sisters, all of whom were still living near Portage. I also visited the neighbors I had known as a boy, renewed my acquaintance with them after an absence of several years, and bade each a formal good-bye. When they asked where I was going, I said, "Oh! I don't know—just anywhere in the wilderness southward. I have already had glorious glimpses of the Wisconsin, Iowa, Michigan, Indiana and Canada wildernesses; now I propose to go south and see something of the vegetation of the warm end of the country, and if possible wander far enough into South America to see tropical vegetation in all its palmy glory."

All the neighbors wished me well and advised me to be careful of my health, reminding me that the swamps in the south were full of malaria. I stopped overnight at the home of an old Scotch lady who had long been my friend, and was now particularly motherly in good wishes and advice. I told her that as I was sauntering along the road near sundown I heard a little bird singing, "The day's gone, The day's done." "Weel, John, my dear laddie," she replied, "your day will never be done. There is no end to the kind of studies you are engaged in,

and you are sure to go on and on, but I want you to remember the fate of Hugh Miller." She was one of the finest examples I ever knew of a kind, generous, great-hearted Scotchwoman.

After all the good wishes and good-byes were over, and I had visited Fountain Lake and Hickory Hill and my first favorite gardens and ferneries, I took a thousand-mile walk to the Gulf of Mexico from Louisville, across Kentucky, Tennessee, North Carolina, Georgia, and Florida.

At this point Muir's memoirs pass in a few sentences over the entire period between the beginning of this remarkable walk and his arrival in California. His notes on the margin of the manuscript, however, show that he intended to expand this portion of his autobiography considerably, probably by using parts of the journal which he kept during his southward journey in 1867. In the meantime this journal, published separately under the title *A Thousand-Mile Walk to the Gulf*, has become accessible to all interested readers. There are, however, some unpublished passages, crossed out by the author during a revision in later life, that throw light upon the struggle with himself in which he was engaged during his stay in Indianapolis.

Muir's more intimate friends like the Carrs, Butlers, and Merrills had ere this observed in him a strange kind of restlessness, an inward compulsion which at times caused him to forsake his tools and his occupation for the beauteous ways of those middle western wildernesses that still were pressing close upon the edge of towns. Mrs. Carr, indeed, used to speak of Muir's "good demon" to whose behests he paid heed as did Socrates to his invisible mentor A letter written to her but two days before he started on his southward journey reveals him under the spell of his good genius. "I wish I knew where I was going," he writes. "Doomed to be 'carried of the spirit into the wilderness,' I suppose. I wish I could be more moderate in my desires, but cannot, and so there is no rest."

The opening sentences of his journal, also, no less than the cover inscription "John Muir, Earth-planet, Universe," contain significant bits of self-revelation. "Few bodies," he wrote, "are inhabited by so satisfied a soul as to allowed exemption from extraordinary exertion through a whole life. The sea, the sky, the rivers have their ebbs and floods, and the earth itself throbs and pulses from calms to earthquakes. So also there are tides and floods in the affairs of men, which in some are slight and may be kept within bounds, but in others they overmaster everything. "He was one of the "others."

The farewell visit to Fountain Lake and Hickory Hill had a much deep significance for him than one would infer from the brief reference to it in his memoirs. Twenty-seven years later, in an address on "National Parks and Forest Reservations," delivered at a meeting of the Sierra Club in San Francisco, he related the plans and hopes he had entertained with regard Fountain Lake:

The preservation of specimen sections of natural flora—bits of pure wildness—was a fond, favorite notion of mine long before I heard of national parks. When my father came from Scotland, he settled in a fine wild region in Wisconsin, beside a small glacier lake bordered with white pond-lilies. And on the north side of the lake, just below our house, there was a car meadow full of charming flowers—cypripediums, pogonias, calopogons, asters, goldenrods, etc.—and around the margin of the meadow many nooks rich in flowering ferns and heathworts. And when I was about to wander away on my long rambles' I was sorry to leave that precious meadow unprotected; therefore, I said to my brother-in-law, who then owned it, "Sell me the forty acres of lake meadow, and keep it fenced, and never allow cattle or hogs to break into it, and I will gladly pay you whatever you say. I want to keep it untrampled for the sake of its ferns and flowers; and even if I should never see it again, the beauty of its lilies and orchids is so pressed into my mind I shall always enjoy looking back at them in imagination, even across seas and continents, and perhaps after I am dead."

But he regarded my plan as a sentimental dream wholly impracticable. The fence he said would surely be broken down sooner or later, and all the work would be in vain. Eighteen years later I found the deep-water pond lilies in fresh bloom, but the delicate garden-sod of the meadow was broken I up and trampled into black mire. On the same Wisconsin farm there was a small flowery, ferny bog that I also tried to save. It was less than half an acre in area, and I said, "Surely you can at least keep for me this little bog." Yes, he would try. And when I had left home, and kept writing about it, he would say in reply, "Let your mind rest, my dear John; the mud hole is safe, and the frogs in it are singing right merrily." But in less than twenty years the beauty of this little glacier-bog also was trampled away.

From a letter to his friend Catherine Merrill, written immediately after his visit to Muir's Lake, or Fountain Lake, as he was later accustomed to call it, we excerpt a more than usually detailed and appreciative description. He had started from Indianapolis about the middle of June, taking with him his young friend Merrill Moores. Eager to see the flora of the Illinois prairies in June, he went to Decatur near the center of the state and then northward by way of Rockford and Janesville. A week was spent in botanizing on the prairie seven miles southwest of Pecatonica, and from there they made their way to his old home in Wisconsin.

We have had our last communion with Muir's Lake [he writes from there on the 12th of August]. It was glassy, calm, and full of shadows in the twilight. I have said farewell to nearly all my friends, too, and will soon leave home once more for I know not where.

You would enjoy a visit to that rocky hill we have spoken of so often, though a mere pimple, I suppose, to the Alps you have enjoyed. The most of Wisconsin is not more than two hundred and fifty or three hundred feet above Lake Michigan, or about one thousand feet above the sea. The Blue Mounds, a few miles west of Madison, are only one thousand six hundred and seventy feet above the sea—the highest land in Wisconsin [Rib Hill in Marathon county, 1940 feet, is now regarded as the highest point.]. Our Observatory is perhaps one hundred and fifty or one hundred and eighty feet above the plain. It is a broad hill with long sloping sides, and with a great pile of whinstone blocks cast upon the top. It is not quite bare in any part, for its sides are clothed richly in white and black oaks, and the rocky summit has gray cedars and rock ferns. A great many ravines run up against the rocks on every side; these have the Desmodiums and the harebells and many precious ferns and rare peculiar plants of their own. One of these ravines has evidently been scooped out for a fern garden. One hundred and twenty thousand of my favorite Osmundas live there, all regularly planted at equal distances.

The highest point commands a landscape circle of about one thousand square miles, composed of ten or twelve miles of the Fox River, Lake Puckawa and five or six nameless little lakes—marsh and woodland exquisitely arranged and joined—and about two hundred hills, and some prairie. Ah! these are the gardens for me! There is landscape gardening! While we were there, clouds of every texture and size were held above its flowers and moved about as needed, now increasing, now diminishing, lighter and deeper shadow and full sunshine in small and greater pieces, side by side as each portion of the great garden required. A shower, too, was guided over some miles that required watering. The streams and the lakes and dens and rains and clouds in the hand of God weighed and measured myriads of plants daily coming into life, every leaf receiving its daily bread—the infinite work done in calm effortless omnipotence.

But now, Miss Merrill, we must leave our garden, and I am sure I do it with more pain than I should ever feel in leaving all the *jardins des plantes* in the world, where poor exiled flowers from all countries are mixed and huddled in royal pens.

After a botanical week spent as the guest of his Madison friends, the Butlers and the Carrs, he returned to Indianapolis with the overmastering impulse strong within him, and started from there by rail for Louisville, Kentucky, on the first of September. "I steered through the big city by compass without speaking a word to any one," he wrote in his journal. "Beyond the city I found a road running southward, and after passing a scatterment of suburban cabins and cottages I reached the green woods and spread out my pocket map to

rough-hew a plan for my journey."

He was now fairly started on the longest and most adventurous of his many rambles. His general plan was to push southward by the leafiest, wildest, and least trodden ways. This he apparently succeeded in doing, for only about twenty-two towns and cities are mentioned in his journal, a very small number when one considers the distance he covered. He carried with him nothing but a small rubber bag which held a change of underclothing, comb, towel, brush, and three small books—a New Testament, Milton's *Paradise Lost*, and Burns's *Poems*. At night he sought the shelter of farmhouses and country taverns and when this resource failed him he would lie down, as near Elizabethtown, Kentucky, "in the bushes by guess," enter a schoolhouse and sleep "on the softest-looking of the benches." Indeed, there were stretches in his walk, in the sparsely populated Cumberland mountain region, where he often had "to sleep with the trees in the one great bedroom of the open night."

When he reached Savannah, Georgia, his money was all but gone and the new supply, which he had directed his brother to send thither, either had not arrived or was being withheld by the express agent. He was unable to find work and his impecunious condition did not permit him to live at an inn. It is characteristic of Muir's shrewdness and freedom from ordinary prejudices and superstitions that under these circumstances he sought out the beautiful Bonaventure Cemetery, four miles east of Savannah. There he felt secure from night-prowlers, and his scientific interest was gratified by "one of the most impressive assemblages of animal and plant creatures" he had ever seen. He built himself a shelter of rushes in a thicket of sparkle-berry bushes and lodged there for a week until the money arrived. Meanwhile he had ample time to reflect on the significance of his surroundings, the place of death in the order of nature, and to describe the Tillandsia-draped oaks of Bonaventure. One of the most beautiful passages in all his writings is the account of this graveyard experience published under the title "Camping Among the Tombs" in *A Thousand-Mile Walk to the Gulf.*

The journal of this walk is especially interesting because it shows how his ideas upon certain subjects were maturing at this time. The conception of death which he had inherited with his religious training was bound to yield to a better understanding of Nature's processes. He is convinced now that "on no subject are our ideas more warped and pitiable than on death. Instead of the friendly sympathy, the union of life and death so apparent in Nature, we are taught that death is an accident, a deplorable punishment for the oldest sin, the 'arch-enemy' of life, etc. And upon these primary, never-to-be-questioned dogmas, these time-honored bones of doctrine, our experiences are founded, tissue after tissue in hideous development, until they form the grimmest body to be found in the whole catalog of civilized Christian manufactures."

He thinks it especially unfortunate that town children, generation after generation of them, should be steeped in "this morbid death orthodoxy. " In the country observation of Nature's on-goings is apt to interpose a corrective, whereas in towns the morbidity of burial customs makes an overpowering impression. "But let a child walk with Nature," he writes, "let him behold the beautiful bleedings and communions of death and life, their joyous inseparable unity as taught in woods and meadows, plains and mountains 'and streams of our blessed star, and they will learn that death is stingless indeed, and has no victory, for it never fights. All is divine harmony."

These excerpts show that he had entirely abandoned the historicity of the early chapters of Genesis as well as the Pauline conception of death based upon them. It was inevitable that the anthropocentric nature philosophy of his day, which held that man was the principal object of creation and that all things existed only for his good, should also fall under his condemnation. In spite of the long letters in which his father urged this theological view of Nature upon him as orthodox Biblical doctrine, he broke away from it radically as contrary to reason and evidence, though without being apparently disturbed in his own strong religious convictions.

The world, we are told [he confides to his journal], was made especially for man—a presumption not supported by all the facts. A numerous class of men are painfully astonished whenever they find anything, living or dead, in all God's universe, which they cannot eat or render in some way what they call useful to themselves. They have precise dogmatic insight of the intentions of the Creator, and it is hardly possible to be guilty of irreverence in speaking of their God any more than of heathen idols. He is regarded as a civilized, law-abiding gentleman in favor either of a republican form of government or of a limited monarchy; believes in the literature and language of England, is a warm supporter of the English constitution and Sunday schools and missionary societies; and is purely a manufactured article as any puppet of a half-penny theatre.

With such views of the Creator it is, of course, not surprising that erroneous views should be entertained of the creation. To such properly trimmed people, the sheep, for example, is an easy problem—food and clothing "for us," eating grass and daisies white by divine appointment for this predestined purpose, on perceiving the demand for wool that would be occasioned by the eating of the apple in the Garden of Eden.

In the same pleasant plan, whales are storehouses of oil for us, to help out the stars in lighting our dark ways until the discovery of the Pennsylvania oil wells. Among plants, hemp, to say nothing of the cereals, is a case of evident destination for ships' rigging, wrapping packages, and hanging the wicked. Cotton is another plain case of clothing. Iron was made for hammers and ploughs, and lead for bullets; all intended for us. And so of other small handfuls of insignificant things.

In satirical mood he then asks these "profound expositors of God's intentions" whether the logic of their reasoning does not indicate also that man is the divinely intended prey of lions, tigers, alligators, and the myriads of noxious insects that plague and destroy him. To say that these maladjustments are "unresolvable difficulties connected with Eden's apple and the devil" is mere evasion. "It never seems to occur to these far-seeing teachers," he writes, "that Nature's object in making animals and plants might possibly be first of all the happiness of each one of them, not the creation of all for the happiness of one. Why should man value himself as more than a small part of the one great unit of creation? And what creature of all that the Lord has taken the pains to make is not essential to the completeness of that unit—the cosmos? The universe would be incomplete without the smallest transmicroscopic creature that dwells beyond our conceitful eyes and knowledge."

He is convinced that the origin of man is bound up inextricably with the origin of every other creature and that therefore the animal world stands to him in a relation quite different from that which is assigned to it by the religious thought of his day. It arouses his indignation to think that "the fearfully good, the orthodox, of this laborious patchwork of modern civilization cry 'Heresy' on every one whose sympathies reach a single hair's breadth beyond the boundary epidermis of our own species." Nor is he able to accept the "closest researches of clergy" according to whom the world is to be cleansed and renewed by a "universal planetary combustion." Finding that whole kingdoms of creatures have enjoyed existence and returned to dust ere man appeared, he apprehends that human beings also, when they have "played their part in Creation's plan, may disappear without a general burning or extraordinary commotion whatever."

It was the middle of October when Muir reached Florida by a little coastwise steamer, *Sylvan Shore*, then plying between Savannah and Fernandina. The latter town, with its fine harbor, was not only a principal port of entry for marine commerce, but was also the Atlantic terminus of a railroad, opened in 1861, that crossed Florida to Cedar Keys on the Gulf, a distance of one hundred and fifty-five miles. Along this railroad Muir footed his way leisurely across the flowery peninsula, though not without many side excursions into the swamps and pine-barrens wherever new plants beckoned to him. His enthusiasm over the novel flora, even at that time of the year, was unbounded. Several notebook drawings of the palmetto in all stages of growth and maturity testify to his rapture over this new plant acquaintance which, as often under such circumstances, took

on a spiritual significance to him. "This palm was indescribably impressive," he writes, "and told me grander things than I ever got from human priest."

It will have occurred to the reader that Muir's habit of sleeping out in the open occasionally when night overtook him, without protection from mosquitoes, was especially dangerous in the South. In the Florida pine barrens where one shelterless night he plashed and groped about until he found a place dry enough to lie down, he observed marked evidences of malaria in the people whom he met. It is not surprising, therefore, that he was taken severely ill soon after he reached Cedar Keys.

In this remote and moribund little town Muir passed one of the most serious crises of his life. Had it not been for a family by the name of Hodgson, who took him into their home and nursed him back to health, he would have filled a nameless grave there soon after his arrival. Mr. Hodgson was the owner of a sawmill which he was operating on a spit of land about two miles from town. Having ascertained that schooners, freighted with lumber, sailed at irregular intervals from Cedar Keys to Galveston, Texas Muir decided to apply for work at the mill and to await the coming of one of these schooners. His mechanical skill had scarcely secured him the desired employment when he was seized with an attack of fever so violent that he lay unconscious for days.

Exactly half a century after these events my wife and I followed Muir's old trail to Cedar Keys. We had some difficulty even in finding, two miles north of the town, the knoll on which had stood the Hodgson residence in which Muir was nursed back to health, and where he wrote charming descriptions of his surroundings. Amid some picturesque old Tillandsia-draped live-oaks, clearly the same which he had sketched in his journal fifty years earlier, we found evidence of a former habitation—remnants of foundations, of garden-beds bordered by conch shells all overgrown with cactus and underbrush. From here, during days of convalescence, he sketched Lime Key with its fringe of palmettos and yuccas, and watched the water-birds feeding when the tide went out. The snowy egret was no longer to be seen, but here and there a pelican flapped along on solemn wing, gulls made patches of gleaming white upon the water, and blue herons stalked along the reedy margin of the shore. They settled down at times in the treetops and looked out gravely from umbrageous caves. Seaward, through openings among the trees, one caught glimpses of distant islands—Keys—that floated like giant birds upon the purplish-blue waters, or faded into the opalescent haze, visible only as supports for the plumey palmetto crowns that waved on slender trunks above them.

It was amusing to see how the jaws of the natives dropped under a facial expanse of blank astonishment whenever I made inquiries about things as they were in Cedar Keys fifty years ago. The longest memory was that of a old negro by the name of Jack Cloud, who was introduced as "McLeod." "You certainly are not a Scotchman," I said; "how do you come by that name? "Both he and the benchful of black cronies in front of the store broke into laughter. "No, sah," he said, "my name is Jack Cloud, sah, but ebberybody done calls me 'McLeod." "Were you born here?" "Oh, Lawd, no; I wuz bawn in Georgia, sah! Aftah de wah, I come down heah to start a cotton plantation for a man. Dat wuz in 1865. Yes, sah, de railroad wuz heah, but so delapurdated, it done took a train a week to get heah from Femandina. De ties and piles wuz all rotten." He told how all the business then went over a strait to the neighboring Key of Atsena Otie where the first settlement had been begun. He remembered Hodgson's sawmill and had assisted in dismantling what was left of it many decades ago.

But neither he nor any one else had any recollection of "sharp-visaged" Captain Parsons and his schooner Island Belle which Muir, in January 1868, saw threading her way along the tortuous channel that leads into the harbor of Cedar Keys. Fifty years had swallowed up all memory of him and his ship; of John Muir and his sojourn; of his friends and their home. In this unlettered corner of the South, where decay in league with warmth and sun and rain obliterates the works of man more speedily than anywhere else, oblivion had swallowed up with equal haste the records of human memories.

Muir still was a convalescent when he boarded the Island Belle and sailed away to Cuba. For a month he made his home on the vessel, at anchor in the harbor of Havana, and spent his days botanizing on the outskirts of the city. The captain and the sailors were accustomed to gather about him when he returned in the evening in order to be entertained with a recital of the day's adventures and discoveries. He was consumed with a desire to explore the central mountain range of Cuba through the whole length of the island and then embark for South America. "My plan," he writes, "was to go ashore anywhere on the north end of the continent, push on southward through the wilderness around the headwaters of the Orinoco, until I reached a tributary of the Amazon, and float down on a raft or skiff the whole length of the great river to its mouth." It seems strange that such a trip should ever have entered the dreams of any person, however enthusiastic and full of daring, particularly under the disadvantages of poor health, of funds less than a hundred dollars, and of the insalubrity of the Amazon valley.

His weakened physical condition forced him to admit that the plan to explore the mountainous wildernesses of Cuba was impossible. After visiting all the shipping agencies in a vain search for a vessel bound for South America this rash enterprise was abandoned also, or rather postponed, as he was accustomed to say. It was then that his mind turned to California, whose wonders had engaged his fancy for many a year. Upon consulting Captain Parsons concerning a passage to New York, the latter pointed out to him a trim little fruit schooner loaded with oranges and ready to weigh anchor. With his usual promptness in making decisions he was aboard the little fruiter and bound for New York within twenty-four hours.

Muir's enthusiastic description of this trip in one of the chapters of *A Thousand-Mile Walk to the Gulf* shows that he took almost as much delight in the scenes of the ocean as in those on land. But New York bewildered him by its size, throngs, and noise. By permission of the captain the schooner remained his home while he made arrangements for his passage to Panama. His walks about the city of New York, he says, "extended but little beyond sight of my little schooner home. . . . Often I thought I would like to explore the city if, like a lot of wild hills and valleys, it was clear of inhabitants."

The North American Company at this time had ordered from New York a new steamship for its Pacific Coast traffic. This was the Nebraska, and she had sailed early m January, 1868, on her long maiden voyage around Cape Horn. Muir found that the Santiago de Cuba was scheduled to sail for Aspinwall on the 6th of March, and that her passengers would connect with the northward-bound Nebraska on the Pacific side of the Isthmus of Panama in about ten days. The records show that the Santiago de Cuba, not a large boat, carried on this trip four hundred passengers and five hundred and forty-two tons of freight. So overcrowded was the vessel that many passengers had to sleep on the decks. Nevertheless Muir engaged steerage passage on this boat and made connections with the Nebraska.

Over his experiences on shipboard, both to Panama and from there to California, Muir has drawn the veil of oblivion. He rarely referred to them, even in the circle of his own family, and then only to indicate that they were such as one would have to forget in order to retain one's faith in humanity.

But of the trip across the Isthmus he wrote, "Never shall I forget the glorious flora, especially for the first fifteen or twenty miles along the Chagres River. The riotous exuberance of great forest trees, glowing in purple, red, and yellow flowers, far surpassed anything I had ever seen, especially of flowering trees, either in Florida or Cuba. I gazed from the car platform enchanted. I fairly cried for joy and hoped that sometime I should be able to return and enjoy and study this most glorious of forests to my heart's content."

Chapter VI Following the Sheep 1868-1869

The Nebraska arrived at San Francisco, March 27th, and Muir lost no time there after he set foot on land. To his friends he was accustomed to relate, touches of humor, how he met on the street, the morning after debarkation, a man with a kit of carpenter's tools on his shoulders. When he inquired of him "the nearest way out of town to the wild part of the State," the man set down his tools in evident astonishment and asked, "where do you wish to go?" "Anywhere that's wild" was Muir's reply, and he was directed to the Oakland Ferry with the remark that that would be as good a way out of town as any.

On shipboard Muir had made the acquaintanceship of a young Englishman by the name of Chilwell, "a most amusing and faithful companion," who eagerly embraced the opportunity to visit Yosemite Valley with him. In those days the usual route to Yosemite was by river steamer to Stockton, thence by stage to Coulterville or Mariposa, and the remainder of way over the mountains on horseback. But Muir disdained this "orthodox route," for "we had plenty of time," he said, "and proposed drifting leisurely mountain ward by the Santa Clara Valley, Pacheco Pass, and the San Joaquin Valley, and thence to Yosemite by any road that we chanced to find; enjoying the flowers and light; camping out in our blankets wherever overtaken by night and paying very little compliance to roads or times."

In his autobiographical manuscript Muir passes in a few sentences over the first part of this trip, intending according to his penciled directions to fill in from a description already written. This must refer to the detailed narrative published in *Old and New* in 1872, from which we excerpt the paragraphs descriptive of his walk as far as the top of the Pacheco Pass.

We crossed the bay by the Oakland Ferry and proceeded up the Santa Clara valley to San Jose. This is one of the most fertile of the many small valleys of the coast; its rich bottoms are filled with wheat-fields, and orchards, and vineyards, and alfalfa meadows.

It was now spring-time, and the weather was the best we ever enjoyed. Larks and streams sang everywhere; the sky was cloudless, and the whole valley was a lake of light. The atmosphere was spicy and exhilarating, my companion acknowledging over his national prejudices that it was the best he ever breathed—more deliciously fragrant than that which streamed over the hawthorn hedges of England. This San Jose sky was not simply pure and bright, and mixed with plenty of well-tempered sunshine, but it possessed a positive flavor, a taste that thrilled throughout every tissue of the body. Every inspiration yielded a well-defined piece of pleasure that awakened thousands of new palates everywhere. Both my companion and myself had lived on common air for nearly thirty years, and never before this discovered that our bodies contained such multitudes of palates, or that this mortal flesh, so little valued by philosophers and teachers, was possessed of so vast a capacity for happiness.

We were new creatures, born again; and truly not until this time were we fairly conscious that we were born at all. Never more, thought I as we strode forward at faster speed, never more shall I sentimentalize about getting free from the flesh, for it is steeped like a sponge in immortal pleasure.

The foothills of the valley are in near view all the way to Gilroy, those of the Monte Diablo range on our left, those of Santa Cruz on our right; they are smooth and flowing, and come down to the bottom levels in curves of most surpassing beauty. They are covered with flowers growing close together in cloud-shaped companies, acres and hillsides in size, white, purple, and yellow, separate, yet blending like the hills upon which they grow. . . .

The Pacheco Pass was scarcely less enchanting than the valley. It resounded with crystal waters, and the loud shouts of thousands of quails. The California quail is a little larger than the Bob White; not quite so plump in form. The male has a tall, slender crest, wider at top than bottom, which he can hold straight up, or droop backward on his neck, or forward over his bill, at pleasure; and, instead of "Bob White," he shouts "pe-check-a," bearing down with a stiff, obstinate emphasis on check." Through a considerable portion of the

pass the road bends and mazes along the groves of a stream, or down in its pebbly bed, leading one now deep in the shadows of dogwoods and alders, then out in the light, through dry chaparral, over green carex meadow banked with violets and ferns, and dry, plantless flood-beds of gravel and sand.

We found ferns in abundance in the pass. . . Also in this rich garden pass we gathered many fine grasses and carices, and brilliant penstemons, azure and scarlet, and mints and lilies, and scores of others, strangers to us, but beautiful and pure as ever enjoyed the sun or shade of a mountain home.

At this point Muir's unpublished memoirs resume the thread of the narrative as follows:

At the top of the Pass I obtained my first view of the San Joaquin plain and the glorious Sierra Nevada. Looking down from a height of fifteen hundred feet, there, extending north and south as far as I could see lay a vast level flower garden, smooch and level like a lake of gold—the floweriest part of the world I had yet seen. From the eastern margin of the golden plain arose the white Sierra. At the base ran a belt of gently sloping purplish foothills lightly dotted with oaks, above that a broad dark zone of coniferous forests and above is forest zone arose the lofty mountain peaks, clad in snow. The atmosphere was so clear that the nearest of the mountain peaks on the axis of range were at a distance of more than one hundred and fifty miles, they seemed to be at just the right distance to be seen broadly in their relations to one another, marshaled in glorious ranks and groups, their snowy robes smooch and bright that it seemed impossible for a man to walk across the open folds without being seen, even at this distance. Perhaps more than three hundred miles of the range was comprehended in this one view.

Descending the pass and wading out into the bed of golden compost five hundred miles long by forty or fifty wide, I found that the average depth of the vegetation was over knee deep, and the flowers were so crowded together that in walking through the midst of them and over them more than a hundred were pressed down beneath the foot at every step. The yellow these compositae, both of the ray and disc flowers, is extremely deep a rich and bossy, and exceeds the purple of all the others in superficial quantity forty or fifty times their whole amount. But to an observer who first looks downward, then takes a wider and wider view, the yellow gradually fade and purple predominates, because nearly all of the purple flowers are taller. In depth, the purple stratum is about ten or twelve inches, the yellow seven or eight, and down in the shade, out of sight, is another stratum of purple, one inch in depth, for the ground forests of mosses are there, with purple stems, and purple cups. The color beauty of these mosses, at least in mass, was not made for human eyes, nor for the wild horses that inhabit these plains, nor the antelopes, but perhaps the little creatures enjoy their own beauty, and perhaps the insects that dwell in these forests and climb their shining columns enjoy it. But we know that however faint, and however shaded' no part of it is lost, for all color is received into the eyes of God.

Crossing this greatest of flower gardens and the San Joaquin River at Hill's Ferry, we followed the Merced River, which I knew drained Yosemite Valley, and ascended the foothills from Snelling by way of Coulterville. We had several accidents and adventures. At the little mining town of Coulterville we bought flour and tea and made inquiries about roads and trails, and the forests we would have to pass through. The storekeeper, an Italian, took kindly pains to tell the pair of wandering wayfarers, new arrived in California, that the winter had been very severe, that in some places the Yosemite trail was still buried in snow eight or ten feet deep, and therefore we would have to wait at least a month before we could possibly get into the great valley, for we would surely get lost should we attempt to go on. As to the forests, the trees, he said, were very large; some of the pines eight or ten feet in diameter.

In reply I told him that it would be delightful to see snow ten feet deep and trees ten feet thick, even if lost, but I never got lost in wild woods. "Well," said he, "go, if you must, but I have warned you; and anyhow you must have a gun, for there are bears in the mountains, but you must not shoot at them unless they come for you and are very, very close up." So at last, at Mr. Chilwell's anxious suggestion, we bought an old army musket, with a few pounds of quail shot and large buckshot, good, as the merchant assured us, for either birds

or bears.

Our bill of fare in camps was simple—tea and cakes, the latter made from flour without leaven and toasted on the coals—and of course we shunned hotels in the valley, seldom indulging even in crackers, as being too expensive. Chilwell, being an Englishman, loudly lamented being compelled to live on so light a diet, flour and water, as he expressed it, and hungered for flesh; therefore he made desperate efforts to shoot something to eat, particularly quails and grouse, but he was invariably unsuccessful and declared the gun was worthless. I told him I thought that it was good enough if properly loaded and aimed, though perhaps sighted too high, and promised to show him at the first opportunity how to load and shoot.

Many of the herbaceous plants of the flowing foothills were the same as those of the plain and had already gone to seed and withered. But at a height of one thousand feet or so we found many of the lily family blooming in all their glory, the Calochortus especially, a charming genus like European tulips, but finer, and many species of two new shrubs—especially, Ceanothus and Adenostoma. The oaks, beautiful trees with blue foliage and white bark, forming open groves, gave a fine park effect. Higher, we met the first of the pines, with long gray foliage, large stout cones, and wide-spreading heads like palms. Then yellow pines, growing gradually more abundant as we ascended. At Bower Cave on the north fork of the Merced the streams were fringed with willows and azalea, ferns, flowering dogwood, etc. Here, too, we enjoyed the strange beauty of the Cave in a limestone hill.

At Deer Flat the wagon-road ended in a trail which we traced up the side of the dividing ridge parallel to the Merced and Tuolumne to Crane Flat, lying at a height of six thousand feet, where we found a noble forest of sugar pine, silver fir, libocedrus, Douglas spruce, the first of the noble Sierra forests, the noblest coniferous forests in the world, towering in all their unspoiled beauty and grandeur around a sunny, gently sloping meadow. Here, too, we got into the heavy winter snow—a fine change from the burning foothills and plains.

Some mountaineer had tried to establish a claim to the Flat by building a little cabin of sugar pine shakes, and though we had arrived early in the afternoon I decided to camp here for the night as the trail was buried in the snow which was about six feet deep, and I wanted to examine the topography and plan our course. Chilwell cleared away the snow from the door and floor of the cabin, and made a bed in it of boughs of fernlike silver fir, though I urged the same sort of bed made under the trees on the snow. But he had the house habit.

After camp arrangements were made he reminded me of my promise about the gun, hoping eagerly for improvement of our bill of fare, however slight. Accordingly I loaded the gun, paced off thirty yards from the cabin, or shanty, and told Mr. Chilwell to pin a piece of paper on the wall and see if I could not put shot into it and prove the gun's worth. So he pinned a piece on the shanty wall and vanished around the corner, calling out, "Fire away."

I supposed that he had gone some distance back of the cabin, but instead he went inside of it and stood up against the mark that he had himself placed on the wall, and as the shake wall of soft sugar pine was only about half an inch thick, the shot passed through it and into his chowder. He came rushing: out, with his hand on his chowder, crying in great concern, "You've shot me, you've shot me, Scottie." The weather being cold, he fortunately had on three coats and as many shirts. One of the coats was a heavy English overcoat. I discovered that the shot had passed through all this clothing and into his shoulder, and the embedded pellets had to be picked out with the point of a penknife. I asked him how he could be so foolish as to stand opposite the mark. "Because," he replied, "I never imagined the blank gun would shoot through the side of the 'ouse."

We found our way easily enough over the deep snow, guided by the topography, and discovered the trail on the brow of the valley just as the Bridal Veil came in sight. I didn't know that it was one of the famous falls I had read about, and calling Chilwell's attention to it I said, "See that dainty little fall over there. I should like to camp at the foot of it to see the ferns and lilies that may be there. It looks small from here, only about

fifteen or twenty feet, but it may be sixty or seventy." So little did we then know of Yosemite magnitudes!

After spending eight or ten days in visiting the falls and the high points of view around the walls, making sketches, collecting flowers and ferns, etc., we decided to make the return trip by way of Wawona, then owned by Galen Clark, the Yosemite pioneer. The night before the start was made on the return trip we camped near the Bridal Veil Meadows, where, as we lay eating our suppers by the light of the camp-fire, we were visited by a brown bear. We heard him approaching by the heavy crackling of twigs. Chilwell, in alarm, after listening a while, said, "I see it! I see it! It's a bear, a grizzly! Where is the gun? You take the gun and shoot him—you can shoot best." But the gun had only a charge of birdshot in it; therefore, while the bear stood on the opposite side of the fire, at a distance of probably twenty-five or thirty feet, I hastily loaded in a lot of buckshot. The buckshot was too large to chamber and therefore it made a zigzag charge on top of the birdshot charge, the two charges occupying about half of the barrel. Thus armed, the gun held at rest pointed at the bear, we sat hushed and motionless, according to instructions from the man who sold the gun, solemnly waiting and watching, as full of fear as the musket of shot. Finally, after sniffing and whining for his supper what seemed to us a long time, the young inexperienced beast walked off. We were much afraid of his return to attack us. We did not then know that bears never attack sleeping campers, and dreading another visit we kept awake on guard most of the night.

Like the Coulterville trail all the high-lying part of the Mariposa trail was deeply snow-buried, but we found our way without the slightest trouble, steering by the topography in a general way along the brow of the canyon of the south fork of the Merced River, and in a day or two reached Wawona. Here we replenished our little flour sack and Mr. Clark gave us a piece of bear meat.

We then pushed eagerly on up the Wawona ridge through a magnificent sugar pine forest and into the far-famed Mariposa Sequoia Grove. The sun was down when we entered the Grove, but we soon had a good fire and at supper that night we tasted bear meat for the first time. My flesh-hungry companion ate it eagerly, though to me it seemed so rank and oily that I was unable to swallow a single morsel

After supper we replenished the fire and gazed enchanted at the vividly illumined brown boles of the giants towering about us, while the stars sparkled in wonderful beauty above their huge domed heads. We camped here long uncounted days, wandering about from tree to tree, taking no note of time. The longer we gazed the more we admired not only their colossal size, but their majestic beauty and dignity. Greatest of trees, greatest of living things, their noble domes poised in unchanging repose seemed to belong to the sky, while the great firs and pines about them looked like mere latter-day saplings.

While we camped in the Mariposa Grove, the abundance of bear tracks caused Mr. Chilwell no little alarm, and he proposed that we load the gun properly with buckshot and without any useless birdshot; but there was no means of drawing the charge—it had to be shot off. The recoil was so great that it bruised his shoulder and sent him spinning like a top. Casting down the miserable, kicking, bad luck musket among the Sequoia cones and branches that littered the ground, he stripped and examined his unfortunate shoulder and, in painful indignation and wrath, found it black and blue and more seriously hurt by the bruising recoil blow than it was by the shot at Crane Flat.

When we got down to the hot San Joaquin plain at Snelling the grain fields were nearly ready for the reaper, and we began to inquire for a job to replenish our remaining stock of money which was now very small, though we had not spent much; the grand royal trip of more than a month in the Yosemite region having cost us only about three dollars each. At our last camp, in a bed of cobble-stones on the Merced River bottom, Mr. Chilwell was more and more eagerly hungering for meat. He tried to shoot one of the jack-rabbits cantering around us, but was unable to hit any of them. I told him, when he begged me to take the gun, that I would shoot one for him if he would drive it up to the camp. He ran and shooed and threw cobble-stones without getting any of them up within shooting distance as I took good care to warn the poor beasts by making myself

and the gun conspicuous. At last discovering the humor of the thing he shouted: "I say, Scottie, this makes me think of a picture I once saw in Punch—game-keepers driving partridges to be shot by a simpleton Cockney."

Then one of those curious burrowing owls alighted on the top of a fencepost beside us, and I said, "If you are so hungry for flesh why don't you shoot one of those owls?" "Howls," he said in disgust, "are only vermin." I argued that that was mere prejudice and custom, and that if stewed in a pot it would make good soup, and the flesh, too, that he hungered for, might also be found to be fairly good, but that if he didn't care for it, I didn't.

I finally pictured the flavor of the soup so temptingly that with watering lips he consented to try it, and the poor owl was shot. When he came to dress it the pitiful little red carcass seemed so worthless a morsel that he was tempted to throw it away, but I said, "No; now that you have it ready for the pot, boil it and at least enjoy the soup." So it was boiled in the teapot and bravely devoured, though he insisted that he did not like the flavor of either the soup or the meat. He charged me, saying: "Now, Scottie, if you go to England with me to see my folks, after our fortunes are made, don't you tell them as 'ow we 'ad a howl for supper." He was always trying to persuade me to go to England with him.

Next day we got a job in a harvest field at Hopeton and were seated at a table once more. Mr. Chilwell never tired of describing the meanness and misery of so pure a vegetable diet as was ours on the Yosemite trip. "Just think of it," said he, "we lived a whole month on flour and water!" He ate so many hot biscuits at that table, and so much beans and boiled pork, that he was sick for three or four days afterwards, a trick the despised Yosemite diet never played him.

This Yosemite trip only made me hungry for another far longer and farther reaching, and I determined to set out again as soon as I had earned little money to get near views of the mountains in all their snowy grandeur, and study the wonderful forests, the noblest of their kind I had ever seen—sugar pines eight and nine feet in diameter, with cones nearly two feet long, silver furs more than two hundred feet in height, Douglas spruce and libocedrus, and the kingly Sequoias.

After the harvest was over Mr. Chilwell left me, but I remained with Mr. Egleston several months to break mustang horses; then ran a ferry boat Merced Falls for travel between Stockton and Mariposa. That same fall made a lot of money sheep-shearing, and after the shearing was over one the sheep-men of the neighborhood, Mr. John Cannel, nicknamed Smoky Jack, begged me to take care of one of his bands of sheep, because the then present shepherd was about to quit. He offered thirty dollars a month a board and assured me that it would be a "foin aisy job."

I said that I didn't know anything about sheep, except the shearing them, didn't know the range, and that his flock would probably be scatter over the plains and lost; but he said he would risk me, that "the sheep would show me the range, and all would go smooth and aisy." At length, considering that, being out every day, a fine opportunity would be offered to watch the growth of the flowery vegetation, and to study the birds and beasts, insects, weather, etc., I dared the job, and sure enough, as my employer said, the sheep soon showed me their range, leading me a wild chase in their search for grass over the dry sunbeaten plains.

Smoky Jack was known far and wide, and I soon learned that he was queer character. Unmarried, living alone, playing the game of money making, he had already become sheep-rich—the owner of three or four bands as the flocks are called. He had commenced his career as a sheep-man when he was poor, with only a score or two of coarse-woofed ewes, which he herded himself and faithfully followed and improved until they had multiplied in thousands.

He lived mostly on beans. In the morning after his bean breakfast he filled his pockets from the pot with dripping beans for luncheon, which he ate in handfuls as he followed the flock. His overalls and boots soon, of course, became thoroughly saturated, and instead of wearing thin, wore thicker and stouter, and by sitting

down to rest from time to time, parts of all the vegetation, leaves, petals, etc., were embedded in them, together with wool fibers, butterfly wings, mica crystals, fragments of nearly everything that part of the world contained rubbed in, embedded and coarsely stratified, so that these wonderful garments grew to have a rich geological and biological significance, like chose of Mr. Delaney's shepherd.

Replying to my inquiry where the sheep were, he directed me to follow the road between French Bar and Snelling four or five miles, and "when you see a cabin on a little hill, that's the place." I found the place, and a queer place it proved to be. The shepherd whom I was to relieve hailed me with delight and within a few minutes of my arrival set off, exulting in his freedom. I begged him to stay until morning and show me the range, but this he refused, saying that it was unnecessary for him to show me the range; all I had to do was simply to let down the corral bars and the starving sheep would soon explain and explore the range.

Left alone, I examined the dismal little hut with dismay. A Dutch oven frying-pan, and a few tin cups lay on the floor; a rickety stool and a bedstead, with a tick made of a wool sack, stuffed with straw and cast-off overalls left by shearers, constituted the furniture. I went outside, looking for a piece of clean ground to lie down on, but no such ground was to be found. Every yard of it was strewn with some sort of sheep camp detritus, bits of shriveled woolly skin, bacon rinds, bones, horns and skulls mixed with all sorts of mysterious compound unclean rubbish! I therefore had to go back into the shanty and spread my blankets on the dirt floor as the least dangerous part of the establishment.

Next morning, by the time I had fried some pancakes and made a cup of tea, the sunbeams were streaming through the wide vertical seams of the shanty wall, and I made haste to open the corral. The sheep were crowding around the gate, and as soon as it was opened, poured forth like a boisterous uncontrollable flood, and soon the whole flock was so widely outspread and scattered over the plain, it seemed impossible that the mad starving creatures could ever be got together again. I ran around from side to side, headed the leaders off again and again, and did my best to confine the size of the flock to an area of a square mile or so.

About noon, to my delight and surprise, they lay down to rest and allowed me to do the same for an hour or so. Then they again scattered, but not so far nor so wildly, and I was still more surprised about half an hour before sundown, while I was wondering how I could ever get them driven back into the corral, to see them gather of their own accord into long parallel files, cross Dry Creek on the bank of which the corral stood, and pour back into the corral and quietly lie down. This ended my first day of sheep-herding.

After the winter rains had set in, and the grass had grown to a height of three or four inches, herding became easy, for they quietly filled themselves; but at this time, just before the rain, when not a green leaf is to be seen, when the dead summer vegetation is parched and crumpled into dust and fragments of stems, the sheep are always hungry and unmanageable; but when full of green grass the entire flock moves as one mild, bland, contented animal. This year the winter rains did not set in until the middle of December, Then Dry Creek became a full, deep, stately flowing river; every hollow in the hills was flooded, every channel so long dry carried a rushing, gurgling, happy stream.

Being out every day I had the advantage of watching the coming of every species of plant. Mosses and liverworts, no trace of which could be seen when dry and crumpled, now suddenly covered the entire plain with a soft velvet robe of living green. Then, at first one by one, the different species of flowering plants appeared, pushing up with marvelous rapidity and bursting into bloom, until all the ground was covered with golden compositae, interrupted and enriched here and there with charming beds of violets, mints, clover, mariposa tulips, etc.

It was very interesting, too, to watch the awakening and coming to light and life of the many species of ants and other insects after their deathlike sleep during the cold rainy season; and the ground squirrels coming out of their burrows to sun themselves and feed on the fresh vegetation; and to watch the nesting birds and hear

them sing—especially the meadow-larks which were in great abundance and sang as if every note was transformed sunshine. Plovers in great numbers and of several species came to feed with snipes and geese and swans.

It was interesting, too, to watch the long-eared hares, or jack-rabbits as they are called, as they cantered over the flowery plain, or confidingly mingled with the flock. Several times I saw inquisitive sheep interviewing the rabbits as they sat erect, even touching noses and indulging apparently in interesting gossip. My dog was fond of chasing the hares, but they bounded along carelessly, and never were so closely pressed as to be compelled to dive into a burrow. They apparently trusted entirely to their speed of foot; but as soon as a golden eagle came in sight they made for the nearest burrow in terrified haste. Then, feeling safe, they would turn around and look out the door to watch the movements of their enemy.

Occasionally I have seen an eagle alight within a yard or two of the door of a burrow into which a hare had been chased, and observed their gestures while the hare and eagle looked each other in the face for an hour at a time, the eagle apparently hoping that the hare might venture forth. When, however, a hare was surprised at any considerable distance from a burrow, the eagle, in swift pursuit, rapidly overtakes it and strikes it down with his elbow, then wheels around, picks it up and carries it to some bare hilltop to feast at leisure.

By the end of May nearly all of the marvelous vegetation of the plains has gone to seed and is so scorched and sun-dried, it crumbles under foot as though it had literally been cast into an oven. Then most of the flocks are driven into the green pastures of the Sierra. A camp is made on the first favorable spot commanding a considerable range, and when it is eaten out the camp is moved to higher and higher pastures in succession, following the upward sweep of grassy, flowery summer towards the summit of the Range.

Ever since I had visited Yosemite the previous year I had longed to get back into the Sierra. When the heavy snows were melting in the spring sunshine, opening the way to the summits of the Range, and I was trying to plan a summer's excursion into their midst, wondering how I could possibly carry food to last a whole summer, Mr. Delaney, a neighbor of Smoky Jack's, noticing my love of plants and seeing some of the drawings I had made in my note-books, urged me to go to the mountains with his flock—not to herd the sheep, for the regular shepherd was to take care of them, but simply to see that the shepherd did his duties. He offered to carry my plant press and blankets, allow me to make his mountain camps my headquarters while I was studying the adjacent mountains, and perfect freedom to pursue my studies, and offering to pay me besides, simply to see that the shepherd did not neglect his flock.

Mr. Delaney was an Irishman who was educated at Maynooth College for a Catholic priest, a striking contrast to his so-called "Smoky" neighbor. He was lean and tall, and I naturally nicknamed him Don Quixote. I told him that I did not think I could be of any practical use to him because I did not know the mountains, knew nothing about the habits of sheep in the mountains, and that I feared that in pushing through brush, fording torrents, and in attacks of bears and wolves, the sheep would be scattered and not half of them ever see the plains again. But he encouraged me by saying that he himself would go to the mountains with the flock, to the first camp, and visit each camp in succession from time to time, bringing letters and fresh provisions, and seeing for himself how his flock was prospering; that the shepherd would do all the herding and that I would be just as free to pursue my studies as if there were no sheep in the question, to sketch and collect plants, and observe the wild animals; but as he could not depend upon his shepherd his fear was that the flock might be neglected, and scattered by bears, and that my services would only be required in cases of accidents of that sort.

I therefore concluded to accept his generous offer. The sheep were counted, the morning the start for the mountains was made, as they passed out of the corral one by one. They numbered two thousand and fifty, and were headed for the mountains. The leaders of the flock had not gone a mile from the home camp before they seemed to understand that they were on their way up to the high green pastures where they had been the year

before, and eagerly ran ahead, while Don Quixote, with a rifle on his shoulder, led two pack animals, and the shepherd and an Indian and Chinaman to assist in driving through the foothills, and myself, marched in the rear.

Our first camp after crossing the dusty, brushy foothills, which were Scarcely less sunburned than the plains, was made on a tributary of the North Fork of the Merced River at an elevation of about three thousand feet above the sea. Here there were no extensive grassy meadows, but the hills and hollows and recesses of the mountain divide between the Merced and the Tuolumne waters were richly clothed with grass and lupines, while clover of different species and ceanothus bushes furnished pasture in fair abundance for several weeks, while the many waterfalls on the upper branches of the river, the charming lily gardens at the foot of them, and many new plants and animals to sketch and study, afforded endless work according to my own heart.

The sheep were kept here too long; the pasture within two or three miles of the camp was eaten bare, while we waited day after day, more and more anxiously, for the coming of the Don with provisions, and to assist and direct the moving of the camp to higher fresh pasturage. Our own pasturage was also exhausted. We got out of flour, and strange to say, although we had abundance of mutton and tea and sugar, we began to suffer. After going without bread for about a week it was difficult to swallow mutton, and our stomachs became more and more restless. The shepherd tried to calm his rebellious stomach by chewing great quantities of tobacco and swallowing most of the juice, and by making his tea very strong, using a handful for each cup. Strange that in so fertile a wilderness we should suffer distress for the want of a cracker, or a slice of bread, while the Indians of the neighborhood sustained their merry, free lives on clover, pine bark, lupines, fern roots, etc., with only now and then a squirrel.

At length the Don came down the long glen, and all our bread woes were ended. He brought with him not only an abundance of provisions, but two men to assist in driving the flock higher. One of these men was an Indian, and I was interested in watching his behavior while eating, driving, and choosing a place to sleep at night. He kept a separate camp, and how quick] his eye was to notice a straggling sheep, and how much better he seemed to understand the intentions and motives of the flock than any of the other assistants.

Our next camp was made on the north side of Yosemite Valley, about a mile back from the top of the wall. Here for six weeks I reveled in the grandeur of Yosemite scenery, sketching from the crown of North Dome, visiting the head of the great Yosemite Fall and making excursions to the eastward to the top of Mount Hoffmann and to Lake Tenaya, enjoying the new plants. The greatest charm of our first camp were the lily gardens, *Lilium pardalinum*, with corollas large enough for babies' bonnets. The species around our Yosemite camp was the mountain lily, *L. parvum*, with from one or two to forty or fifty flowers, the magnificent panicles rising to the height of six or seven feet, or even higher.

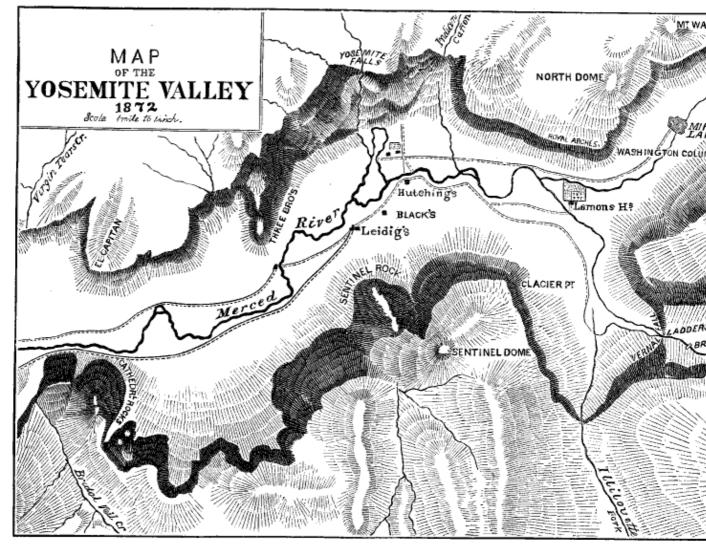
The principal tree of the forests at an elevation of eight thousand feet is the magnificent silver fir. The tallest that I measured near camp was no less than two hundred and forty feet in height, while with this grandeur and majesty is combined exquisite beauty of foliage and flower and fruit; the branches like sumptuous fern fronds, arranged in regular whorls round the stem like the leaves of lilies. From this camp I made the acquaintance on the top of Mount Hoffmann of trees I had not seen before—the beautiful mountain hemlock (*Tsuga Mertensiana*) and most graceful in form of all the California conifers, and the curious dwarf pine (*Pinus albicaulis*) that forms the timberline. To tell the glories of this magnificent camp-ground would require many a volume.

Here, for the first time, the sheep were attacked by bears in the night and scattered. The morning light showed a heap of dead sheep in the corral, killed by suffocation in piling on top of each other and pressing against the wall of the corral, while only two were carried out of the corral and half of the carcasses eaten. The second day after this attack the corral was again visited, another lot of sheep smothered and one carried off and half devoured. Just after we had succeeded in gathering the scattered flock into one again the Don arrived, and

immediately ordered the camp moved, saying that the first robber bear and perhaps others, would visit the camp every night, and that no noisy watching, shooting, or building of fires would be of any avail to stop them. Accordingly, next morning the flock was headed toward the high grassy forests north of the Tuolumne meadows which we reached a few days later, where abundance of the best pasturage was found. Here we stayed until the approach of winter warned the Don to turn the flock toward the lowlands. At this camp I had a glorious time climbing, studying, sketching, pressing new plants, etc. But far from satisfied I determined to return next year and as many other years as opportunities offered or were made.

When we arrived at the home ranch the flock was corralled and counted and strange to say, every sheep of the two thousand and fifty was accounted for. A few had been killed for mutton, one was killed by the bite of a rattlesnake, one broke its leg jumping over a rock and had to be killed, one or two were sold to settlers on the way down to the foothills, and so forth, besides those lost by bears. This was a summer of greatest enjoyment of all that I liked best. I climbed the surrounding mountains; made the acquaintance of many new trees, shrubs, and herbaceous plants, the main forest zones, glacier meadows, gardens and endless falls and cascades. There, too, I made the acquaintance of some of the Mono Indians, who visited our camp while on their annual deer hunt. The whole summer was crowded with the noblest pictures and sculptures and monuments of nature's handiwork. I explored the magnificent group of mountains at the head of the Tuolumne River crossed the range by the Mono Pass, visited Mono Lake and the range of volcanic cones extending from its southern shore, making excursions from camp into all the surrounding region, sketching, writing notes, pressing plants, tracing the works and ways of the ancient glaciers, and reveling in the glorious life and beauty of the unspoiled new-born wilderness. And when at last the snow drove me out of it I determined to return to it again and again as I was able.

Chapter VII First Yosemite Years 1869-1870



Map of Yosemite Valley, 1972. From Samuel Kneeland's <u>Wonders of Yosemite</u> (Boston, 1873). (Not published in Life and letters).

Muir's first excursion into the High Sierra ended in September, 1869. What he saw and experienced during that memorable summer is told vividly, and with infectious enthusiasm, in his journal, later published as *My First Summer in the Sierra*. Only one thing there was that marred his joy—the fearful destruction wrought in the forests by the "hoofed locusts" which he was set to guard. Though he did not realize it then, the time was coming when his direct observation of the devastating effect of sheeping in the High Sierra was to become an important factor in his campaign to expel the trampling, devouring hordes from the mountains. But the uppermost impression in his mind, when the summer ended, was after all the Edenic loveliness of the regions he had visited. "I have crossed the Range of Light," so runs the concluding sentence of his journal, "surely the brightest and best of all the Lord has built; and rejoicing in its glory I gladly, gratefully hopefully pray I may see it again."

The fulfillment of this desire was not to be long delayed, for the means of accomplishment were in his own power. After spending about eight weeks breaking horses for Pat Delaney, building fences, and running a gang-plough over his broad acres below French Bar, he set out on foot for Yosemite by way of Pino Blanco, Coulterville, and Harding's Mill.

Meanwhile his Madison friends, the Carrs, had, during the summer of 1869, removed to California, where Professor Carr had been appointed to a Professorship in the University of California. They had not seen Muir since 1867 and were at this time urging him to pay them a visit in Oakland. "I thank you most heartily for the very kind invitation you send me," he writes from Delaney's ranch near La Grange under date of November 15th, 1869. "I could enjoy a blink of rest in your new home with a relish that only those can know who have suffered solitary banishment for so many years But I must return to the mountains—to Yosemite. I am told that the winter storms there will not be easily borne, but I am bewitched, enchanted, and tomorrow I must start for the great temple to listen to the winter songs and sermons preached and sung only there."

Mrs. Carr, soon after her arrival in California, had visited Yosemite, but to her and Muir's great disappointment the letter which was to call him down from the heights, to meet her in the Valley, failed to reach its destination. Muir at this time was still purposing to go on an exploratory trip to South America, a plan in which Mrs. Carr was warmly abetting him. So fully was his mind made up on this point that in a letter to his brother David he allowed himself only about six months more in California, and prospect of so early a departure to other lands made him determined spend these months in the mountains.

The proposed South American journey and the spell which the bee and grandeur of the Sierra Nevada were weaving about him form the subject of a paragraph in a letter written to his sister Sarah during this same summer while encamped "in a spruce grove near the upper end of Yosemite, two miles from the north wall."

Just think [he writes] of the blessedness of my lot!—have been camped he, right in the midst of Yosemite rocks and waters for fifteen days, with nearly all of every day to myself to climb, sketch, write, meditate, and botanize! My foot has pressed no floor but that of the mountains for many a day. I am far from the ways and pursuits of man. I seldom even hear the bleating of our twenty-five hundred sheep. The manifold overwhelming sublimities of the Sierra are all in all. I am with Nature in the grandest, most divine of all her earthly dwelling places. . . .

A few months will call upon me to decide to what portion of God's glorious star I will next turn. The sweets of home, the smooth waters of civilized life have attractions for me whose power is increased by time and constant rambling, but I am a captive, I am bound. Love of pure unblemished Nature seems to overmaster and blur out of sight all other objects and considerations. I know that I could under ordinary circumstances accumulate wealth and obtain a fair position in society, and I am arrived at an age that requires that I should choose some definite course for life. But I am sure that the mind of no truant schoolboy is more free and disengaged from all the grave plans and purposes and pursuits of ordinary orthodox life than mine. But I wonder what spirit is conjuring up such sober affairs at this time. I only meant to say a word by way of family greeting. Tomorrow I will be among the sublimities of Yosemite and forget that ever a thought of civilization or time-honored proprieties came among my pathless, lawless thoughts and wanderings. Few persons at this time had braved the storms and isolation of Yosemite during the winder season. The first to do this was James C. Lamon, a Virginian, who came to California from Texas in 1851 and found his way into Yosemite Valley in 1857. Two years later he planted an orchard opposite Half Dome and in 1862 began to make the Valley his residence both in winder and in summer. In 1864 his example was followed by J. M. Hutchings who brought his wife with him and soon became a sort of valet de place. His frame house, situated directly opposite the Yosemite Fall, served also the purpose of a hotel for visitors, and Muir upon his arrival in the Valley naturally sought shelter there. The following letter reflects something of the elation with which he began to explore his new surroundings:

To Mrs. Ezra S. Carr

Yosemite December 6th, 1869

Dear Friend Mrs. Carr:

I am feasting in the Lord's mountain house, and what pen may write my blessings! I am going to dwell here all winter magnificently "snow-bound." Just think of the grandeur of a mountain winter in Yosemite! Would that you could enjoy it also!

I read your word of pencil upon the bridge below the Nevada, and I thank you for it most devoutly. No one nor all of the Lord's blessings can enable me to exist without friends, and I know that you are a friend indeed.

There is no snow in the Valley. The ground is covered with the brown and yellow leaves of the oak and maple, and their crisping and rustling make me think of the groves of Madison.

I have been wandering about among the falls and rapids studying the grand instruments of slopes and curves and echoing caves upon which those divine harmonies are played. Only a thin flossy veil sways and bends over Yosemite now, and Pohono, too, is a web of waving mist. New songs are sung, forming parts of the one grand anthem composed and written in "the beginning."

Most of the flowers are dead. Only a few are blooming in summer nooks on the north side rocks. You remember that delightful fernery by the ladders. Well, I discovered a garden meeting of Adiantum far more delicate and luxuriant than those at the ladders. They are in a cove or covelette between the upper and lower Yosemite Falls. They are the most delicate and graceful plant creatures I ever beheld, waving themselves in lines of the most refined of heaven's beauty to the music of the water. The motion of purple dulses in pools left by the tide on the sea coast of Scotland was the only memory that was stirred by these spiritual ferns.

You speak of dying and going to the woods. I am dead, and gone to heaven.

Indian [Tom] comes to the Valley once a month upon snowshoes. He brings the mail, and so I shall hope to hear from you. Address to Yosemite, via Big Oak Flat, care of Mr. Hutchings.

[John Muir]



Sketch of John Muir's cabin at the base of Yosemite Falls

A pleasing picture of his employment, his cabin, and the variety of his nature interests during the next two years is drawn in the following passage from unfinished memoirs:

I had the good fortune to obtain employment from Mr. Hutchings in building a sawmill to cut lumber for cottages, that he wished to build in the spring, from the fallen pines which had been blown down in a violent wind-storm a year or two before my arrival. Thus I secured employment for two years, during all of which time I watched the varying aspect of the glorious valley, arrayed in its winter robes; the descent from the heights of the booming, out-bounding avalanches like magnificent waterfalls; the coming and going of the noble storms; the varying songs of the falls; the growth of frost crystals on the rocks and leaves and snow; the sunshine sifting through them in rainbow colors; climbing every Sunday to the top of the walls for views of the mountains in glorious array along the summit of the range, etc.

I boarded with Mr. Hutchings' family, but occupied a cabin that I built for myself near the Hutchings' winter home. This cabin, I think, was the handsomest building in the Valley, and the most useful and convenient for a mountaineer. From the Yosemite Creek, near where it first gathers its beaten waters at the foot of the fall, I dug a small ditch and brought a stream into the cabin, entering at one end and flowing out the other with just current enough to allow it to sing and warble in low, sweet tones, delightful at night while I lay in bed. The floor was made of rough slabs, nicely joined and embedded in the ground. In the spring the common pteris ferns pushed up between the joints of the slabs, two of which, growing slender like climbing ferns on account of the subdued light, I trained on threads up the sides and over my window in front of my writing desk in an ornamental arch. Dainty little tree frogs occasionally climbed the ferns and made fine music in the night, and common frogs came in with the stream and helped to sing with the Hylas and the warbling, tinkling water. My bed was suspended from the rafters and lined with libocedrus plumes, altogether forming a delightful home in the glorious Valley at a cost of only three or four dollars, and I was loath to leave it. This all too brief account of Muir's earlier Yosemite years we fortunately are able to supplement with the following letters:

To David Gilrye Muir

Yosemite *March* 20*th*, [1870]

Dear Brother David G.:

Your last of January 6th reached me here in the rocks two weeks ago. I a very heartily glad to learn that your dear wife and wee ones have escaped from sickness to health. "Ten weeks of fever"—mercy, what intense significance these four words have for me after my Florida experience. We were taught to believe that Providence has special designs to accomplish by the agency of such afflictions. I cannot say that I have the requisite amount of faith to feel the truth of this, but one invariable result of suffering in love-knit family is to quicken all the powers that develop compact units from clusters of human souls.

I am sitting here in a little shanty made of sugar pine shingles this Sabbath evening. I have not been at church a single time since leaving home. Yet this glorious valley might well be called a church, for every lover of the great Creator who comes within the broad overwhelming influences of the place fails not to worship as he never did before. The glory of the Lord is upon all his works; it is written plainly upon all the fields of every clime, and upon every sky, but here in this place of surpassing glory the Lord has written in capitals. I hope that one day you will see and read with your own eyes.

The only sounds that strike me tonight are the ticking of the clock, the flickering of the fire and the love songs of a host of peaceful frogs that sing out in the meadow up to their throats in slush, and the deep waving roar of the falls like breakers on a rocky coast.

Your description of the sad quiet and deserted loneliness of home made me sorry, and I felt like returning to the old farm to take care of father and mother myself in their old days, but a little reflection served to show that of all the family, my views and habits and disposition make me the most incapable for the task.

You stirred a happy budget of memories in speaking of my work-shop and laboratory. The happiest days and scrap portions of my life were in that old slant-walled garret and among the smooth creeks that trickled among the sedges of Fountain Lake meadow.

In recalling the mechanical achievements of those early days I remember with satisfaction that the least successful one was that horrid guillotine of a thing for slicing off gophers' heads.

... I have completed the sawmill here. It works extremely well. If not a "Kirk and a mill" I have at least made a house and a mill here....

To Sarah Muir Galloway

Yosemite Valley *March* 24*th*, 1870

Dear Sister:

A grand event has occurred in our remote snowbound Valley. Indian Tom has come from the open lower world with the mail. . . .

I wrote you some weeks ago from this place. Tom leaves the Valley tomorrow I have four letters to write this evening, and it is nearly nine o'clock, so I will not try to write much, but will just say a few things in haste. First of all let me say that though my lot in these years is to wander in foreign lands, my heart is at home. I still feel you all as the chief wealth of my inmost soul and the most necessary elements of my life. What if many a river runs between us. Distance ought not to separate us. Comets that leave their sun for long irregular journeys through the fields of the sky acknowledge as constant and controlling a sympathy with its great center as the nearer, more civilized stars that travel the more proper roads of steady circles. No one reflection gives me so much comfort as the completeness and unity of our family. An apparently short column of years has made men and women of us all, and as I wrote to Daniel, we stand united like a family clump of trees—may the divine power of family love keep us one. And now do not consider me absent—lost. I have but gone out a little distance to look at the Lord's gardens.

Remember me very warmly to Mrs. Galloway. Tell her that I sympathize very keenly with her in her great affliction. Tell her that my eyes open every day upon the noblest works of God and that I would gladly lend her my own eyes if I could. I think of her very often. I was telling my friend here about her a few nights ago in our little shanty. I do not live "near the Yosemite," but in it—in the very grandest, *warmest* center of it. I wish you could hear the falls tonight—they speak a most glorious language, and I hear them easily through the thin walls of our cabin.

Of course I am glad to hear from you in this solitude, and I thank you for the daisy and the rose leaf and the old legend. I will tell you all about the Yosemite and many other places when I reach home. The surpassing glory of a place like this explains the beauty of that [which] is written in smaller characters, like that of your Mound hill. . . .

To Mrs. Ezra S. Carr

Yosemite April 5th, 1870

Dear Mrs. Carr:

I wish you were here to-day, for our rocks are again decked with deep snow. Two days ago a big gray cloud collared Barometer Dome,—the vast looming column of the upper falls was

swayed like a shred of loose mist by broken pieces of storm that struck it suddenly, occasionally bending it backwards to the very top of the cliff, making it hang sometimes more than a minute like an inverted bow edged with comets. A cloud upon the Dome and these ever varying rockings and bendings of the falls are sure storm signs, but yesterday's morning sky was clear, and the sun poured the usual quantity of the balmiest spring sunshine into the blue ether of our Valley gulf. But ere long ragged lumps of cloud began to appear all along the Valley rim, coming gradually into closer ranks, and rising higher like rock additions to the walls. From the top of the cloud-banks, fleecy fingers arched out from both sides and met over the middle of the meadows, gradually thickening and blackening until at night big confident snowflakes began to fall.

We thought that the last snow harvest had been withered and reaped long ago by the glowing sun, for the bluebirds and robins sang spring, and so also did the bland unsteady winds, and the brown meadow opposite the house was spotted here and there with blue violets. Carex spikes were shooting up through the dead leaves and the cherry and briar rose were unfolding their leaves; and besides these, spring wrote many a sweet mark and word that I cannot tell, but snow fell all the hours of to-day in cold winter earnest, and now at evening there rests upon rocks, trees, and weeds, as full and ripe a harvest of snow flowers as I ever beheld in the stormiest, most opaque days of mid-winter. [Added later:]

April 13th, [1870]

About twelve inches of snow fell in that last snowstorm. It disappeared as suddenly as it came, snatched away hastily almost before it had time to melt, as if a mistake had been made in allowing it to come here at all. A week of spring days, bright in every hour, without a stain or thought of the storm, came in glorious colors, giving still greater pledges of happy life to every living creature of the spring, but a loud energetic snowstorm possessed every hour of yesterday. Every tree and broken weed bloomed yet once more. All summer distinctions were leveled off. All plants and the very rocks and streams were equally polypetalous.

This morning winter had everything in the Valley. The snow drifted about in the frosty wind like meal and the falls were muffled in thick cheeks of frozen spray. Thus do winter and spring leap into the Valley by turns, each remaining long enough to form a small season or climate of its own, or going and coming squarely in a single day. Whitney says that the bottom has fallen out of the rocks here—which I most devoutly disbelieve. Well, the bottom frequency falls out of these winter clouds and climates. It is seldom that any long transition slant exists between dark and bright days in this narrow world of rocks.

I know that you are enchanted with the April loveliness of your new home. You enjoy the most precious kind of sunshine, and by this time flower patches cover the hills about Oakland like colored clouds. I would like to visit chose broad outspread blotches of social flowers that are so characteristic of your hills, but far rather would I see and feel the flowers that are now at Fountain Lake, and the lakes of Madison.

Mrs. Hutchings thought of sending you a bulb of the California lily by mail, but found it too large. She wishes to be remembered to you. Your Squirrel [Florence Hutchings] is very happy. She is a rare creature.

I hope to see you and the Doctor soon in the Valley. I have a great deal to say to you which I will not try to write. Remember me most cordially to the Doctor and to Allie and all the boys. I am much obliged to you for those botanical notes, etc., and I am, Ever most cordially yours

John Muir

To David Gilrye Muir

Balmy Sabbath Morning in Yosemite April 10th, [1870]

Dear Brother:

Your geographical, religious and commercial letter was handed me this morning by a little black-eyed witch of a girl [Florence Hutchings], the only one the Valley. I also received your note of February 8th in due time (that is any time) and I propose to answer them as one, thus accomplishing "twa at a blow"; but I am bewildered by the magnitude and number of the subjects of which they treat. I think that since my pen is perturbed by too big a quantum of levity for Sabbath writing I shall begin with baptism, hoping that my muddy ink and muddy thoughts will settle to the seriousness or anger that naturally belongs to the subject.

I do not like the doctrine of close communion as held by hard-shells, because the whole clumsy structure of the cling rests upon any foundation of coarse-grained dogmatism. Imperious, bolt-upright exclusiveness upon a subject is hateful, but it becomes absolutely hideous and impious in matters of religion, where all for men are equally interested. I have no patience at all the man who complacently wipes his pious lips and waves me away from a simple rite which commemorates the love and sacrifice of Christ, telling me, "Go out from us for you are not of us," and all this not for want of Christian love on my part, or the practice of self-denying virtues in seeking to elevate myself, but simply because in his infallible judgment I am mistaken in the number of quarts of that common liquid we call water which should be made use of in baptism.

I think infant baptism by sprinkling or any other mode is a beautiful and impressive ordinance, and however the Scripture of the thing is interpreted no parent can be doing an unseemly or unchristian act in dedicating a child to God and taking upon him vows to lead his child in the path that all good people believe in. The baptism of an old sinner is apt to do but little good, but the baptism of an infant, in connection with the religious training which is supposed to follow it, is likely to do very much good.

I was baptised three times this morning. 1st (according to the old way of dividing the sermon), in balmy sunshine that penetrated to my very soul, warming all the faculties of spirit, as well as the joints and marrow of the body; 2nd, in the mysterious rays of beauty that emanate from plant corollas; and 3rd, in the spray of the lower Yosemite Falls. My 1st baptism was by immersion, the 2nd by pouring, and the 3rd by sprinkling. Consequently all Baptists are my brethering, and all will allow that I've "got religion."

[John Muir]

Yosemite *May* 17*th*, [1870]

Dear Friend Mrs. Carr:

Our valley is just gushing, throbbing full of open, absorbable beauty, and I feel that I must tell you about it. I am lonely among my enjoyments; the valley is full of visitors, but I have no one to talk to.

To Mrs. Ezra S. Carr

The season that is with us now is about what corresponds to full-fledged spring in Wisconsin. The oaks are in full leaf and have shoots long enough to bend over and move in the wind. The good old bracken is waist high already, and almost all the rock ferns have their outermost fronds unrolled.

Spring is in full power and is steadily reaching higher like a shadow, and will soon reach the topmost horizon of rocks. The buds of the poplar opened on the 9th of last month, those of the oaks on the 24th.

May 1st was a fine, hopeful, healthful, cool, bright day, with plenty of the fragrance of new leaves and flowers and of the music of bugs and birds. From the 5th to the 14th was extremely warm, the thermometer averaging about 85° at noon in shade. Craggy banks of cumuli became common about Starr King and the Dome, flowers came in troops, the upper snows melted very fast, raising the falls to their highest pitch of glory. The waters of the Yosemite Fall no longer float softly and downily like hanks of spent rockets, but shoot at once to the

bottom with tremendous energy. There is at least ten tunes the amount of water in the Valley that there was when you were here. In crossing the Valley we had to sail in the boat. The river paid but little attention to its banks, flowing over the meadow in great river-like sheets.

But last Sunday, 15th, was a dark day. The rich streams of heat and light were withheld. The thermometer fell suddenly to 35°, and down among the verdant banks of new leaves, and groves of half-open ferns, and thick settlements of confidant flowers came heavy snow in big blinding flakes, coming down with a steady gait and taking their places gracefully upon shrinking leaves and petals as if they were doing exactly right. The whole day was snowy and stormy like a piece of early winter. Snow fell also on the 16th. A good many of the ferns and delicate flowers are killed.

There are about fifty visitors in the Valley at present. When are you and the Doctor coming? Mr. Hutchings has not yet returned from Washington, so I will be here all summer. I have not heard from you since January.

I had a letter the other day from Professor Butler. He has been glancing and twinkling about among the towns of all the states at a most unsubstantial velocity. . . . Most cordially yours,

John Muir

To Mrs. Ezra S. Carr

Yosemite Sunday May 29th, [1870]

Dear Friend:

I received your "apology" two days ago and ran my eyes hastily over it three or four lines at a time to find the place that would say you were coming, but you "fear" that you cannot come at all, and only "hope" that the Doctor may! But I shall continue to look for you, nevertheless. The Chicago party you speak of were here and away again before your letter arrived. All sorts of human stuff is being poured into our Valley this year, and the blank, fleshly apathy with which most of it comes in contact with the rock and water spirits of the place, is most amazing. I do not wonder that the thought of such people being here makes you "mad"; but, after all, Mrs. Carr, they are about harmless. They climb sprawlingly to their saddles like overgrown frogs pulling themselves up a stream bank through the bent sedges, ride up the Valley with about as much emotion as the horses they ride upon—are comfortable when they have "done it all" and long for the safety and flatness of their proper homes.

In your first letter to the Valley you complain of the desecrating influences of the fashionable hordes about to visit here, and say that you mean to come only once more and "into the beyond." I am pretty sure that you are wrong in saying and feeling so, for the tide of visitors will float slowly about the *bottom* of the Valley as a harmless scum collecting in hotel and saloon eddies, leaving the rocks and falls eloquent as ever and instinct with imperishable beauty and greatness; and recollect that the top of the Valley is more than half way to real heaven and the Lord has many mansions in the Sierra equal in power and glory to Yosemite, though not quite so open, and I venture to say that you will yet see the Valley many times both in and out of the body.

I am glad you are going to the Coast Mountains to sleep on Diablo—Angelo—ere this. I am sure that you will be lifted above all the effects of your material work. There is a precious natural charm in sleeping under the open starry sky. You will have a very perfect view of the Joaquin Valley, and the snowy pearly wall of the Sierra Nevada. I lay for weeks last summer upon a bed of pine leaves at the edge of a daisy gentian meadow in full view of Mt. Dana.

Mrs. Hutchings says that the lily bulbs were so far advanced in their growth, when she dug some to send you, that they could not be packed without being broken, but I am going to be here all summer and I know where the grandest plantation of these lilies grows, and I will box up as many of them as you wish, together with as many other Yosemite things as you may ask for, and send it out to you before the pack train makes its last trip. I know the Spirea you speak of—it is abundant all around the top of the Valley and the rocks at Lake Tenaya and reaches almost to the very summit about Mt. Dana. There is also a purple one very abundant on the fringe meadows of Yosemite Creek a mile or two back from the brink of the falls. Of course it will be a source of keen pleasure to me to procure you anything you may desire. I should like to see that grand Agave. I saw some in Cuba, but they did not exceed twenty-five or thirty feet in height.

I have thought of a walk in the wild gardens of Honolulu, and now that you speak of my going there it becomes very probable, as you seem to understand me better than I do myself. I have no square idea about the time shall I get myself away from here. I shall at least stay till you come. I fear that the Agave will be in the spirit world ere that time.

You say that I ought to have such a place as you saw in the gardens of that mile and half of climate. Well, I think those lemon and orange groves would do perhaps to make a living, but for a garden I should not have anything less than a piece of pure nature. I was reading Thoreau's *Maine Woods* a short time ago. As described by him these woods are exactly like those of Canada West. How I long to meet *Linnoea* and *Chiogenes hispidula* once more! I would rather see these two children of the evergreen woods than all the twenty-seven species of palm that Agassiz met on the Amazon.

These summer days "go on" calmly and evenly. Scarce a mark of the frost and snow of the 15th is visible. The bracken are four or five feet high already. The earliest azaleas have opened and the whole crop of buds is ready to burst. The river does not overflow its banks now, but it is exactly brim full.

The thermometer averages about 75° at noon. We have sunshine every morning from a bright blue sky. Ranges of cumuli appear towards the summits with great regularity every day about eleven o'clock, making a splendid background for the South Dome. In a few hours these clouds disappear and give up the sky to sunny evening.

Mr. Hutchings arrived here from Washington a week ago. There are sixty or seventy visitors here at present. .

... Ever yours most cordially

J. Muir

When Congress in 1864, by special Act, granted to the State of California the Yosemite Valley, together with a belt of rock and forest a mile in width around the rim, for recreational purposes, no account was taken of the possible claims of such settlers as J. C. Lamon and J. M. Hutchings. These two endeavored to make good what they regarded as preemption claims to a section of land in the Valley. Their action resulted in prolonged litigations but the issue was finally decided against the claimants both by the supreme Court of the State and the Federal Supreme Court. It was not, however until 1875 that the Commissioners appointed by the governor found themselves in undisputed control of the Valley. Muir's references to Mr. Hutchings' absences in Washington relate to this matter.

Among Eastern tourists visiting Yosemite Valley in 1870 were Mark Hopkins, then President of Williams College, and Mrs. Robert C. Waterston, the accomplished daughter of Josiah Quincy. "His [Muir's] letters," wrote Mrs. Waterston to a friend, "are poems of great and exquisite beauty worthy to be written out of a heart whose close communion with nature springs to a perfect love."

Too near to God for doubt or fear, He shares the eternal calm.

Thérèse Yelverton and her Yosemite novel, in which John Muir and "Squirrel"—Florence Hutchings—were introduced as leading characters must be reserved for more extended notice in another connection.

To Mrs. Ezra S. Carr

Yosemite *July* 29*th*, [1870]

My Dear Friend Mrs. Carr

I am very, very blessed. The Valley is full of people, but they do not annoy me. I revolve in pathless places and in higher rocks than *the world* and his ribbony wife can reach. Had I not been blunted by hard work in the mill, an crazed by Sabbath raids among the high places of this heaven, I would have written you long since. I have spent every Sabbath for the last two months i the spirit world, screaming among the peaks and outside meadows like negro Methodist in revival time, and every intervening clump of week days in trying to fix down and assimilate my shapeless harvests of revealed glory into the spirit and into the common earth of my existence, and I am rich—rich beyond measure, not in rectangular blocks of sifted knowledge, or in thin sheets of beauty hung picture-like about "the walls of memory," but in unselected atmospheres of terrestrial glory diffused evenly throughout my whole substance.

Your Brooksian letters I have read with a great deal of interest. They a so full of the spice and poetry of unmingled Nature, and in many places they express my own present feelings very fully. Quoting from your Forest Glen, "Without anxiety and without expectation all my days come and go mix. with such sweetness to every sense," and again, "I don't know anything time, and but little of space," and "My whole being seemed to open to the sun." All this I do most comprehensively appreciate, and am just beginning to know how fully congenial you are. Would that you could share my mountain enjoyments! In all my wanderings through Nature's beauty, whether it is among the ferns at my cabin door, or in the high meadows and peaks, amid the spray and music of waterfalls, you are the first to meet me, and often speak to you as verily present in the flesh.

Last Sabbath I was baptised in the irised foam of the Vernal, and in the divine snow of Nevada, and you were there also and stood in real presence by the sheet of joyous rapids below the bridge.

I am glad to know that McClure and McChesney have told you of our night with upper Yosemite. Oh, what a world is there! I passed, no, I *lived* another night there two weeks ago, entering as far within the veil amid equal glory, together with Mr. Frank Shapleigh of Boston. Mr. Shapleigh is an artist and I like him. He has been here six weeks, and has just left for home. I told him to see you and to show you his paintings. He is acquainted with Charles Sanderson and Mrs. Waterston. Mrs. Waterston left the Valley before your letter reached me, but one morning about sunrise an old lady came to the mill and asked me if I was the man who was so fond of flowers, and we had a very earnest unceremonious that about the Valley and about "the beyond." She is made of better stuff than most of the people of that heathen town of Boston, and so also is Shapleigh.

Mrs. Yelverton is here and is going to stop a good while. Mrs. Waterston told her to find me, and we are pretty well acquainted now. She told me other day that she was going to write a Yosemite novel!! and that "Squirrel" and I were going into it. I was glad to find that she knew you. I have seen Professor LeConte; perhaps he is stopping at one of the other hotels.

Has Mrs. Rapelye or Mr. Colby told you about our camping in the spruce woods on the south rim of the Valley, and of our walk at daybreak to the top of the Sentinel dome to see the sun rise out of the crown peaks of beyond?

About a week ago at daybreak I started up the mountain near Glacier point to see Pohono in its upper woods and to study the kind of life it lived up there. I had a glorious day, and reached my cabin at daylight, by walking all night. And, oh, what a night among those moon shadows! It was one o'clock A.M. when I reached the top of the Cathedral rocks, a most glorious twenty-four hours of life amid nameless peaks and meadows, and the upper cataracts of Pohono! Mr. Hutchings told me next morning that I had done two or three days' climbing in one and that I was shortening my life, but I had a whole lifetime of enjoyment, and I care but little for the arithmetical length of my days. I can hardly realize that I have not yet seen you here. I thank you for sending me so many friends, but I am waiting for you.

I am going up the mountain soon to see your lily garden at the top of Indian Canyon. "Let the Pacific islands lie." My love to Allie and all your boys and to the Doctor. Tell him that I have been tracing glaciers in all the principal canyons towards the summit.

Ever thine John Muir

The meeting of John Muir and Joseph LeConte in August, 1870, was destined to have literary and scientific consequences not foreseen at the time. It appears clearly from the first of the following letters that Muir was already aware of the existence of living glaciers in the Sierra Nevada, a fact not then known to any one else and one which he regarded as having an important bearing upon his theory of Yosemite's origin. Discussion of the broader issues involved we must postpone to the chapter on "Persons and Problems."

To Mrs. Ezra S. Carr

[August 7th, 1870]

[First part of letter missing.]... Tomorrow we set out for the Lyell Glacier in company with LeConte and his boys. We will be with them four or five days when they will go on Monoward for Tahoe. I mean to set some stakes in a dozen glaciers and gather some arithmetic for clothing my thoughts

I hope you will not allow old H[utchings] or his picture agent Houseworth to so gobble and bewool poor Agassiz that I will not see him. . .

I will return to the Valley in about a week, if I don't get overdeep in a crevasse.

Later. Yours of Monday eve has just come. I am glad your boy is so soon to feel mother, home, and its blessings. I hope to meet [John] Torrey, although I will push leeward as before, but may get back in time. I will enjoy Agassiz, and Tyndall even more. I'm sorry for poor [Charles Warren] Stoddard; tell him to come. .

Ever yours John Muir

To Mrs. Ezra S. Carr

Yosemite August 20th, [1870]

Dear Friend Mrs. Carr:

I have just returned from a ten days' ramble [Described in Joseph LeConte's privately printed <u>Journal of</u> <u>Ramblings through the High Sierras of California by the University Excursion Party</u> (1875). Muir's theory of the glacial origin is mend several times in this rare booklet. Reprinted in the Sierra Club Bulletin, Vol. III, no. I (1900).] with Professor LeConte and his students in the beyond, and, oh! we have had a most glorious season of terrestrial grace. I do wish I could ramble ten days of equal size in very heaven that I could compare its scenery with that of Bloody Canyon and the Tuolumne Meadows and Lake Tenaya and Mount Dana.

Our first camp after leaving the Valley was at Eagle Point, overlooking the Valley on the north side, from which a much better general view of the Valley and the high crest of the Sierra beyond is obtained than from inspiration Point. Here we watched the long shadows of sunset upon the living map at our feet and in the later darkness half silvered by the moon, went far out of human cares and human civilization.

Our next camp was at Lake Tenaya, one of the countless multitudes of starry gems that make this topmost mountain land to sparkle like a sky. After moonrise LeConte and I walked to the lake shore and climbed upon a big sofa-shaped rock that stood, islet-like, a little way out in the shallow water, and here we found another bounteous throne of earthly grace, and I doubt if John in Patmos saw grander visions than we. And you were remembered there and we cordially wished you with us.

Our next sweet home was upon the velvet gentian meadows of the South Tuolumne. Hare we feasted upon soda and burnt ashy cakes and stood an hour in a frigid rain with our limbs bent forward like Lombardy poplars in a gale, but ere sunset the black cloud departed, our spines were straightened a glowing fire, we forgot the cold and all about half raw mutton and alkaline cakes. The grossest of our earthly coils was shaken off, and ere the last slant sunbeams left the dripping meadow and the spirey mountain peaks we were again in the third alpine heaven and saw and heard things equal in glory to the purest and best of Yosemite itself.

Our next camp was beneath a big gray rock at the foot of Mount Dana. Here we had another rainstorm, which drove us beneath our rock where we lay in complicated confusion, our forty limbs woven into a knotty piece of tissue compact as felt.

Next day we worshiped upon high places on the brown cone of Dana, and returned to our rock. Next day walked among the flowers and cascades of Bloody Canyon, and camped at the lake. Rode next day to the volcanic cone nearest to the lake and bade farewell to the party and climbed to the highest crater in the whole range south of the Mono Lake. Well, I shall not try to tell you anything, as it is unnecessary. Professor LeConte, whose company I enjoyed exceedingly, will tell you about our camp meeting on the Tenaya rock.

I will send you a few choice mountain plant children by Mrs. Yelverton. If there is anything in particular that you want, let me know. Mrs. Yelverton will not leave the Valley for some weeks, and you have time to write.

I am ever your friend John Muir

The two following letters relate in part to an American colonization scheme promoted by a Mr. A. D. Piper, of San Francisco, who is said to have received from the Brazilian and Peruvian governments a concession for the navigation of the waters of the upper Amazon, together with a grant of millions of acres on the Purus in the Department of Beni. One of Mrs. Carr's sons joined the expedition and she was anxious to have Muir go also, holding out to him the prospect of a cheap and comfortable passage to the heart of the Andes and the privilege of "locating" three hundred and twenty five acres of land anywhere within the grant. Muir was too canny to be inveigled into joining such an expedition. It speedily went to pieces in Brazil, whence Mrs. Carr's son returned seriously broken in health.

To Mrs. Ezra S. Carr

Tuolumne River, two miles below La Grange *November 4th*, [1870]

Dear Friend Mrs. Carr:

Yours of October 2nd reached me a few days since. The Amazon and Andes have been in all my thoughts for many years, and I am sure that I shall meet them some day ere I die, or become settled and civilized and useful. I am obliged to you for all of this information. I have studied many paths and plans for the interior of South America, but none so easy and sure ever appeared as this of your letter.

I thought of landing at Guayaquil and crossing the mountains to the Amazon, float to Para, subsisting on berries and quinine, but to steam along the palmy shores with company and comforts is perhaps more practical, though not so pleasant. Hawthorne says that steam spiritualizes travel, but I think that it squarely degrades and materializes travel. However, flies and fevers have to be considered in this case.

I am glad that Ned has gone. The woods of the Purus will be a grand place for the growth of men. It must be that I am going soon, for you have shown me the way. People say that my wanderings are very many and methodless, but they are all known to you in some way before I think of them. You are a prophet in the concerns of my little outside life, and pray what says the spirit about my final escape from Yosemite? You saw me at these rock altars years ago, and I think I shall remain among them until you take me away.

I reached this place last month by following the Merced of the Valley and through all its canyons to the plains above Snelling—a most glorious walk. I intended returning to the Valley ere this, but Mr. Delaney, the man with whom I am stopping at present, would not allow me to leave before I had plowed his field, and so I will not be likely to see Yosemite again before January, when I shall have a grand journey over the snow.

Mrs. Yelverton told me before I started upon my river explorations that she would likely be in Oakland in two weeks, and so I made up a package for you of lily bulbs, cones, ferns, etc., but she wrote me a few days ago that she was still in the Valley.

I find that a portion of my specimens collected in the last two years and left at this place and Hopeton are not very well cared for, and I have concluded to send them to you. I will ship them in a few days by express, and I will be down myself, perhaps, in about a year. If there is anything in these specimens that the Doctor can make use of in his lectures tell him to do so freely, of course.

The purple of these plains and of this whole round sky is very impressively glorious after a year in the deep rocks.

People all throughout this section are beginning to hear of Dr. Carr H. accomplishes a wonderful amount of work. My love to Allie, and to the Doctor, and I am, Ever most cordially yours John Muir

To Mrs. Ezra S. Carr

Near La Grange, California December 22nd, [1870]

Dear Mrs. Carr:

It is so long since I have heard from you that I begin to think you have sent a letter to Yosemite. I am feeling lonely again, and require a word from you.

Some time ago Mr. Hutchings wrote me saying that he would require my shingle cabin for his sister, and so I am homeless again. I expected to pas the winter there, writing, sketching, etc., and in making exploratory raid back over the mountains in the snow, but Mr. Hutchings' jumping my nest after expressly promising to keep it for me, has broken my pleasant lot of plans, and I am at work making new ones. Were it not that Mr. Hutchings owes me money and that I have a lot of loose notes and outline sketches to work up I should set out for South America at once. As it is, I shall very likely remain where I am for a few months and return to the mountains in the spring. I wish in particular to trace some of the upper Yosemite streams farther and more carefully than I have yet done, and I shall dip yet once more into the fathomless grandeur of the Valley.

I am in comfortable quarters at present, within sight and hearing of the Tuolumne, on a smooth level once the bottom of a shallow lake-like expansion of the river where it leaves the slates.

Evening purple on the mountains seen through an ample gap up the Tuolunnne is of terrestrial beauty, the purest and best. The sheet gold of the plain compositae will soon be lighted in the sun days of spring, deepening and glowing yet brighter as it spreads away over the sphered and fluted rock-waves of this old ocean bed. You must not fail to see the April gold of the Joaquin.

I send herewith a letter to Mrs. Yelverton in your care, as you will be likely to know where she is. I have just received a letter which she left for me at Snelling, giving an account [Cf. Summer with a Countess," by Mary Viola Lawrence in *The Overland Monthly*, November, 1871.] of her fearful perils in the snow. It seems strange to me that I should not have known and felt her anguish in that terrible night, even at this distance. She told me that I ought to wait and guide her out, and I feel a kind of guiltiness in not doing so.

Since writing the above yours of November 19th is received, directed to the "Tuolumne River, etc." You are "glad that I am kindly disposed towards South America, but a year is a long time," etc. But to me a Yosemite year is a very little measure of time, or rather, a measureless and formless mass of time which can in no manner be geometrically or arithmetically dealt with. But, Mrs. Carr, why do you wish to cut me from California and graft me among the groves of the Purus? Please write the reason. This Pacific sunshine is hard to leave. If souls are allowed to go a-rapping and visiting where they please I think that, unbodied, I will be found wallowing in California light.

If the bulbs were lost I will procure some more for you, if you do not send me up the Amazon before next fall.

[John Muir]

Chapter VIII Yosemite, Emerson, and the Sequoias

When the early winter storms of 1870 stopped Muir's rambles among the peaks he was able to take refuge in his snug den near the foot of the lower Yosemite Fall. Though dispossessed for a time by Mr. Hutchings, as indicated in his December letter from La Grange, he probably passed the greater part of the winter, as well as the following spring and summer, in his friend attractive sugar pine cabin. There, as the letter of a reminiscent friend reveals, he might of an evening be found under the lamp, beside his cozy fireplace, reading the writings of Alexander von Humboldt, Sir Charles Lyell, John Tyndall, Charles Darwin, and the latest botanical works on trees. Thus the "harvests of revealed glory," gathered on the mountains during the summer months, were further enriched by wide-ranging study during the long winter evenings. "I think of you as far too blessed" writes Mrs. Carr at this time, "to need words from the lower world, and yet I meant to send many and oft repeated greetings to your winter quarters. I think with delight of how the winter home looks, of little brown 'Squirrel' in the glow of firelight, of the long walks, and readings, and thinkings—the morning tintings of the rocks, the comforting warmth of the pines and firs."

But the approach of the winter of 1871 found him homeless in dead earnest. There is reason for thinking that Muir's employer, Mr. Hutchings, did not look with favor upon the young Scotch man's growing fame and popularity as an interpreter of the Valley. It was a function which he himself had exercised so long that he had come to regard it as peculiarly his own. What could have been more natural under the circumstances than that Hutchings, having no scientific competence to formulate independent ideas on the origin of the Valley, should make a combination of other men's views and preach it to all comers in opposition to Muir? The latter, too, had found the work of a sawmill operator increasingly irksome. In any case, he left the employ of Hutchings during the summer of 1871, and after the close of the tourist season we find him busy removing his chattels from Hutchings' to Black's Hotel, then the newest of the three hostelries in the Valley. Like Leidig's Hotel, still farther down the stream, it was situated on the south bank of the Merced almost opposite Sentinel Rock.

With this habitational background of John Muir in mind, let us resume the thread of his correspondence after his return to Yosemite from La Grange. The first letter, bearing no date, probably was written toward the end of February, or the beginning of March, 1871, for his statement that many storms had swept over the mountains since he returned to the Valley shows that he had been there for some time.

To Mrs. Ezra S. Carr

[Yosemite *February* or *March*, 1871]

My Dear Friend Mrs. Carr:

"The Spirit" has again led me into the wilderness, in opposition to all counter attractions, and I am once more in the glory of Yosemite.

Your very cordial invitation to your home reached me as I was preparing to ascend, and when my whole being was possessed with visions of snowy forests of the pine and spruce, and of mountain spires beyond, pearly and half transparent, reaching into heaven's blue, not purer than themselves.

In company with another young fellow whom I persuaded to walk, I left the plains just as the first gold sheets were being outspread. My first plan was to follow the Tuolumne upward as I had followed the Merced downward, after reaching Hetch Hetchy Valley, which has about the same altitude as Yosemite, and spending a week or so in sketching and exploring its falls and rocks, crossing the high mountains past the west end of the Hoffmann range and going down into Yosemite by Indian Canyon, passing thus a glorious month with the mountains, with all their snows and crystal brightness, and all the nameless glories of their magnificent winter. But my plan went agley. I lost a week's sleep by the pain of a sore hand, and I became unconfident in my strength when measured against weeks of wading in snow up to the neck. Therefore I reluctantly concluded to push directly for the Valley by Crane's Flat and Tamarack.

Our journey was just a week in length, including one day of rest in the Crane's Flat cabin. Some of our nights were cold, and we were hungry once or twice. We crossed the snow line on the flank of Pilot Peak ridge six or eight miles below Crane's Flat.

From Crane's Flat to the brim of the Valley the snow was about five feet in depth, and as it was not frozen or compacted in any way we of course had a splendid season of wading.

I wish that you could have seen the edge of the snow-cloud which hovered, oh, so soothingly, down to the grand Pilot Peak brows, discharging its heaven-begotten snows with such unmistakable gentleness and moving, perhaps with conscious love from pine to pine as if bestowing separate and independent blessings upon each. In a few hours we climbed under and into this glorious storm-cloud. What a harvest of crystal flowers, and what wind songs were gathered from the spirey firs and the long fringy arms of the Lambert pine. We could not see far before us in the storm, which lasted until some time in the night, but as I was familiar with the general map of the mountain we had no difficulty in finding our way.

Crane's Flat cabin was buried, and we had to grope about for the door. After making a fire with some cedar rails I went out to watch the coming on of the darkness, which was most impressively sublime. Next morning was every way the purest creation I ever beheld. The little Flat, spot-like in the massive spiring woods, was in splendid vesture of universal white, upon which the grand forest-edge was minutely repeated and covered with a close sheet of snow flowers.

Some mosses grow luxuriantly upon the dead generations of their own species. The common snow flowers belong to the sky and in storms are blown about like ripe petals in an orchard. They settle on the ground—the bottom of the atmospheric sea—like mud or leaves in a lake, and upon this soil, this field of broken sky flowers, grows a luxuriant carpet of crystal vegetation complete and ripe in a single night.

I never before knew that these mountain snow plants were so variable and abundant, forming such bushy clumps and thickets and palmy, ferny groves. Wading waist-deep I had fine opportunities for observing them, but they shrink from human breath—not the only flowers which do so. Evidently not made for man!—neither the flowers composing the snow which came drifting down to us broken and dead, nor the more beautiful crystals which vegetate upon them!

A great many storms have come to the mountains since I passed them, and there can hardly be less than ten feet at the altitude of Tamarack and toward the summit still more.

The weather here is balmy now, and the falls are glorious. Three weeks ago the thermometer at sunrise stood at 12° . I have repaired the mill and dam, and the stream is in no danger of drying up and is more dammed than ever.

To-day has been cloudy and rainy. Tissiack and Starr King are grandly dipped in white cloud. I sent you my plants by express. I am sorry that my Yosemite specimens were not with the others. I left a few notes with Mrs. Yelverton when I left the Valley in the fall. I wish that you would ask her, if you should see her, where she left it, as Mrs. Hutchings does not know....

I have been nearly blind since I crossed the snow. Give my kindest regards to all your homeful, and to my friends. I am

Always yours most cordially J. M.

The following letter is of special interest because it contains a brief description of the "hang-nest" attached to the west-end gable of the sawmill. The included sketch is the only surviving pictorial record both of the mill and of his retreat. The adventure of which he hesitated to tell his sister had already been described in a letter to Mrs. Carr, but follows here more logically the one to his sister. Both are striking revelations of his nature enthusiasms at this time.

To Sarah Muir Galloway

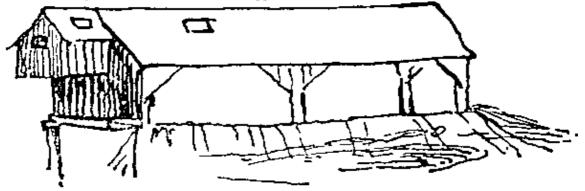
In the Sawmill, Yosemite Valley April 5th, 1871

Dear Sister Sarah:

This is one of the most surpassingly glorious of Yosemite days, and I have suddenly thought to write you. We have rain and storm. The vast column of the upper Yosemite Falls is swaying with wonderful ever-changing forms of beauty, and all our mountain walls are wreathed in splendid clouds. In some places a strip of muffy white cloud reaches almost from the bottom of the wall to the top, and just across the meadow the summit of a pine-crested mountain is peering above the clouds like an island in the sky—thus:



It is hard to write here, as the mill jars so much by the stroke of the saw and the rain drips from the roof, and I have to set the log every few minutes. I am operating this same mill that I made last winter. I like the piney fragrance of the fresh-sawn boards, and I am in constant view of the grandest of all the falls. I sleep in the mill for the sake of hearing the murmuring hush of the water beneath me, and I have a small box-like home fastened beneath the gable of the mill, looking westward down the Valley, where I keep my notes, etc. People call it the hang-nest, because it seems unsupported, thus:



Fortunately, the only people that I dislike are afraid to enter it. The hole in the roof is to command a view of the glorious South Dome, five thousand feet high. There is a corresponding skylight on the other side of the roof which commands a full view of the upper Yosemite Falls, and the window in the end has a view sweeping down the Valley among the pines and cedars and silver firs. The window in the mill roof to the right is above my head, and I have to look at the stars on calm nights.

Two evenings ago I climbed the mountain to the foot of the upper Yosemite Falls, carrying a piece of bread and a pair of blankets so that I could spend the night on the rock and enjoy the glorious waters, but I got drenched and had to go home, reaching the house at two o'clock in the morning. My wetting was received in a way that I scarcely care to tell. The adventure nearly cost all. I mean to go tomorrow night, but I will not venture behind the column again.



Here are the outlines of a grand old pine and gnarly mossy oak that stand a few steps from the mill. You liked the flowers. Well, I will get you a violet from the side of the mill-race, as I go up to shut off the water. Goodnight, with a brother's warmest love.

To Mrs. Ezra S. Carr

[John Muir]

Midnight, [Yosemite *April 3rd*, 1871]

Oh, Mrs. Carr, that you could be here to mingle in this night-noon glory! am in the upper Yosemite Falls and can hardly calm to write, but from my first baptism hours ago, you have been so present that I must try to fix you written thought.

In the afternoon I came up the mountain here with a blanket and a piece of bread to spend the night in prayer among the spouts of this fall. But what can I say more than wish again that you might expose your soul to the rays of this heaven?

Silver from the moon illumines this glorious creation which we term "falls," and has laid a magnificent double prismatic bow at its base. The tissue of the fall is delicately filmed on the outside like the substance of spent clouds, and the stars shine dimly through it. In the solid shafted body of the falls is a vast number of passing caves, black and deep, with close white convolving spray for sills and shooting comet sheaves above and down their sides, like lime crystals in a cave. And every atom of the magnificent being from the thin silvery crest that does not dim the stars to the inner arrowy hardened shafts that strike onward like thunderbolts in sound and energy, all is life and spirit: every bolt and spray feels the hand of God. Oh, the music that is blessing me now! The sun of last week has given the grandest notes of all the yearly anthem. I said that I was going to stop here until morning and pray a whole blessed night with the falls and the moon, but I am too wet and must go down. An hour or two ago I went out somehow on a little seam that extends along the wall behind the falls. I suppose I was in a trance, but I can positively say that I was in the body, for it is sorely battered and wetted. As I was gazing past the thin edge of the fall and away beneath the column to the brow of the rock, some heavy splashes of water struck me, driven hard against the wall. Suddenly I was darkened, down came a section of the outside tissue composed of spent comets. I crouched low, holding my breath, and anchored to some angular fakes of rock, took my baptism with moderately good faith.

When I dared to look up after the swaying column admitted light, I pounced behind a piece of ice and the wall which was wedging tight, and I no longer feared being washed off, and steady moonbeams slanting past the arching meteors gave me confidence to escape to this snug place where McChesney and I slept one night, where I have a fire to dry my socks. This rock shelf, extending behind the falls, is about five hundred feet above the base of the fall on the perpendicular rock face.

How little do we know of ourselves, of our profoundest attractions and repulsions, of our spiritual affinities! How interesting does man become considered in his relations to the spirit of this rock and water! How significant does every atom of our world become amid the influences of those beings unseen, spiritual, angelic mountaineers that so throng these pure mansions of crystal foam and purple granite.

I cannot refrain from speaking to this little bush at my side and to the spray drops that come to my paper and to the individual sands of the slopelet I am sitting upon. Ruskin says that the idea of foulness is essentially connected with what he calls dead unorganized matter. How cordially I disbelieve him tonight, and were he to dwell a while among the powers of these mountains he would forget all dictionary differences betwixt the clean and the unclean, and he would lose all memory and meaning of the diabolical sin-begotten term *foulness*.

Well, I must go down. I am disregarding all of the doctors' physiology in sitting here in this universal moisture. Farewell to you, and to all the beings about us. I shall have a glorious walk down the mountain in this thin white light, over the open brows grayed with Selaginella and through the thick black shadow caves in the live oaks, all stuck full of snowy lances of moonlight.

[John Muir]

One of the most memorable experiences of John Muir was the coming of Ralph Waldo Emerson to Yosemite Valley, on May 5th, 1871. Muir was Muir was thirty three years old and Emerson sixty eight, but the disparity of their years proved no obstacle to the immediate beginning of a warm friendship. The best account of their meeting is contained in a memorandum of after-dinner remarks made by Muir twenty five years later when Harvard University Conferred upon him an honorary M. A. degree.

I was fortunate [he said] in meeting some of the choicest of your Harvard men, and at once recognized them as the best of God's nobles. Emerson, Agassiz, Gray—these men influenced me more than any others. Yes, the most of my years were spent on the wild side of the continent, invisible, in the forests and mountains. These men were the first to find me and hail me as a brother. First of all, and greatest of all, came Emerson. I was then living in Yosemite Valley as a convenient and grand vestibule of the Sierra from which I could make excursions into the adjacent mountains. I had not much money and was then running a mill that I had built to saw fallen timber for cottages.

When he came into the Valley I heard the hotel people saying with solemn emphasis, "Emerson is here." I was excited as I had never been excited before, and my heart throbbed as if an angel direct from heaven had alighted on the Sierran rocks. But so great was my awe and reverence, I did not dare to go to him or speak to him. I hovered on the outside of the crowd of people that were pressing forward to be introduced to him and shaking hands with him. Then I heard that in three or four days he was going away, and in the course of sheer desperation I wrote him a note and carried it to his hotel telling him that E1 Capitan and Tissiack demanded him to stay longer.

The next day he inquired for the writer and was directed to the little sawmill. He came to the mill on horseback attended by Mr. Thayer[James Bradley Thayer, a member of Emerson's party, who, in 1884, published a little volume of reminiscences under the title of A *Western Journey with Mr. Emerson.*] and inquired for me. I stepped out and said, "I am Mr. Muir." "Then Mr. Muir must have brought his own letter," said Mr. Thayer and Emerson said, "Why did you not make yourself known last evening? I should have been very glad to have seen you." Then he dismounted and came into the mill. I had a study attached to the gable of the mill, overhanging the stream, into which I invited him, but it was not easy of access, being reached only by a series of sloping planks roughened by slats like a hen ladder; but he bravely climbed up and I showed him my collection of plants and sketches drawn from the surrounding mountains which seemed to interest him greatly, and he asked many questions, pumping unconscionably.

He came again and again, and I saw him every day while he remained in the valley, and on leaving I was invited to accompany him as far as the Mariposa Grove of Big Trees. I said, "I'll go, Mr. Emerson, if you will promise to camp with me in the Grove. I'll build a glorious campfire, and the great brown boles of the giant Sequoias will be most impressively lighted up, and the night will be glorious." At this he became enthusiastic like a boy, his sweet perennial smile became still deeper and sweeter, and he said, "Yes, yes, we will camp out, camp out"; and so next day we left Yosemite and rode twenty five miles through the Sierra forests, the noblest on the face of the earth, and he kept me talking all the time, but said little himself. The colossal silver firs, Douglas spruce, Libocedrus and sugar pine, the kings and priests of the conifers of the earth, filled him with awe and delight. When we stopped to eat luncheon he called on different members of the party to tell stories or recite poems, etc., and spoke, as he reclined on the carpet of pine needles, of his student days at Harvard. But when in the afternoon we came to the Wawona Tavern. . . . There the memorandum ends, but the continuation is found in his volume *Our National Parks* at the conclusion of the chapter on "The Forests of the Yosemite":

Early in the afternoon, when we reached Clark's Station, I was surprised to see the party dismount And when I asked if we were not going up into the grove to camp they said: "No; it would never do to lie out in the night air. Mr. Emerson might take cold; and you know, Mr. Muir, that would be a dreadful thing." In vain I urged, that only in homes and hotels were colds caught, that nobody ever was known to take cold camping in these woods, that there was not a single cough or sneeze in all the Sierra. Then I pictured the big climate changing, inspiring fire I would make, praised the beauty and fragrance of Sequoia flame, told how the great trees would stand about us transfigured in purple light, while the stars looked between the great domes; ending by urging them to come on and make an immortal Emerson night of

it. But the house habit was not to be overcome, nor the strange dread of pure night air, though it is only cooled day air with a little dew in it. So the carpet dust and unknowable reeks were preferred. And to think of this being a Boston choice. Sad commentary on culture and the glorious transcendentalism.

Accustomed to reach whatever place I started for, I was going up the mountain alone to camp, and wait the coming of the party next day. But since Emerson was so soon to vanish, I concluded to stop with him. He hardly spoke a word all evening, yet it was a great pleasure simply to be with him, warming in the light of his face as at a fire. In the morning we rode up the trail through a noble forest of pine and fir into the famous Mariposa Grove, and stayed an hour or two, mostly in ordinary tourist fashion,—looking at the biggest giants, measuring them with a tape line, riding through prostrate fire-bored trunks etc., though Mr. Emerson was alone occasionally, sauntering about as if under a spell. As we walked through a fine group, he quoted, "There were giants in those days," recognizing the antiquity of the race. To commemorate his visit, Mr. Galen Clark, the guardian of the grove, selected the finest of the unnamed trees and requested him to give it a name. He named it Samoset, after the New England sachem, as the best that occurred to him.

The poor bit of measured time was soon spent, and while the saddles were being adjusted I again urged Emerson to stay. "You are yourself a Sequoia," I said. "Stop and get acquainted with your big brethren." But he was past his prime, and was now a child in the hands of his affectionate but sadly civilized friends, who seemed as full of old-fashioned conformity as of bold intellectual independence. It was the afternoon of the day and the afternoon of his life, and his course was now westward down all the mountains into the sunset. The party mounted and rode away in wondrous contentment apparently, tracing the trail through ceanothus and dogwood bushes, around the bases of the big trees, up the slope of the sequoia basin, and over the divide. I followed to the edge of the grove. Emerson lingered in the rear of the train, and when he reached the top of the ridge, after all the rest of the party were over and out of sight, he turned his horse, took off his hat and waved me a last good-bye. I felt lonely, so sure had I been that Emerson of all men would be the quickest to see the mountains and sing them. Gazing awhile on the spot where he vanished, I sauntered back into the heart of the grove, made a bed of sequoia plumes and ferns by the side of the stream, gathered a store of firewood, and then walked about until sundown. The birds, robins, thrushes, warblers, etc., that had kept out of sight, came about me, now that all was quiet, and made cheer. After sundown I built a great fire, and as usual had it all to myself. And though lonesome for the first time in these forests, I quickly took heart again-the trees had not gone to Boston, nor the birds; and as I sat by the fire, Emerson was still with me in spiry, though I never again saw him in the flesh. A few days later there occurred a little incident in Oakland which is worth telling, for it reveals through Emerson's appreciativeness the impression which Muir had made upon him. The Carrs, then living in a cottage in Oakland, heard one evening during a dense fog a commotion at their back door. Upon investigation they found Ralph Waldo Emerson standing there, with his cloak wrapped closely about him. He had lost his way in the fog and had come up to the back door in his confusion. Urged to come in, he declined, saying that he must at once follow his wife and daughter who had already gone across the ferry to San Francisco. "But I," he added, "could not go through Oakland without coming up here to thank you for that letter to John Muir."

Though now in the closing decade of his life and growing infirm, Emerson, sent him an occasional package of books accompanied with words of good cheer, while Muir wrote him enthusiastic letters, and sent fragrant reminders of his Yosemite surroundings. One of his winter recreations was to climb an Incense Cedar, abloom amid the snows of January, gather some of the golden sprays of staminate blossoms, and mail them to his friends. The delicate attention of such an aromatic pngt sent to Emerson drew from him following letter.

Was it the "incense" quality of this cedar which, combined with some playful allusion in Muir's letter, made the flowers "significant" to the of Concord?

From Ralph Waldo Emerson

Concord 5th February, 1872

My Dear Muir:

Here lie your significant cedar flowers on my table, and in another letter; and I will procrastinate no longer. That singular disease of deferring, which kills all my designs, has left a pair of books brought home to send to you months and months ago, still covering their inches on my cabinet, and the letter and letters which should have accompanied, to utter my thanks and lively remembrance, are either unwritten or lost, so I will send this *peccavi*, as a sign of remorse.

I have been far from unthankful—I have everywhere testified to my friends who should also be yours, my happiness in fading—the right man in the right place—in your mountain tabernacle, and have expected when your guardian angel would pronounce that your probation and sequestration in the solitudes and snows had reached their term, and you were to bring your ripe fruits so rare and precious into waiting society.

I trust you have also had, ere this, your own signals from the upper powers. I know that society in the lump, admired at a distance, shrinks and dissolves, when approached, into impracticable or uninteresting individuals, but always with a reserve of a few unspoiled good men, who really give it its halo in the distance. And there are drawbacks also to solitude, who is a sublime mistress, but an intolerable wife. So I pray you to bring to an early close your absolute contracts with any yet unvisited glaciers or volcanoes, roll up your drawings, herbariums and poems, and come to the Atlantic Coast. Here in Cambridge Dr. Gray is at home, and Agassiz will doubtless be, after a month or two, returned from Terra del Fuego perhaps through San Francisco—or you can come with him. At all events, on your arrival, which I assume as certain, you must find your way to this village, and my house. And when you are tired of our dwarf surroundings, I will show you better people.

With kindest regards Yours

R. W. Emerson

[P. S.] I send two volumes of collected essays by book-post. In an undated fragment of a letter to Mrs. Carr, Muir refers to this letter as follows:

He [Emerson] judges me and my loose drifting voyages as kindly as yourself. The compliments of you two are enough to spoil one, but I fancy that he, like you, considers that I am so mountain-tanned and storm-beaten I may bear it. I owe all of my best friends to you. A prophecy in this letter of Emerson's recalled one of yours sent me when growing at the bottom of a mossy maple hollow in the Canada woods, that I would one day be with you, Doctor, and Priest in Yosemite. Emerson prophesies in similar dialect that I will one day go to him and "better men" in New England, or something to that effect. I feel like objecting in popular slang that I "can't see it." I shall indeed go gladly to the "Atlantic Coast" as he prophesies, but only to see him and the Glacier ghosts of the North. Runkle wants to make a teacher of me, but I have been too long wild, too befogged to burn well in their patent, high-heated, educational furnaces.

Neither Emerson's nor Muir's anticipations were to be realized. "There remained many a forest to wander through," writes Muir, "many a mountain and glacier to cross, before I was to see his Wachusett and Monadnock, Boston and Concord. It was seventeen years after our parting on the Wawona ridge that I stood beside his grave under a pine tree on the hill above Sleepy Hollow. He had gone to higher Sierras, and, as I fancied, was again waving his hand in friendly recognition."

Notes of travel made by Sarah Jane Lippincott in 1871-72, under the pen-name of Grace Greenwood, afford a fleeting contemporary glimpse of John Muir as he appeared at this time to a discerning observer in Yosemite.

Among our visitors in the evening [she writes] was Mr. Muir, the young Scottish mountaineer, student, and enthusiast, who has taken sanctuary in the Yosemite, who stays by the variable Valley with marvellous constancy, who adores her alike in her fast, gay summer life and solemn autumn glories, in her winter cold and stillness, and in the passion of her spring floods and tempests. Not profoundest snows can chill his ardour, not earthquakes can shake his allegiance. Mr. Muir talks with a quiet, quaint humor, and a simple eloquence which are quite delightful. He has a clear blue eye, a firm, free step, and marvelous nerve and endurance. He has the serious air and unconventional ways of a man who has been much with Nature in her grand, solitary places. That tourist is fortunate who can have John Muir for a guide in and about the Valley.

Among the fortunate ones who had in June come to John Muir with a note of introduction from Mrs. Carr was Henry Edwards, by profession an actor, but by avocation an entomologist. "In our lower world Mr. Edwards, who brings you this note," said Mrs. Carr, "is accounted one of Nature's truest and most devoted disciples. You will take pleasure in introducing him to your heavenly bugs and butterflies, and the winged dragons that hover over those hot springs in 'the beyond.' I do not know how long he proposes to sojourn there, but make the most of the time, for he has the keys to the Kingdom."

Mr. Edwards, familiarly known as "Harry" Edwards among his San Francisco friends, was a rather remarkable man. A finished artist in his profession, he was at the same time the gatherer and possessor of what was then regarded as one of the finest private collections of butterflies and beetles in the world. It was to be expected that such an enthusiast would find a kindred spirit in John Muir, who was prevailed upon to collect some high Sierran butterflies for him, with interesting scientific results.

Your kind letter [he wrote to Muir on August 25th, 1871], found me confined to my bed. To-day for the first time in nearly two weeks I was sitting for a little while in my butterfly room when our dear friend Mrs. Carr walked in and brought me your box of butterflies. The sight of them has done me good, and I hope in a day or two I will be quite restored. Do not again ever think that you cannot collect, or that what you do find will be valueless. In the small box which you sent me are four species new to my collection, and two[There is no further confirmation of this statement in records left by Edwards. But Mr. Frank E. Watson, of the American Museum of Natural History, which now owns the Edwards Collection, calls my attention to the fact that in 1881 the butterfly Thecla Muiri was named by Henry Edwards after John Muir. In Papilio, vol. 1, p. 54 (1881), Edwards writes, "I have named this exquisite little species after my friend John Muir, so well known for his researches into the geology of the Sierra Nevada, who frequently added rare and interesting species to my collection." *of these are new to science*. I cannot, if I wrote for a week, tell you how interesting they are to me. All the specimens are rare, and are different from those found in the Valley. The two new species are the bright crimson copper one from Cathedral Peak, and one of the small bluish butterflies. There is a pair of greenish yellow ones, very rare and interesting. The species was described from a pair only which were taken by the Geological Survey at the head waters of the Tuolumne River, and strange to say, no others have turned up until you found it now.... It is really very singular that the remove of a few miles from the Yosemite should produce species so very different from those of the Valley itself, and at the same time so characteristic in their forms. It is another of the beautiful fields for thought which your wonderful region opens up, and which render your lovely mountains so enchanting to a worshipper of Nature. I hope you will go on to find your truest and best enjoyment among such scenes, and that in the end your labors may meet the reward they deserve, not from your own self-gratification alone, but from the spontaneous recognition of kindred minds.

This Edwards letter is only one of many that might be quoted to show how profitably Muir was at this time studying the multiformity of his natural environment. In the absence of authoritative treatises on the plants, insects, and wild life of the region he had to send specimens to classifying specialists for identification, or appeal to his friends about San Francisco Bay, particularly J. B. McChesney, to secure the desired information for him. Most of them thought that he was adhering much too closely to his Sierran wildernesses, and even Mrs. Carr labored to dislodge him from his mountain solitudes and to bring him into what Emerson called

"waiting society."

But so intense was his preoccupation with his tasks, so much were they a part of his deepest enjoyments, that her pleadings fell on deaf ears. If anything her remonstrances only served to kindle into flame the poetic fire of his soul. For there was nothing like the provocation of a little aspersion against the worthiness of the objects he was pursuing to bring him to the full stature of his ability as a writer—a vindicator of the objects of his devotion. A letter written under such stimulus is the following:

To Mrs. Ezra S. Carr

Yosemite *December* 11*th*, [1871]

Dear Mrs. Carr:

We are snowbound, and your letter of November 1st came two days ago. I sympathize with you for the loss of your brown Japanese, but I am glad to know that you found so much of pure human goodness in the life of your scholar. The whole world is enriched, beautified by a stratum—an atmosphere—of Godlike souls, and it is ignorance alone that banks human love into narrow gutter channels and stagnant pools, making it selfish and impure when it should be boundless as air and light, blending with all the world, keeping sight of our impartial Father who is the fountain sun of all the love that is rayed down to earth.

But glaciers, dear friend—ice is only another form of terrestrial love. I am astonished to hear you speak so unbelievingly of God's glorious crystal glaciers. "They are only pests," and you think them wrong in temperature, and they lived in "horrible times" and you don't care to hear about them "only that they made instruments of Yosemite music." You speak heresy for once, and deserve a dip in Methodist Tophet, or Vesuvius at least.

I have just been sending ice to LeConte and snow to McChesney and I have nothing left but hailstones for you, but I don't know how to send them to speak them. You confuse me. You have taught me here and encouraged me to read the mountains. Now you will not listen; next summer you will be converted—you will be iced then.

I have been up Nevada to the top of Lyell and found a living glacier, but you don't want that; and I have been in Hetch Hetchy and the canyon above, and I was going to tell you the beauty there; but it is all ice-born beauty, and too cold for you; and I was going to tell about the making of the South Dome, but ice did that too; and about the hundred lakes that I found, but the ice made them, every one; and I had some groves to speak about—groves of surpassing loveliness in *new* pathless Yosemites, but they all grew upon glacial drift—and I have nothing to send but what is frozen or freezable.

You like the music instruments that glaciers made, but no songs were so grand as those of the glaciers themselves, no falls so lofty as those which poured from brows, and chasmed mountains of pure dark ice. Glaciers *made* the mountains and ground corn for all the flowers, and the forests of silver fir, made smooth paths for human feet until the sacred Sierras have become the most approachable of mountains. Glaciers came down from heaven, and they were angels with folded wings, white wings of snowy bloom. Locked hand in hand the little spirits did nobly; the primary mountain waves, unvital granite, were soon carved to beauty. They bared the lordly domes and fashioned the clustering spires; smoothed godlike mountain brows, and shaped lake cups for crystal waters; wove myriads of mazy canyons, and spread them out like lace. They remembered the loudsonged rivers and every tinkling rill. The busy snowflakes saw all the coming flowers, and the grand predestined forests. They said, "We will crack this rock for Cassiope where she may sway her tiny urns. Here we'll smooth a plat for green mosses, and round a bank for bryanthus bells." Thus labored the willing flake-souls linked in close congregations of ice, breaking rock food for the pines, as a bird crumbles bread for her young, spiced with dust of garnets and zircons and many a nameless gem; and when food was

gathered for the forests and all their elected life, when every rock form was finished, every monument raised, the willing messengers, unwearied, unwasted, heard God's "well done" from heaven calling them back to their homes in the sky. The following was added later on the same sheet:

January 8th, 1872

Dear Friend:

We are gloriously snowbound. One storm has filled half of last month, and it is snowing again. Would that you could behold its beauty! I half expected another glacial period, but I will not say anything about ice until you become wiser, though I send you a cascade jubilee which you will relish more than anybody else. I have tried to put it in form for publication, and if you can rasp off the rougher angles and wedge in a few slippery words between bad splices, perhaps it may be sufficiently civilized for *Overland* or *Atlantic* But I always felt a chill come over my fingers when a calm place in the storm allowed me to think of it. Also I have been sorry for one of our bears, and I think you will sympathize with me. At least I confide my dead friend to your keeping, and you may print what you like. Heavens! if you only had been here in the flood!

[John Muir]

The same note of triumphant apology for his choice of the wilderness instead of the city is found in the following unique letter about the Sequoias. They were deepest in his affections, and under his playful prose-poetry it is not difficult to discover the Muir who in a few years was to arouse the whole nation to the importance of preserving for future generations these greatest and most ancient of all living things. His love for them had in it something personal, and there are those who have overheard him talking to them as to human beings. The original of this letter, written with Sequoia sap, still shines purple after more than half a century. Although it lacks a definite date, internal evidence clearly refers it to his earliest years in Yosemite, perhaps 1870.

To Mrs. Ezra S. Carr

Squirrelville, Sequoia Co. Nut Time

Dear Mrs. Carr

Do behold the King in his glory, King Sequoia! Behold! Behold! seems all I can say Some time ago I left all for Sequoia and have been and am at his feet; fasting and praying for light, for is he not the greatest light in the woods, in the world? Where are such columns of sunshine, tangible, accessible, terrestrialised? Well may I fast, not from bread, but from business, book-making, duty-going, and other trifles, and great is my reward already for tbe manly, freely sacrifice. What giant truths since coming to Gigantea, what magnificent clusters of Sequoiac *becauses*. From here I cannot recite you one, for you are down a thousand fathoms deep in dark political quagg, not a burr-length less. But I'm in the woods, woods, woods, and they are in *me-ee-ee*. The King tree and I have sworn eternal love—sworn it without swearing, and I've taken the sacrament with Douglas squirrel, drunk Sequoia wine, Sequoia blood, and with its rosy purple drops I am writing this woody gospel letter.

I never before knew the virtue of Sequoia juice. Seen with sunbeams in it, its color is the most royal of all royal purples. No wonder the Indians instinctively drink it for they know not what. I wish I were so drunk and Sequoical that I could preach the green brown woods to all the juiceless world, descending from this divine wilderness like a John the Baptist, eating Douglas squirrels and wild honey or wild anything, crying, Repent, for the Kingdom of Sequoia is at hand!

There is balm in these leafy Gileads—pungent burrs and living King-juice for all defrauded civilization; for sick grangers and politicians; no need of Salt rivers. Sick or successful, come suck Sequoia and be saved.

Douglas squirrel is so pervaded with rosin and burr juice his flesh can scarce be eaten even by mountaineers. No wonder he is so charged with magnetism! One of the little lions ran across my feet the other day as I lay resting under a fir, and the effect was a thrill like a battery shock. I would eat him no matter how rosiny for the lightning he holds. I wish I could eat wilder things. Think of the grouse with balsam-scented crop stored with spruce buds, the wild sheep full of glacier meadow grass and daisies azure, and the bear burly and brown as Sequoia, eating pine-burrs and wasps' stings and all; then think of the soft lightningless poultice-like pap reeking upon town tables. No wonder cheeks and legs become flabby and fungoid! I wish I were wilder, and so, bless Sequoia, I will be. There is at least a punky spark in my heart and it may blaze in this autumn gold, fanned by the King. Some of my grandfathers must have been born on a muirland for there heather in me, and tinctures of bog juices, that send me to Cassiope, and oozing through all my veins impel me unhaltingly through endless glacier meadows, seemingly the deeper and danker the better.

See Sequoia aspiring in the upper skies, every summit modeled in fine cycloidal curves as if pressed into unseen moulds, every bole warm in the mellow amber sun. How truly godful in mien! I was talking the other day with a duchess [This may be a playful allusion to Thérèse Yelverton who, still claiming her disputed marriage rights, was supposed to have become a Viscountess when her husband succeeded his father as fourth Viscount of Avomnore in October, 1870.] and was struck with the grand bow with which she bade me good-bye and thanked me for the glaciers I gave her, but this forenoon King Sequoia bowed to me down in the grove as I stood gazing, and the high bred gestures of the lady seemed rude by contrast.

There goes Squirrel Douglas, the master spirit of the tree-top. It has just occurred to me how his belly is buffy brown and his back silver gray Ever since the first Adam of his race saw trees and burrs, his belly has been rubbing upon buff bark, and his back has been combed with silver needles. Would that some of you, wise—terribly wise—social scientists, might discover some method of living as true to nature as the buff people of the woods, running as free as the winds and waters among the burrs and filbert thickets of these leafy, mothery woods.

The sun is set and the star candles are being lighted to show me and Douglas squirrel to bed. Therefore, my Carr, goodnight. You say, "When are you coming down?" Ask the Lord—Lord Sequoia.

[John Muir]

Chapter IX Persons and Problems

It seems impossible that any human being can ever have looked upon Yosemite Valley without raising the question of its origin. Its physical features, sculptured in granite, are so extraordinary that they at once stimulate the imagination to go in quest of the efficient cause. Even the Indians are said to have speculated about the Valley's origin in their legends, and the first white men who entered it in 1851, and encamped on the river-bank opposite El Capitan, immediately occupied themselves with the question in their campfire talk. Although the gold rush began in 1849, it was not until the beginning of the sixties that a systematic geological survey of California was begun. Until then the state was, geologically speaking, an unknown land. In the interest of the growing industrial importance of mining this situation called for remedy, and in 1860 the California Legislature passed an Act to create the office of State Geologist, and by a section of the same Act Josiah D. Whitney was appointed to fill the office.

Whitney had the backing of the leading geologists of his day and was a man of such prominence in his field that he was made Professor of Geology at Harvard in 1865. He gathered around him an able staff of assistants,

among whom were William H. Brewer, Charles F. Hoffmann, and William M. Gabb. In 1863 Clarence King, also, joined this group as volunteer assistant in geological field-work. During the period from 1860 to 1874 Whitney conducted, with these and other assistants, a topographical, geological, and natural history survey of California, issuing six volumes under the title of Geological Survey of California (Cambridge, 1865-70). The first volume, Geology of California, published in 1865, brought an intimation of the theory Whitney was going to propound on the subject of Yosemite's origin. "The domes," he wrote, "and such masses as that of Mount Broderick, we conceive to have been formed by the process of upheaval, for we can discover nothing about them which looks like the result of ordinary denudation. The Half Dome seems, beyond a doubt, to have been split as under in the middle, the lost half having gone down in what may truly be said to have been 'the wreck of matter and the crush of worlds."' In 1869 he published The Yosemite Guide-Book and came to be regarded as the foremost scientific authority on everything pertaining to Yosemite Valley. In this book he set forth his view of the Valley's origin as follows: "We conceive that, during the process of upheaval of the Sierra, or, possibly, at some time after that had taken place, there was at the Yosemite a subsidence of a limited area, marked by lines of 'fault' or fissures crossing each other somewhat nearly at right angles. In other and more simple language, the bottom of the Valley sank down to an unknown depth, owing to its support being withdrawn from underneath during some of those convulsive movements which must have attended the upheaval of so extensive and elevated a chain."

It only excites wonder now that a geologist of Professor Whitney's standing should have propounded a theory so completely at variance with the evidence. Indeed, members of his own corps pointed out that the floor of the Valley was of one piece with the sides and that there was no evidence of fault lines or of fusion. Although Clarence King had observed enough evidence of glaciation in the Valley to venture the opinion that it had once been filled with ice to the depth of at least a thousand feet, Whitney stoutly asserted that "there is no reason to suppose, or at least no proof, that glaciers have ever occupied the Valley or any portion of it. . . so that this theory [of glacial erosion], based on entire ignorance of the whole subject, may be dropped without wasting any more time upon it." It should be added that Clarence King shared his chief's belief in a cataclysmic origin of the Valley, holding that glaciers only scoured and polished it after it had been formed [See original edition of *Mountaineering in the Sierra Nevada, p. 134 (1872)*. Several writers have mistakenly made Clarence King the originator of the glacial erosion theory as regards Yosemite. He held no such theory. He did not even precede Muir in the publication of his glacial observations in the chapter entitled "Around Yosemite Walls," for that chapter, unlike the others, was not published serially in *1871*, but appeared for the first time in the above-mentioned volume in *1872*. The dates affixed to the chapters of King's book in the Scribner reprint are misleading, for they do not give the date of publication, but the years in which the observations are supposed to have been made.].

<u>Whitney's *Yosemite Guide-Book*</u> was published by authority of the California Legislature and the views set forth in it, therefore, had official sanction in the eyes of the public. Its author was the first scientist of standing who had reached a definite conclusion after an examination of the geological evidence and he was little inclined to give serious consideration to any view except his own. It required considerable courage, knowledge, and interpretative ability to go up against such a strongly entrenched and assertive antagonist. But Muir, recognizing the subsidence theory as contrary to his reading of the geological record, accepted the challenge. During the very first year of his residence in the Valley (1869-70) he had become convinced that it had not been formed by a cataclysm, but by long, slow, natural processes in which ice played by far the major part. He never lost an opportunity to discuss the question with interested visitors to the Valley and soon became the recognized and finally victorious opponent of the cataclysmic theory. Since there has been some misapprehension among historical geologists as to the time when Muir began to advocate the glacial erosion theory it seems appropriate to introduce some evidence on this point.

In the autumn of 1871 there issued from The Riverside Press, then Hurd and Houghton, a curious novel entitled <u>Zanita, a Tale of the Yosemite</u> ittle did the publishers dream that the hero of the tale would one day become one of their most famous authors. Few now remember the writer [Thérèse Yelverton, Viscountess Avonmore, 1832-81, authoress and plaintiff in the famous suit of Thelwall vs. Yelverton which the Court of Common Pleas at Dublin, Ireland, decided in her favor. Though on this occasion (1861) the validity of both her Irish and her Scottish marriage to William Charles

Yelverton, fourth Viscount Avonmore, was affirmed, the latter finally succeeded in getting a majority of the House of Lords to decide against the marriage (1867). Her maiden name was Maria Teresa Longworth. When her slender fortune had been spent in litigation she supported herself largely by her writings for which she found the materials in wide-ranging travels. Her case was heralded to the entire English-speaking world not only by journalists, but by such plays as Cyrus Redding's *A Wife and not a Wife*, and James Roderick O'Flanagan's novel *Gentle Blood, or The Secret Marriage*.] of the novel, though she was one of the most noted women of her time, and a warm friend of John Muir. The novel's chief interest lies in the fact that the authoress, coming to Yosemite Valley and taking up her abode there for a season in the spring of 1870, appropriated the inhabitants as characters of her tale, and reported their conversations. The names of Oswald and Placida Naunton are only thin disguises for Mr. and Mrs. J. M. Hutchings; Zanita and Cozy are their daughters, Florence and Gertrude; Methley is James C. Lamon, and Professor Brown seems to play for the most part the role of Professor Josiah D. Whitney, but with occasional admixtures of Professor Joseph LeConte. The hero of the novel is John Muir himself—under the name of Kenmuir. It is the sobriquet by which she addresses him in extant letters, at the same time identifying herself among the characters by signing herself as "Mrs. Brown."

Dear Kenmuir [she writes in 1871] *The Daughters of Ahwahnee* will be out in fall. How you will laugh when you see it. You and Cosa are the best survivors except the everlasting hills and vales.

[T. Y.]

Subsequently, writing from Hong Kong, she complained that the publishers had effaced many passages besides changing the title to <u>Zanita</u>. In spite of much exaggeration and unreal sentiment, a student of early Yosemite life will find here more than a historical setting. So much is clear from a reference to the book in one of Muir's letters.

Mrs. Yelverton's book [he writes] I have not yet seen. A friend sent me a copy, but it failed to reach hither. I saw some of the manuscript and have some idea of it. She had a little help from me, the use of my notebooks, etc., some of which, I suppose, she may have worked into her descriptions.

The Naunton family is the Hutchings family. The name Zanita is a fragment of the word manzanita, the Spanish name of a very remarkable California shrub. "Zanita" is Floy Hutchings [Florence Hutchings was the first white child bom in Yosemite Valley (August 23rd 1864). She died in 1881, was buried in the Valley, and Mount Florence was named for her.], a smart and handsome and mischievous Topsy that can scarce be overdrawn She is about seven or eight years old. Her sister Cosa, as we call her (I have forgotten what Mrs. Yelverton calls her), is more beautiful far in body and mind, a very precious darling of a child. Mrs. Naunton or Hutchings, was always kind to me, but Mr. Naunton is a very different character in reality, whatever Mrs. Yelverton made of him.

As for Kenmuir, I don't think she knew enough of wild nature to pen him well, but I have often worn shirts, soiled, ragged and buttonless, but with a spray like what I sent you stuck somewhere, or a carex, or chance flower. It is about all the vanity I persistently indulge in, at least in bodily adornments. There can be little doubt that we have in the pages of this novel a fairly accurate description of Muir's personal appearance in 1870, however distortedly she may have reproduced his views and conversation. While to her mind "his garments had the tatterdemalion style of a Mad Tom," she "soon divined that his refinement was innate, and his education collegiate." "Kenmuir, I decided in my mind, was a gentleman," so runs her naive comment, revealing her at the same time upon her own lofty perch of assumed gentility. It is of interest to find her noting Muir's "glorious auburn hair," "his open blue eyes of honest questioning," and "his bright intelligent face, shining with a pure and holy enthusiasm." She saw his "lithe figure. . . skipping over the rough boulders, poising for a moment the rhythmic motion of his flexile form. . . . His figure was about five feet nine, well knit, and bespoke that active grace which only trained muscles can assume." This new acquaintance, the like of whom, by her own confession, she had never met in all her travels, proved a tempting hero for her tale of

Yosemite. Either from lack of skill in portrayal, or because in this case fact was stranger than fiction, the reviewers of <u>Zanita</u> were left unconvinced. "One says your character is all 'bosh," she writes to Muir, "and only exists in my imagination. I should like to tell him that you had an existence in my heart as well!"

The question of the Valley's origin, always one of the primary interests of Yosemite residents and visitors, is not overlooked by the author of <u>Zanita</u>. The appearance of Whitney's *Yosemite Guide-Book* naturally had given new stimulus to discussion, particularly by the authoritative manner in which its author sought to settle the question. The views attributed to Muir in Mrs. Yelverton's reports of these discussions furnish a clue to the early date at which he had reached conclusions opposed to those of Whitney. Among the Valley conversations of 1870, related by her in chapter four, is one in which the alias of Whitney ascribes the formation of the Valley to the falling out of the bottom "in the wreck of creation," whereupon Kenmuir exclaims:

"Good gracious! there never was a 'wreck of creation.' As though the Lord did not know how to navigate. No bottom He made ever fell out by accident. These learned men pretend to talk of a catastrophe happening to the Lord's works, as though it were some poor trumpery machine of their own invention. As it is, it was meant to be.

"Why! I can show the Professor where the mighty cavity has been grooved and wrought out for millions of years. A day and eternity are as one in His mighty workshop. I can take you where you can see for yourself how the glaciers have labored, and cut and carved, and elaborated, until they have wrought out this royal road."

This novel also indicates that Muir knew at least as early as 1870 that ice had overridden Glacier Point, a fact of some historical interest since the origin of the name is not certainly known, and if any one other than Muir bestowed it he can hardly have grasped the meaning of the evidences of glaciation observed there. One would naturally suppose Clarence King to have been the first to perceive both the fact and the significance of it, but he set the limit of the highest ice-flood far below Glacier Point. But Muir, during the first year of his residence in the Valley, had fathomed the meaning of its glacial phenomena much more completely than he has ever received credit for, and when he propounded a theory of glacial erosion to account for the Valley's origin, he apparently had already correlated the ice-record on Glacier Point. At any rate Mrs. Yelverton, in speaking of Glacier Point as the place where she had first seen Muir, notes the existence there of "traces of ancient glaciers which he said 'are no doubt the instruments the Almighty used in the formation of the Valley."

Another, more direct, witness that Muir held the glacial origin theory as early as 1870, and probably earlier, is found in the writings of his friend Joseph LeConte. The latter, for many years Professor of Geology in the University of California, arrived in the State one year later than Muir and made his first visit to Yosemite and the High Sierra with a company of students in the summer of 1870. Muir and LeConte met in Yosemite through the mediation of Mrs. Carr, and Muir, on account of his knowledge of the region north of Yosemite, was invited to accompany the party across the crest of the Sierra to Mono Lake. On the night of the eighth of August the party was encamped on a meadow near what is now called Eagle Peak and there LeConte made the following entry in his journal:

After dinner, lay down on our blankets, and gazed up through the magnificent tall spruces into the deep blue sky and the gathering masses of white clouds. Mr. Muir gases and gazes and cannot get his fill. He is a most passionate lover of nature. Plants, and flowers, and forests, and sky, and clouds, and mountains, seem actually to haunt his imagination. He seems to revel in the freedom of this life. I think he would pine away in a city or in conventional life of any kind. He is really not only an intelligent man, as I saw at once, but a man of strong, earnest nature, and thoughtful, closely observing and original mind. I have talked much with him to-day about the probable manner in which Yosemite was formed. He fully agrees with

me that the peculiar cleavage of the rock is a most important point, which must not be left out of account. He further believes that the Valley has been wholly formed by causes still in operation in the Sierra—that the Merced Glacier and the Merced River and its branches . . . have done the whole work.

This reference of LeConte to Muir's glacial observations fully bears out the evidence of Mrs. Yelverton's novel that Muir had as early as 1870 definitely reached the conclusion that Yosemite is not the result of a sudden and exceptional catastrophe, but the product of "causes still in operation," as stated by Professor LeConte. In other words Muir was at this time aware also of the existence of residual glaciers in the High Sierra, for in his letter of August 7th, 1870, he mentions his intention "to set some stakes in a dozen glaciers and gather some arithmetic for clothing my thoughts." A year later (1871) he had verified by actual measurements his belief that what Whitney called snowfields were glaciers, and he had also found one in the Merced group of mountains that was delivering glacial mud, or rock meal, showing that the process of erosion on a small scale was still going on.

LeConte's inference from Muir's conversation, that he believed the ancient Merced Glacier and subsequent Merced River to "have done the whole work" of forming Yosemite Valley, requires some modification, for Muir did assume a certain amount of pre-glacial and post-glacial erosion, as may be seen in certain passages of his *Sierra Studies*. But it still is far from proved that he was wrong in regarding these particular erosion factors as subordinate. In justice to Muir it must, of course, be remembered that neither he nor any other geologist was at this time reckoning with the work of successive glacial epochs, least of all in Yosemite where the evidence of two glaciations remains speculative and theoretical. These are, at most, but shiftings of the boundaries of the original problem, and in no way detract from the value of Muir's pioneering work.

What concerned Muir most at this time was the ease with which bands of Yosemite pilgrims were captured by Whitney's exceptional creation theory of the Valley's origin, thus coming to regard it as "the latest, most uncompanioned wonder of the earth."

No wonder [said Muir] that a scientist standing on the Valley floor and looking up at its massive walls, has been unable to interpret its history. The magnitude of the characters in which the account of its origin is recorded has prevented him from reading it. "We have interrogated," says the scientist, "all the known valley-producing causes. The torrent has replied, 'It was not I'; the glacier has answered, 'It was not I'; and the august forces that fold and crevasse whole mountain chains disclaim all knowledge of it."

But, during my few years' acquaintance with it, I have found it not full of chaos, uncompanioned and parentless. I have found it one of many Yosemite valleys, which differ not more than one pine tree differs from another. Attentive study and comparison of these throws a flood of light upon the origin of the Yosemite; uniting her, by birth, with sister valleys distributed through all the principal river-basins of the range. The scorn with which Whitney and his assistants rejected Muir's theory and observations as those of a "shepherd" had not the slightest discouraging effect upon him, for he knew they had seen but a fraction of the evidence, and that hastily. It only sent him back to his mountain temples for more revealing facts which he wrote and preached to his friends with the zeal of a Hebrew prophet and no apology except that of Amos, "The Lord Jehovah hath spoken; who can but prophesy?" It is the voice of a man with a divine call that is heard in the following letters:

To Catherine Merrill

Yosemite Valley, July 12th, [1871]

Dear Friend:

Your sister's note which came with the little plants tells that you are about to escape from the frightful

tendencies of a "Christian" school to the smooth shelter of home. I glanced at the regulations, order, etc., in the catalogue which you sent, and the grizzly thorny ranks of cold enslaving "musts" made me shudder as I fancy I should had I looked into a dungeon of the olden times full of rings and thumbscrews and iron chains. You deserve great credit for venturing into such a place. None but an Indiana professor would dare the dangers of such a den of ecclesiastical slave-drivers. I suppose that you were moved to go among those flint Christians by the same motives of philanthropy which urged you amongst other forms of human depravity.

From my page I hold my bosom to our purple rocks and snowy waters and think of the divine repose which enwraps them all together with the tuned flies, and birds, and plants which inhabit them, and I thank God for this tranquil freedom, this glorious mountain Yosemite barbarism.

I have been with you and your apostolic friends these fifteen minutes and I feel a kind of choking and sinking as though I were smothering in nightmare. Come to Yosemite! Change the subject.

Last Sabbath week I read one of the most magnificent of God's own mountain manuscripts. During my rambles of the last two years in the basin of Yosemite Creek north of the Valley, I had gathered many faint hints from what I read as glacial footprints in the rocks worn by the storms and blotting chemistry of ages. Now there is a deep canyon in the top of the Valley wall near the upper Yosemite Falls which has engaged my attention for more than a year, and I could not account for its formation in any other way than by a theory which involved the supposition that a glacier formerly filled the basin of the stream above. Suddenly the big truth came to the birth. I ran up the mountain, 'round to the top of the falls, said my prayers, received baptism in the irised spray and ran northward toward the head of the basin, full of faith, confident that there was a writing for me somewhere on the rock, and I had not drifted four miles before I found all that I had so long sought in a narrow hollow where the ice had been compelled to wedge through under great pressure, thus deeply grooving and hardening the granite and making it less susceptible of decomposition. I continued up the stream to its source in the snows of Mt. Hoffmann, and everywhere discovered strips of meadow and sandy levels formed from the matter of moraine sand and bouldery accumulations of all kinds, smoothed and leveled by overflowing waters.

This dead glacier was about twelve miles in length by about five in breadth—of depth I have as yet no reliable data. Its course was nearly north and south, at right angles to the branches of the summit glaciers which entered Yosemite by the canyons of the Tenaya and Nevada streams. It united with those opposite Hutchings, in the Valley. Perhaps it was not born so early as those of the summits, from the canyons of Nevada and Tenaya. This is intensely interesting to me, and from its semi-philosophic character ought to be so in some degree to any professor. You must write. My love to all. You must write. I start tomorrow for the High Sierra about Mt. Dana and over in the Mono basin among the lavas and volcanoes. Will be back in a month.

[John Muir]

To Mrs. Ezra S. Carr

Yosemite August 13th, [1871]

Dear Friend:

I was so stunned and dazed by your last that I have not been able to write anything. I was sure that you were coming, and you cannot come, and Mr. King, the artist, left me the other day, and I am done with Hutchings, and I am lonely. Well, it must be wait, for although there is no common human reason why I should not see you and civilization in Oakland, I cannot escape from the powers of the mountains. I shall tie some flour and a blanket behind my saddle and return to the Mono region, and try to decide some questions that require undisturbed thought. Then I will stalk about over the summit slates of Dana and Gibbs and Lyell, reading new chapters of glacial manuscript, and more if I can. Then, perhaps, I will follow the Tuolumne down to the Hetch Hetchy Yosemite. Then perhaps follow every Yosemite stream back to its

smallest sources in the mountains of the Lyell group and the Cathedral group and the Obelisk and Mt. Hoffmann. This will, perhaps, be my work until the coming of the winter snows, when I will probably find a sheltered rock nook where I can make a nest of leaves and mosses and doze until spring.

I expect to be entirely alone in these mountain walks, and notwithstanding the glorious portion of daily bread which my soul will receive in these fields where only the footprints of God are seen, the gloamin' will be very lonely, but I will cheerfully pay this price of friendship, hunger, and *all* besides.

I suppose you have seen Mr. King, who kindly carried some [butter]flies for Mr. Edwards[Mr. Henry Edwards, actor and entomologist; for a report on this package of butterflies see Chap. 8.]. I thought you would easily see him or let him know that you had his specimens. I collected most of them upon Mount Hoffmann, but was so busy in assisting Reilly that I could not do much in butterflies., Hereafter I shall be entirely free.

The purples and yellows begin to come in the green of our groves and the rocks have the autumn haze and the water songs are at their lowest hushings. Young birds are big as old ones, and it is the time of ripe berries, and is it true that those are Bryant's "melancholy days"? I don't know. I will not think, but I will go above these brooding days to the higher brighter mountains. . . .

To Mrs. Ezra S. Carr

[John Muir]

Yosemite September 8th, 1871

Dear Friend:

I am sorry that King made you uneasy about me. He does not understand me as you do, and you must not heed him so much. He thinks that I am melancholy, and above all that I require polishing. I feel sure that if you were here to see how happy I am, and how ardently I am seeking a knowledge of the rocks you could not call me away, but would gladly let me go with only God and his written rocks to guide me. You would not think of calling me to make machines or a home, or of rubbing me against other minds, or of setting me up for measurement. No, dear friend, you would say, "Keep your mind untrammeled and pure. Go unfrictioned, unmeasured, and God give you the true meaning and interpretation of his mountains."

You know that for the last three years I have been ploddingly making observations about this Valley and the high mountain region to the East of it, drifting broodingly about and taking in every natural lesson that I was fitted to absorb. In particular the great Valley has always kept a place in my mind. How did the Lord make it? What tools did He use? How did He apply them and when? I considered the sky above it and all of its opening canyons, and studied the forces that came in by every door that I saw standing open, but I could get no light. Then I said, "You are attempting what is not possible for you to accomplish. Yosemite is the end of a grand chapter. If you would learn to read it go commence at the beginning." Then I went above to the alphabet valleys of the summits, comparing canyon with canyon with all their varieties of rock structure and cleavage, and the comparative size and slope of the glaciers and waters which they contained. Also the grand congregation of rock creations were present to me, and I studied their forms and sculpture. I soon had a key to every Yosemite rock and perpendicular and sloping wall. The grandeur of these forces and their glorious results overpower me, and inhabit my whole being. Waking or sleeping I have no rest. In dreams I read blurred sheets of glacial writing or follow lines of cleavage or struggle with the difficulties of some extraordinary rock form. Now it is clear that woe is me if I do not drown this tendency toward nervous prostration by constant labor in working up the details of this whole question. I have been down from the upper rocks only three days and am hungry for exercise already.

Professor Runkle [John Daniel Runkle.], President of the Massachusetts Institute of Technology, was here last week, and I preached my glacial theory to him for five days, taking him into the canyons of the Valley and up among the grand glacier wombs and pathways of the summit. He was fully convinced of the truth of my readings, and urged me to write out the glacial system of Yosemite and its tributaries for the Boston Academy of Science. I told him that I meant to write my thoughts for my own use and that I would send him the manuscript and if he and his wise scientific brothers thought it of sufficient interest they might publish it.

He is going to send me some instruments, and I mean to go over all the glacier basins carefully, working until driven down by the snow. In winter I can make my drawings and maps and write out notes. So you see that for a year or two I will be very busy.

I have settled with Hutchings and have no dealings with him now. I think that next spring I will have to guide a month or two for pocket money, although I do not like the work. I suppose I might live for one or two seasons without work. I have five hundred dollars here, and I have been sending home money to my sisters and brothers—perhaps about twelve or fifteen hundred, and a man in Canada owes me three or four hundred dollars more which I suppose I could get if I was in need; but you know that the Scotch do not like to spend their last dollar. Some of my friends are badgering me to write for some of the magazines, and I am almost tempted to try it, only I

afraid that this would distract my mind from my main work more than the distasteful and depressing labor of the mill or of guiding. What do you think about it?

Suppose I should give some of the journals my first thoughts about this glacier work as I go along, and afterwards gather them and press them for the Boston wise. Or will it be better to hold my wheesht [Scottish word for silence] and say it all at a breath? You see how practical I have become, and how fully I have burdened you with my little affairs!

Perhaps you will ask, "What plan are you going to pursue in your work?" Well, here it is—the only book I ever have invented. First, I will describe each glacier with its tributaries separately, then describe the rocks and hills and mountains over which they have flowed or past which they have flowed, endeavoring to prove that all of the various forms which those rocks now have is the necessary result of the ice action in connection with their structure and cleavage, etc.—also the different kinds of canyons and lake basins and meadows which they have made. Then, armed with these data, I will come down to Yosemite, where all of my ice has come, and prove that each dome and brow and wall, and every grace and spire and brother is the necessary result of the delicately balanced blows of well directed and combined glaciers against the parent rocks which contained them, only thinly carved and moulded in some instances by the subsequent action of water, etc.

Libby sent me Tyndall's new book, and I have looked hastily over it. It is an alpine mixture of very pleasant taste, and I wish I could enjoy reading and talking it with you. I expect Mrs. Hutchings will accompany her husband to the East this winter, and there will not be one left with whom I can exchange a thought. Mrs. Hutchings is going to leave me out all the books I want, and Runkle is going to send me Darwin. These, with my notes and maps, will fill my winter hours, if my eyes do not fail. And now that you see my whole position I think that you would not call me to the excitements and distracting novelties of civilization.

This bread question is very troublesome. I will eat anything you think will suit me. Send up either by express to Big Oak Flat or by any other chance, and I will remit the money required in any way you like.

My love to all and more thanks than I can write for your constant kindness.

To Mrs. Ezra S. Carr

[J. M.]

Yosemite [September or October], 1871

Dear Friend Mrs. Carr:

I am again upon the bottom meadow of Yosemite, after a most intensely interesting bath among the outer mountains. I have been exploring the upper tributaries of the Cascade and Tamarack streams, and in particular all of the basin of Yosemite Creek. The present basin of every stream which enters the Valley on the north side was formerly filled with ice, which also flowed into the Valley, although the ancient ice basins did not always correspond with the present water basins because glaciers can flow up hill. The *whole* of the north wall of the valley was covered with an unbroken flow of ice, with perhaps the single exception of the crest of Eagle Cliff, and though the book of glaciers gradually dims as we go lower on the range, yet I fully believe that future investigation will show that in the earlier ages of Sierra Nevada ice vast glaciers flowed to the foot of the range east of Yosemite, and also north and south at an elevation of 9000 feet. The glacier basins are almost unchanged, and I believe that ice was the agent by which all of the present rocks received their special forms.

More of this some other day. Would that I could have you here or in any wild place where I can think and speak! Would you not be thoroughly iced? You would not find in me one unglacial thought. Come, and I will tell you how El Capitan and Tissiack were fashioned.

I will most likely live at Black's Hotel this winter in charge of the premises, and before next spring I will have an independent cabin built with a special Carr corner where you and the Doctor can come and stay all summer. Also, I will have a tent so that we can camp and receive night blessings where we choose, and then I will have horses enough so that we can go to the upper temples also.

I wish you could see Lake Tenaya. It is one of the most perfectly and richly spiritual places in the mountains, and I would like to preempt there. Somehow I should feel like leaving home in going to Hetch Hetchy. Besides, there is room there for many other claims, and soon will fill with coarse homesteads. But as the winter is so severe at Lake Tenaya, very few will care to live there. Hetch Hetchy is about four thousand feet above sea, while Lake Tenaya is eight. I have been living in these mountains in so haunting, hovering, floating a way, that it seems strange to cast any kind of an anchor. All is so equal in glory, so ocean-like, that to choose one place above another is like drawing dividing lines in the sky.

I think I answered your last with respect to remaining here in winter. I can do much of this ice work in the quiet, and the whole I subject is purely physical, so that I can get but little from books. All depends upon the goodness of one's eyes. No scientific book in the world can tell me how this Yosemite granite is put together, or how it has been taken down. Patient observation and constant brooding above the rocks, lying upon them for years as the ice did, is the way to arrive at the truths which are graven so lavishly upon them.

Would that I knew what good prayers I could say, or good deeds I could do, so that ravens would bring me bread and venison for the next two years. Then would I get some tough gray clothes, the color of granite, so no one could see or find me but yourself. Then would I reproduce the ancient ice rivers, and watch their workings and dwell with them. I go again to my lessons tomorrow morning.

Some snow fell and, bye the bye, I must tell you about it. If poor, good, melancholic Cowper had been here yesterday morning here is just what he would have sung:

The rocks have been washed, just washed in a shower Which winds to their faces conveyed. The plentiful cloudlets bemuffled their brows, Or lay on their beautiful heads.

But cold sighed the winds in the fir trees above, And down in the pine trees below; For the rain that came laving and washing in love Was followed, alas, by a snow.

Which, being unmetaphored and prosed into sense, means that yesterday morning a strong southeast wind, cooled among the highest snows of the Sierra, drove back the warm northwest winds from the hot San Joaquin plains and burning foothill woods, and piled up a jagged cloud addition to our Valley walls. Soon those white clouds began to darken and to reach out long filmy edges, which uniting over the Valley made a close dark ceiling. Then came rain, unsteady at first, now a heavy gush, then a sprinkling halt, as if the clouds so long out of practice had forgotten something. But after a half hour of experimental pouring and sprinkling there came an earnest, steady, well-controlled rain. On the mountain the rain soon turned to snow, and some half-melted flakes reached the bottom of the Valley This morning Starr King and Tissiack and all the upper valley rim is white. . . .

Ever devoutly your friend, John Muir The following letter furnishes a good summary of Muir's glacial studies at the stage which they had reached in 1871. Attention should be called to the fact that in his opening sentence, Muir gives the California State Geological Survey credit for views which its chief had already repudiated, for in his Yosemite Guide Book of 1869 Josiah D. Whitney asserted that he had made an error in the first volume of the Survey when he stated that glaciers had entered the Valley from the head of the Merced.

To Clinton L. Merriam

Yosemite Valley September 24th, 1871

Dear Merriam:

The main trunk glaciers which entered Yosemite by the Tenaya, and Nevada, and South Canyons, have been known to many since the publication of the first volume of the California State Geological Survey; but I am not aware of the existence of any published account of the smaller glaciers, which entered the Valley by the lower side canyons or indeed that their former existence was known at all.

I have been haunting the rocks of this region for a long time, anxious to spell out some of the great mountain truths which I felt were written here, and ever since the number, and magnitude, and significance of these Yosemite glaciers began to appear, I became eager for knowledge concerning them and am now devoting all my time to their history.

You know my views concerning the formation of Yosemite, that the great Valley itself, together with all of its various domes and sculptured walls, were produced and fashioned by the united labors of the grand combination of glaciers which flowed over and through it, their forces having been rigidly governed and directed by the peculiar physical structure of the granite of which this region is made, and, moreover, that all of the rocks and lakes, and meadows of the whole upper Merced basin owe their specific forms and carving to this same glacial agency.

I left the Valley two weeks ago to explore the main trunk glacier of Yosemite Creek basin, together with its radiating border of tributaries, gathering what data I could read regarding their age, and direction, size, etc., also the kind and amount of work which they had done, but while I was seeking for traces of the western shore of the main stream upon the El Capitan ridge, I discovered that the Yosemite glacier was not the lowest ice stream which flowed to the Valley, but that the Ribbon basin or Virgin's Tears as it is also called, was also the bed of an ancient glacier which flowed nearly south, uniting with the central glaciers of the summits, in the

valley below El Capitan.

This Ribbon glacier must have been one of the very smallest of the ice streams which flowed to Yosemite, having been only about four miles in length by three in width. It had some small groove tributaries from the slopes of El Capitan, but most of its ice was derived from a high spur of the Hoffmann group to the north, which runs nearly southwest. Its bed is steep and regular, and it must have flowed with considerable velocity.

I could not find any of the original grooved and polished surfaces of the old bed, but some protected patches may still exist where a boulder of the proper form has settled upon a rounded summit. I found many such preserved patches in the basin of Yosemite creek, one of which is within half a mile of the top of the falls. It has a polished surface of about four square feet, with very distinct striae and grooves, although the unsheltered rock about it is eroded to the depth of four or five inches.

In as much as this small glacier sloped openly to the sun, and was not very deep, it was one of the first to die, and of course its written pages have been longer exposed to blurring rains and frosts, but notwithstanding the many crumbling blotting storms which have fallen upon the lithographs of this small ice-stream, the great truth of its former existence in this home, written in characters of moraine, and meadow, and fluted slope, is just as clear as when all of its shining newborn rocks gleamed forth the full shadowless poetry of its whole life.

There are a few castle-shaped piles, and crumbling domes upon its east bank, excepting which the basin is now plain and lake-like. But it contains most lovely meadows, interesting in their present flora, and in their glacial history, and noble forests made up mostly of the two silver firs (*Picea amabilis* and *P. grandis*) planted upon moraines which have been spread and leveled by the agency of water.

These rambling researches in the Ribbon basin recalled some observations made by me a year ago in the lower portion of the canyons of the Cascade and Tamarack streams, and I now guessed that careful search would discover abundant glacial manuscript in those basins also. Accordingly on reaching the highest point on the rim of the Ribbon ice, I obtained broad map views of both the Cascade and Tamarack basins, and singled out from their countless adornments many forms of lake, and rock, which seemed to be genuine glacier workmanship, unmarred in any way by the various powers which have come upon them since they were abandoned by their parent ice.

This highest ridge of the Ribbon glacier basin, bounded its ice on the north, and upon its opposite side I saw shining patches, which I ran down to examine. They proved to be polished unchanged fragments of the bottom of another ancient ice stream, which according to the testimony of their striae, had flowed south 40° west. This new glacier proved to be the eastmost tributary of the Cascade. Anxious to know it better, I proceeded west along the Mono trail to Cascade meadows, then turning to the right, entered the mouth of the tributary at the upper end of the meadows. Both of the ridges which formed the banks of the stream are torn and precipitous, evidently the work of ice. I followed up the bed of the tributary to its source, upon the flat west bank of the Yosemite basin, and throughout its whole length there is abundance of polished tablets, and moraines, and various kinds of rock sculpture forming ice testimony as full and indisputable as can be rendered by the most recent glacier pathways of the Alps.

I should gladly have welcomed the grateful toil of exploring the main trunk of this Cascade glacier from its farthest snows upon the Tuolumne divide, to its mouth in the Merced Canyon below Yosemite, but my stock of provisions was too small, and besides I felt that I would most likely have to explore the basin of Tamarack also, and following westward among the older, changed, and covered glacier highways, I might drift as far as the end of Pilot Peak ridge. Therefore turning reluctantly to the easier pages of Yosemite Creek I resolved to leave those lower chapters for future lessons' But before proceeding with Yosemite Creek let me distinctly give here as my opinion that future investigation will discover proofs of the existence in the earlier ages of a

Sierra Nevada ice of vast glaciers which flowed to the very foot of the range.

Already it is clear that all of the upper basins were filled with ice, so deep and universal that but few of the ridges were sufficiently high to separate it into individual glaciers. Vast mountains were flowed over, and rounded or moved away like boulders in a river.

Ice flowed into Yosemite by every one of its canyons, and at a comparatively recent period of its history, its north wall, with perhaps the single exception of the crest of Eagle Cliff was covered with an unbroken stream of ice, the several glaciers having united before coming to the wall.

John Muir

Fortunately Muir decided not to hold his "wheesht" [Scottish word for silence]. The above letter is an abridgment of an article, entitled <u>"Yosemite Glaciers"</u> that he sent four days later as his "first thoughts" to the *New York Tribune*. After some delay it appeared in that paper, December 5th, 1871, and constitutes the first published statement of the ice erosion theory to account for the origin of Yosemite. It is but just to point out that Muir was not following in any one's footsteps in propounding his theory [William Phipps Blake has been mistakenly credited with being the originator of the theory. In his paper "Sur l'action des anciens glaciers dans la Sierra Nevada de Californie et sur l'origine de la vallée de Yo-Semite," published in the *Comptes Rendus des Seances de l'Academie des Sciences de Paris*, tome 65, 1867, the origin of the Valley is ascribed to sub-glacial erosion by water pouring; from the glaciers above. The precise form of statement is as follows: "On peut en conclure que cette vallée parait due à une érosion sous-glaciaire, due à l'écoulement des eaux provenant de la fonte des glaces supérieures."], for the simple reason that there was no one to be followed, and though he put forward but a small part of his evidence, it proved to be the beginning of the end of Whitney's subsidence theory.

Muir had hardly published his views and discoveries when Professor Samuel Kneeland, of the Massachusetts Institute of Technology, utilized his article, together with letters he had written to President J. D. Runkle, to prepare a paper ["On the Glaciers of the Yosemite Valley," read at a meeting held February 21, 1872, and published in the *Proceedings* of the Society, Vol. XV, pp. 36-47 (1872). Also republished the same year in Kneeland's book *The Wonders of Yosemite Valley and of California.*] for the Boston Society of Natural History. Muir did not approve of the use that Kneeland made of his materials, claiming that he gave him "credit for all the smaller sayings and doings and stole the broadest truth to himself." But the paper had the effect of attracting considerable attention to Muir's views and explorations.

Meanwhile Muir was going at his task systematically. The difficulty of correlating his studies without good maps was in large measure surmounted by his ability to sketch accurately and rapidly the physical features of the region under examination. Nothing shows better his industry and the minute care with which he worked than the large number of mountain sketches that date from this period. By means of them he could, when working up his results, call to mind with particularity and vividness the physiography of the country in connection with his notes.

Early in November, 1871, when winter cold was already settling upon the heights, he made his first expedition to Hetch Hetchy, the "Tuolumne Yosemite" as he aptly described it. whose needless destruction and conversion to the domestic uses of San Francisco was to sadden the evening of his life. A hunter by the name of Joseph Screech is said to have discovered the Valley in 1850, a year before Yosemite was entered for the first time by Captain Boling's party. In 1871 its use was claimed by a sheep owner named Smith and consequently was often called Smith's Valley. This man's shepherd and a few Digger Indians were the only occasional inhabitants of the Valley at this time.

Excerpts from a description of this "last raid of the season" will give the reader an idea of the manner in which he fared on these lonely excursions.

I went alone [he writes], my outfit consisting of a pair of blankets and a quantity of bread and coffee. There is a weird charm in carrying out such a free and pathless plan as I had projected; passing through untrodden forests, from canyon to canyon, from mountain to mountain; constantly co upon new beauties and new truths. . . . As I drifted over the dome-paved basin of Yosemite Creek. . . sunset found me only three miles back from the brow of El Capitan, near the head of a round smooth gap—the deepest groove in the El Capitan ridge. Here I lay down and thought of the time when the groove in which I rested was being ground away at the bottom of a vast ice-sheet that flowed over all the Sierra like a slow wind. . . . My huge camp fire glowed like a sun. . . . A happy brook sang confidingly, and by its side I made my bed of rich, spicy boughs, elastic and warm. Upon so luxurious a couch, in such a forest, and by such a fire and brook, sleep is gentle and pure. Wildwood sleep is always refreshing; and to those who receive the mountains into their souls, as well as into their sight—living with them clean and free—sleep is a beautiful death, from which we arise every dawn into a new-created world, to begin a new life in a new body.

The second day he suddenly emerged on top of the wall of the main Tuolumne Canyon about two miles above Hetch Hetchy. After describing glowingly the canyon floor four thousand feet below and the sublime wilderness of mountains around and beyond, he indulges in some reflections on the diversity of impression produced upon different persons by such a scene.

To most persons unacquainted with the genius of the Sierra Nevada [he observes], especially to those whose lives have been spent in shadows, the impression produced by such a landscape is dreary and hopeless. Like symbols of a desolate future, the sunburned domes, naves, and peaks, lie dead and barren beneath a thoughtless, motionless sky; weed-like trees darken their gray hollows and wrinkles, with scarcely any cheering effect. To quote from a Boston professor [J. D. Whitney], "The heights are bewildering, the distances overpowering, the stillness oppressive, and the utter barrenness and desolation indescribable." But if you go to the midst of these bleached bones of mountains, and dwell confidingly and waitingly with them be assured that every death-taint will speedily disappear; the hardest rocks will pulse with life, secrets of divine beauty and love will be revealed to you by lakes, and meadows, and a thousand flowers, and an atmosphere of spirit be felt brooding over all.

He descended into the canyon by what he at first supposed to be a trail laid out by Indians, but soon discovered that it was a bear-path leading to harvests of brown acorns in black oak groves and to thickets of berry-laden manzanita. Muir never went armed on any of these exploratory excursions, his aim being, so far as in him lay, to live at peace with all the inhabitants of the wilds.

The sandy ground [he notes] was covered with bear-tracks; but that gave me no anxiety. because I knew that bears never eat men where berries and acorns abound. Night came in most impressive stillness. My blazing fire illumined the brown columns of my guardian trees, and from between their bulging roots a few withered breckans and golden-rods leaned forward, as if eager to drink the light. Here and there a star glinted through the shadowy foliage overhead, and in front I could see a portion of the mighty canyon walls massed in darkness against the sky; making me feel as if at the bottom of the sea. The near, soothing hush of the river joined faint, broken songs of cascades. I became drowsy, and, on the incense-like breath of my green pillow, I floated away into sleep.

After a careful exploration of the Hetch Hetchy Valley he struck, on his return, straight across the mountains toward Yosemite. November storms often blanket the High Sierra in snow, and he was caught in the edge of a storm on the way back.

During the first night [he writes] a few inches of snow fell, but I slept safely beneath a cedar-log, and pursued my journey next day, charmed with the universal snow-bloom that was upon every tree, bush, and weed, and upon all the ground, in lavish beauty. I reached home the next day, rejoicing in having added to my mountain wealth one more Yosemite Valley.

Thus ended the exploring season of 1871, and in the following letter, written to his mother immediately after the Hetch Hetchy excursion, we get a glimpse of his plans:

To Mrs. Daniel Muir

Yosemite Valley *November* 16th, [1871]

Dear Mother:

Our high-walled home is quiet now; travel has ceased for the season, and I have returned from my last hard exploratory ramble in the summit mountains. I will remain during the winter at Black's Hotel, taking care of the premises and working up the data which I have garnered during these last months and years concerning the ancient glacial system of this wonderful region. For the last two or three months I have worked incessantly among the most remote and undiscoverable of the deep canyons of this pierced basin, finding many a mountain page glorious with the writing of God and in characters that any earnest eye could read. The few scientific men who have written upon this region tell us that Yosemite Valley is unlike anything else, an exceptional creation, separate in all respects from all other valleys, but such is not true. Yosemite is one of many, one chapter of a great mountain book written by the same pen of ice which the Lord long ago passed over every page of our great Sierra Nevadas. I know how Yosemite and all the other valleys of these magnificent mountains were made and the next year or two of my life will be occupied chiefly in writing their history in a human book—a glorious subject, which God help me preach aright.

I have been sleeping in the rocks and snow, often weary and hungry, sustained by the excitements of my subject and by the Scottish pluck and perseverance which belongs to our family. For the last few days I have been eating and resting and enjoying long warm sleeps beneath a roof, in a warm, rockless, boulderless bed.

In all my lonely journeys among the most distant and difficult pathless, passless mountains, I never wander, am never lost. Providence guides through every danger and takes me to all the truths which I need to learn, and some day I hope to show you my sheaves, my big bound pages of mountain gospel.

I have been busy moving my few chattels from Hutchings' to Black's, about half a mile down the Valley, and I scarce feel at home. Tidings of the great far sweeping fires have reached our hidden home, and I am thankful that your section of towns and farms has been spared. I heard a few weeks ago from David and Joanna and learn that all is well. Wisconsin winter will soon be upon you. May you enjoy its brightness and universal beauty in warm and happy homes.

Our topmost mountains are white with their earliest snow, but the Valley is still bare and brown with rustling leaves of the oak and alder and fronds of the fast fading ferns. Between two and three thousand persons visited the Valley this summer. I am glad they are all gone. I can now think my thoughts and say my prayers in quiet.

Ever devoutly yours in family love John

It was during the winter of 1871-72 that Muir began to write for publication. "In the beginning of my studies I never intended to write a word for the press," he was accustomed to remark to his friends. But in September, 1871, he sent the first of several serial letters to the *New York Tribune*, and it appeared on December 5th, 1871, under the title "Yosemite Glaciers." The second and third, entitled "Yosemite in Winter" and "Yosemite in Spring," appeared January 1st and May 7th, 1872. Extracts from letters written to friends in Boston were read at the February, March, and May

meetings of the Boston Society of Natural History by Dr. Samuel Kneeland, and were afterwards published in the *Proceedings of* the Society. In April, 1872, he began a series of contributions to the *Overland Monthly*, whose editorial direction had then passed from Francis Bret Harte to Benjamin P. Avery. This was the magazine upon which John H. Carmany, its publisher, is reputed to have spent thirty thousand dollars—to make Bret Harte famous. Muir's first contribution, placed through the mediation of Mrs. Carr, was "Yosemite Valley in Flood"—a vivid description of a great storm that swept Yosemite for three days during the preceding December. This article, exciting instant and widespread interest, was followed in July by "Twenty Hill Hollow."

Many of his friends at this time were aware of his literary ability through his letters and were urging him to write, but no one had assessed his genius and his literary powers more accurately than his friend Jeanne C. Carr. In an extant fragment of a letter written in March she informs him that she has combined two of his glacial letters, one written to her and the other to Professor LeConte, and that she is sending this combination to Emerson with the request to get it published in the *Atlantic*. "You are not to know anything about it," she writes—"let it take its chances."

"My mind is made up on one point," she continues. "All this fugitiveness is going to be gathered up, lest you should die like Moses in the mountains and God should bury you where 'no man knoweth.' I copied every word of your old Journal. It looks pretty, and reads well. You have only to continue it and make the *Yosemite Year Book*, painting in your inimitable way the march of the seasons there. Try your pen on the humans, too. Get sketches at least. I think it would be a beautiful book. Then you will put your scientific convictions into clear-cut crystalline prose for other uses." To these suggestions the following letter is in part a reaction:

To Mrs. Ezra S. Carr

Yosemite Valley March 16th, [1872]

Dear Mrs. Carr:

Yours of February 26th reached me to-day, and as I have a chance to send you a hasty line by an Indian who is going to Mariposa I would say that I fear you are giving yourself far too much trouble about those little fragments. If they or any other small pieces that chance to the end of my pen give you and the Doctor any pleasure I am well paid. Very few friends besides will care for them. . . .

You don't understand my reference to Ruskin's "moderation." Don't you remember that he speaks in some of his books about the attributes of Nature, "Repose," "Moderation," etc.? He says many true and beautiful things of Repose, but weak and uninspired things concerning Moderation, telling us most solemnly that Nature is never immoderate! and that if he had the power and the paint he would have "Moderation" brushed in big capitals upon all the doors and lintels of art factories and manufactories of the whole world! etc., etc., as near as I can recollect. The heavy masonry of the Sierra seems immoderate to some.

I am astonished at your copying those dry tattered notes. People speak of writing with one foot in the grave. I wrote most of those winter notes with one foot in bed while stupid with the weariness of Hutchings' logs. I'm not going to die until done with my glaciers. As for that glacier which you propose to construct out of your letter and LeConte's, I cannot see how a balanced unit can be made from such material.

I had a letter from Emerson the other day of which I told you in another letter. He prophesies, in the same dialect that you are accustomed to use, that I shall one day go to the Atlantic Coast. He knows nothing of my present ice work.

I read your Hindu extracts with much interest. I am glad to know, by you and Emerson and others living and dead, that my unconditional surrender to Nature has produced exactly what you have foreseen—that drifting without human charts through fight and dark, calm and storm, I have come to so glorious an ocean. But more of this by and by.

As for that idea of Mountain Models, I told Runkle last fall that a model, in plaster of Paris, of a section of the Sierra reaching to the summits, including Yosemite, would do more to convince people of the truth of our glacial theory of the formation of the Valley and of canyons in general than volumes of rocky argument; because magnitudes are so great only very partial views are obtained. He agreed with me and promised to send me a box with plaster for a model three or four feet long, and instruments, barometer, level, etc., but it has not come.

I have material for some outline glacier maps, but as I had no barometer last fall I have no definite depths of canyons or heights. If you think they would be worth presenting to the wise Congress of next summer, I will send them. Emerson told me, hurry done with the mountains. I don't see how he knows I am meddling with them. Have you told him? He says I may go East with Agassiz. I will not be done here for several years.

I am in no hurry. I want to see all the world. I am going to be down about the Golden Gate looking for a mouth to a portion of my ice. I answered two others of yours dated 4th and 8th of February, but the letter is still here. I will risk only this with Lo.

[John Muir]

During the month of February he had got in touch again with his friend Emily Pelton, of Prairie du Chien days. In 1864, on the way back from his botanical ramble down the Wisconsin River, he had made a detour to pay her a visit, but her uncle, for reasons of his own, had contrived to prevent a meeting by telling him that she was not at home. Years had passed since then, and now her coming to California opened the prospect of a visit to Yosemite. "You will require no photographs to know me," he writes. "The most sun-tanned and round-shouldered and bashful man of the crowd—if you catch me in a crowd—that's me!... In all these years since I saw you I have been isolated; somehow I don't mould in with the rest of mankind and have become far more confusedly bashful than when I lived in the Mondell.""

He recalls with amusement his odd appearance when he came to Prairie du Chien, and how he rebuked various members of the Mondell circle for irreverence and sins of one kind or another. And then shines forth a characteristic Muir trait—undying loyalty and devotion to his friends. For he adds: "something else I remember, Emily,—your kind words to me the first time I saw you. Kind words are likely to live in any human soil, but planted in the heart of a Scotchman they are absolutely immortal, and whatever Heaven may have in store for you in after years you have at least one friend while John Muir lives."

The subjoined letter to her, though apparently written hurriedly, is significant for its clear-cut and pungent defence of his mode of life and the effect which he believed it to have upon his character. Miss Pelton did not visit the Valley until June, 1873. In her party, which camped in Tenaya Canyon for nine days, were Mrs. Carr, A. Kellogg, botanist of the California Academy of Sciences, William Keith, the artist, and several others.

Muir's acquaintanceship with Keith, begun on a previous visit to the Valley, speedily ripened into a devoted and lasting friendship.

The projected excursion with Professor LeConte, mentioned in the same letter, acquires significance in connection with the latter's publication of a paper on "Some Ancient Glaciers of the Sierra," read in September, 1872, before the California Academy of Sciences. In this paper Professor LeConte made the first published announcement of Muir's discovery of living glaciers in the Sierra Nevada. LeConte gave Muir full credit for this discovery, but the freedom with which the latter, in conversation as well as in his letters, poured out the results of his exploratory work before his scientific friends gave point to Mrs. Carr's fear that others, less scrupulous, might obtain the credit and reap the advantage of his glacial discoveries. She therefore urged him, as will appear later, to do his own publishing of his discoveries.

To Emily Pelton

Yosemite Valley April 2nd, 1872

Dear Friend Emily:

Your broad pages are received. You must never waste letter time in apologies for size. The more vast and prairie-like the better. But now for the business part of your coming. Be sure you let me know within a few days the time of your setting out so that I may be able to keep myself in a findable, discoverable place. I am, as perhaps I told you, engaged in the study of glaciers and mountain structure, etc., and I am often out alone for weeks where you couldn't find me. Moreover, I have a good many friends of every grade who will be here, all of whom have greater or lesser claims on my attention. With Professor LeConte I have made arrangements for a long scientific ramble back in the summits; also with Mrs. Carr. You will readily understand from these engagements and numerous other probabilities of visits, especially from scientific friends who almost always take me out of Yosemite, how important it is that I should know very nearly the time of your coming. I would like to have a week of naked, unoccupied time to spend with you and nothing but unavoidable, unescapable engagements will prevent me from having such a week.

If Mr. Knox would bring his team you could camp out, and the expense would be nothing, hardly, and you could make your headquarters at a cabin I am building. This would be much the best mode of travelling and of seeing the Valley. Independence is nowhere sweeter than in Yosemite. People who come here ought to abandon and forget all that is called business and duty, etc.; they should forget their individual existences, should forget they are born. They should as nearly as possible live the life of a particle of dust in the wind, or of a withered leaf in a whirlpool. They should come like thirsty sponges to imbibe without rule. It is blessed to lean fully and trustingly on Nature, to experience, by taking to her a pure heart and unartificial mind, the infinite tenderness and power of her love.

You mention the refining influences of society. Compared with the intense purity and cordiality and beauty of Nature, the most delicate refinements and cultures of civilization are gross barbarisms.

As for the rough vertical animals called men, who occur in and on these mountains like sticks of condensed filth, I am not in contact with them; I do not live with them. I live alone, or, rather, with the rocks and flowers and snows and blessed storms; I live in blessed mountain *light*, and love nothing less pure. You'll find me rough as the rocks and about the same color—granite. But as for loss of pure mindedness that you seem to fear, come and see my teachers; come, see my Mountain Mother, and you will be at rest on that point.

We have had a glorious storm of the kind called earthquake. I've just been writing an account of it for the *New York Tribune* [May 7th, 1872]. It would seem strange that any portion of our perpendicular walls are left unshattered. It is delightful to be trotted and dumpled on our Mother's mountain knee. I hope we will be

blessed with some more. The first shock of the morning of [March] 26th, at half-past two o'clock, was the most sublime storm I ever experienced.

Most cordially yours John Muir The above-mentioned earthquake was one of great intensity and made one of the memorable experiences of his life. He sent a description of it to the Boston Society of Natural History and to several friends.

Though I had never enjoyed a storm of this sort [he wrote], the thrilling motion could not be mistaken, and I ran out of my cabin, both glad and frightened, shouting, "A noble earthquake!" feeling sure I was going to learn something. The shocks were so violent and varied, and succeeded one another so closely, that I had to balance myself carefully in walking as if on the deck of a ship among waves, and it seemed impossible that the high cliffs of the valley could escape being shattered. In particular, I feared that the sheer-fronted Sentinel Rock, towering above my cabin, would be shaken down, and I took shelter back of a large yellow pine hoping that it might protect me from at least the smaller outbounding boulders. For a minute or two the shocks became more and more violent—flashing horizontal thrusts mixed with a few twists and battering, explosive, upheaving jolts—as if Nature were wrecking her Yosemite temple, and getting ready to build a better one.

It was on this occasion that he saw Eagle Rock on the south wall give way and fall into the Valley with a tremendous roar.

I saw it failing [writes Muir] in thousands of the great boulders I had so long been studying, pouring to the Valley floor in a free curve luminous with friction, making a terribly sublime spectacle—an arc of glowing passionate fire, fifteen hundred feet span, as true in form and as serene in beauty as a rainbow in the midst of the stupendous roaring rock-storm.

He was thrilled by the phenomenon, for he realized that by a fortunate chance he was enabled to witness the formation of a mountain talus, a process about which he had long been speculating.

Before the great boulders had fairly come to rest he was upon the newborn talus, listening to the grating, groaning noises with which the rocks were gradually settling into their places. His scientific interest in the phenomenon made him so attentive to even its slightest effects that all fear was banished, and he astounded his terrified fellow residents of Yosemite with his enthusiastic recital of his observations. They were ready to flee to the lowlands, leaving the keys of their premises in his hands, while he prepared to resume his glacial studies, armed with fresh clues to the origin of canyon taluses.

To Mrs. Ezra S. Carr

New Sentinel Hotel, Yosemite Valley [April, 1872]

Sunday night I was up in the moon among the lumined spray of the upper Falls. The lunar bows were glorious and the music Godful as ever. You will yet mingle amid the forms and voices of this peerless fall.

I wanted to have you spend two or three nights up there in full moon, and planned a small hut for you, but since the boisterous waving of the rocks, the danger seems forbidding, at least for you. We can go up there in the afternoon, spend an hour or two, and return.

I had a grand ramble in the deep snow outside the Valley, and discovered one beautiful truth concerning snow structure, and three concerning the forms of forest trees.

These earthquakes have made me immensely rich. I had long been aware of the life and gentle tenderness of the rocks, and instead of walking upon them as unfeeling surfaces, began to regard them as a transparent sky. Now they have spoken with audible voice and pulsed with common motion. This very instant just as my pen reached "and" on the third line above, my cabin creaked with a sharp shock and the oil waved in my lamp.

We had several shocks last night. I would like to go somewhere on the west South American coast to study earthquakes. I think I could invent some experimental. . . [Rest of letter lost.]

To Mrs. Ezra S. Carr

New Sentinel Hotel Yosemite Valley *April 23rd*, 1872

Dear Mrs. Carr:

Yours of April 9th and 15th, containing Ned's canoe and colonization adventures came tonight. I feel that you are coming, and I win not hear any words preparatory of consolation for the unsupposable case of your nonappearance.

Come by way of Clark's, and spend a whole day or two in the Sequoias. Thence to Sentinel Dome and Glacier Point. From thence swoop to our meadows and groves *direct* by a trail now in course of construction which will be completed by the time the snow melts. This new trail will be the best in scenery and safety of five which enter the Valley. It leads from Glacier Point down the face of the mountain by an easy grade to a point back of Leidig's hotel, and has over half a dozen Inspiration Points.

I hear that Mr. Paregoy intends building a hotel at Glacier Point. If he does you should halt there for the night after leaving Clark's. If not, then stop at the present "Paregoy's" five or six miles south of the Valley at the Westfall Meadows—built since your visit. You might easily ride from Clark's to the Valley in a day, but a day among the silver firs and another about the glories of the Valley rim and settings is a "sma' request."

The snow is deep this year, and the regular Mariposa trail leading to Glacier Point, etc., will not be open before June. The Mariposa travel of May, and perhaps a week or so of June, will enter the Valley from Clark's by a sort of sneaking trail along the river canyon below the snow, but you must not come that way.

You may also enter the Valley via Little Yosemite and Nevada and Vernal Falls, by a trail constructed last season; also by Indian Canyon on the north side of the Valley by a trail now nearly completed. This last is a noble entrance, but perhaps not equal to the first. Whatever way you come we will travel all of these, up or down, and bear in mind that you must go among the summits in July or August. Bring no friends that will not go to these fount fountains beyond, or are uncastoffable. Calm thinkers like your Doctor, who first fed me with science, and LeConte are the kind of souls fit for the formation of human clouds adapted to this mountain sky. Nevertheless, I will rejoice beyond measure, though you come as a comet tailed with a whole misty town. Ned is a brave fellow. God bless him unspeakably and feed him with his own South American self.

I shall be most happy to know your Daggetts or anything that you call dear. I have not seen any of my *Tribune* letters, though I have written five or six. Send copy if you can. Goodnight and love to all. J. M.

To Miss Catharine Merrill

New Sentinel Hotel Yosemite Valley June 9th, 1872

Catharine Merrill My Dear Friend I am very happy to hear your hand language once more, but in some places I am black and

blue with your hurricane of scolding.

I [am] glad you so much enjoy your work (not scolding), but am sorry to hear of the languor which clearly speaks of struggles and long continued toil of nerve-exhausting kind. I hope you will not persist in self-sacrifice of so destructive a species. The sea will do you good; bathe in it and bask in sunshine and allow the pure and generous currents of universal uncolleged beauty to blow about your bones and about all the overworked wheels of your mind. I know very well how you toil and toil, striving against lassitude and the cloudy weather of discouraging cares with a brave heart, your efforts toned by the blessedness of doing good; but do not, I pray you, destroy your health. The Lord understands his business and has plenty of tools, and does not require over-exertion of any kind.

I wish you could come here and rest a year in the simple unmingled Love fountains of God. You would then return to your scholars with fresh truth gathered and absorbed from pines and waters and deep singing winds, and you would find that they all sang of fountain Love just as did Jesus Christ and all of pure God manifest in whatever form. You say that good men are "nearer to the heart of God than are woods and fields, rocks and waters" Such distinctions and measurements seem strange to me. Rocks and waters, etc., are words of God and so are men. We all flow from one fountain Soul. All are expressions of one Love. God does not appear, and flow out, only from narrow chinks and round bored wells here and there in favored races and places, but He flows in grand undivided currents, shoreless and boundless over creeds and forms and all kinds of civilizations and peoples and beasts, saturating all and fountainizing all.

You say some other things that I don't believe at all, but I have no room to say them nay; further—I don't stab the old grannies where I wasted so much time, the colleges of all kinds, "Christian" and common, West and Northwest, with their long tails of pretensions. I only said a few words of free sunshine, using the dim old clouds of learning for a background.

My love to Mina and Mrs. Moores and the dear younglings. The falls are in song gush and the light is balmed with summer love. Would I could send some. I shall be sure to keep you an open letter-road so that you can see your Merrill whom you all commit so confidingly to my care. Hoping that you will get strength by the sea and enjoy all the spiritual happiness you deserve.

I am ever cordially Your friend

John Muir

To Mrs. Ezra S. Carr

New Sentinel Hotel, Yosemite Valley July 6th, [1872]

Dear Mrs. Carr:

Yours of Tuesday eve, telling me of our Daggetts and Ned and Merrill Moores, has come. So has the lamp and the book. I have not yet tried the lamp, but it is splendid in shape and shines grand as gold.

The Lyell is just what I wanted. I think that your measure of the Daggetts is exactly right. As good as civilized people can be, they have grown to the top of town culture and have sent out some shoots half-gropingly into the spirit sky.

I am very glad to know that Ned is growing strong. Perhaps we may [see] South America together yet. I hope to see you come to your own of mountain fountains soon. Perhaps Mrs. Hutchings may go with us. You live so fully in my own life that I cannot realize that I have not yet seen you here. A year or two of waiting seems nothing.

Possibly I may be down on your coast this fall or next, for I want to see what relations the coast and coast mountains have to the Sierras. Also I want to go north and south along this range, and then among the basins and ranges eastward. My subject is expanding at a most unfollowable pace. I could write something with data already harvested, but I am not satisfied.

I have just returned from Hetch Hetchy with Mrs. [J. P.] Moore. Of course we had a glory and a fun—the two articles in about parallel columns of equal size. Meadows grassed and lillied head-high, spangled river reaches, and currentless pools, cascades countless and unpaintable in form and whiteness, groves that heaven all the Valley! You were with us in all our joy, and you will come again.

I am a little weary and half incline to truantism from mobs, however blessed, in some unfindable grove. I start in a few minutes for Clouds' Rest with Mr. and Mrs. Moore.

I am ever your friend J. Muir

To Mrs. Ezra S. Carr

New Sentinel Hotel, Yosemite Valley July 14th, 1872

Dear Mrs. Carr:

Yours announcing Dr. [Asa] Gray is received. I have great longing for Gray whom I feel to be a great, progressive, unlimited man like Darwin and Huxley and Tyndall. I will be most glad to meet him. You are unweariable in your kindness to me, and you helm my fate more than all the world beside.

I am approaching a kind of fruiting time in this mountain work, and I want very much to see you. All say *"Write,"* but I don't know how or what; and, besides, I want to see North and South, and the inland basins and the sea-coast, and all the lake basins and the canyons, also the Alps of every country and the continental glaciers of Greenland, before I write the book we have been speaking of. All this will require a dozen years or twenty, and money. The question is, what will I write now, etc.? I have learned the alphabet of ice and mountain structure here, and I think I can read fast in other countries. I would let others write what I have read here, but that they make so damnable le a hash of it and ruin so glorious a unit.

I miss the [J. P.] Moores because they were so cordial and kind to me. Mrs. Moore believes in ice and can preach it too. I wish you could bring Whitney and her together and tell me the fight. Mrs. Moore made the most sensible visit to our mountains of all comers I have known. Mr. Moore is a man who thinks and he took to this mountain structure like a pointer to partridges. . . . Talk to Mrs. Moore about Hetch Hetchy, etc. She knows it all from Hog Ranch to highest sea wave cascades, and higher, yet higher.

I ought not to fun away letter space in speaking to you. Yet I am weary and impractical and fit for nothing serious until I am tuned and toned by a few weeks of calm. . . .

Farewell. I will see you and we will plan work and ease and days of holy mountain rest. . . .

Remember me to Ned and all the boys, and to the Doctor, who ought to come hither with you.

Ever thine John Muir

To Sarah Muir Galloway

Yosemite Valley July 16th, 1872

Dear Sister Sarah:

Your bundle composed of socks and letters has arrived, for which I am much indebted. I had not seen the *Tribune* letter you sent. I want you to see all I write, good or bad. I may some time write regularly for some journal or other. My scientific friends are clamorous for glaciers, etc.

I have had a great day in meeting Dr. As Gray, the first botanist in the world. My Boston friends made him know me before he came, and I expect a grand time with him. While waiting for Gray this afternoon on the mountainside I climbed the Sentinel Rock, three thousand feet high. Here is an oak sprig from the top.

Merrill Moores came a couple of days ago to spend a few months with me. I am very happy, but have to see too many people for the successful prosecution of my studies.

Full moon lights all the groves and rocks and casts splendid masses of shade on meadow and wall. Visitors jar and noise, but Nature goes grandly and calmly over all confusion like winds over our domes....

I hope to see Agassiz this summer, and if I can get him away into the outside mountains among the old glacier wombs alone, I shall have a glorious time. . . .

J. Muir During the latter part of July, Mrs. Carr, in one of her letters, suggested a way in which he might study the Coast Range with her Oakland home as a base.

This is what you are going to do [she writes]. After the harvest time is over, and the last bird plucked (I wish I could see some of your game birds; all that I see are sacred storks and ibises), you will pack up all your duds, ready to leave [Yosemite] two or more years, take your best horse and ride forth some clear September morning. You will live with us, and your horse at Moores near by, whenever you are not exploring the Coast Range. We will have some choice side trips. . . You will pass the winter here, and meanwhile ways will open for you to go to South America. You will write up all your settled convictions, and put your cruder reflections in the form of notes and queries, not without scientific worth, and securing to yourself any advantage there may be in priority of observation. So writing, and studying, and visiting, the months will pass swiftly until your Valley home is filled again with color and song. God will teach you, as He has taught me, that the dear places and the dearer souls are but tents of a night; we must move on and leave them, though it cost heart-breaks. Not those who cling to you, but those who walk apart, yet ever with you, are your true companions.

The proposed plan had for him one fatal defect. It revealed too patent a design to separate him from Yosemite and for this he was not ready. Here follows his reply:

To Mrs. Ezra S. Carr

Yosemite Valley August 5th, 1872

Dear Mrs. Carr:

Your letter telling me to catch my best glacier birds and come to you and the Coast mountains only makes me the more anxious to see you, and if you cannot come up I will have to come down, if only for a talk. My birds are flying everywhere, into all mountains and plains all climes and times, and some are ducks in the sea, and I scarce know what to do about it. I must see the Coast Ranges and the coast, but I was thinking that a month or so might answer for the present, and then, instead of spending the winter in town, I would hide in Yosemite and write, or I thought I would pack up some meal and dried plums to some deep wind sheltered canyon back among the glaciers of the summits and write there and be ready to catch any whisper of

ice and snow in these highest storms.

You anticipate all the bends and falls and rapids and cascades of my mountain life and I know that you say truly about my companions being those who live with me in the same sky, whether in reach of hand or only of spiritual contact, which is the most real contact of all. I am learning to live close to the lives of my friends without ever seeing them. No miles of any measurement can separate your soul from mine. [Part of the letter missing.]

The Valley is full of sun but glorious Sierras are piled above the South Dome and Staff King. I mean the bossy cumuli that are daily upheaved at this season, making a cloud period yet grander than the rock-sculpturing, Yosemite making, forest-planting glacial period. Yesterday we had our first midday shower; the pines waved gloriously at its approach, the woodpeckers beat about as if alarmed, but the humming-bird moths thought the cloud shadows belonged to evening and came down to eat among the mints. All the firs and rocks of Starr King were bathily dripped before the Valley was vouchsafed a single drop. After the splendid blessing the afternoon was veiled in calm clouds, and one of intensely beautiful pattern and gorgeously irised was stationed over Eagle Rock at the sunset. Farewell....

As ever. . . Your friend John Muir

Instead of coming down to Oakland he writes to her three weeks later, "My horse and bread, etc., are ready for upward. I returned three days ago from Mounts Lyell, McClure, and Hoffmann. I spent three days on a glacier up there planting stakes, etc. This time I go to the Merced group, one of whose mountains shelters a glacier. Ink cannot tell the glow that lights me at this moment in turning to the mountains. I feel strong to leap Yosemite walls at a bound. Hotels and human impurity will be far below. I will fuse in spirit skies."

Meanwhile Muir was enlarging the circle of his scientific friends and strengthening the bonds that united him to old ones. Professor Asa Gray had returned to Cambridge, enthusiastic about his Yosemite excursions, and sent Muir a list of live plants he wanted for the Botanic Garden "at the rate of a cigar box full of each." The latter was still nursing disappointment that Gray had not accompanied him on an excursion into the high mountains north of Yosemite. "If you and Mrs. Gray," he writes, "had only exposed yourselves to the plants and rocks and waters and glaciers of our glorious High Sierra, I would have been content to have you return to your Cambridge classes and to all of the just and proper ding dong of civilization."

Mrs. Carr meanwhile was acting as an intermediary between Muir and Professor Louis Agassiz who was making a brief sojourn in San Francisco, and was then regarded as the leading authority on glaciation. "I sent to Agassiz," she writes, "the [letter] you enclosed. Either that or something from the papers (*New York Tribune* clippings) excited him to say with great warmth, 'Muir is studying to greater purpose and with greater results than any one else has done.' LeConte told me he spoke of your work with enthusiasm."

Among these new friends was also the noted botanist John Torrey, who, writing in September, 1872, from the home of his friend Dr. Engelmann in St. Louis, expressed his great satisfaction over the pleasant and instructive hours he spent with Muir in Yosemite, and gave an interesting account of his visit with Dr. Parry at Empire. It was, as Muir noted on the envelope of Torrey's letter, "his last Yosemite trip," for he died the following March. "That little Botrychium," adds Torrey in reference to a plant Muir had sent him, "looks peculiar and I will report on it when I go home." He never did, and twenty-six years elapsed before any one else found a plant of this genus in the High Sierra.

From the month of October of this same year, 1872, dates the beginning of Muir's devoted friendship with the artist William Keith, who, with a fellow artist by the name of Irwin, came to Yosemite with a letter of

introduction from Mrs. Carr. "I commission Mr. Irwin," writes the latter, "to sketch you in your hay-rope suspenders, etc., against the day when you are famous and carry all the letters of the alphabet as a tail to your literary kites. . . . The Agassizes God bless them, go to-day, taking some of your glacierest letters, and the slip from the *New York Tribune* containing 'A Glacier's Death,' for reading on the way."

And so these letters were lost to the purposes of this biography. But the following one, in which he gives the first full account of his discovery of living glaciers in the Sierra Nevada, has fortunately survived the accidents of time.

To Mrs. Ezra S. Carr

Yosemite Valley October 8th, 1872

Dear Mrs. Carr:

Here we are again, and here is your letter of September 24th. I got down last eve, and boo! was I not weary? Besides pushing through the rough upper half of the great Tuolumne Canyon, have climbed more than twenty-four thousand feet in these ten days!—three times to the top of the glacieret of Mount Hoff[mann] and once to Mounts Lyell and McClure.

Have bagged a quantity of Tuolumne rocks sufficient to build a dozen Yosemites. Strips of cascades longer than ever, lacy or smooth, and white as pressed snow. A glacier basin with ten glassy lakes set all near together like eggs in a nest. Three El Capitans and a couple of Tissiacks. Canyons glorious with yellows and reds of mountain maple and aspen and honeysuckle and ash, and new music immeasurable from strange waters and winds, and glaciers, too, flowing and grinding, alive as any on earth. Shall I pull you out some?

Here is a clean white-skinned glacier from the back of McClure with glassy emerald flesh and singing crystal blood, all bright and pure as a sky, yet handling mud and stone like a navvy, building moraines like a plodding Irishman. Here is a cascade two hundred feet wide, half a mile long, glancing this way and that, filled with bounce and dance and joyous hurrah, yet earnest as a tempest, and singing like angels loose on a frolic from heaven. And here [are] more cascades and more—broad and flat like clouds, and fringed like flowing hair, and falls erect as Pines, and lakes like glowing eyes. And here are visions, too, and dreams, and a splendid set of ghosts, too many for ink and narrow paper. . . .

Professor [Samuel] Kneeland, Secretary of the Massachusetts Institute of Technology, gathered some letters I sent to Runkle and that *Tribune* letter and hashed them into a compost called a paper for the Boston Society of Natural History and gave me credit for all of the smaller sayings and doings, and stole the broadest truth to himself. I have the proof sheets of the paper and will show them to you some time. . . .

As for the living "Glaciers of the Sierra," here is what I have learned concerning them. You will have the first chalice to steal, for I have just concluded my experiments on them for the season and have not yet cast them at any of the great professors or presidents.

One of the yellow days of last October, [1871], when I was among the mountains of the Merced group, following the footprints of the ancient glaciers that once flowed grandly from their ample fountains, reading what I could of their history as written in moraines and canyons and lakes and carved rocks, I came upon a small stream that was carrying mud of a kind I had not before seen. In a calm place where the stream widened I collected some of this mud and observed that it was entirely mineral in composition and fine as flour like mud from a fine grit grindstone. Before I had time to reason I said, "Glacier mud!—mountain meal!"

Then I observed that this muddy stream issued from a bank of fresh-quarried stones and dirt that was sixty or seventy feet in height. This I at once took to be a moraine. In climbing to the top of it I was struck with the steepness of its slope and with its raw, unsettled, plantless, new-born appearance. The slightest touch started

blocks of red and black slate, followed by a rattling train of smaller stones and sand and a cloud of the dry dust of mud, the whole moraine being as free from lichens and weather-stains as if dug from the mountain that very day.

When I had scrambled to the top of the moraine I saw what seemed to be a huge snowbank four or five hundred yards in length by half a mile in width. Embedded in its stained and furrowed surface were stones and dirt like that of which the moraine was built. Dirtstained lines curved across the snowbank from side to side, and when I observed that these curved lines coincided with the curved moraine, and that the stones and dirt were most abundant near the bottom of the bank, I shouted, "A living glacier!" These bent dirt lines show that the ice is flowing in its different parts with unequal velocity, and these embedded stones are journeying down to be built into the moraine, and they gradually become more abundant as they approach the moraine because there the motion is slower.

On traversing my new-found glacier I came to a crevasse down a wide an jagged portion of which I succeeded in making my way, and discovered and jagged that my so-called snowbank was clear green ice, and comparing the form of the basin which it occupied with similar adjacent basins that were empty I was led to the opinion that this glacier was several hundred feet in depth.

Then I went to the "snowbanks" of Mounts Lyell and McClure and believed that they also were true glaciers and that a dozen other snowbanks seen from the summit of Mount Lyell, crouching in shadow, were glaciers living as any in the world and busily engaged in completing that vast work of mountain-making accomplished by their giant relatives now dead, which, united and continuous, covered all the range from summit to sea like a sky.

But although I was myself thus fully satisfied concerning the real nature of these ice masses, I found that my friends [An undated fragmentary letter of 1872, addressed to Mrs. Carr, contains the following passage: "I had a good letter from LeConte. He evidently doesn't know what to think of the huge lumps of ice that I sent him. I don't wonder at his cautious withholding of judgment. When my Mountain Mother first told me the tale I could hardly dare to believe either and kept saying, 'What?' like a child half asleep."] regarded my deductions and statements with distrust. Therefore I determined to collect proofs of the common measured arithmetical kind.

On the 21st of August last, I planted five stakes in the glacier of Mount McClure which is situated east of Yosemite Valley near the summit of the Range. Four of these stakes were extended across the glacier in a straight line, from the east side to a point near the middle of the glacier. The first stake was planted about twenty-five yards from the east bank of the glacier, the second, ninety-four yards, the third, one hundred and fifty-two, and the fourth, two hundred and twenty-five yards. The positions of these stakes were determined by sighting across From bank to bank past a plumb-fine made of a stone and a black horsehair.

On observing my stakes on the 6th of October, or in forty-six days after being planted, I found that stake No. I had been carried downstream eleven inches, No. 2, eighteen inches, No. 3, thirty-four, No. 4, forty-seven inches. As stake No. 4 was near the middle of the glacier, perhaps it was not far from the point of maximum velocity—forty-seven inches in forty-six days, or one inch per day. Stake No. 5 was planted about midway between the head of the glacier and stake No. 4. Its motion I found to be in forty-six days forty inches.

Thus these ice masses are seen to possess the true glacial motion. Their surfaces are striped with bent dirt bands. Their surfaces are bulged and undulated by inequalities in the bottom of their basins, causing an upward and downward swedging corresponding to the horizontal swedging as indicated by the curved dirt bands.

The Mount McClure glacier is about one half mile in length and about at the broad the same in width abroadest place. It is crevassed on the southeast corner. The crevasse runs about southeast and northeast and is

several hundred yards in length. its width is nowhere more than one foot.

The Mount Lyell glacier, separate from that of McClure by a narrow crest, is about a mile in width by a mile in length.

I have planted stakes in the glacier of Red Mountain also, but have not yet observed them.

The Sierras adjacent to the Yosemite granite set on edge at right angles to the direction of the range, or about N. 30° E., S. 30° W. Also lines of cleavage cross these, running nearly parallel with the main range. Also the granite of this region has a horizontal cleavage or stratification. The first mentioned of these lines have the fullest development, and give direction and character to many Valleys and canyons and determine the principal features of many rock forms. No matter how hard and domed and homogeneous the granite may be, it still possesses these lines of cleavage, which require only simple conditions of moisture, time, etc., for their development. But I am not ready to discuss the origin of these planes of cleavage which make this granite so denudable, nor their full significance with regard to mountain structure in general. I will only say here that oftentimes the granite contained between two of these N. 30° E. planes is softer than that Outside and has been denuded, leaving vertical walls as determined by the direction of the cleavage, thus giving, rise to those narrow slotted canyons called "Devil's slides," "Devil's lanes," "Devil's gateways," etc.

In many places in the higher portions of the Sierra these slotted canyons are filled with "snow," which I thought might prove to be ice—might prove to be living glaciers still engaged in cutting into the mountains like endless saws.

To decide this question on the 23rd of August last, I set two stakes in the narrow slot glacier of Mount Hoffmann, marking their position by sighting across from wall to wall, as I did on the McClure glacier, but on visiting them a month afterwards I found that they had been melted out, and I was unable to decide anything with any considerable degree of accuracy.

On the 4th of October last I stretched a small trout-line across the glacier, fastening both ends in the solid banks, which at this place were only sixteen feet apart. I set a short inflexible stake in the ice so as just to touch the tightly drawn line, by which means I was enabled to measure the flow of the glacier with great exactness.

Examining this stake in twenty-four hours after setting it, I found that it had been carried down about three sixteenths of an inch. At the end of four days I again examined it, and found that the whole downward motion was thirteen sixteenths of an inch, showing that the flow of this glacieret was perfectly regular.

In accounting for these narrow lane canyons so common here, I had always referred them to ice action in connection with special conditions of cleavage, and I was gratified to find that their formation was still going on. This Hoffmann glacieret is about one thousand feet long by fifteen to thirty feet wide, and perhaps about one hundred feet deep in deepest places.

Now, then, Mrs. Carr, I must hasten back to the mountains. I'll go tomorrow.

[John Muir]

This letter forms the kernel of an article, "Living Glaciers of California," which he published in the *Overland Monthly* of December, 1872. The following January it was reprinted in Silliman's *Journal of Science and Arts*, and so was brought to the attention of a wide circle of scientific men. The blank stubbornness of the prejudices by which Muir was opposed at this time is revealed in the fact that ten years after Muir had published his discovery, and the facts had been confirmed by Professor LeConte and accepted by leading geologists, Professor Whitney asserted in one of his papers, "It may be stated that there are no glaciers at all in

the Sierra Nevada. . . . There are certainly none in the higher portions of the Sierra Nevada or Rocky Mountains, these most elevated regions having been sufficiently explored to ascertain that fact." When Israel C. Russell, of the United States Geological Survey, wrote his treatise *Glaciers of North America*, giving Muir full credit for his discovery, he called attention to this curiously dogmatic statement, and to the fact that Clarence King "also rejected Mr. Muir's observations as is shown by several emphatic passages in his report on the exploration of the fortieth parallel."

In the following letter, of which the first part is missing, Muir records some observations regarding the amount of erosion accomplished by water, as compared with ice, since the close of the last glacial epoch. Attention should be called also to Muir's observation that, viewed from mountain tops, the outlines of moraines about Yosemite are marked by fir forests.

To Mrs. Ezra S. Carr

Autumn, [1872]

... The bottom portion of the foregoing section, with perpendicular sides is here about two feet in depth and was cut by the water. The Nevada here *never was* more than four or five feet deep, and all of the bank records of all the upper streams say the same thing of the absence of great floods.

The entire region above Yosemite and as far down as the bottom of Yosemite has scarcely been touched by any other denudation than that of ice. Perhaps all of the post-glacial denudation of every kind would not average an inch in depth for the whole region.

Yosemite and Hetch Hetchy are lake basins filled with sand and the matter of moraines washed from the upper canyons. The Yosemite ice in escaping from the Yosemite basin was compelled to flow upward a considerable height on both sides of the bottom walls of the Valley. The canyon below the Valley is very crooked and very narrow, and the Yosemite glacier flowed across all of its crooks and high above its walls without paying any compliance to it, thus: [drawing]. The light lines show the direction of the ice current [The text of this letter is taken from a typewritten copy of the original which has been lost. Hence it is not possible to reproduce the drawings which was a part of the original letter.].

In going up any of the principal Yosemite streams, lakes in all stages of decay are found in great abundance regularly becoming younger until we reach the almost countless gems of the summits with scarce an inch of carex upon their shallow sandy borders, and with their bottoms still bright with the polish of ice. Upon the Nevada and its branches there are not fewer than a hundred of these glacial lakes from a mile to a hundred yards in diameter, with countless glistening pondlets not much larger than moons.

All of the grand fir forests about the Valley are planted upon moraines and from any of the mountain tops the shape and extent of the neighboring moraines may always be surely determined by the firs growing upon them.

Some pines will grow upon shallow sand and crumbling granite, but those luxuriant forests of the silver firs are always upon a generous bed of glacial drift. I discovered a moraine with smooth pebbles upon a shoulder of the South Dome, and upon every part of the Yosemite upper and lower walls.

I am surprised to find that water has had so little to do with mountain structure here. Whitney says that there is no proof that glaciers ever flowed in this Valley, yet its walls have not been eroded to the depth of an inch since the ice left it, and glacial action is glaringly apparent many miles below the Valley.

[John Muir]

In concluding this chapter a few comments are in place on the historical significance of the foregoing series of letters and published communications from the pen of John Muir. One writer, mistaking the facts, has claimed for Clarence King the honor of having been "the first to point out the Prominent role which the ice of the glacial epochs must have played in the elaboration of the Yosemite Valley." For two decisive reasons this claim is void. In the first place, King believed that the ice gave nothing to the Valley but a little polishing, and in the next place he did not himself publish anything upon the subject until after William Phipps Blake and John Muir were already in print with their observations. Nor am I able to find that King, when he did publish, added any important scientific item to what Muir had already said more fully in his *Tribune* article. Since Blake, as previously noted, attributed the erosion of Yosemite to water pouring down from glaciers above the Valley, and not to the abrasion of glaciers themselves, Muir stands out alone as the first one who demonstrated the part that ice played in the making of Yosemite. He, too, was the first one to point out how the glacial action was controlled by the peculiar structure and jointing of the granite. Others who have written upon this feature have in good part only followed in his footsteps.

It would have been interesting if Clarence King and John Muir could have been brought together for a discussion of their theories and observations. But so far as we are able to ascertain they never met personally. From Whitney's report *The Geology of the Sierra Nevada*, Muir knew that King had noted the existence of moraines in Yosemite Valley. But Whitney, in recording the fact, treated King's observations somewhat cavalierly, and four years later stigmatized them as erroneous. Thereafter the decidedly adverse views of his chief probably prevented King from leaving the question of glacial action and the origin of Yosemite open for further investigation. At any rate, six years later King, in his article entitled "The Range," expressly exempts Yosemite from formation by streams and ice, and classifies it as one of those "most impressive passages of the Sierra Valleys that are actual ruptures of the rock; either the engulfinent of masses of great size, as Professor Whitney supposes in explanation of the peculiar form of Yosemite, or a splitting asunder in yawning cracks!" The latter was apparently King's own view.

Muir regarded his *Tribune* article in 1871 as only a preliminary statement of his views, continuing meanwhile his study and exploration of the Sierra Nevada, with Yosemite as his base, until 1874. In that year he published, in the *Overland Monthly*, his series of articles under the general title of "Studies in the Sierra." [The titles of the individual "Studies" are: 1. "Mountain Sculpture," May, 1874; 2, "Origin of Yosemite Valleys," June, 1874; 3. "Ancient Glaciers and their Pathways," July, 1874; 4. "Glacial Denudation," August, 1874; 5. "Post-Glacial Denudation," November, 1874; 6. "Formation of Soils," December, 1874; 7. "Mountain-Building," January, 1875. Reprinted with the inclusion of Muir's typographical corrections, in the *Sierra Club Bulletin, Vols. IX-XI (1915-21)*. For a convenient summary of Muir's views on Yosemite glaciation the reader is referred to *The Yosemite (1912)*.] These articles were a remarkable achievement for the time when they were written and contain the condensed results of five years of careful and detailed field-work. From 1869 to 1874 he had spent the whole of every summer season in the High Sierra, reading, as he put it, "the glacial manuscripts of God." Thereafter these studies were continued intermittently for another five years, so that in 1879 he could say that he had devoted ten years of his life to the interpretation of the Sierra Nevada. Numerous notebooks and sketches attest his industry as well as the minuteness and care with which he went over every part of the region.

When the Sierra Club began to republish Muir's "Studies in the Sierra," the noted geologist E. C. Andrews, of the Geological Survey of Australia, wrote to Secretary William E. Colby:

John Muir's note on glacial action is very fine indeed. In Muir you had a man in America long ago who explained the action of ice-rivers, and it was really quite unnecessary to have waited until Henry Gannett made his great rediscovery or, rather, belated contribution to glacial studies. John Muir evidently was not understood stood in his generation, but he will surely come to his own now, and he will become one of the "immortals"—one who illustrated the force of the passages, "Blessed are the meek, for they shall inherit the earth," and "Blessed are the pure in heart, for they shall see God."... Had I had access to the treasure

house of knowledge afforded by the Sierra Club's reprint of Muir's notes, I would have written a much better note on "An Excursion to the Yosemite" in 1910, as I would have had a much larger number of valuable facts to draw upon than I had as a result of my limited observations alone.

It is interesting to compare this retrospective tribute with a forward-looking one in a paper read before the Rhode Island Historical Society, in 1872. The writer, John Erastus Lester, met Muir in Yosemite and refers to him as one, "who, Hugh Miller like, is studying the rocks in and around the Valley.... He is by himself pursuing a course of geological studies, and is making careful drawings of different parts of the gorge. No doubt he is more thoroughly acquainted with this Valley than any one else. He has been far up the Sierras where glaciers are now in action, ploughing deep depressions in the mountains. He has made a critical examination of the superincumbent rocks, and already has much material upon which to form a correct theory."Muir did not take up the question as to what the physical contours of the Yosemite region were before the last glacial epoch. In assuming that they were comparatively simple, many competent to form a judgment think he is more likely to have been right than those who speculate about a pre-glacial Yosemite. As for the doctrine of two distinct glaciations of the Sierra Nevada, recently advanced, most students of the question probably will agree with Professor Lawson that this is a theory that "must be subjected to much more critical study before it can be accepted by geologists as an established fact." In evaluating Muir's work it must be borne in mind that he was contending against a theory which eliminated glaciers altogether from the causes that led to the formation of Yosemite. To have injected into his disproof of that theory speculations about a pre-glacial Yosemite would only have weakened, in his days, the penetrative power of his argument.

Now that time has mellowed the issues that once were so hotly debated, and death has removed the actors in the explorers' drama to that bourn whence no traveller returns, we may attempt the task of calmly assessing the originality and importance of the work which these early investigators have severally done. This is not the place to go into details, although we have looked into the work of each of these men with care. But even in the light of the facts presented it will, I think, be conceded without question that Muir was not only the first, but the only one who has presented a reasoned and systematic account of the glaciation of the Sierra Nevada, and who recognized the fact that the origin of Yosemite Valley cannot be separated from the origin of similar Yosemites in the Sierra Nevada. Indeed, the very use of the word "yosemite" in the generic sense was originated by him, and as such contains the essence of his denial of Whitney's and King's assumption that the Valley was of unique cataclysmic origin. In his main contention he was right, and the extent to which his minor conclusions may be modified by advancing geological science is a question quite apart from the credit that belongs to him as the greatest of the pioneer students of the Yosemite problem.

To one who now looks back upon Muir's glacial explorations through his letters, the practical profit of these years of intense preoccupation and activity may seem disproportionately small. But it is all a matter of time and scale and the kind of values for which one is looking. As Sir E. Ray Lankester says in his *Diversions of a Naturalist*, a man's pursuit of science has been sufficiently profitable if "it has given him a new and unassailable outlook on all things both great and small. Science commends itself to us as does Honesty and as does great Art and all fine thought and deed—not as a policy yielding material profits, but because it satisfies man's soul."

Muir's letters show that these deeper satisfactions of the soul were his in full measure during these years. There were those among his friends who again and again in their letters expressed their longing for his peace of mind. "I can see you sitting, reading this," wrote Thérèse Yelverton in 1872, "in some quiet spot in the evening, with all nature as calm and still as your own heart. I used to envy you that, for mine will not be still, but is restless and unquiet." To all such longings he could but say in one form or another, "Camp out among the grass and gentians of glacier meadows, in craggy garden nooks full of Nature's darlings. Climb the mountains and get their good tidings. Nature's peace will flow into you as sunshine flows into trees. The winds will blow their own freshness into you, and the storms their energy, while cares will drop off like

autumn leaves."

Chapter X Yosemite and Beyond 1872-1873

Perhaps it is natural that so picturesque a personality as John Muir should become a magnet for legends. Several are already afloat in the Valley he loved, and two of them are particularly baseless and absurd. The first is a canard about a sawmill by means of which he is said to have denuded the Valley of trees. It was a tale set afoot during the Hetch Hetchy controversy when his opponents were only too anxious to discredit him in the eyes of the public. The fact that Muir sawed only fallen timber has already been set forth in another connection and requires no further statement. The second concerns the place of his former habitation in the Valley. It owes its origin, no doubt, to the desire of local guides to gratify the curiosity of visitors who wish to see some particular spot that has associations with John Muir.

In a secluded, umbrageous tangle of alders and azaleas, on the spit of land formed by the confluence of Tenaya Creek with the Merced, stands what at first glance looks like the remnants of a log cabin. Examination reveals the fact that there never had been a floor or windows; that it was never more than partly roofed and too low for a man to stand comfortably erect, while the opening which should serve as a door is only three feet high. It is all that remains of the sheep corral of John Lamon, the earliest inhabitant of the Valley. The myth-making faculty of the local guide has glorified it as "Muir's Lost Cabin," and as such it has been pointed out to great numbers of eager sight-seers.

But there is no mystery about the two cabins which Muir erected for himself in Yosemite. The places where they stood are known, although not a vestige of the original structures remains. The first he erected late in 1869 near the lower Yosemite Falls, and the site is now indicated by a bronze plate on a glacial boulder. He left it in the autumn of 1871 to take up his abode at Black's Hotel under the shadow of Sentinel Rock. But during the spring and summer of 1872 he erected for himself a log cabin in a clump of dogwood bushes, near the Royal Arches, on the banks of the Merced. The precise locality is to be sought at the point where the Merced approaches closest to the Royal Arches, and in a bold curve swings southward again across the Valley. In the same neighborhood Lamon had also built his winter cabin. During the cold season of the year when the south side of the Valley is wrapped in the frosty shadows of its high walls, the sun shines obliquely against the talus slopes of the north side and generates a grateful warmth. Here, then was Muir's second home in Yosemite Valley—one, however, that he seems to have occupied very little after 1874. The survival of Lamon's old corral in the immediate neighborhood appears to have led to its identification with this last of Muir's cabins. The following winter letters of 1872 probably were written from there. Asa Gray's visit doubtless had given new stimulus to his study of the Yosemite flora, though in the absence of descriptive botanical handbooks he had great difficulty in determining the species.

To J. B. McChesney

Yosemite *December* 10*th*, 1872

Dear McChesney:

Yours of November 30th is here. Many thanks for the plants, though I am not much wiser. I knew the generic names of the first three. Only two are fully named. I suppose that the specimens I sent were too small and fragmentary to be determined with certainty. If I could only have access to books containing these plants I could easily name them. I have read Tyndall's *Hours of Exercise [in the Alps]*. Tyndall is a true man, with eyes that can see far down into the fountain truths of nature.

I am glad to know that you miss no opportunity in seeking Nature's altars. May she be good to you and feed your soul while you labor amid those Oakland wastes of civilization. I love [the] ocean as I do the mountains—indeed the mountains are an ocean with harder waves than yours.

You must be very happy in communion with so many kindred minds. I hope to know [Charles Warren] Stoddard some day. Tell him that I am going to build a nest and that it will always be open to him. Come next year, all of you. Come to these purest of terrestrial fountains. Come and receive baptism and absolution from civilized sins. You were but sprinkled last year. Come and be immersed! You have never seen our Valley with her jewels on, never seen her flowers of snow.

A few days ago many a flower ripened in the fields of air and they have fallen to us. All the trees and the bushes are flowered beyond summer, bowed down in snow bloom and all the rocks are buried. The day after the "storm" (a most damnable name for the flowering of the clouds) I lay out on the meadow to eat a grand meal of newmade beauty, and about midday I suddenly wanted the outside mountains, and so cast off my coat and ran up towards Glacier Point. I soon was near [the] top, and was very hungry for the view that was so grandly mingled and covered with snow and sky, but the snow was now more than ten feet deep and dusty and light as winter fog. I tried to wallow and swim it, but the slope was so steep that I always fell back and sank out of sight, and I was fully baffled. I had a glorious slide downwards. Hawthorne speaks of the spirituality of locomotive railroad travel, but this balmy slide in the mealy snow out-spiritualized all other motions that I ever made in space.

Farewell, write again. I am lonely. [John Muir]

During the interval between this and the next letter he made a rapid trip to Oakland in order to forward some literary plans in consultation with Mrs. Carr and others. On this occasion he met Edward Rowland Sill. In returning to Yosemite he walked from Turlock via Hopeton and Coulterville. The excursion to Clouds Rest described in his letter to Gray came as the conclusion of this return walk which included a very adventurous first climb through the Tenaya Canyon, and which forms the subject of a long letter to Mrs. Carr, published under the title of "A Geologist's Winter Walk." This very characteristic letter, in which he relates how he punished his "ill behaved bones" for allowing themselves to be demoralized by even a brief sojourn in "civilization," will be found in its completest form in *Steep Trails*. In spite of what Muir characterized as the "angular factiness of his pursuits," Dr. Gray was found to have carefully preserved the following and other Muir letters at the Gray Herbarium in Cambridge.

To Asa Gray

Yosemite Valley December 18th, 1872

My Dear Gray:

I received the last of your notes two days ago, announcing the arrival of the ferns. You speak of three boxes of Primula. I sent seven or eight.

I had some measurements to make about the throat of the South Dome, so yesterday I climbed there, and then ran up to Clouds Rest for your Primulas, and as I stuffed them in big sods into a sack, I said, "Now I wonder what mouthfuls this size will accomplish for the Doctor's primrose hunger." Before filling your sack I witnessed one of the most glorious of our mountain sunsets; not one of the assembled mountains seemed remote—all had ceased their labor of beauty and gathered around their parent sun to receive the evening blessing, and waiting angels could not be more solemnly hushed. The sun himself seemed to have reached a higher life as if he had died and only his soul were glowing with rayless, bodiless *Light*, and as Christ to his disciples, so this departing sun soul said to every precious beast, to every pine and weed, to every stream and mountain, "My peace I give unto you."

I ran home in the moonlight with your sack of roses slung on my shoulder by a buckskin string—down through the junipers, down through the firs, now in black shadow, now in white light, past great South Dome white as the moon, past spirit-like Nevada, past Pywiack, through the groves of Illilouette and spiry pines of the open valley, star crystals sparkling above, frost crystals beneath, and rays of spirit beaming everywhere.

I reached home a trifle weary, but could have wished so Godful a walk some miles and hours longer, and as I slid your roses off my shoulder I said, "This is one of the big round ripe days that so fatten our lives—so much of sun on one side, so much of moon on the other."

I have a rare chance of getting your plants packed out of the Valley tomorrow, and so have determined to send all together with a few seeds in a box by Wells Fargo Express. The books, both Hutchings' and mine, are along all right. Many thanks. I am hard at work on dead glaciers.

I am very cordially Your friend John Muir

To J. B. McChesney

Yosemite Valley December 20th, 1872

My Dear McChesney:

Among all the souls which shine upon my eye up from that dim and distant Oakland none is of purer ray than your own, and living or dying, in this land or in that, I shall never cease to thank God for friends like you.

My excursion down into that befogged jungle of human plants in which you manage to live and love forms a far more notable chapter in my personal history than any of you can comprehend, and now that I am warm again, safe nestled in mountain ether, I seem to have returned to life from a strange and half-remembered death.

Here many a thought comes crowding to my page, but I must hush them back, for they would overcrowd a thousand letters. So drawing a long sigh I must content myself with saying 'thank you' for all your kindness, and leave you to eat the good brown bread of your little hills, and whatsoever of God you can find there, until your angel shall again guide you to the clean fountains of the Sierras.

Remember me to all your family and to Kelsey and any of my friends you chance to see—Miss Brigham, Sill, and all the rest. Kiss your Alice some extra times for me. She is the sweetest flake of childhood I found in all your town, and she comes back to me in form and voice and in touch too, with most living vividness.

Farewell. I am Ever your friend John Muir

One of the gifts that came to his cabin at Christmas time was a beautiful lamp from a friend in Chicago, to whom he addressed the following letter in acknowledgment:

To Mrs. Kate N. Daggett

Yosemite Valley *December* 30th, 1872

[Salutation torn off.]

I have just this minute for the first time lighted your elegant lamp, and I send you again most

cordial thanks for so precious a gift.

This is the first St. Germain lamp I have seen, and it is certainly the most beautiful of all light fountains. Its forms have been composed by a true artist. its many curves blend into song with scarce a discordant tone. The trill around the base of the chimney is all that my eye-ear dislikes.

The massive finely moulded foundation glows like an ice-polished dome, and the grateful green of the shade is like that of high glacier lakes. If among the multitude of articles that now enter a human home there be one that deserves to be crowned with beauty above everything else, it is the fountain of light. The poet is the only workman capable of making a candlestick.

It is delightful to observe how steadily God-born beauty is flowing into all the handiwork of man. Nature is insinuating herself into every pore of humanity, and it is oozing out in forms that are constantly becoming less and less impure, and those forms of purer and more direct Godfulness are coming not only from the study cells of the painter and architect and art poets in general recognized as such, but they are flowing from the workshop from the foundry and the forge.

I know little of men, seeing them only afar off and in the lump, but standing as I now do on the mountain-side and contemplating the various hives of industry among civilizations old and new, all looming on my vision, dim in the great sea-divided distances, I have this one big, well-defined faith for humanity as a workman, that the time is coming when every "article of manufacture" will be as purely a work of God as are these mountains and pine trees and bonnie loving flowers.

I only meant to say you another warm thank you, but the fresh dewy beauty of your sunrise lamp conjured and loosened these thoughts and sent them down to my page, as rain and frost loosen and send down trains of rattling rough-angled rocks to Yosemite meadows.

I suppose our dear Mrs. Carr has told you of the eclipse of my life, years ago when my eyes were quenched just at the spring-dawn of summer when the voice of the bluebird began to appear mingled with the first flower-words of Erigenia and Anemone. But though in that terrible darkness I died to light, I lived again, and God who is Light has led me tenderly from light to light to the shoreless ocean of rayless beamless Spirit Light that bathes these holy mountains.

[John Muir]

The earlier writings of John Ruskin were at this time widely read and discussed both in England and in America, and Muir, also, was a deeply interested reader. But he took exception to the unqualified admiration with which some of his friends accepted Ruskinian ideas. In the following letter we have a brief but searching critique, from his point of view, of the dualism and artificiality of Ruskin's nature philosophy.

To J. B. McChesney

Yosemite Valley January 10th, 1873

Dear McChesney:

I have just finished a ramble through the handsome gardens of Ruskin that you gave me. Page after page is studded with flowers like a glacier meadow, and most of his chapters of hill and dale make a handsome landscape in spite of his numberless boundaries and human-carved rocks.

Few of our modem writers are so strikingly suggestive as Ruskin. His pungent steel-tempered sentences compel one to think, and his errors and absurdities are so clearly expressed that they do good rather than harm.

Ruskin is great, but not a great man—only a great ready-to-burst bud of a man. He is chained and tethered, not like the stars, by Nature's own laws, but by ropes and chains manufactured in the mills and forges of conventions, and although they are made of good material and are so transparent in places as to be well-nigh invisible, and he roams as if loose over this world and what he takes to be the next, yet after all one never can feel that he is free. His widest world, his highest sky, is enclosed by a hard definite shell making one think of a mouse beneath a huge bellglass, so huge that it does not feel its bounds. The bellglass underneath which Ruskin lives and moves and brandishes his verbal spears is made of the heaviest and most opaque *stuff* in the universe—a thousand times denser than hammered steel.

There are writers of far lesser intellectual development who yet give hints and hopes of indefinite growth—it doth not appear what they *shall* be, but Ruskin leaves us nothing to hope. Among all the possibilities of after-development I can find nothing that will fit him. His very hopes and longing of heaven that he places deep in the immensities and eternities are weighed and measured and branded and they are bounded by surfaces definite as those of a crystal and could be made to order like bricks by Yankee machinery.

But the worst thing I find in his books is his lack of faith in the Scriptures of Nature. Nature, according to Ruskin, is the joint work of God and the devil, and therefore made up of alternate strips and bars of evil and good.

We must not dwell in contact with Nature, he tells us, else we will become blind to her beauty, which is the vulgar gross old heresy that familiarity with God will produce contempt of him. He would have us take beauty as we do roast beef or medicine, at stated times, the intervals to be measured by a London watch instead of inhaling it every moment as we do breath.

Evil, he says, always exists with good and ugliness with beauty, in order to act as foils the one for the other. Beside every mountain angel he sets a mountain devil, that the blackness of the one may be made wholly striking by the whiteness of the other, and that the angel's white may be brightened by the devil's black. Here I want to say so much that I cannot say anything.

Ruskin, with all his well-bred amiability, is an infidel to Nature. You never can feel that there is the slightest *union* betwixt Nature and him. He goes to the Alps and improves and superintends and reports on Nature with the conceit and lofty importance of a factor of a duke's estate.

Kalmia, one of the very dearest of our mountain flowers, a companion of Bryanthus and Cassiope, one of the purest and most outspoken words of love that God has ever uttered on mountain meadow, he calls a type of deceit because when he eats it, it poisons him—is unfit for his stomach—a good English reason for setting it on the devil's half of Nature. But I have lived with and loved Kalmia many a day, and slept with my cheek upon her bonnie purple flowers, and I know that she is not a devil's foil for any plant. She was born and bred in Love Divine and dwells in Love and speaks Love only.

And I know something about "the blasted trunk, and the barren rock, the moaning of the bleak winds, the solemn solitudes of moors and seas, the roar of the black, perilous, merciless whirlpools of the mountain streams;" and they have a language for me, but they declare nothing of wrath or of hell, only Love plain as was ever spoken.

Christianity and mountainanity are streams from the same fountain, and when I read the bogies of Ruskin's "mountain gloom" and mountain evil, and mountain devil, and the unwholesomeness of mountain beauty as

everyday breath and bread, then I wish for plenty of words and a preacher's commission.

Farewell. My kindest regards to your parents and wife and younglings. I am

Ever truly thine John Muir

To Asa Gray

Yosemite Valley February 22nd, 1873

Dear Dr. Gray:

Your letter of January 4th arrived just before our trails were snow-blocked. The seeds I sent in a letter envelope are *Libocedrus decurrens*.

As for the express charges on the primula box, I have not got the receipt by me and cannot tell what they amount to, but you must remember that you gave me money sufficient to prepay all such boxes for a year to come.

Did I tell you that our wee primula grows upon the Hoffmann range a few miles west of Mount Hoffmann, and also on the east slope of the Sierra, between Mounts Lyell and Ritter? Next summer I will find a new genus and a half dozen new species for that generous embalming which you propose. Here are a few plants which I wish you would name for me.

Our winter is very glorious. January was a block of solid sun-gold, not of the thin frosty kind, but of a quality that called forth butterflies and tingled the fern coils and filled the noontide with a dreamy hum of insect wings. On the 15th of January I found one big Phacelia in full bloom on the north side of the Valley about one thousand feet above the bottom or five thousand above the sea. Also at the same sunny nook several bushes of *Arctostaphylos glauca* were in full flower, and many other plants were swelling their buds and breathing fragrance, showing that they were full of the thoughts and intentions of spring. Our Laurel was in flower a month ago; so was our winter wheat (*Libocedrus*).

This month up to present date has been profusely filled with snow. About ten feet has fallen on the bottom of the Valley since the 30th of January. Your primulas on Clouds' Rest must be covered to a depth of at least twelve or fifteen feet. I wish you could see our pines in full bloom of soft snow, or waving in storm. They know little of the character of a pine tree who see it only when swaying drowsily in a summer breeze or when balanced motionless and fast asleep in hushed sunshine.

We are grandly snowbound and have all this winter glory of sunlight and storm-shade to ourselves. Our outside doors are locked, and who will disturb us?

I call your attention to the two large yellow and purple plants from the top of Mount Lyell, above all of the pinched and blinking dwarfs that almost justify Darwin's mean ungodly word "struggle." They form a rounded expansion upon the wedge of plant life that slants up into the thin lean sky. They are the noblest plant mountaineers I ever saw, climbing above the glaciers into the frosty azure, and flowering in purple and gold, rich and abundant as ever responded to the thick, creamy sun-gold of the tropics.

Ever very cordially yours John Muir

In his reply to this letter, which reflects Muir's watchful interest in the sun-warmed winter cliff gardens above

his cabin, Gray reported on the plants Muir had sent for identification. "If you will keep botanizing in the High Sierra," he wrote, "you will find curious and new things, no doubt. One such, at least, is in your present collection in letter—the wee mouse-tail *Ivesia*. And the rare species of Lewisia is as good as new, and is so wholly to California. . . . *Ivesia Muirii* is the first fruit—'the day of small things.' Get a new alpine genus, that I may make a *Muiria glacialis!"* The primula so often referred to is the beautiful alpine red-purple Sierra Primrose (*Primula suffrutescens* Gray).

To Mrs. Ezra S. Carr

Yosemite Valley March 30th, [1873]

Dear Mrs. Carr: Your two last are received. The package of letters was picked up by a man in the Valley.

There was none for thee. I have Hetch Hetchy about ready. I did not intend that Tenaya ramble ["A Geologist's Winter Walk"] for publication, but you know what is better.

I mean to write and send all kinds of game to you with hides and feathers on, for if I wait until all become one it may be too long. As for LeConte's "Glaciers," they will not hurt mine, but hereafter I will say my thoughts to the public in any kind of words I chance to command, for I am sure they win be better expressed in this way than in any second-hand hash, however able.

Oftentimes when I am free in the wilds I discover some rare beauty in lake or cataract or mountain form, and instantly seek to sketch it with my pencil, but the drawing is always enormously unlike the reality. So also in word sketches of the same beauties that are so living, so loving, so filled with warm God, there is the same infinite shortcoming. The few hard words make but a skeleton, fleshless, heartless, and when you read, the dead bony words rattle in one's teeth. Yet I will not the less endeavor to do my poor best, believing that even these dead bone-heaps called articles will occasionally contain hints to some living souls who know how to find them. I have not received Dr. Stebbins' letter. Give him and all my friends love from me. I sent Harry Edwards the butterflies I had lost. Did he get them?

Farewell, dear, dear spiritual mother. Heaven repay your everlasting love.

John Muir

To Mrs. Ezra S. Carr

[Yosemite] April 1st, 1873

Dear Mrs. Carr: Yours containing Dr. Stebbins' was received to-day. Some of our letters come in by Mariposa, some by Coulterville, and some by Oak Flat, causing large delays.

I expect to be able to send this out next Sunday, and with it "Hetch Hetchy," which is about ready, and from this time you will receive about one article a month.

This letter of yours is a very delightful one. I shall look eagerly for the "Rural Homes."

When I know Dr. Stebbins' summer address I will write to him. He is a dear young soul, though an old man. I am "not to write"—therefore, farewell, with love.

I will some time send you

Big Tuolumne Canyon Ascent of Mount Ritter Formation of Yosemite Valley Other Yosemite Valleys (1, 2, 3, 4, or more) The Lake District Formation of Lakes Transformation of Lakes to Meadows, Wet The Glacial Period Formation of Simple Canyons to Meadows, Dry Formation of Compound Canyons to Sandy Flats, Treeless, or to Sandy Flats, Forested Description of Each Glacier of Region Origin of Sierra Forests Distribution of Forests A Description of each of the Yosemite Falls, and of the Basins from whence derived Yosemite Shadows, as Related to Groves, Meadows and Bends of the River Avalanches, Earthquakes, Birds, Bears, etc. and "mony mae."

[John Muir]

To Sarah Muir Galloway

Yosemite Valley September 3rd, 1873

Dear Sister Sarah:

I have just returned from the longest and hardest trip I have ever made in the mountains, having been gone over five weeks. I am weary, but resting fast; sleepy, but sleeping deep and fast; hungry, but eating much. For two weeks I explored the glaciers of the summits east of here, sleeping among the snowy mountains without blankets and with but little to eat on account of its being so inaccessible. After my icy experiences it seems strange to be down here in so warm and flowery a climate.

I will soon be off again, determined to use all the season in prosecuting my researches—will go next to Kings River a hundred miles south, then to Lake Tahoe and adjacent mountains, and in winter work in Oakland with my pen.

The Scotch are slow, but some day I will have the results of my mount mountain studies in a form in which you all will be able to read and judge of them. In the mean time I write occasionally for the *Overland Monthly*, but neither these magazine articles nor my first book will form any finished part of the scientific contribution that I hope to make.... The mountains are calling and I must go, and I will work on while I can, studying incessantly.

My love to you all, David and the children and Mrs. Galloway who though shut out from sunshine yet dwells in Light. I will write again when I return from Kings River Canyon. The leaf sent me from China is for Cecelia.

Farewell, with love everlasting [John Muir] The exploratory excursion into the Kings River region, which he had in prospect when he wrote to his sister, forms the subject of several of the following letters. As both the letters and his notebooks show, the trip involved almost incredible physical exertion and endurance on his part. By delaying his start for a day, Muir succeeded in persuading Galen Clark to go along. Unfortunately the latter's duties as Guardian of Yosemite Valley compelled him to leave the party before its objects had been accomplished. In his volume, *The Yosemite*, Muir has paid a warm tribute to Clark both as a man and a mountaineer. After the botanist Dr. A. Kellogg and the artist William Simms left him at Mono, Muir pushed on alone to Lake Tahoe.

To Mrs. Ezra S. Carr

Clark's Station September 13th, [1873.]

Dear Mrs. Carr:

We have just arrived from the Valley, and are now fairly off for the ice in the highest and broadest of the Sierras. Our party consists of the blessed Doctor [A. Kellogg] and Billy Simms, *Artist*, and I am so glad that the Doctor will have company when I am among the summits. We hoped to have secured Clark also, a companion for me among the peaks and snow, but alack, I *must* go alone. Well, I will not complain a word, for I shall be overpaid a thousand, thousand fold. I can give you no measured idea of the time of our reaching Tahoe, but I will write always on coming to stations if such there be in the rocks or sage where letters are written. . . .

Now for God's glorious mountains. I will miss you, yet you will more than half go. It is only now that I feel that I am taking leave of you.

Farewell. Love to all. [John Muir]

To Mrs. Ezra S. Carr

Camp on South Fork, San Joaquin, near divide of San Joaquin and Kings River September 27th[?] [1873.]

Dear Mrs. Carr:

We have been out nearly two weeks. Clark is going to leave us. Told me five minutes ago. Am a little nervous about it, but will of course push on alone.

We came out through the Mariposa Grove, around the head of the Chiquita Joaquin, across the canyon of the North Fork of San Joaquin, then across the canyon of Middle Fork of San Joaquin, and up the east side of the South Fork one day's journey. Then picked our wild way across the canyon of the South Fork and came up one day's journey on the west side of the canyon; there we made a camp for four days. I was anxious to see the head fountains of this river, and started alone, Clark not feeling able to bear the fatigue involved in such a trip. I set out without blankets for a hard climb; followed the Joaquin to its *glaciers*, and climbed the highest mountain I could find at its head, which was either Mount Humphreys or the mountain next south. This is a noble mountain, considerably higher than any I have before ascended. The map of the Geological Survey gives no detail of this wild region.

I was gone from camp four days; discovered fifteen glaciers, and yosemite valleys "many O." The view from that glorious mountain (13,500 feet high?) is not to be attempted here. Saw over into Owens River valley and all across the fountains of Kings River. I got back to camp last evening. This morning after breakfast Clark said that he ought to be at home attending to business and could not feel justified in being away, and therefore had made up his mind to leave us, going home by way of the valley of the main Joaquin.

We will push over to the Kings River region and attempt to go down between the Middle and North Forks. Thence into the canyon of the South Fork and over the range to Owens Valley, and south to Mount Whitney if the weather holds steady, then for Tahoe, etc. As we are groping through unexplored regions our plans may be considerably modified. I feel a little anxious about the lateness of the season. We may be at Tahoe in three or four weeks.

We had a rough time crossing the Middle Fork of the Joaquin. Browny rolled down over the rocks, not sidewise but end over end. One of the mules rolled boulder-like in a yet more irregular fashion. Billy went forth to sketch while I was among the glaciers, and got lost—was thirty-six hours without food.

I have named a grand *wide-winged* mountain on the head of the Joaquin Mount Emerson. Its head is high above its fellows and wings are white with ice and snow.

This is a dear bonnie morning, the sun rays lovingly to His precious mountain pines. The brown meadows are nightly frosted browner and the yellow aspens are losing their leaves. I wish I could write to you, but hard work near and far presses heavily and I cannot. Nature makes huge demands, yet pays an thousand, thousand fold. As in all the mountains I have seen about the head of Merced and Tuolumne this region is a song of God.

On my way home yesterday afternoon I gathered you these orange leaves from a grove of one of the San Joaquin yosemites. Little thought I that you would receive them so soon.

Remember me to the Doctor and the boys and to Mrs. and Mr. Moore and Keith. Dr. Kellogg wishes to be kindly remembered. Farewell.

[John Muir]

To Mrs. Ezra S. Carr

Camp in dear Bonnie Grove where the pines meet the foothill oaks. About eight or ten miles southeast from the confluence of the North Fork of Kings River with the hunk. *October 2nd* [?] [1873.]

Dear Mrs. Carr:

After Clark's departure a week ago we climbed the divide between the South Fork of the San Joaquin and Kings Rivers. I scanned the vast landscape on which the ice had written wondrous things. After a short scientific feast I decided to attempt entering the valley of the west branch of the North Fork, which we did, following the bottom of the valley for about ten miles, then was compelled to ascend the west side of the canyon into the forest. About six miles farther down we made out to re-enter the canyon where there is a yosemite valley, and by hard efforts succeeded in getting out on the opposite side and reaching the divide between the North Fork and the Middle Fork. We then followed the top of the divide nearly to the confluence of the North Fork with the trunk, and crossed the main river yesterday, and are now in the pines again over all the wildest and most impracticable portions of our journey.

In descending the divide to the main Kings River we made a descent of near seven thousand feet, "down deny down" with a vengeance, to the hot pineless foothills. We rose again and it was a most grateful resurrection. Last night I watched the writing of the spiry pines on the sky gray with stars, and if you had been here I would have said, Look! etc.

Last evening when the Doctor and I were bed-building, discussing as usual the goodnesses and badnesses of boughy mountain beds, we were astonished by the appearance of two prospectors coming through the

mountain rye. By them I send this note.

To-day we will reach some of the Sequoias near Thomas' Mill (*vide* Map of Geological Survey), and in two or three days more will be in the canyon of the South Fork of Kings River, If the weather appears tranquil when we reach the summit of the range I may set out among the glaciers for a few days, but if otherwise I shall push hastily for die Owens River plains, and thence up to Tahoe, etc.

I am working hard and shall not feel easy until I am on the other wise beyond the reach of early snowstorms. Not that I fear snowstorms for myself, but the poor animals would die or suffer.

The Doctor's duster and fly-net are safe, and therefore he is. Billy is in good spirits, apt to teach sketching in and out of season. Remember me to the Doctor and the boys and Moores and Keith, etc.

Ever yours truly John Muir

To Mrs. Ezra S. Carr

Independence *October* 16th, 1873

Dear Mrs. Carr:

All of my season's mountain work is done. I have just come down from Mount Whitney and the newly discovered mountain five miles northwest of Whitney, and now our journey is a simple saunter along the base of the range to Tahoe, where we will arrive about the end of the month, or a few days earlier.

I have seen a good deal more of the high mountain region about the heads of Kings and Kern Rivers than I expected to see in so short and so late a time. Two weeks ago I left the Doctor and Billy in the Kings River yosemite, and set out for Mount Tyndall and adjacent mountains and canyons. I ascended Tyndall and ran down into the Kern River canyon and climbed some nameless mountains between Tyndall and Whitney, and thus gained a pretty good general idea of the region. After crossing the range by the Kearsage Pass, I again left the Doctor and Billy and pushed southward along the range and northward and up Cottonwood Creek to Mount Whitney; then over to the Kern Canyon again and up to the new "highest" peak which I did not ascend, as there was no one to attend to my horse.

Thus you see I have rambled this highest portion of the Sierra pretty thoroughly, though hastily. I spent a night without fire or food in a very icy wind-storm on one of the spires of the new highest peak, by some called Fisherman's Peak.[Now called Mount Whitney. An error in the first Geological Survey map, explained by Clarence King in the second edition of his *Mountaineering in the Sierra Nevada*. led to the identification of Sheep Mountain as Mount Whitney.] That I am already quite recovered from the tremendous exposure proves that I cannot be killed in any such manner. On the day previous I climbed two mountains, making over ten thousand feet of altitude. It seems that this new Fisherman's Peak is causing some stir in the newspapers. If I feel writeful I will send you a sketch of the region for the *Overland*.

I saw no mountains in all this grand region that appeared at all inaccessible to a mountaineer. Give me a summer and a bunch of matches and a sack of meal and I will climb every mountain in the region.

I have passed through Lone Pine and noted the yosemite and local subsidences accomplished by the earthquakes. The bunchy bushy compositae of Owen's Valley are glorious. I got back from Whitney this P.M. How I shall sleep! My life rose wave-like with those lofty granite waves. Now it may wearily float for a time along the smooth flowery plain.

Love to all my friends. Ever cordially yours John Muir

The "stir in the newspapers," alluded to by Muir, was partly at the expense of Clarence King who, in his published account of what he believed to have been the first ascent of Mount Whitney, had described it as a somewhat venturesome undertaking. It now became evident that he had missed Mount Whitney and climbed an easy neighboring mountain of less elevation. In 1903 Mr. George W. Stewart published in the Mount Whitney Club Journal a communication from Muir which is of considerable interest in this connection, not only because it presents the original records of first ascents of Mount Whitney, but also because in it Muir states it to have been his uniform practice never to leave his name on any mountain, rock, or tree. "Reading the accounts of these Whitney climbs [in the above-mentioned journal] recalls to mind," he writes, "my first ascent in October, 1873. Early in the morning of the 25th I left my horse on a meadow a short distance north of the Hockett trail crossing of the summit, and climbed the mountain (now Sheep Mountain), about fourteen thousand feet high, named Mount Whitney on the State Geological Survey map of the region. To the north about eight miles I saw a higher peak and set off to climb it the same day. I reached the summit needles about eleven o'clock that night, and danced most of the time until morning, as the night was bitterly cold and I was in my shirt-sleeves. The stars and the dawn and the sunrise were glorious, but, having had no supper, I was hungry and hastened back to camp, and to Independence, where I left my horse, and set out again for the summit afoot, direct from the east side, going up a canyon opposite Lone Pine. I reached the summit about eight o'clock A.M., October 29th, 1873. In a yeast-powder can I found the following account of first ascents, which I copied into my notebook as follows:

Sept. 19th, 1873. This peak, Mt. Whitney, was this day climbed by Clarence King, U.S. Geologist, and Frank F. Knowles of Tule River. On Sept. 1st, in New York, I first learned that the high peak south of here, which I climbed in 1871, was not Mt. Whitney, and I immediately came here. Clouds and storms prevented me from recognizing this in 1871, or I should have come here then.

All honor to those who came here before me.

C. King

Notice. Gentlemen, the looky finder of this half a dollar is wellkome to it.

Carl Rabe Sept. 6th, 1873 "Of course, I replaced these records, as well as Carl Rabe's half a dollar, but did not add my own name. I have never left my name on any mountain, rock, or tree in any wilderness I have explored or passed through, though I have spent ten years in the Sierra alone."

In this Kings-Kern-Tahoe excursion Muir had traveled over a thousand wilderness miles, climbed numerous peaks, and discovered many glaciers and new yosemites. His observations had furnished him with a harvest of new facts to be utilized in the projected series of "Studies in the Sierra" which he had agreed to write for the *Overland Monthly* during the coming winter. His articles on "Hetch Hetchy Valley," and "Explorations in the Great Tuolumne Canyon," had appeared in the same magazine during July and August, lifting him at once to the rank of its foremost contributor. In the second of these articles he had disproved Whitney's statement that the Tuolumne Canyon was "probably inaccessible through its entire length," and that "it certainly cannot be entered from its head." "I have entered the Great Canyon from the north by three different side canyons," wrote Muir, "and have passed through it from end to end. . . without encountering any extraordinary difficulties. I am sure that it may be entered at more than fifty different points along the walls by mountaineers of ordinary nerve and skill. At the head it is easily accessible on both sides."

But Muir, as the reader will have perceived, was a mountaineer of more than ordinary nerve and skill, and one secret of his amazing physical endurance was not in his muscles, but in the spirit which they served. Of this fact he was not wholly unaware when he wrote, "It is astonishing how high and far we can climb in mountains that we love." But he seems to have been conscious, also, of the development, in himself, of a kind of muscle sense referred to in a passage which he wrote during the exploring season of 1873:

The life of a mountaineer is favorable to the development of soul-life as well as limb-life, each receiving abundance of exercise and abundance of food. We little suspect the great capacity that our flesh has for knowledge. Oftentimes in climbing canyon-walls I have come to polished slopes near the heads of precipices that seemed to be too steep to be ventured upon. After scrutinizing them, and carefully noting every dint and scratch that might give hope of a foothold, I have decided that they were unsafe. Yet my limbs, possessing a separate sense, would be of a different opinion, after they also had examined the descent and confidently have set out to cross the condemned slopes against the remonstrances of my other will. My legs sometimes transport me to camp in the darkness, over cliffs and through bogs and forests that are inaccessible to city legs during the day, even when piloted by the mind which owns them.

On the first of November Muir had reached Lake Tahoe and in two weeks he was in Yosemite again. The Yosemite chapter of his life was about to close and it cost him a severe struggle to separate himself from the beloved Valley. But he had engaged himself to bring to paper his mountain studies during the winter, a task that involved at least a temporary sojourn in a place within easy reach of San Francisco. "I suppose I must go into society this winter," he wrote to his sister Sarah on November 14th, 1873. "I would rather go back in some undiscoverable comer beneath the rafters of an old garret with my notes and books and listen to the winter rapping and blowing on the roof. May start for Oakland in a day or two. Will probably live in Professor Carr's family."

He departed as the first snowflakes began to whirl over the Valley which thereafter was to know him as a resident no more. When he reached Oakland the Carr household was in deep mourning over the tragic death of the eldest son, so he accepted the offer of a room in the home of his friends Mr. and Mrs. J. B. McChesney, at 1364 Franklin Street.

[End of Volume I]

Volume II



John Muir 1890

Chapter XI On Widening Currents 1873-1875

The ten months' interval of Muir's Oakland sojourn made a complete break in his accustomed activities. It was a storm and stress period to which he refers afterward as "the strange Oakland epoch," and we are left to infer that the strangeness consisted chiefly in the fact that he was housebound—by his own choice, to be sure, but nevertheless shut away from the free life of the mountains. It is not surprising, perhaps, that this period is marked by an almost complete stoppage of his correspondence, though he never was more continuously busy with his pen than during these months.

Easily the foremost literary journal of the Pacific Coast at that time was the "Overland Monthly." It had been founded in 1868, and Bret Harte was the man to whom it owed both its beginning and the fame it achieved under his editorship. The magazine, however, was not a profit-yielding enterprise, for John H. Carmany, its owner, professed to have lost thirty thousand dollars in his endeavor to make it pay. In a sheaf of reminiscences written years afterward, he reveals the double reason why the magazine proved expensive and why so many distinguished names, such as those of Mark Twain, Joaquin Miller, Ambrose Bierce, Edward Rowland Sill, Bret Harte, and John Muir, appear on its roll of contributors. "They have reason to remember me," he wrote, "for never have such prices been paid for poems, stories, and articles as I paid to the writers of the old "Overland."

Bret Harte, balking at a contract designed to correct his dilatory literary habits, left the magazine in 1871, and, after several unsatisfactory attempts to supply his place, Benjamin P. Avery became editor of the "Overland."

In March, 1874, he wrote a letter acknowledging the first number of Muir's notable series of "Studies in the Sierra," thereby disclosing what the latter had been doing during the winter months. "I am delighted," he tells Muir, "with your very original and clearly written paper on 'Mountain Sculpture' which reveals the law beneath the beauty of mountain and rock forms." This article, accompanied by numerous illustrative line drawings, appeared as the leading contribution in May and was followed in monthly succession by six others, in the order given in an earlier chapter [Vol. I, [Chapter 9.] p. 358.].

Not many weeks after the receipt of this initial article, Mr. Avery accepted an appointment as Minister to China. "Not ambition for honors," he wrote to Muir, "but the compulsion of broken health made me risk a foreign appointment, and I especially regret that the opportunity to share in the publication of your valuable

papers, and to know you most intimately, is to be lost to me." To the deep regret of his friends, Avery died in China the following year. Mr. Carmany, despairing of the "Overland" as a financial venture, let it come to an end in 1875, and Muir, when his current engagements were discharged, formed new literary connections.

There can be no doubt that during the closing years of the magazine, 1874-75, Muir's articles constituted by far the most significant contribution. It was in good measure due to Mrs. Carr that he was finally induced to write this series of "Sierra Studies." She had even suggested suspension of correspondence in order to enable him to accomplish the task.

"You told me I ought to abandon letter writing," he wrote to her on Christmas day, 1872, and I see plainly enough that you are right in this, because my correspondence has gone on increasing year by year and has become far too bulky and miscellaneous in its character, and consumes too much of my time. Therefore I mean to take your advice and allow broad acres of silence to spread between my letters, however much of self-denial may be demanded."

In the same letter, which a strange combination of circumstances has just brought to light again after fifty-two years, he expresses pungently that distaste for the mechanics of writing which undoubtedly accounts in part for the relative smallness of his formal literary output.

Book-making frightens me [he declares], because it demands so much artificialness and retrograding. Somehow, up here in these fountain skies [of Yosemite] I feel like a flake of glass through which light passes, but which, conscious of the inexhaustibleness of its sun fountain, cares not whether its passing light coins itself into other forms or goes unchanged—neither charcoaled nor diamonded! Moreover, I find that though I have a few thoughts entangled in the fibres of my mind, I possess no words into which I can shape them. You tell me that I must be patient and reach out and grope in lexicon granaries for the words I want. But if some loquacious angel were to touch my lips with literary fire, bestowing every word of Webster, I would scarce thank him for the pngt, because most of the words of the English language are made of mud, for muddy purposes, while those invented to contain spiritual matter are doubtful and unfixed in capacity and form, as wind-ridden mist-rags.

These mountain fires that glow in one's blood are free to all, but I cannot find the chemistry that may press them unimpaired into booksellers' bricks. True, with that august instrument, the English language, in the manufacture of which so many brains have been broken, I can proclaim to you that moonshine shine is glorious, and sunshine more glorious, that winds rage, and waters roar, and that in 'terrible times' glaciers guttered the mountains with their hard cold snouts. This is about the limit of what I feel capable of doing for the public—the moiling, squirming, fog-breathing public. But for my few friends I can do more because they already know the mountain harmonies and can catch the tones I gather for them, though written in a few harsh and gravelly sentences. There was another aspect of writing that Muir found irksome and that was its solitariness. Being a fluent and vivid conversationalist, accustomed to the excitation of eager hearers, he missed the give-and-take of conservation when he sat down with no company but that of his pen. Even the writing of a letter to a friend had something of the conversational about it. But to write between four walls for the 'Babylonish mobs' that hived past his window was another matter. Fresh from Cassiope, the heather of the High Sierra, aglow with enthusiasm for the beauty that had burned itself into his soul, he could but wonder and grow indignant at the stolid self-sufficiency of "the metallic, money-clinking crowds," among whom he felt himself as alien as any Hebrew psalmist or prophet by the waters of Babylon.

It is not to be wondered at, therefore, that this first sojourn in the San Francisco Bay region was for Muir a kind of exile under which he evidently chafed a good deal. His human environment was so unblushingly materialistic that, in spite of a few sympathetic friends, it seemed to him well-nigh impossible to obtain a hearing on behalf of Nature from any other standpoint than that of commercial utility. On this point he

differed trenchantly with his contemporaries and doubtless engaged in a good many arguments, for his frankness and downright sincerity did not permit him to compromise the supremacy of values which by his own standard far exceeded those of commercialism. It is by reference to such verbal passages of arms that we must explain his allusion, in the following letter, to "all the morbidness that has been hooted at me."

The issue was one which, in his own mind, he had settled fundamentally on his thousand-mile walk to the Gulf, but which challenged him again at every street corner in Oakland, and he was not the man to retire from combat in such a cause. He was, in fact, an eager and formidable opponent. "No one who did not know Muir in those days," remarked one of his old friends to me, "can have any conception of Muir's brilliance as a conversational antagonist in an argument." The world made especially for the uses of man? "Certainly not," said Muir. "No dogma taught by the present civilization forms so insuperable an obstacle to a right understanding of the relations which human culture sustains to wildness. Every animal, plant, and crystal controverts it in the plainest terms. Yet it is taught from century to century as something ever new and precious, and in the resulting darkness the enormous conceit is allowed to go unchallenged!"

Though grilling in his very blood over this huckster appraisement of Nature, Muir labored hard and continuously with his pen throughout the winter and the following spring and summer. When autumn came he had completed not only his seven "Studies in the Sierra," but had also written a paper entitled "Studies in the Formation of Mountains in the Sierra Nevada" for the American Association for the Advancement of Science, and articles on "Wild Sheep of California" and "Byways of Yosemite Travel." About this time his health had begun to suffer from excessive confinement and irregular regular diet at restaurants, so, yielding with sudden resolution to an overpowering longing for the mountains, he set out again for Yosemite. The following letter in which his correspondence with Mrs. Carr reaches its highest level and, in a sense, its conclusion, celebrates his escape from an uncongenial environment.

To Mrs. Ezra S. Carr

Yosemite Valley, [September, 1874]

Dear Mrs. Carr:

Here again are pine trees, and the wind, and living rock and water! I've met two of my ouzels on one of the pebble ripples of the river where I used to be with them. Most of the meadow gardens are disenchanted and dead, yet I found a few mint spikes and asters and brave, sunful goldenrods and a patch of the tiny Mimulus that has two spots on each lip. The fragrance and the color and the form, and the whole spiritual expression of goldenrods are hopeful and strength-giving beyond any other flowers that I know. A single spike is sufficient to heal unbelief and melancholy.

On leaving Oakland I was so excited over my escape that, of course, I forgot and left all the accounts I was to collect. No wonder, and no matter. I'm beneath that grand old pine that I have heard so often in storms both at night and in the day. It sings grandly now, every needle sun-thrilled and shining and responding tunefully to the azure wind.

When I left I was in a dreamy exhausted daze. Yet from mere habit or instinct I tried to observe and study. From the car window I watched the gradual transitions from muddy water, spongy tule, marsh and level field as we shot up the San Jose Valley, and marked as best I could the forms of the stream cañons as they opened to the plain and the outlines of the undulating hillocks and headlands between. Interest increased at every mile, until it seemed unbearable to be thrust so flyingly onward even towards the blessed Sierras. I will study them yet, free from time and wheels. When we turned suddenly and dashed into the narrow mouth of the Livermore pass I was looking out of the right side of the car. The window was closed on account of the cinders and smoke from the locomotive. All at once my eyes clasped a big hard rock not a hundred yards away, every line of which is as strictly and outspokenly glacial as any of the most alphabetic of the high and young Sierra. That one sure glacial word thrilled and overjoyed me more than you will ever believe. Town

smokes and shadows had not dimmed my vision, for I had passed this glacial rock twice before without reading its meaning,

As we proceeded, the general glacialness of the range became more and more apparent, until we reached Pleasanton where once there was a grand *mer de glace*. Here the red sun went down in a cloudless glow and I leaned back, happy and weary and possessed with a lifeful of noble problems.

At Lathrop we suppered and changed cars. The last of the daylight had long faded and I sauntered away from the din while the baggage was being transferred. The young moon hung like a sickle above the shorn wheat fields, Ursa Major pictured the northern sky, the Milky Way curved sublimely through the broadcast stars like some grand celestial moraine with planets for boulders, and the whole night shone resplendent, adorned with that calm imperishable beauty which it has worn unchanged from the beginning.

I slept at Turlock and next morning faced the Sierra and set out through the sand afoot. The freedom I felt was exhilarating, and the burning heat and thirst and faintness could not make it less. Before I had walked ten miles I was wearied and footsore, but it was real earnest work and I liked it. Any kind of simple natural destruction is preferable to the numb, dumb, apathetic deaths of a town.

Before I was out of sight of Turlock I found a handful of the glorious *Hemizonia virgata* and a few of the patient, steadfast eriogonums that I learned to love around the slopes of Twenty-Hill Hollow. While I stood with these old dear friends we were joined by a lark, and in a few seconds more Harry Edwards [For the meaning of this allusion see vol. I, [Chapter 8.] p. 263.] came flapping by with spotted wings. Just think of the completeness of that reunion!—Twenty-Hill Hollow, low, Hemizonia, Eriogonum, Lark, Butterfly, and I, and lavish outflows of genuine Twenty-Hill Hollow sun gold. I threw down my coat and one shirt in the sand, forgetting Hopeton and heedless that the sun was becoming hotter every minute. I was wild once more and let my watch warn and point as it pleased.

Heavy wagon loads of wheat had been hauled along the road and the wheels had sunk deep and left smooth beveled furrows in the sand. Upon the smooth slopes of these sand furrows I soon observed a most beautiful and varied embroidery, evidently tracks of some kind. At first I thought of mice, but soon saw they were too light and delicate for mice. Then a tiny lizard darted into the stubble ahead of me, and I carefully examined the track he made, but it was entirely unlike the fine print embroidery I was studying. However I knew that he might make very different tracks if walking leisurely. Therefore I determined to catch one and experiment. I found out in Florida that lizards, however swift, are short-winded, so I gave chase and soon captured a tiny gray fellow and carried him to a smooth sand-bed where he could embroider without getting away into grass tufts or holes. He was so wearied that he couldn't skim and was compelled to walk, and I was excited with delight in seeing an exquisitely beautiful strip of embroidery about five-eighths of an inch wide, drawn out in flowing curves behind him as from a loom. The riddle was solved. I knew that mountain boulders moved in music; so also do lizards, and their written music, printed by their feet, moved so swiftly as to be invisible, covers the hot sands with beauty wherever they go.

But my sand embroidery lesson was by no means done. I speedily discovered a yet more delicate pattern on the sands, woven into that of the lizard. I examined the strange combination of bars and dots. No five-toed lizard had printed that music, I watched narrowly down on my knees, following the strange and beautiful pattern along the wheel furrows and out into the stubble. Occasionally the pattern would suddenly end in a shallow pit half an inch across and an eighth of an inch deep. I was fairly puzzled, picked up my bundle, and trudged discontentedly away, but my eyes were hungrily awake and I watched all the ground. At length a gray grasshopper rattled and flew up, and the truth flashed upon me that he was the complementary embroiderer of the lizard. Then followed long careful observation, but I never could see the grasshopper until he jumped, and after he alighted he invariably stood watching me with his legs set ready for another jump in case of danger. Nevertheless I soon, made sure that he was my man, for I found that in jumping he made the shallow pits I

had observed at the termination of the pattern I was studying. But no matter how patiently I waited he wouldn't *walk* while I was sufficiently near to observe. They are so nearly the color of the sand. I therefore caught one and lifted his wing covers and cut off about half of each wing with my penknife, and carried him to a favorable place on the sand. At first he did nothing but jump and make dimples, but soon became weary and *walked* in common rhythm with all his six legs, and my interest you may guess while I watched the embroidery—the written music laid down in a beautiful ribbon-like strip behind. I glowed with wild joy as if I had found a new glacier—copied specimens of the precious fabric into my notebook, and strode away with my own feet sinking with a dull craunch, craunch, craunch in the hot gray sand, glad to believe that the dark and cloudy vicissitudes of the Oakland period had not dimmed my vision in the least. Surely Mother Nature pitied the poor boy and showed him pictures.

Happen what would, fever, thirst, or sunstroke, stroke, my joy for that day was complete, Yet I was to receive still more. A train of curving tracks with a line in the middle next fixed my attention, and almost before I had time to make a guess concerning their author, a small hawk came shooting down vertically out of the sky a few steps ahead of me and picked up something in his talons. After rising thirty or forty feet overhead, he dropped it by the roadside as if to show me what it was. I ran forward and found a little bunchy field mouse and at once suspected him of being embroiderer number three. After an exciting chase through stubble heaps and weed thickets I wearied and captured him without being bitten and turned him free to make his mark in a favorable sand bed. He also embroidered better than he knew, and at once claimed the authorship of the new track work.

I soon learned to distinguish the pretty sparrow track from that of the magpie and lark with their three delicate branches and the straight scratch behind made by the backcurving curving claw, dragged loosely like a spur of a Mexican vaquero. The cushioned elastic feet of the hare frequently were seen mixed with the pattering scratchy prints of the squirrels. I was now wholly trackful. I fancied I could see the air whirling in dimpled eddies from sparrow and lark wings. Earthquake boulders descending in a song of curves, snowflakes glinting songfully hither and thither." The water in music the oar forsakes." The air in music the oar forsakes. All things move in music and write it. The mouse, lizard, and grasshopper sing together on the Turlock sands, sing with the morning stars.

Scarce had I begun to catch the eternal harmonies of Nature when I heard the hearty god-damning din of the mule driver, dust whirled in the sun gold, and I could see the sweltering mules leaning forward, dragging the heavily piled wheat wagons, deep sunk in the sand. My embroidery perished by the mile, but grasshoppers never wearied nor the gray lizards nor the larks, and the coarse confusion of man was speedily healed.

About noon I found a family of grangers feeding, and remembering your admonitions anent my health requested leave to join them. My head ached with fever and sunshine, and I couldn't dare the ancient brown bacon, nor the beans and cakes, but water and splendid buttermilk came in perfect affinity, and made me strong.

Towards evening, after passing through miles of blooming Hemizonia, I reached Hopeton on the edge of the oak fringe of the Merced. Here all were yellow and woebegone with malarious fever. I rested one day, spending the time in examining the remarkably flat water eroded valley of the Merced and the geological sections which it offers. In going across to the river I had a suggestive time breaking my way through tangles of blackberry and brier-rose and willow. I admire delicate plants that are well prickled and therefore took my scratched face and hands patiently. I bathed in the sacred stream, seeming to catch all its mountain tones while it softly mumbled and rippled over the shallows of brown pebbles. The whole river back to its icy sources seemed to rise in clear vision, with its countless cascades and falls and blooming meadows and gardens. Its pine groves, too, and the winds that play them, all appeared and sounded.

In the cool of the evening I caught Browny and cantered across to the Tuolumne, the whole way being fragrant and golden with Hemizonia. A breeze swept in from your Golden Gate regions over the passes and across the plains, fanning the hot ground and drooping plants and refreshing every beast and tired and weary, plodding man.

It was dark ere I reached my old friend Delaney, but was instantly recognized by my voice, and welcomed in the old good uncivilized way, not to be misunderstood.

All the region adjacent to the Tuolumne River where it sweeps out into the plain after its long eventful journey in the mountains, is exceedingly picturesque. Round terraced hills, brown and yellow with grasses and compositae and adorned with open groves of darkly foilaged live oak are grouped in a most open tranquil manner and laid upon a smooth level base of purple plain, while the river bank is lined with nooks of great beauty and variety in which the river has swept and curled, shifting from side to side, retreating and returning as determined by floods and the gradual erosion and removal of drift beds formerly laid down. A few miles above here at the village of La Grange the wild river has made some astonishing deposits in its young days, through which it now flows with the manners of stately old age, apparently disclaiming claiming all knowledge of them. But a thousand, thousand boulders gathered from many a moraine, smashed and ground in pot-holes, record their history and tell of white floods of a grandeur not easily conceived. Noble sections nearly a hundred feet deep are laid bare, like a book, by the mining company. Water is drawn from the river several miles above and conducted by ditches and pipes and made to play upon these deposits for the gold they contain. Thus the Tuolumne of to-day is compelled to unravel and lay bare its own ancient history which is a thousandfold more important than the handfuls of gold sand it chances to contain.

I mean to return to these magnificent records in a week or two and turn the gold disease of the La Grangers to account in learning the grand old story of the Sierra flood period. If these hundred laborious hydraulickers were under my employ they could not do me better service, and all along the Sierra flank thousands of strong arms are working for me, incited by the small golden bait. Who shall say that I am not rich?

Up through the purple foothills to Coulterville, where I met many hearty, shaggy mountaineers glad to see me. Strange to say the "Overland" studies have been read and discussed in the most unlikely places. Some numbers have found their way through the Bloody Cañon pass to Mono.

In the evening Black and I rode together up into the sugar pine forests and on to his old ranch in the moonlight. The grand priest-like pines held their arms above us in blessing. The wind sang songs of welcome. The cool glaciers and the running crystal fountains were in it. I was no longer *on* but *in* the mountains—home again, and my pulses were filled. On and on in white moonlight-spangles on the streams, shadows in rock hollows and briery ravines, tree architecture on the sky more divine than ever stars in their spires, leafy mosaic in meadow and bank. Never had the Sierra seemed so inexhaustible—mile on mile onward in the forest through groves old and young, pine tassels overarching and brushing both cheeks at once. The chirping of crickets only deepened the stillness.

About eight o'clock a strange mass of tones came surging and waving through the pines. "That's the death song," said Black, as he reined up his horse to listen. "Some Indian is dead." Soon two glaring watch-fires shone red through the forest, marking the place of congregation. The fire glare and the wild wailing came with indescribable impressiveness through the still dark woods. I listened eagerly as the weird curves of woe swelled and cadenced, now rising steep like glacial precipices, now swooping low in polished slopes. Falling boulders and rushing streams and wind tones caught from rock and tree were in it. As we at length rode away and the heaviest notes were lost in distance, I wondered that so much of mountain nature should well out from such a source. Miles away we met Indian groups slipping through the shadows on their way to join the death wail.

Farther on, a harsh grunting and growling seemed to come from the opposite bank of a hazelly brook along which we rode. "What? Hush! That's a bear," ejaculated Black in a gruff bearish undertone. "Yes," said [I], "some rough old bruin is sauntering this fine night, seeking some wayside sheep lost from migrating flocks." Of course all nightsounds otherwise unaccountable are accredited to bears. On ascending a sloping hillock less than a mile from the first we heard another grunting bear, but whether or no daylight would trans. form our bears to pigs may well be counted into the story.

Past Bower Cave and along a narrow winding trail in deep shadow—so dark, had to throw the reins on Browny's neck and trust to his skill, for I could not see the ground and the hillside was steep. A fine, bright tributary of the Merced sang far beneath us as we climbed higher, higher through the hazels and dogwoods that fringed the rough black boles of spruces and pines. We were now nearing the old camping ground of the Pilot Peak region where I learned to know the large nodding lilies (L. *pardalinum*) so abundant along these streams, and the groups of alder-shaded cataracts so characteristic of the North Merced Fork. Moonlight whitened all the long fluted slopes of the opposite bank, but we rode in continuous shadow. The rush and gurgle and prolonged *Aaaaaah* of the stream coming up, sifting into the wind, was very solemnly impressive. It was here that you first seemed to join me. I reached up as Browny carried me underneath a big Douglas spruce and plucked one of its long plumy sprays, which brought you from the Oakland dead in a moment. You are more spruce than pine, though I never definitely knew it till now.

Miles and miles of tree scripture along the sky, a bible that will one day be read! The beauty of its letters and sentences have burned me like fire through all these Sierra seasons. Yet I cannot interpret their hidden thoughts. They are terrestrial expressions of the sun, pure as water and snow. Heavens! listen to the wind song! I'm still writing beneath that grand old pine in Black's yard and that other companion, scarcely less noble, back of which I sheltered during the earthquake, is just a few yards beyond. The shadows of their boles lie like charred logs on the gray sand, while half the yard is embroidered with their branches and leaves. There goes a woodpecker with an acorn to drive into its thick bark for winter, and well it may gather its stores, for I can myself detect winter in the wind.

Few nights of my mountain life have been more eventful than that of my ride in the woods from Coulterville, where I made my reunion with the winds and pines. It was eleven o'clock when we reached Black's ranch. I was weary and soon died in sleep. How cool and vital and recreative was the hale young mountain air. On higher, higher up into the holy of holies of the woods! Pure white lustrous clouds overshadowed the massive congregations of silver fir and pine. We entered, and a thousand living arms were waved in solemn blessing. An infinity of mountain life. How complete is the absorption of one's life into the spirit of mountain woods. No one can love or hate an enemy here, for no one can conceive of such a creature as an enemy. Nor can one have any distinctive love of friends. The dearest and best of you all seemed of no special account, mere trifles.

Hazel Green water, famous among mountaineers, distilled from the pores of an ancient moraine, spiced and toned in a maze of fragrant roots, winter nor summer warm or cool it! Shadows over shadows keep its fountains ever cool. Moss and felted leaves guard from spring and autumn frosts, while a woolly robe of snow protects from the intenser cold of winter. Bears, deer, birds, and Indians love the water and nuts of Hazel Green alike, while the pine squirrel reigns supreme and haunts its incomparable groves like a spirit. Here a grand old glacier swept over from the Tuolumne ice fountains into the basin of the Merced, leaving the Hazel Green moraine for the food of her coming trees and fountains of her predestined waters.

Along the Merced divide to the ancient glacial lake-bowl of Crane's Flat, was ever fir or pine more perfect? What groves! What combinations of green and silver gray and glowing white of glinting sunbeams. Where is leaf or limb awanting, and is this the upshot of the so-called "mountain glooms" and mountain storms? If so, is Sierra forestry aught beside an outflow of Divine Love? These round-bottomed grooves sweeping across the divide, and down whose sides our horses canter with accelerated speed, are the pathways of ancient ice-currents, and it is just where these crushing glaciers have borne down most heavily that the greatest

loveliness of grove and forest appears.

A deep cañon on filled with blue air now comes in view on the right. That is the valley of the Merced, and the highest rocks visible through the trees belong to the Yosemite Valley. More miles of glorious forest, then out into free light and down, down, down into the groves and meadows of Yosemite. Sierra sculpture in its entirety without the same study on the spot, No one of the rocks seems to call me now, nor any of the distant mountains. Surely this Merced and Tuolumne chapter of my life is done.

I have been out on the river bank with your letters. How good and wise they seem to be! You wrote better than you knew. Altogether they form a precious volume whose sentences are more intimately connected with my mountain work than any one will ever be able to appreciate. An ouzel came as I sat reading, alighting in the water with a delicate and graceful glint on his bosom. How pure is the morning light on the great gray wall, and how marvelous the subdued lights of the moon! The nights are wholly enchanting.

I will not try [to] tell the Valley. Yet I feel that I am a stranger here. I have been gathering you a handful of leaves. Show them to dear Keith and give some to Mrs. McChesney. They are probably the last of Yosemite that I will ever give you. I will go out in a day or so. Farewell! I seem to be more really leaving you here than there. Keep these long pages, for they are a kind of memorandum of my walk after the strange Oakland epoch, and I may want to copy some of them when I have leisure.

Remember me to my friends. I trust you are not now so sorely overladen. Good-night. Keep the goldenrod and yarrow. They are auld lang syne.

Ever lovingly yours John Muir To take leave of Yosemite was harder than he anticipated. Days grew into weeks as in leisurely succession he visited his favorite haunts—places to which during the preceding summer he had taken on a camping trip [See <u>[Chapter 9.]</u> vol. I, p. 322.] a group of his closest friends, including Emily Pelton and Mrs. Carr. It was on this outing that bears raided the provisions cached by the party during an excursion into the Tuolumne Cañon and Muir saved his companions from hardship by fetching a new supply of food from Yosemite, making the arduous trip of forty miles without pause and in an amazingly short time.

Yosemite Valley, October 7th, 1874

Dear Mrs. Carr:

I expected to have been among the foothill drift long ago, but the mountains fairly seized me, and ere I knew I was up the Merced Cañon where we were last year, past Shadow and Merced Lakes and our Soda Springs. I returned turned last night. Had a glorious storm, and a thousand sacred beauties that seemed yet more and more divine. I camped four nights at Shadow Lake [Now called Merced Lake.] at the old place in the pine thicket. I have ouzel tales to tell. I was alone and during the whole excursion, or period rather, was in a kind of calm incurable ecstasy. I am hopelessly and forever a mountaineer.

How glorious my studies seem, and how simple. I found out a noble truth concerning the Merced moraines that escaped me hitherto. Civilization and fever and all the morbidness that has been hooted at me have not dimmed my glacial eye, and I care to live only to entice people to look at Nature's loveliness. My own special self is nothing. My feet have recovered their cunning. I feel myself again.

Tell Keith the colors are coming to the groves. I leave Yosemite for over the mountains to Mono and Lake Tahoe. Will be in Tahoe in a week, thence anywhere Shastaward, etc. I think I may be at Brownsville, Yuba County, where I may get a letter from you. I promised to call on Emily Pelton there. Mrs. Black has fairly mothered me. She will be down in a few weeks. Farewell.

John Muir

Having worked the Yosemite problem out of his blood he was faced with the question of the next step in his career. Apparently while debating with others the character of the relation which Nature should sustain to man he had found his calling, one in which his glacial studies in Yosemite formed only an incident, though a large one. Hereafter his supreme purpose in life must be "to entice people to look at Nature's loveliness"—understandingly, of course.

In the seventies, before lumber companies, fires, and the fumes from copper smelters had laid a blight upon the Shasta landscapes, the environs of the great mountain were a veritable garden of the Lord. Its famous mineral springs and abundant fish and game, no less than its snowy grandeur, attracted a steady stream of visitors. Clarence King had discovered glaciers on its flanks and many parts of the mountain were still imperfectly explored. The year was waning into late October when Muir, seeking new treasuries of Nature's loveliness, turned his face Shastaward.

In going to Mount Shasta, Muir walked along the main Oregon and California stage-road from Redding to Sisson's. Unable to find any one willing to make the ascent of the mountain with him so late in the season, he secured the aid of Jerome Fay, a local resident, to take blankets and a week's supply of food as far as a pack-horse could break through the snow, Selecting a sheltered spot for a camp in the upper edge of the timber belt, he made his adventurous ascent alone from there on the 2d of November, and returned to his camp before dark. Realizing that a storm was brewing, he hastily made a "storm-nest" and snugged himself in with firewood to enjoy the novel sensation of a Shasta storm at an altitude of nine thousand feet, the elements broke loose violently the next morning, and continued for nearly a week, while Muir, his trusty notebook in hand, watched the deposition of snow upon the trees, studied the individual crystals with a lens, observed a squirrel finding her stores under the drifts, and made friends with wild sheep that sought shelter near his camp. He was much disappointed when Mr. Sisson, concerned for his safety, sent two horses through the blinding snowstorm and brought him down on the fifth day from the timber-line to his house. The following letter was written just before he began the first stage of the ascent.

To Mrs. Ezra S. Carr

Sisson's Station, November 1st, 1874

Dear Mrs. Carr:

Here is icy Shasta fifteen miles away, yet at the very door. It is all close-wrapt in clean young snow down to the very base—one mass of white from the dense black forest-girdle at an elevation of five or six thousand feet to the very summit. The extent of its individuality is perfectly wonderful. When I first caught sight of it over the braided folds of the Sacramento Valley I was fifty miles away and afoot, alone and weary. Yet all my blood turned to wine, and I have not been weary since.

Stone was to have accompanied me, but has failed of course. The last storm was severe and all the mountaineers shake their heads and say impossible, etc., but you know that I will meet all its icy snows lovingly.

I set out in a few minutes for the edge of the timber-line. Then upwards, if unstormy, in the early morning. If the snow proves to be mealy and loose it is barely possible that I may be unable to urge my way through so many upward miles, as there is no intermediate camping ground. Yet I am feverless and strong now, and can spend two days with their intermediate night in one deliberate unstrained effort.

I am the more eager to ascend to study the mechanical conditions of the fresh snow at so great an elevation; also to obtain clear views of the comparative quantities of lava denudation northward and southward; also general views of the channels of the ancient Shasta glaciers, and many other lesser problems besides—the fountains of the rivers here, and the living glaciers. I would like to remain a week or two, and may have to

return next year in summer.

I wrote a short letter ["Salmon Breeding on the McCloud River," *San Francisco Evening Bulletin*, Oct. 29, 1874.] a few days ago which was printed in the Evening Bulletin, and I suppose you have seen it. I wonder how you all are faring in your wildernesses, educational, departmental, institutional, etc. Write me a line here in care of Sisson. I think it will reach me on my return from icy Shasta. Love to all—Keith and the boys and the McChesneys. Don't forward any letters from the Oakland office. I want only mountains until my return to civilization. Farewell.

Ever cordially yours

John Muir

One of Muir's endearing traits was his genuine fondness for children, who rewarded his sympathy with touching confidence and devotion. The following letter, written to his admiring little chum [See vol. [Chapter 10.] I, p. 372.] in the McChesney household, sheds additional light upon his Shasta rambles and the mood, so different from mere adventure-seeking, in which he went questing for knowledge of Nature.

To Alice McChesney

Sisson's Station Foot of Mount Shasta November 8th, 1874

My Dear Highland Lassie Alice:

It is a stormy day here at the foot of the big snowy Shasta and so I am in Sisson's house where it is cozy and warm. There are four lassies here—one is bonnie, one is bonnier, and one is far bonniest, but I don't know them yet and I am a little lonesome and wish Alice McChesney were here. I can never help thinking that you were a little unkind in sending me off to the mountains without a kiss and you must make that up when I get back.

I was up on the top of Mount Shasta, and it is very high and all deep-buried in snow, and I am tired with the hard climbing and wading and wallowing. When I was coming up here on purpose to climb Mount Shasta people would often say to me, "Where are you going?" and I would say, "To Shasta," and they would say, "Shasta City?" and I would say, "Oh, no, I mean *Mount* Shasta!" Then they would laugh and say, *"Mount Shasta!!* Why man, you can't go on Mount Shasta *now*. You're two months too late. The snow is ten feet deep on it, and you would be all buried up in the snow, and freeze to death." And then I would say, "But I like snow, and I like frost and ice, and I'm used to climbing and wallowing in it." And they would say, "Oh, that's all right enough to talk about or sing about, but I'm a mountaineer myself, and know all about that Shasta Butte and you just can't go noway and nohow." But I did go, because I loved snow and mountains better than they did. Some places I had to creep, and some places to slide, and some places to scramble, but most places I had to climb, climb deep in the frosty snow.

I started at half-past two in the morning, all alone, and it stormed wildly and beautifully before I got back here and they thought that poor, crazy mountain climber must be frozen solid and lost below the drifts, but I found a place at the foot of a low bunch of trees and made a hollow and gathered wood and built a cheery fire and soon was warm; and though the wind and the snow swept wildly past, I was snug-bug-rug, and in three days I came down here. But I liked the storm and wanted to stay longer.

The weather is stormy yet, and most of the robins are getting ready to go away to a warmer place, and so they are gathering into big flocks. I saw them getting their breakfast this morning on cherries. Some hunters are here and so we get plenty of wild venison to eat, and they killed two bears and nailed their skins on the side of the barn to dry. There are lots of both bears and deer on Shasta, and three kinds of squirrels.

Shasta snowflakes are very beautiful, and I saw them finely under my magnifying glass, Here are some bonnie Crataegus leaves I gathered for you. Fare ye well, my lassie. I'm going to-morrow with some hunters to see if I can find out something more about bears or wild sheep.

Give my love to your mother and father and Carrie, and tell your mother to keep my letters until I come back, for I don't want to know anything just now except mountains. But I want your papa to write to me, for I will be up here, hanging about the snowy skirts of Shasta, for one or two or three weeks.

It is a dark, wild night, and the Shasta squirrels are curled up cozily in their nests, and the grouse have feather pantlets on and are all roosting under the broad, shaggy branches of the fir trees. Good-night, my lassie, and may you nest well and sleep well—as the Shasta squirrels and grouse.

John Muir

During the following weeks he circled the base of the mountain, visited the Black Butte and the foot of the Whitney Glacier, as well as Rhett and Klamath lakes, and gathered into his notebook a rich harvest of observations to be made into magazine articles later. Some of the material, however, he utilized at once in a series of letters to the "Evening Bulletin" of San Francisco.

In explanation of various allusions In some of the following letters to Mrs. Carr, it should be added that she and her husband had in view, and later acquired, a tract of land in what was then the outskirts of Pasadena. Both had been very active in organizing the farmers of California into a State Grange in 1873. Two years later Dr. Carr was elected State Superintendent of Public Instruction, and during his incumbency Mrs. Carr served as deputy Superintendent, discharging most of the routine work of the office in Sacramento, besides lecturing before granges and teachers' institutes throughout the State. There were many quarreling political factions in California, and the Grangers' movement and the Department of Public Instruction were never far from the center of the political storms.

To Mrs. Ezra S. Carr

Sisson's Station, December 9th, 1874

Dear Mrs. Carr:

Coming in for a sleep and rest I was glad to receive your card. I seem to be more than married to icy Shasta. One yellow, mellow morning six days ago, when Shasta's snows were looming and blooming, I stepped outside the door to gaze, and was instantly drawn up over the meadows, over the forests to the main Shasta glacier in one rushing, cometic whiz, then, swooping to Shasta Valley, whirled off around the base like a satellite of the grand icy sun. I have just completed my first revolution. Length of orbit, one hundred miles; time, one Shasta day.

For two days and a half I had nothing in the way of food, yet suffered nothing, and was finely nerved for the most delicate work of mountaineering, both among crevasses and lava cliffs. Now I am sleeping and *eating*. I found some geological facts that are perfectly glorious, and botanical ones, too.

I wish I could make the public be kind to Keith and his paint.

And so you contemplate vines and oranges among the warm California angels! I wish you would all go a-granging among oranges and bananas and all such blazing red-hot fruits, for you are a species of Hindoo sun fruit yourself. For me, I like better the huckleberries of cool glacial bogs, and acid currants, and benevolent, rosy, beaming apples, and common Indian summer pumpkins. I wish you could see the holy morning alpen-glow of Shasta.

Farewell. I'll be down into gray Oakland some time. I am glad you are essentially independent of those commonplace plotters that have so marred your peace. Eat oranges and hear the larks and wait on the sun.

Ever cordially

To Mrs. Ezra S. Carr

John Muir

Sisson's Station, December 21st, 1874

Dear Mrs. Carr:

I have just returned from a fourth Shasta excursion, and find your [letter] of the 17th. I wish you could have been with me on Shasta's shoulder last eve in the sun-glow. I was over on the head-waters of the McCloud, and what a head! Think of a spring giving rise to a river! I fairly quiver with joyous exultation when I think of it. The infinity of Nature's glory in rock, cloud, and water! As soon as I beheld the McCloud upon its lower course I knew there must be something extraordinary in its alpine fountains, and I shouted, "O where, my glorious river, do you come from?" Think of a spring fifty yards wide at the mouth, issuing from the base of a lava bluff with wild songs—not gloomily from a dark cavey mouth, but from a world of ferns and mosses gold and green! I broke my way through chaparral and all kinds of river-bank tangle in eager vigor, utterly unweariable.

The dark blue stream sang solemnly with a deep voice, pooling and boulder-dashing and *aha-a-a-ing* in white flashing rapids, when suddenly I heard water notes I never had heard before. They came from that mysterious spring; and then the Elk forest, and the alpine-glow, and the sunset! Poor pen cannot tell it.

The sun this morning is at work with its blessings as if it had never blessed before. He never wearies of revealing himself on Shasta. But in a few hours I leave this altar and all its—Well, to my Father I say thank you, and go willingly.

I go by stage and rail to Brownsville to see Emily [Pelton] and the rocks there and the Yuba. Then perhaps a few days among the auriferous drifts on the Tuolumne, and then to Oakland and that book, walking across the Coast Range on the way, either through one of the passes or over Mount Diablo. I feel a sort of nervous fear of another period of town dark, but I don't want to be silly about it. The sun glow will all fade out of me, and I will be deathly as Shasta in the dark. But mornings will come, dawnings of some kind, and if not, I have lived more than a common eternity already.

Farewell. Don't overwork—that is not the work your Father wants. I wish you could come a-beeing in the Shasta honey lands. Love to the boys. [John Muir] On one of the excursions to which he refers in the preceding letter, Muir accompanied four hunters, three of them Scotchmen [Among these Scots was G. Buchanan Hepburn, of Hadingdonshire, on one of whose letters Muir made the memorandum, "Lord Hepburn, killed in Mexico or Lower California." Twenty years later, during his visit to Scotland, Muir was by chance enabled to communicate the details of the man's unhappy fate to his relatives.], who were in search of wild sheep. The party went to Sheep Rock, twenty miles north of Sisson's, and from there fifty miles farther to Mount Bremer, then one of the most noted strongholds of wild game in the Shasta region. This expedition afforded Muir a new opportunity to study wild sheep and his observations were charmingly utilized in the little essay "Wild Wool," one of his last contributions to the "Overland" in 1875, republished afterwards in "Steep Trails."

A week after writing the above letter he was at Knoxville, also known as Brownsville, on the divide between the Yuba and Feather Rivers. It was a mild, but tempestuous, December, and during a gale that sprang up while he was exploring a valley tributary to the Yuba, he climbed a Douglas spruce in order to be able to enjoy the better the wild music of the storm. The experience afterwards bore fruit in one of his finest descriptions—an article entitled "A Wind Storm in the Forests of the Yuba," which appeared in "Scribner's Monthly" in November, 1878, and later as a chapter in "The Mountains of California." With the possible

exception of his dog story, "Stickeen," no article drew more enthusiastic comments from readers who felt moved to write their appreciation.

From his earliest youth Muir had derived keen enjoyment from storms, but he had never tried to give a reason for the joy that was in him. The reaction he got from the reading public showed that they regarded his enthusiasin for storms as admirable, but also as singular. The latter was a surprise to Muir, who regarded all the manifestations of Nature as coming within the range of his interest, and saw no reason why men should *fear* storms. Reflecting upon the fact, he reached the conclusion that such fear is due to a wrong attitude toward nature, to imaginary or grossly exaggerated notions of danger, or, in short, to a "lack of faith in the Scriptures of Nature," as, he averred, was the case with Ruskin. As for himself, a great storm was nothing but "a cordial outpouring of Nature's love."

By what he regarded as a fortunate coincidence, he was still on the headwaters of the Feather and the Yuba rivers on the date of the memorable Marysville flood, January 19, 1875. A driving warm rainstorm suddenly melted the heavy snows that filled the drainage basins of these rivers and sent an unprecedented flood down into the lowlands, submerging many homesteads and a good part of Marysville. One can almost sense the haste with which he dashed off the lines of the following letter on the morning of the day of the flood—impatient to heed the call of the storm.

To Mrs. Ezra S. Carr

Brownsville, Yuba County January 19th, 1875

My dear Mother Carr:

Here are some of the dearest and bonniest of our Father's bairns—the little ones that so few care to see. I never saw such enthusiasm in the care and breeding of mosses as Nature manifests among these northern Sierras. I have studied a big fruitful week among the cañons and ridges of the Feather and another among the Yuba rivers, living and dead.

I have seen a dead river—a sight worth going round the world to see. The dead rivers and dead gravels wherein lies the gold form magnificent problems, and I feel wild and unmanageable with the intense interest they excite, but I will choke myself off and finish my glacial work and that little book of studies. I have been spending a few fine social days with Emily [Pelton], but now work.

How gloriously it storms! The pines are in ecstasy, and I feel it and must go out to them. I must borrow a big coat and mingle in the storm and make some studies. Farewell. Love to all.

P.S. How are Ned and Keith? I wish Keith had been with me these Shasta and Feather River days. I have gained a thousandfold more than I hoped. Heaven send you Light and the good blessings of wildness. How the rains plash and roar, and how the pines wave and pray! Tradition still tells of his return to the Knox House after the storm, dripping and bedraggled; of the pity and solicitude of his friends over his condition, and their surprise when he in turn pitied them for having missed "a storm of exalted beauty and riches." The account of his experience was his final contribution to the "Overland Monthly" in June, 1875, under the title, "A Flood-Storm in the Sierra." Nowhere has he revealed his fervid enjoyment of storms more unreservedly than in this article {It was incorporated in part only as the chapter on "The River Floods" in *The Mountains of California*. The omitted portions are important to a student of Muir's personality.]. "How terribly downright," he observes, "must be the utterances of storms and earthquakes to those accustomed to the soft hypocrisies of society. Man's control is being extended over the forces of nature, but it is well, at least for the present, that storms can still make themselves heard through our thickest walls. . . . Some were made to think."

M.

There was a new note in his discourses, written and spoken, when he emerged from the forests of the Yuba. Fear and utilitarianism, he was convinced, are a crippling equipment for one who wishes to understand and appreciate the beauty of the world about him. But meanness of soul is even worse. Herded in cities, where the struggle for gain sweeps along with the crowd even the exceptional individual, men rarely come in sight of their better selves. There is more hope for those who live in the country. But instead of listening to the earnest and varied voices of nature, the country resident, also, is too often of the shepherd type who can only hear "baa." "Even the howls and ki-yis of coyotes might be blessings if well heard, but he hears them only through a blur of mutton and wool, and they do him no good."

Despite these abnormalities, Muir insisted, we must live in close contact with nature if we are to keep fresh and clean the fountains of moral sanity. "The world needs the woods and is beginning to come to them," he asserts in his floodstorm article. "But it is not yet ready... for storms... Nevertheless the world moves onward, and 'it is coming yet, for a' that,' that the beauty of storms will be as visible as that of calms."

Chapter XII "The World Needs the Woods" 1875-1878

When out of doors, Muir was scarcely conscious of the passage of time, so completely was he absorbed, almost physically absorbed, in the natural objects about him. The mountains, the stars, the trees, and sweet-belled Cassiope recked not of time! Why should he? Nor was he at such periods burdened with thoughts of a calling. On the contrary, he rejoiced in his freedom and, like Thoreau, sought by honest labor of any sort only means enough to preserve it intact.

But when he came out of the forests, or down from the mountains, and had to take account, in letters and personal contacts, of the lives, loves, and occupations of relatives and friends, he sometimes was brought up sharply against the fact that he had reached middle age and yet had neither a home nor what most men in those days would have recognized as a profession. Then, as in the following letter, one catches a note of apology for the life he is leading. He can only say, and say it triumphantly, that the course of his bark is controlled by other stars than theirs, that he must be free to live by the laws of his own life.

To Sarah Muir Galloway

Oakland, [February 26th,] 1875

My Dear Sister Sarah:

I have just returned from a long train of excursions in the Sierras and find yours and many other letters waiting, all that accumulated for five months. I spent my holidays on the Yuba and Feather rivers exploring. I have, of course, worked hard and enjoyed bard, ascending mountains, crossing cañons, rambling ceaselessly over hill and dale, plain and lava bed.

I thought of you all gathered with your little ones enjoying the sweet and simple pleasures that belong to your lives and loves. I have not yet in all my wanderings found a single person so free as myself. Yet I am bound to my studies, and the laws of my own life. At times I feel as if driven with whips, and ridden upon. When in the woods I sit at times for hours watching birds or squirrels or looking down into the faces of flowers without suffering any feeling of haste. Yet I am swept onward in a general current rent that bears on irresistibly. When, therefore, I shall be allowed to float homeward, I dinna, dinna ken, but I hope.

The world, as well as the mountains, is good to me, and my studies flow on in a wider and wider current by the incoming of many a noble tributary. Probably if I were living amongst you all you would follow me in my scientific work, but as it is, you will do so imperfectly. However, when I visit you, you will all have to submit

to numerous lectures. . . .

Give my love to David and to Mrs. Galloway and all your little ones, and remember me as ever lovingly your brother,

John

On the 28th of April he led a party to the summit of Mount Shasta for the purpose of finding a proper place to locate the monument of the Coast and Geodetic Survey. Two days later he made another ascent with Jerome Fay in order to complete some barometrical observations. While engaged in this task a fierce storm arose, enveloping them, with great suddenness, in inky darkness through which roared a blast of snow and hail. His companion deemed it impossible under the circumstances to regain their camp at timber-line, so the two made their way as best they could to the sputtering fumaroles or "Hot Springs" on the summit. The perils of that stormy night, described at some length in "Steep Trails," were of a much more serious nature than one might infer from the casual reference to the adventure in the following letter.

To Mrs. Ezra S. Carr

1419 Taylor St., May 4th, 1875

Dear Mrs. Carr:

Here I am safe in the arms of Daddy Swett—home again from icy Shasta and richer than ever in dead river gravel and in snowstorms and snow. The upper end of the main Sacramento Valley is entirely covered with ancient river drift and I wandered over many square miles of it. In every pebble I could hear the sounds of running water. The whole deposit is a poem whose many books and chapters form the geological Vedas of our glorious state.

I discovered a new species of hail on the summit of Shasta and experienced one of the most beautiful and most violent snowstorms imaginable. I would have been with you ere this to tell you about it and to give you some lilies and pine tassels that I brought for you and Mrs. McChesney and Ina Coolbrith, but alack! I am battered and scarred like a log that has come down the Tuolumne in flood-time, and I am also lame with frost nipping. Nothing serious, however, and I will be well and better than before in a few days.

I was caught in a violent snowstorm and held upon the summit of the mountain all night in my shirt sleeves. The intense cold and the want of food and sleep made the fire of life smoulder and burn low. Nevertheless in company with another strong mountaineer [Jerome Fay] I broke through six miles of frosty snow down into the timber and reached fire and food and sleep and am better than ever, with all the valuable experiences. Altogether I have had a very instructive and delightful trip.

The Bryanthus you wanted was snow-buried, and I was too lame to dig it out for you, but I will probably go back ere long. I'll be over in a few days or so.

[John Muir]

With the approach of summer, Muir returned to the Yosemite and Mount Whitney region, taking with him his friends William Keith, J. B. McChesney, and John Swett. In the letters he wrote from there to the "San Francisco Evening Bulletin" one feels that the forest trees of the Sierra Nevada are getting a deepening hold upon his imagination. "Throughout all this glorious region," he writes, "there is nothing that so constantly interests and challenges the admiration of the traveller as the belts of forest through which he passes."

Of all the trees of the forest the dearest to him was the sugar pine (*Pinus Lambertiana*), and he frequently refers to it as the "King of the pines." "Many a volume," he declares in one of the letters written on this outing, " might be filled with the history of its development from the brown whirling-winged seed-nut to its ripe and Godlike old age; the quantity and range of its individuality, its gestures in storms or while sleeping in

summer light, the quality of its sugar and nut, and the glossy fragrant wood"—all are distinctive. But, as his notebooks and some of the following letters show, he now begins to make an intensive study of all the trees of the Pacific Coast, particularly of the redwood. Thus, quite unconsciously, he was in training to become the leading defender of the Sierra forests during critical emergencies that arose in the nineties.

To Mrs. Ezra S. Carr

Yosemite Valley, June 3d, 1875

Dear Mrs. Carr: Where are you? Lost in conventions, elections, women's rights and fights, and buried beneath many a load of musty granger hay. You always seem inaccessible to me, as if you were in a crowd, and even when I write, my written words seem to be heard by many that I do not like.

I wish some of your predictions given in your last may come true, like the first you made long ago. Yet somehow it seems hardly likely that you will ever be sufficiently free, for your labors multiply from year to year. Yet who knows.

I found poor Lamon's [James C. Lamon, pioneer settler of Yosemite Valley, who died May 22, 1875. See characterization of him in Muir's *The Yosemite*.] grave, as you directed. The upper end of the Valley seems fairly silent and empty without him.

Keith got fine sketches, and I found new beauties and truths of all kinds. Mack [McChesney] and Swett will tell you all. I send you my buttonhole plume.

Farewell.

To Mrs. Ezra S. Carr

Black's Hotel Yosemite, California July 31st, 1875

John Muir

Dear Mrs. Carr:

I have just arrived from our long excursion to Mount Whitney, all hale and happy, and find your weary plodding letter, containing things that from this rocky standpoint seem strangely mixed—things celestial and terrestrial, cultivated, and wild. Your letters set one a-thinking, and yet somehow they never seem to make those problems of life clear, and I always feel glad that they do not form any part of my work, but that my lessons are simple rocks and waters and plants and humble beasts, all pure and in their places, the Man beast with all his complications being laid upon stronger shoulders.

I did not bring you down any Sedum roots or Cassiope sprays because I had not then received your letter, not that I forgot you as I passed the blessed Sierra heathers, or the primulas, or the pines laden with fragrant, nutty cones. But I am more and more made to feel that my gardens and herbariums and woods are all in their places as they grow, and I know them there, and can find them when I will. Yet I ought to carry their poor dead or dying forms to those who can have no better.

The Valley is lovely, scarce more than a whit the worse for the flower-crushing feet that every summer brings. . . . I am not decided about my summer. I want to go with the Sequoias a month or two into all their homes from north to south, learning what I can of their conditions and prospects, their age, stature, the area they occupy, etc. But John Swett, who is brother now, papa then, orders me home to booking. Bless me, what an awful thing town duty is! I was once free as any pine-playing wind, and feel that I have still a good length of line, but alack! there seems to be a hook or two of civilization in me that I would fain pull out, yet *would not*

pull out—O, O, O!!!

I suppose you are weary of saying book, book, book, and perhaps when you fear me lost in rocks and Mono deserts I will, with Scotch perverseness, do all you ask and more. All this letter is about myself, and why not when I'm the only person in all the wide world that I know anything about—Keith, the cascade, not excepted.

Fare ye well, mother quail, good betide your brood and be they and you saved from the hawks and the big ugly buzzards and cormorants—grangeal, political, right and wrongical,—and I will be

Ever truly John Muir "Only that and nothing more."

To Sarah Muir Galloway

Yosemite Valley, November 2nd, 1875

Dear Sister Sarah:

Here is your letter with the Dalles in it. I'm glad you have escaped so long from the cows and sewing and baking to God's green wild Dalles and dells, for I know you were young again and that the natural love of beauty you possess had free, fair play. I shall never forget the big happy day I spent there on the rocky, gorgey Wisconsin above Kilbourn City. What lanes full of purple orchids and ferns! *Aspidium fragrans* I found there for the first time, and what hillsides of huckleberries and rare asters and goldenrods. Don't you wish you were wild like me and as free to satisfy your love for whatever is pure and beautiful?

I returned last night from a two and a half months' excursion through the grandest portion of the Sierra Nevada forests. You remember reading of the big trees of Calaveras County, discovered fifteen or twenty years ago. Well, I have been studying the species (*Sequoia gigantea*) and have been all this time wandering amid those giants. They extend in a broken, interrupted belt along the western flank of the range a distance of one hundred and eighty miles. But I will not attempt to describe them here. I have written about them and will send you printed descriptions.

I fancy your little flock is growing fast towards prime. Yet how short seems the time when you occupied your family place on Hickory Hill. Our lives go on and close like day—morning, noon, night. Yet how full of pure happiness these life days may be, and how worthy of the God that plans them and suns them,

The book you speak of is not yet commenced, but I must go into winter quarters at once and go to work. While in the field I can only observe—take in, but give nothing out. The first winter snow is just now falling on Yosemite rocks. The domes are whitened, and ere long avalanches will rush with loud boom and roar, like new-made waterfalls. The November number of "Harper's Monthly" contains "Living Glaciers of California." The illustrations are from my pencil sketches, some of which were made when my fingers were so benumbed with frost I could scarcely hold my pencil.

Give my love to David and the children and Mrs. Galloway, and I will hope yet to see you all. But now, once more, Farewell.

[John Muir]

In tracing out the main forest belt of the Sierra Nevada, as Muir did during these years, he became appalled by the destructive forces at work therein. No less than five sawmills were found operating in the edge of the Big Tree belt. On account of the size of the trees and the difficulty of felling them, they were blasted down with dynamite, a proceeding that added a new element of criminal waste to the terrible destruction. The noble Fresno grove of Big Trees and the one situated on the north fork of the Kaweah already were fearfully ravaged. The wonderful grove on the north fork of the Kings River still was intact, but a man by the name of

Charles Converse had just formed a company to reduce it to cheap lumber in the usual wasteful manner.

Hoping to arouse California legislators to at least the economic importance of checking this destruction he sent to the *Sacramento Record Union* a communication entitled God's First Temples," with the sub-heading, "How Shall we Preserve our Forests?" It appeared on February 5, 1876, and while it made little impression upon legislators it made Muir the center around which conservation sentiment began to crystallize. Few at this time had pointed out, as he did, the practical importance of conserving the forests on account of their relation to climate, soil, and water-flow in the streams. The deadliest enemies of the forests and the public good, he declared, were not the sawmills in spite of their slash fires and wastefullness. That unsavory distinction belonged to the "sheep-men," as they were called, and Muir's indictment of them in the above. mentioned article, based upon careful observation, ran as follows.

Incredible numbers of sheep are driven to the mountain pastures every summer, and in order to make easy paths and to improve the pastures, running fires are set everywhere to burn off the old logs and underbrush. These fires are far more universal and destructive than would be guessed. They sweep through nearly the entire forest belt of the range from one extremity to the other, and in the dry weather, before the coming on of winter storms, are very destructive to all kinds of young trees, and especially to sequoia, whose loose, fibrous bark catches and burns at once. Excepting the Calaveras, I, last summer, examined every sequoia grove in the range, together with the main belt extending across the basins of Kaweah and Tule, and found everywhere the most deplorable waste from this cause, Indians burn off underbrush to facilitate deerhunting. Campers of all kinds often permit fires to run, so also do mill-men, but the fires of "sheep-men" probably form more than ninety per cent of all destructive fires that sweep the woods.... Whether our loose-jointed Government is really able or willing to do anything in the matter remains to be seen. If our law-makers were to discover and enforce any method tending to lessen even in a small degree the destruction going on, they would thus cover a multitude of legislative sins in the eyes of every tree lover. I am satisfied, however, that the question can be intelligently discussed only after a careful survey of our forests has been made, together with studies of the forces now acting upon them.

The concluding suggestion bore fruit years afterward when President Cleveland, in 1896, appointed a commission to report upon the condition of the national forest areas.

To Sarah Muir Galloway

1419 Taylor St., San Francisco April 17th, 1876

Dear Sister Sarah:

I was glad the other day to have the hard continuous toil of book writing interrupted by the postman handing in your letter. It is full of news, but I can think of little to put in the letter you ask for.

My life these days is like the life of a glacier, one eternal grind, and the top of my head suffers a weariness at times that you know nothing about. I'm glad to see by the hills across the bay, all yellow and purple with buttercups and gilias, that spring is blending fast into summer, and soon I'll throw down my pen, and take up my heels to go mountaineering once more.

My first book is taking shape now, and is mostly written, but still far from complete. I hope to see it in print, rubbed, and scrubbed, and elaborated, some time next year.

Among the unlooked-for burdens fate is loading upon my toil-doomed shoulders, is this literature and lecture tour. I suppose I will be called upon for two more addresses in San Francisco ere I make my annual hegira to

the woods. A few weeks ago I lectured at San Jose and Oakland.

I'm glad to hear of the general good health and welfare of our scattered and multiplied family, of Katie's returning health, and Joanna's. Remember me warmly to Mrs. Galloway, tell her I will be in Wisconsin in two or three years, and hope to see her, still surrounded by her many affectionate friends. I was pleasantly surprised to notice the enclosed clipping to-day in the "N.Y. Tribune." I also read a notice of a book by Professor James Law of Cornell University, whom I used to play with. I met one of his scholars a short time ago. Give my love to David and all your little big ones.

Ever very affectionately yours John Muir

To Sarah Muir Galloway

1419 Taylor St., San Francisco January 12th, [1877]

Dear Sister Sarah:

I received your welcome letter to-day. I was beginning to think you were neglecting me. The sad news of dear old Mrs. Galloway, though not unexpected, makes me feel that I have lost a friend. Few lives are so beautiful and complete. as hers, and few could have had the glorious satisfaction, in dying, to know that so few words spoken were other than kind, and so few deeds that did anything more than augment the happiness of others. How many really good people waste, and worse than waste, their short lives in mean bickerings, when they might lovingly, in broad Christian charity, enjoy the glorious privilege of doing plain, simple, every-day good. Mrs. Galloway's character was one of the most beautiful and perfect I ever knew.

How delightful it is for you all to gather on the holidays, and what a grand multitude you must make when you are all mustered. Little did I think when I used to be, and am now, fonder of home and still domestic life than any one of the boys, that I only should be a bachelor and doomed to roam always far outside the family circle. But we are governed more than we know and are driven with whips we know not where. Your pleasures, and the happiness of your lives in general, are far greater than you know, being clustered together, yet independent, and living in one of the most beautiful regions under the sun. Long may you all live to enjoy your blessings and to learn to love one another and make sacrifices for one another's good.

You inquire about [my] books. The others I spoke of are a book of excursions, another on Yosemite and the adjacent mountains, and another "Studies in the Sierra" (scientific). The present volume will be descriptive of the Sierra animals, birds, forests, falls, glaciers, etc., which, if I live, you will see next fall or winter. I have not written enough to compose with much facility, and as I am also very careful and have but a limited vocabulary, I make slow progress. Still, although I never meant to write the results of my explorations, now I have begun I rather enjoy it and the public do me the credit of reading all I write, and paying me for it, which is some satisfaction, and I will not probably fail in my first effort on the book, inasmuch as I always make out to accomplish in some way what I undertake.

I don't write regularly for anything, although I'm said to be a regular correspondent of the [San Francisco] "Evening Bulletin," and have the privilege of writing for it when I like. Harper's have two unpublished illustrated articles of mine, but after they pay for them they keep them as long as they like, sometimes a year or more, before publishing.

Love to David and George, and all your fine lassies, and love, dear Sarah, to yourself.

From your wandering brother [John Muir]

The following letter invites comment. Until far into the later years of his life Muir wrote by preference with quills which he cut himself. Over against his bantering remark, that the pen he sends her may be a goose quill after all, should be set the fact that among the mementos preserved by his sister Sarah is a quill-pen wrapped with a cutting from one of John's letters which reads, "Your letter about the first book recalls old happy days on the mountains. The pen you speak of was made of a wing-feather of an eagle, picked up on Mount Hoffman, back a few miles from Yosemite." The book he wrote with it did not see the light of day, at least in the form which he then gave it, and it is not certain what it contained beyond glowing descriptions of Sierra forests and scenery, and appeals for their preservation. That "the world needs the woods" has now become more than a sentimental conviction with him; the moral and economic aspects of the question begin to emerge strongly. One likes to think it a fact of more than poetic significance that such a book by such a man was written with a quill from an eagle's wing, and that the most patriotic service ever rendered by an American eagle was that of the one who contributed a wing pinion to John Muir for the defense of the western forests.

To Sarah Muir Galloway

San Francisco, April 23rd, 1877

My Dear Sister Sarah:

To thee I give and bequeath this old gray quill with which I have written every word of my first book, knowing, as I do, your predilection for curiosities.

I can hardly remember its origin, but I think it is one that I picked up on the mountains, fallen from the wing of a golden eagle; but, possibly, it may be only a pinion feather of some tame old gray goose, and my love of truth compels me to make this unpoetical statement. The book that has grown from its whittled nib is, however, as wild as any that has ever appeared in these tame, civilized days. Perhaps I should have waited until the book was in print, for it is not absolutely certain that it will be accepted by the publishing houses. It has first to be submitted to the tasting critics, but as everything in the way of magazine and newspaper articles that the old pen has ever traced has been accepted and paid for, I reasonably hope I shall have no difficulties in obtaining a publisher, The manuscript has just been sent to New York, and will be reported on in a few weeks. I leave for the mountains of Utah to-day.

The frayed upper end of the pen was produced by nervous gnawing when some interruption—in my logic or rhetoric occurred from stupidity or weariness. I gnawed the upper end to send the thoughts below and out at the other.

Love to all your happy family and to thee and David. The circumstances of my life since I last bade you farewell have wrought many changes in me, but my love for you all has only grown greater from year to year, and whatsoever befalls I shall ever be,

Yours affectionately John Muir

The statement, in the preceding letter, that he is leaving for the mountains of Utah, the reader familiar with Muir's writings will at once connect with the vivid Utah sketches that have appeared in the volume entitled "Steep Trails." In the same book are found the two articles on "The San Gabriel Valley" and "The San Gabriel Mountains," which grew out of an excursion he made into southern California soon after his return from Utah.

Mrs. Carr, who in 1877 had suffered the loss of another of her sons, was at this time preparing to carry out her long cherished plan to retire from public life to her new home in the South. With her for a magnet, Carmelita, as she called it, became for a time the literary center of southern California. There Helen Hunt Jackson wrote the grater part of her novel "Ramona," and numerous other literary folk, both East and West, made it at one time or another the goal of their pilgrimages. In her spacious garden she indulged to the full her passion for bringing together a great variety of unusual plants, shrubs, and trees, many of them contributed by John Muir. Dr. E. M. Congar, mentioned in one of the following letters, had been a fellow student of Muir at the

The Life and Letters of John Muir by William Frederic Badè — John Muir Writings University of Wisconsin.

To Mrs. Ezra S. Carr

Swett Home, July 23rd, [1877]

Dear Mrs. Carr:

I made only a short dash into the dear old Highlands above Yosemite, but all was so full of everything I love, every day seemed a measureless period. I never enjoyed the Tuolumne cataracts so much; coming out of the sun lands, the gray salt deserts of Utah, these wild ice waters sang themselves into my soul more enthusiastically than ever, and the forests' breath was sweeter, and Cassiope fairer than in all my first fresh contacts.

But I am not going to tell it here. I only write now to say that next Saturday I will sail to Los Angeles and spend a few weeks in getting some general views of the adjacent region, then work northward and begin a careful study of the Redwood. I will at least have time this season for the lower portion of the belt, that is for all south of here. If you have any messages, you may have time to write me (I sail at 10 A.M.), or if not, you may direct to Los Angeles. I hope to see Congar, and also the spot you have elected for home. I wish you could be there in your grown, fruitful groves, all rooted and grounded in the fine garden nook that I know you will make. It must be a great consolation, in the midst of the fires you are compassed with, to look forward to a tranquil seclusion in the South of which you are so fond.

John [Swett] says he may not move to Berkeley, and if not I may be here this winter, though I still feel some tendency towards another winter in some mountain den.

It is long indeed since I had anything like a quiet talk with you. You have been going like an avalanche for many a year, and I sometimes fear you will not be able to settle into rest even in the orange groves. I'm glad to know that the Doctor is so well. You must be pained by the shameful attacks made upon your tried friend LaGrange. Farewell.

Ever cordially yours John Muir

To Mrs. Ezra S. Carr

Pico House Los Angeles, California August 12th, 1877

Dear Mrs. Carr:

I've seen your sunny Pasadena and the patch called yours, Everything about here pleases me and I felt sorely tempted to take Dr. Congar's advice and invest in an orange patch myself. I feel sure you will be happy here with the Doctor and Allie among so rich a luxuriance of sunny vegetation, How you will dig and dibble in that mellow loam! I cannot think of you standing erect for a single moment, unless it be in looking away out into the dreamy West.

I made a fine shaggy little five days' excursion back in the heart of the San Gabriel Mountains, and then a week of real pleasure with Congar resurrecting the past about Madison. He has a fine little farm, fine little family, and fine cozy home. I felt at home with Congar and at once took possession of his premises and all that in them is. We drove down through the settlements eastward and saw the best orange groves and vineyards, but the mountains I, as usual, met alone. Although so gray and silent and unpromising they are full of wild gardens and ferneries. Lilyries!—some specimens ten feet high with twenty lilies, big enough for bonnets! The main results I will tell you some other time, should you ever have an hour's leisure.

I go North to-day, by rail to Newhall, thence by stage to Soledad and on to Monterey, where I will take to the woods and feel my way in free study to San Francisco. May reach the City about, the middle of next month. . .

Ever cordially J. M.

To Mrs. Ezra S. Carr

1419 Taylor St., San Francisco September 3d, [1877]

Dear Mrs. Carr:

I have Just been over at Alameda with poor dear old Gibbons. [W. P. Gibbons, M.D., an able amateur botanist and early member of the California Academy of Sciences.] You have seen him, and I need give no particulars. "The only thing I'm afraid of, John," he said, looking up with his old child face, "is that I shall never be able to climb the Oakland hills again." But he is so healthy and so well cared for, we will be strong to hope that he will. He spoke for an hour with characteristic unselfishness on the injustice done Dr. [Albert] Kellogg in failing to recognize his long-continued devotion to science at the botanical love feast held here the other night. He threatens to write up the whole discreditable affair, and is very anxious to obtain from you a copy of that Gray letter to Kellogg which was not delivered.

I had a glorious ramble in the Santa Cruz woods. and have found out one very interesting and picturesque fact concerning the growth of this Sequoia. I mean to devote many a long week to its study. What the upshot may be I cannot guess, but you know I am never sent empty away.

I made an excursion to the summit of Mt. Hamilton in extraordinary style, accompanied by Allen, Norton, Brawley, and all the lady professors and their friends—a curious contrast to my ordinary *still hunting*. Spent a week at San Jose, enjoyed my visit with Allen very much. Lectured to the faculty on methods of study without undergoing any very great scare.

I believe I wrote you from Los Angeles about my Pasadena week. Have sent a couple of letters to the "Bulletin" from there—not yet published.

I have no inflexible plans as yet for the remaming months of the season, but Yosemite seems to place itself as a most persistent candidate for my winter. I shall soon be in flight to the Sierras, or Oregon.

I seem to give up hope of ever seeing you calm again. Don't grind too hard at these Sacramento mills. Remember me to the Doctor and Allie.

Ever yours cordially John Muir

One of the earliest and most distinguished pioneer settlers of California was General John Bidwell, of Chico, at whose extensive and beautiful ranch distinguished travelers and scientists often were hospitably entertained. In 1877, Sir Joseph Hooker and Asa Gray were among the guests of Rancho Chico, when they returned from a botanical trip to Mount Shasta, whither they had gone under the guidance of John Muir. This excursion, on which more later, drew Muir also into the friendly circle of the Bidwell family, and the following letter was written after a prolonged visit at Rancho Chico. "Lize in Jackets," wrote the late Mrs. Annie E. K. Bidwell in kindly transmitting a copy of this letter, "refers to my sister's mule, which, when attacked by yellow jackets whose nests we trod upon, would rise almost perpendicularly, then plunge forward frantically, kicking and twisting her tail with a rapidity that elicited uproarious laughter from Mr. Muir. Each of our riding animals had characteristic movements on this occasion, which Mr. Muir classified with much merriment." Just before his departure, on October 2, Muir expressed the wish that he might be able to descend the Sacramento River in a skiff, whereupon General Bidwell had his ranch car. penter hastily construct a kind of boat in which Muir made the trip described in the following letter.

To General John Bidwell, Mrs. Bidwell, and Miss Sallie Kennedy

Sacramento, October 10th, 1877

Friends three:

The Chico flagship and I are safely arrived in Sacramento, unwrecked, unsnagged, and the whole winding way was one glorious strip of enjoyment. When I bade you good-bye, on the bank I was benumbed and bent down with your lavish kindnesses like one of your vine-laden willows. It is seldom that I experience much difficulty in leaving civilization for God's wilds, but I was loath indeed to leave you three that day after our long free ramble in the mountain woods and that five weeks' rest in your cool fruity home. The last I saw of you was Miss Kennedy white among the leaves like a fleck of mist, then sweeping around a bend you were all gone—the old wildness came back, and I began to observe, and enjoy, and be myself again.

My first camp was made on a little oval island some ten or twelve miles down, where a clump of arching willows formed a fine nestlike shelter; and where I spread my quilt on the gravel and opened the box so daintily and thoughtfully stored for my comfort. I began to reflect again on your real goodness to me from first to last, and said, I'll not forget those Chico three as long as I live."

I placed the two flags at the head of my bed, one on each side, and as the campfire shone upon them the effect was very imposing and patriotic. The night came on full of strange sounds from birds and insects new to me, but the starry sky was clear and came arching over my lowland nest seemingly as bright and familiar with its glorious constellations as when beheld through the thin crisp atmosphere of the mountain-tops.

On the second day the Spoonbill sprang a bad leak from the swelling of the bottom timbers; two of them crumpled out thus [sketch] [After Mrs. Bidwell's death, the writer unfortunately was unable to obtain from her relatives the loan of this letter for the reproduction of the two included sketches.] at a point where they were badly nailed, and I had to run her ashore for repairs. I turned her upside down on a pebbly bar, took out one of the timbers, whittled it carefully down to the right dimensions, replaced it, and nailed it tight and fast with a stone for a hammer; then calked the new joint, shoved her back into the current, and rechristened her "The Snag Jumper." She afterwards behaved splendidly in the most trying places, and leaked only at the rate of fifteen tincupfuls per hour.

Her performances in the way of snag-jumping are truly wonderful. Most snags are covered with slimy algae and lean downstream and the sloping bows of the Jumper enabled her to glance gracefully up and over them, when not too high above the water, while her lightness prevented any strain sufficient to crush her bottom. [Sketch of boat.] On one occasion she took a firm slippery snag a little obliquely and was nearly rolled upside down, as a sod is turned by a plow. Then I charged myself to be more careful, and while rowing often looked well ahead for snag ripples—but soon I came to a long glassy reach, and my vigilance not being eternal, my thoughts wandered upstream back to those grand spring fountains on the head of the McCloud and Pitt. Then I tried to picture those hidden tributaries that flow beneath the lava tablelands, and recognized in them a capital illustration of the fact that in their farthest fountains all rivers are lost to mortal eye, that the sources of all are hidden as those of the Nile, and so, also, that in this respect every river of knowledge is a Nile. Thus I was philosophizing, rowing with a steady stroke, and as the current was rapid, the Jumper was making fine headway, when: with a tremendous bump she reared like "Lize in Jackets," swung around stern downstream, and remained fast on her beam ends, erect like a coffin against a wall. She managed, however, to get out of even this scrape without disaster to herself or to me.

I usually sailed from sunrise to sunset, rowing one third of the time, paddling one third, and drifting the other third in restful comfort, landing now and then to examine a section of the bank or some bush or tree. Under these conditions the voyage to this port was five days in length. On the morning of the third day I hid my craft

in the bank vines and set off cross-lots for the highest of the Marysville Buttes, reached the summit, made my observations, and got back to the river and Jumper by two o'clock. The distance to the nearest foothill of the group is about three miles, but to the base of the southmost and highest butte is six miles, and its elevation is about eighteen hundred feet above its base, or in round numbers two thousand feet above tidewater. The whole group is volcanic, taking sharp basaltic forms near the summit, and with stratified conglomerates of finely polished quartz and metamorphic pebbles tilted against their flanks. There is a sparse growth of live oak and laurel on the southern slopes, the latter predominating, and on the north quite a close tangle of dwarf oak forming a chaparral. I noticed the white mountain spiraea also, and madroña, with a few willows, and three ferns toward the summit. *Pellaea andromedoefolia, Gymnogramma triangularis,* and *Cheilanthes gracillima;* and many a fine flower—penstemons, gilias, and our brave eriogonums of blessed memory. The summit of this highest southmost butte is a coast survey station.

The river is very crooked, becoming more and more so in its lower course, flowing in grand lingering deliberation, now south, now north, east and west with fine un-American indirectness. The upper portion down as far as Colusa is full of rapids, but below this point the current is beautifully calm and lake-like, with innumerable reaches of most surpassing loveliness. How you would have enjoyed it! The bank vines all the way down are of the same species as those that festoon your beautiful Chico Creek (*Vitis californica*), but nowhere do they reach such glorious exuberance of development as with you.

The temperature of the water varies only about two and a half degrees between Chico and Sacramento. a distance by the river of nearly two hundred miles—the upper temperature 64°, the lower 66 1/2°. I found the temperature of the Feather [River] waters at their confluence one degree colder than those of the Sacramento, 65° and 66° respectively, which is a difference in exactly the opposite direction from what I anticipated. All the brown discoloring mud of the lower Sacramento, thus far, is derived from the Feather, and it is curious to observe how completely the two currents keep themselves apart for three or four miles. I never landed to talk to any one, or ask questions, but was frequently cheered from the bank and challenged by old sailors "Ship ahoy," etc., and while seated in the stern reading a magazine and drifting noiselessly with the current, I overheard a deck hand on one of the steamers say, "Now that's what I call taking it aisy."

I am still at a loss to know what there is in the rig or model of the Jumper that excited such universal curiosity. Even the birds of the river, and the animals that came to drink, though paying little or no heed to the passing steamers with all their plash and outroar, at once fixed their attention on my little flagship, some taking flight with loud screams, others waiting with outstretched necks until I nearly touched them, while others circled overhead. The domestic animals usually dashed up the bank in extravagant haste, one crowding on the heels of the other as if suffering extreme terror. I placed one flag, the smaller, on the highest pinnacle of the Butte, where I trust it may long wave to your memory; the other I have still. Watching the thousand land birds—linnets, orioles, sparrows, flickers, quails, etc.—Nature's darlings, taking their morning baths, was no small part of my enjoyments.

I was greatly interested in the fine bank sections shown to extraordinary advantage at the present low water, because they cast so much light upon the formation of this grand valley, but I cannot tell my results here.

This letter is already far too long, and I will hasten to a close. I will rest here a day or so, and then push off again to the mouth of the river a hundred miles or so farther, chiefly to study the deposition of the sediment at the head of the bay, then push for the mountains. I would row up the San Joaquin, but two weeks or more would be required for the trip, and I fear snow on the mountains.

I am glad to know that you are really interested in science, and I might almost venture another lecture upon you, but in the mean time forbear. Looking backward I see you there in your leafy home, and while I wave my hand, I will only wait to thank you all over and over again for the thousand kind things you have done and said—drives, and grapes, and rest, "a' that and a' that."

And now, once more, farewell. Ever cordially your friend John Muir

During this same summer of 1877, and previous to the experiences narrated in the preceding letter, the great English botanist Sir Joseph Dalton Hooker had accepted an invitation from Dr. F. V. Hayden, then in charge of the United States Geological and Geographical Survey of the Territories, to visit under his conduct the Rocky Mountain region, with the object of contributing to the records of the Survey a report on the botany of the western states. Professor Asa Gray was also of the party. After gathering some special botanical collections in Colorado, New Mexico, and Utah, they came to California and persuaded John Muir, on account of his familiarity with the region, to go with them to Mount Shasta. One September evening, as they were encamped on its flanks in a forest of silver firs, Muir built a big fire, whose glow stimulated an abandant flow of interesting conversation. Gray recounted reminiscences of his collecting tours in the Alleghanies; Hooker told of his travels in the Himalayas and of his work with Tyndall, Huxley, and Darwin. "And of course," notes Muir, "we talked of trees, argued the relationship of varying species, etc.; and I remember that Sir Joseph, who in his long active life had traveled through all the great forests of the world, admitted, in reply to a question of mine, that in grandeur, variety, and beauty, no forest on the globe rivaled the great coniferous forests of my much loved Sierra."

But the most memorable incident of that night on the flanks of Shasta grew out of the mention of *Linnoea borealis*—charming little evergreen trailer whose name perpetuates the memory of the illustrious Linnaeus. "Muir, why have you not found *linnoea* in California?" said Gray suddenly during a pause in the conversation. "It must be here, or hereabouts, on the northern boundary of the Sierra. I have heard of it, and have specimens from Washington and Oregon all through these northern woods, and you should have found it here." The camp fire sank into heaps of glowing coals, the conversation ceased, and all fell asleep with *Linnoea* uppermost in their minds.

The next morning Gray continued his work alone, while Hooker and Muir made an excursion westward across one of the upper tributaries of the Sacramento. In crossing a small stream, they noticed a green bank carpeted with what Hooker at once recognized as *Linnoea*—the first discovery of the plant within the bounds of California. "It would seem," said Muir, "that Gray had felt its presence the night before on the mountain ten miles away. That was a great night, the like of which was never to be enjoyed by us again, for we soon separated and Gray died." [Muir's article on Linnus in *Library of the World's Best Literature*, vol, 16 (1897).] The impression Muir made upon Hooker is reflected in his letters. In one of them, written twenty-five years after the event, Hooker declares, "My memory of you is very strong and durable, and that of our days in the forests is inextinguishable."

In the following letter to his sister Muir gives some additional details of the Shasta excursion, and makes reference to an exceedingly strenuous exploring trip up the Middle Fork of the Kings River, from which he had just returned.

To Sarah Muir Galloway

Thanksgiving Evening at old 1419 Taylor St. [*November* 29, 1877]

My Dear Sister Sarah:

I find an unanswered letter of yours dated September 23d, and though I have been very hungry on the mountains a few weeks ago, and have just been making bountiful amends at a regular turkey thank-feast of the old New England type, I must make an effort to answer it, however incapacitated by "stuffing," for, depend upon it, this Turkish method of thanks does make the simplest kind of literary effort hard; one's brains go heavily along the easiest lines like a laden wagon in a bog.

But I can at least answer your questions. The Professor Gray I was with on Shasta is the writer of the school botanies, the most distinguished botanist in America, and Sir Joseph Hooker is the leading botanist of England, We had a fine rare time together in the Shasta forests, discussing the botanical characters of the grandest coniferous trees in the world, camping out, and enjoying ourselves in pure freedom. Gray is an old friend that I led around Yosemite years ago, and with whom I have corresponded for a long time. Sir Joseph I never met before. He is a fine cordial Englishman, President of the Royal Scientific Society, and has charge of the Kew Botanic Gardens. He is a great traveler, but perfectly free from all chilling airs of superiority. He told me a great deal about the Himalayas, the deodar forests there, and the gorgeous rhododendrons that cover their flanks with lavish bloom for miles and miles, and about the cedars of Lebanon that he visited and the distribution of the species in different parts of Syria, and its relation to the deodar so widely extended over the mountains of India. And besides this scientific talk he told many a story and kept the camp in fine lively humor. On taking his leave he gave me a hearty invitation to London, and promised to show me through the famous government gardens at Kew, and all round, etc., etc. When I shall be able to avail myself of this and similar advantages I don't know. I have met a good many of Nature's noblemen one way and another out here, and hope to see some of them at their homes, but my own researches seem to hold me fast to this comparatively solitary life.

Next you speak of my storm night on Shasta. Terrible as it would appear from the account printed, the half was not told, but I will not likely be caught in the same experience again, though as I have said, I have just been very hungry—one meal in four days, coupled with the most difficult, nerve-trying cliff work. This was on Kings River a few weeks ago. Still, strange to say, I did not feel it much, and there seems to be scarce any limit to my endurance.

I am far from being friendless here, and on this particular day I might have eaten a score of prodigious thank dinners if I could have been in as many places at the same time, but the more I learn of the world the happier seems to me the life you live. You speak of your family gatherings, of a week's visit at Mother's and here and there. Make the most of your privileges to trust and love and live in near, unjealous, generous sympathy with one another, for I assure you these are blessings scarce at all recognized in their real divine greatness....

We had a company of fourteen at dinner tonight, and we had what is called a grand time, but these big eating parties never seem to me to pay for the trouble they make, though all seem to enjoy them immensely. A crust by a brookside out on the mountains with God is more to me than all, beyond comparison. Nevertheless these poor legs in their wearniess do enjoy a soft bed at times and plenty of nourishment. I had another grand turkey feast a week ago. Coming home here I left my boat at Martinez, thirty miles up the bay, and walked to Oakland across the top of Mount Diablo, and on the way called at my friends, the Strentzels, who have eighty acres of choice orchards and vineyards, where I rested two days, my first rest in six weeks. They pitied my weary looks, and made me eat and sleep, stuffing me with turkey, chicken, beef, fruits, and jellies in the most extravagant manner imaginable, and begged me to stay a month. Last eve dined at a French friend's in the city, and you would have been surprised to see so temperate a Scotchman doing such justice to French dishes. The fact is I've been hungry ever since starving in the mountain cañons.

This evening the guests would ask me how I felt while starving? Why I did not die like other people? How many bears I had seen, and deer, etc.? How deep the snow is now and where the snow line is located, etc.? Then upstairs we chat and sing and play piano, etc., and then I slip off from the company and write this. Now it [is] near midnight, and I must slip from thee also, wishing you and David and all your dear family goodnight. With love,

[John Muir]

To General John Bidwell

1419 Taylor St., San Francisco December 3, 1877

My Dear General:

I arrived in my old winter quarters here a week ago, my season's field work done, and I was just sitting down to write to Mrs. Bidwell when your letter of November 29th came in. The tardiness of my Kings River postal is easily explained. I committed it to the care of a mountaineer who was about to descend to the lowlands, and he probably carried it for a month or so in his breeches' pocket in accordance with the well-known business habits of that class of men. And now since you are so kindly interested in my welfare I must give you here a sketch of my explorations since I wrote you from Sacramento.

I left Snag-Jumper at Sacramento in charge of a man whose name I have forgotten. He has boats of his own, and I tied Snag to one of his stakes in a snug out-of-the-way nook above the railroad bridge. I met this pilot a mile up the river on his way home from hunting. He kindly led me into port, and then conducted me in the dark up the Barbary Coast into the town; and on taking leave he volunteered the information that he was always kindly disposed towards strangers, but that most people met under such circumstances would have robbed and made away with me, etc. I think, therefore, that leaving Snag in his care will form an interesting experiment on human nature.

I fully intended to sail on down into the bay and up the San Joaquin as far as Millerton, but when I came to examine a map of the river deltas and found that the distance was upwards of three hundred miles, and learned also that the upper San Joaquin was not navigable this dry year even for my craft, and when I also took into consideration the approach of winter and danger of snowstorms on the Kings River summits, I concluded to urge my way into the mountains at once, and leave the San Joaquin studies until my return.

Accordingly I took the steamer to San Francisco, where I remained one day, leaving extra baggage, and getting some changes of clothing. Then went direct by rail to Visalia, thence pushed up the mountains to Hyde's Mill on the Kaweah, where I obtained some flour, which, together with the tea Mrs. Bidwell supplied me with, and that piece of dried beef, and a little sugar, constituted my stock of provisions. From here I crossed the divide, going northward through fine Sequoia woods to Converse's on Kings River. Here I spent two days making some studies on the Big Trees, chiefly with reference to their age. Then I turned eastward and pushed off into the glorious wilderness, following the general direction of the South Fork a few miles back from the brink until I had crossed three tributary cañons from 1500 to 2000 feet deep. In the eastmost and middle one of the three I was delighted to discover some four or five square miles of Sequoia, where I had long guessed the existence of these grand old tree kings.

After this capital discovery I made my way to the bottom of the main South Fork Cañon down a rugged side gorge, having a descent of more than four thousand feet. This was at a point about two miles above the confluence of Boulder Creek. From here I pushed slowly on up the bottom of the cañon, through brush and avalanche boulders, past many a charming fall and garden sacred to nature, and at length reached the grand yosemite at the head, where I stopped two days to make some measurements of the cliffs and cascades. This done, I crossed over the divide to the Middle Fork by a pass 12,200 feet high, and struck the head of a small tributary that conducted me to the head of the main Middle Fork Cañon, which I followed down through its entire length, though it has hitherto been regarded as absolutely inaccessible in its lower reaches. This accomplished, and all my necessary sketches and measurements made, I climbed the cañon wall below the confluence of the Middle and South Forks and came out at Converse's again; then back to Hyde's Mill, Visalia, and thence to Merced City by rail, thence by stage to Snelling, and thence to Hopeton afoot.

Here I built a little unpretentious successor to Snag out of some gnarled, sun-twisted fencing, launched it in the Merced opposite the village, and rowed down into the San Joaquin—thence down the San Joaquin past Stockton and through the tule region into the bay near Martinez. There I abandoned my boat and set off cross lots for Mount Diablo, spent a night on the summit, and walked the next day into Oakland. And here my fine summer's wanderings came to an end. And now I find that this mere skeleton finger board indication of my

excursion has filled at least the space of a long letter, while I have told you nothing of my gains. If you were nearer I would take a day or two and come and report, and talk inveterately in and out of season until you would be glad to have me once more in the cañons and silence. But Chico is far, and I can only finish with a catalogue of my new riches, setting them down one after the other like words in a spelling book.

- 1. Four or five square miles of Sequoias.
- 2. The ages of twenty-six specimen Sequoias,
- 3. A fine fact about bears,
- 4. A sure measurement of the deepest of all the ancient glaciers yet traced in the Sierra.
- 5. Two waterfalls of the first order, and cascades innumerable.
- 6. A new Yosemite valley!!!
- 7. Grand facts concerning the formation of the central plain of California.
- 8. A picturesque cluster of facts concerning the river birds and animals.
- 9. A glorious series of new landscapes, with mountain furniture and garniture of the most ravishing grandeur and beauty.

Here, Mrs. Bidwell, is a rose leaf from a wild briar on Mount Diablo whose leaves are more flowery than its petals. Isn't it beautiful? That new Yosemite Valley is located in the heart of the Middle Fork Cañon, the most remote, and inaccessible, and one of the very grandest of all the mountain temples of the range. It is still sacred to Nature, its gardens untrodden, and every nook and rejoicing cataract wears the bloom and glad sun-beauty of primeval wildness—ferns and lilies and grasses over one's head. I saw a flock of five deer in one of its open meadows, and a grizzly bear quietly munching acorns under a tree within a few steps.

The cold was keen and searching the night I spent on the summit by the edge of a glacier lake twenty-two degrees below the freezing point, and a storm wind blowing in fine hearty surges among the shattered cliffs overhead, and, to crown all, snow flowers began to fly a few minutes after midnight, causing me to fold that quilt of yours and fly to avoid a serious snowbound. By daylight I was down in the main Middle Fork in a milder climate and safer position at an elevation of only seventy-five hundred feet. All the summit peaks were quickly clad in close unbroken white.

I was terribly hungry ere I got out of this wild cañon—had less than sufficient for one meal in the last four days, and this, coupled with very hard nerve-trying cliff work was sufficiently exhausting for any mountaineer. Yet strange to say, I did not suffer much. Crystal water, and air, and honey sucked from the scarlet flowers of Zauschneria, about one tenth as much as would suffice for a humming bird, was my last breakfast—a very temperate meal, was it not?—wholly ungross and very nearly spiritual. The last effort before reaching food was a climb up out of the main cañon of five thousand feet, Still I made it in fair time—only a little faint, no giddiness, want of spirit, or incapacity to observe and enjoy, or any nonsense of this kind. How I should have liked to have then tumbled into your care for a day or two!

My sail down the Merced and San Joaquin was about two hundred and fifty miles in length and took two weeks, a far more difficult and less interesting [trip], as far as scenery is concerned, than my memorable first voyage down the Sacramento. Sandbars and gravelly riffles, as well as snags gave me much trouble, and in the Tule wilderness I had to tether my tiny craft to a bunch of rushes and sleep cold in her bottom with the seat for a pillow. I have gotten past most of the weariness but am hungry yet notwithstanding friends have been stuffing me here ever since. I may go hungry through life and into the very grave and beyond unless you effect a cure, and I'm sure I should like to try Rancho Chico—would have tried it ere this were you not so far off.

I slept in your quilt all through the excursion, and brought it here tolerably clean and whole. The flag I left tied to the bushtop in the bottom of the third F Cañon. I have not yet written to Gray, have you? Remember me to your sister, I mean to write to her soon. I must close. With lively remembrances of your rare kindness, I

am

Ever very cordially yours John Muir

To Dr. and Mrs. John Strentzel, and Miss Strentzel

1419 Taylor St., San Francisco December 5th, 1877

Friends three: I made a capital little excursion over

I made a capital little excursion over your Mount Diablo and arrived in good order in San Francisco after that fine rest in your wee white house.

I sauntered on leisurely after bidding you good-bye, enjoying the landscape as it was gradually unrolled in the evening light. One charming bit of picture after another came into view at every turn of the road, and while the sunset fires were burning brightest I had attained an elevation sufficient for a grand comprehensive feast.

I reached the summit a little after dark and selected a sheltered nook in the chaparral to rest for the night and await the coming of the sun. The wind blew a gale, but I did not suffer much from the cold. The night was keen and crisp and the stars shone out with better brilliancy than one could hope for in these lowland atmospheres.

The sunrise was truly glorious. After lingering an hour or so, observing and feasting and making a few notes, I went down to that halfway hotel for breakfast. I was the only guest, while the family numbered four, well attired and intellectual looking persons, who for a time kept up a solemn, quakerish silence which I tried in vain to break up. But at length all four began a hearty, spontaneous discussion upon the art of cat killing, solemnly and decently relating in turn all their experience in this delightful business in bygone time, embracing everything with grave fervor in the whole scale of cat, all the way up from sackfuls of purblind kittens to tigerish Toms. Then I knew that such knowledge was attainable only by intellectual New Englanders.

My walk down the mountain-side across the valleys and through the Oakland hills was very delightful, and I feasted on many a bit of pure picture in purple and gold, Nature's best, and beheld the most ravishingly beautiful sunset on the Bay I ever yet enjoyed in the low-lands.

I shall not soon forget the rest I enjoyed in your pure white bed, or the feast on your fruity table. Seldom have I been so deeply weary, and as for hunger, I've been hungry still in spite of it all, and for aught I see in the signs of the stomach may go hungry on through life and into the grave and beyond

Heaven forbid a dry year! May wheat grow!

With lively remembrances of your rare kindness, I am,

Very cordially your friend John Muir

The winter and the spring months passed swiftly in the effort to correlate and put into literary form his study of the forests. There were additional "tree days," too, and other visits with the congenial three on the Strentzel ranch. But when the Swetts, with whom he made his home, departed for the summer, taking their little daughter with them, he furloughed himself to the woods again without ceremony. "Helen Swett," he wrote to the Strentzels on May 5th, "left this morning, and the house is in every way most dolefully dull, and I won't stay in it. Will go into the woods, perhaps about Mendocino—will see more trees."

Chapter XIII Nevada, Alaska, and a Home 1878-1880

During the summer of 1878 the United States Coast and Geodetic Survey made a reconnaissance along the 39th parallel of latitude in order to effect the primary triangulation of Nevada and Utah. The survey party was in charge of Assistant August F. Rodgers, and was making preparations to set out from Sacramento in June, when Muir returned from a trip to the headwaters of the north and middle forks of the American River. He decided immediately to accept an invitation to join the party, although some of his friends, notably the Strentzels, sought to dissuade him on account of the Indian disturbances which had made Nevada unsafe territory for a number of years, Idaho was then actually in the throes of an Indian war that entailed the destruction and abandonment of the Malheur Reservation across the boundary in Oregon.

But the perils of the situation were in Muir's view outweighed by the exceptional opportunity to explore numerous detached mountain ranges and valleys of Nevada about which little was known at the time. "If an explorer of God's fine wildernesses should wait until every danger be removed," he wrote to Mrs. Strentzel, "then he would wait until the sun set. The war country lies to the north of our line of work, some two or three hundred miles. Some of the Pah Utes have gone north to join the Bannocks, and those left behind are not to be trusted, but we shall be well armed, and they will not dare to attack a party like ours unless they mean to declare war, however gladly they might seize the opportunity of killing a lonely and unknown explorer. In any case we will never be more than two hundred miles from the railroad."

Unfortunately Muir, becoming absorbed the following year in the wonders of Alaska, never found time to reduce his Nevada explorations to writing in the form of well-considered articles. He did, however, write for the "San Francisco Evening Bulletin" a number of sketches during the progress of the expedition, and these, published in "Steep Trails," can now be supplemented with the following letters to the Strentzels—the only extant series written during that expedition.

Since Muir ultimately married into the Strentzel family, its antecedents are of interest to the reader and may be sketched briefly in this connection. John Strentzel, born in Lublin, Poland, was a participant in the unsuccessful Polish revolution of 1830. To escape the bitter fate of being drafted into the victorious Russian army he fled to Upper Hungary where he obtained a practical knowledge of viticulture, and later was trained as a physician at the University of Buda-Pesth. Coming to the United States in 1840, he joined at Louisville, Kentucky, a party of pioneers known as Peters' Colonization Company,-and went with them to the Trinity River in Texas, where he built a cabin on the present site of the city of Dallas, then a wild Comanche country. When the colony failed and dispersed he removed to Lamar County in the same state, was married at Honeygrove to Louisiana Erwin, a native of Tennessee, and in 1849, with his wife and baby daughter, came across the plains from Texas to California as medical adviser to the Clarkesville "train" of pioneer immigrants. Not long afterwards he settled in the Alhambra Valley [According to the journal of Dr. Strentzel, this was not the original name of the valley. A company of Spanish soldiers, sent to chastise some Indians, was unable to obtain provisions there, and so named it, "Canada de la Hambre," or Valley of Hunger. "Mrs. Strentzel, on arriving here," writes her husband, "was displeased with the name, and, remembering Irving's glowing description of the Moorish paradise, decided to re-christen our home Alhambra." Ever since then the valley has borne this modification of the original name.] near Martinez, and became one of the earliest and most successful horticulturists of California.



Louie Wanda Strentzel (Mrs. John Muir)

Miss Louie Wanda Strentzel, now arrived at mature womanhood, was not only the pride of the family, but was known widely for the grace with which she dispensed the generous hospitality of the Strentzel household. She had received her education in the Atkins Seminary for Young Ladies at Benicia and, according to her father, was "passionately fond of flowers and music." Among her admiring friends was Mrs. Carr, who at various times had vainly tried to bring about a meeting between Miss Strentzel and Mr. Muir. "You see how I am snubbed in trying to get John Muir to accompany me to your house this week," wrote Mrs. Carr in April, 1875. Mount Shasta was in opposition at the time, and easily won the choice.

But so many roads and interests met at the Strentzel ranch, so many friends had the two in common, that sooner or later an acquaintanceship was bound to result. In 1878 Muir began to be a frequent and fondly expected guest in the Strentzel household, and he was to discover ere long that the most beautiful adventures are not those one deliberately goes to seek.

Meantime, despite the dissuasion of his solicitous friends, he was off to the wildernesses of Nevada. Since the Survey had adopted for triangulation purposes a pentagon whose angles met at Genoa Peak, the party first made its way to the town of the same name in its vicinity, where the first of the following letters was written.

To Dr. and Mrs. Strentzel

Genoa, Nevada, July 6, 1878

Dear Strentzels:

We rode our horses from Sacramento to this little village via Placerville and Lake Tahoe. The plains and foothills were terribly hot, the upper Sierra along the south fork of the American River cool and picturesque, and the Lake region almost cold. Spent three delightful days at the Lake—steamed around it, and visited Cascade Lake a mile beyond the western shore of Tahoe.

We are now making up our train ready to push off into the Great Basin. Am well mounted, and with the fine brave old garden desert before me, fear no ill. We will probably reach Austin, Nevada, in about a month. Write to me there, care Captain A. F. Rodgers.

Your fruity hollow wears a most beautiful and benignant aspect from this alkaline standpoint, and so does the memory of your extravagant kindness.

Farewell John Muir

To Dr. and Mrs. Strentzel

West Walker River Near Wellington's Station July 11th, 1878

Dear Strentzels:

We are now fairly free in the sunny basin of the grand old sea that stretched from the Wasatch to the Sierra. There is something perfectly enchanting to me in this young desert with its stranded island ranges. How bravely they rejoice in the flooding sunshine and endure the heat and drought.

All goes well in camp. All the Indians we meet are harmless as sagebushes, though perhaps about as bitter at heart. The river here goes brawling out into the plain after breaking through a range of basaltic lava.

In three days we shall be on top of Mount Grant, the highest peak of the Wassuck Range, to the west of Walker Lake.

I send you some Nevada prunes, or peaches rather. They are very handsome and have a fine wild flavor. The bushes are from three to six feet high, growing among the sage. It is a true *Prunus*. Whether cultivation could ever make it soft enough and big enough for civilized teeth I dinna ken, but guess so. Plant it and see. It will not be ashamed of any pampered "free" or "cling," or even your oranges.

The wild brier roses are in full bloom, sweeter and bonnier far than Louie's best, bonnie though they be.

I can see no post-office ahead nearer than Austin, Nevada, which we may reach in three weeks. The packs are afloat.

Good-morning. [John Muir]

To Dr. John Strentzel

Austin, Nevada August 5th, 1878

Dear Doctor:

Your kind note of the 24th was received the other day and your discussion of fruits and the fineness in general of civilized things takes me at some little disadvantage.

From the "Switch" we rode to the old Fort Churchill on the Carson and at the "Upper" lower end of Mason Valley were delighted to find the ancient outlet of Walker Lake down through a very picturesque cañon to its confluence with the Carson. It appears therefore that not only the Humboldt and Carson, but the Walker River also poured its waters into the Great Sink towards the end of the glacial period. From Fort Churchill we pushed east-ward between Carson Lake and the Sink. Boo! how hot it was riding in the solenm, silent glare, shadeless, waterless. Here is what the early emigrants called the forty-mile desert, well marked with bones and broken wagons. Strange how the very sunshine may become dreary. How strange a spell this region casts over poor mortals accustomed to shade and coolness and green fertility. Yet there is no real cause, that I could see, for reasonable beings losing their wits and becoming frightened. There are the lovely tender abronias blooming in the fervid sand and sun, and a species of sunflower, and a curious leguminous bush crowded with purple blossoms, and a green saltwort, and four or five species of artemisia, really beautiful, and three or four handsome grasses.

Lizards reveled in the grateful heat and a brave little tamias that carries his tail forward over his back, and here and there a hare. Immense areas, however, are smooth and hard and plantless, reflecting light like water. How eloquently they tell of the period, just gone by, when this region was as remarkable for its lavish abundance of lake water as now for its aridity. The same grand geological story is inscribed on the mountain flanks, old beach lines that seem to have been drawn with a ruler, registering the successive levels at which the grand lake stood, corresponding most significantly with the fluctuations of the glaciers as marked by the terraced lateral moraines and successively higher terminal moraines.

After crossing the Sink we ascended the mountain range that bounds it on the East, eight thousand to ten thousand feet high. How treeless and barren it seemed. Yet how full of small charming gardens, with mints, primroses, brier-roses, penstemons, spiraeas, etc., watered by trickling streams too small to sing audibly. How glorious a view of the Sink from the mountain-top. The colors are ineffably lovely, as if here Nature were doing her very best painting.

But a letter tells little. We next ascended the Augusta Range, crossed the Desetoya and Shoshone ranges, then crossed Reese River valley and ascended the Toyabe Range, eleven thousand feet high. Lovely gardens in all. Discovered here the true *Pinus flexilis* at ten thousand feet. It enters the Sierra in one or two places on the south extremity of the Sierra, east flank. Saw only one rattlesnake. No hostile Indians. Had a visit at my tent yesterday from Captain Bob, one of the Pah Ute plenipotentiaries who lately visited McDowell at San Francisco. Next address for two weeks from this date, Eureka, Nevada.

I'm sure I showed my appreciation of good things. That's a fine suggestion about the grapes. Try me, Doctor, on tame, tame Tokays.

Cordially yours John Muir

To Dr. and Mrs. John Strentzel

In camp near Belmont, Nevada August 28th, 1878

Dear Strentzels:

I sent you a note from Austin. Thence we traveled southward down the Big Smoky Valley, crossing and recrossing it between the Toyabe and Toquima Ranges, the dominating summits of which we ascended. Thence still southward towards Death Valley to Lone Mountain; thence northeastward to this little mining town.

From the summit of a huge volcanic table mountain of the Toquima Range I observed a truly glorious spectacle—a dozen "cloud-bursts" falling at once while we were cordially pelted with hail. The falling water cloud-drapery, thunder tones, lightning, and tranquil blue sky windows between made one of the most impressive pictures I ever beheld. One of these cloudbursts fell upon Austin, another upon Eureka. But still more glorious to me was the big significant fact I found here, fresh, telling glacial phenomena—a whole series. Moraines, *roches moutonnées*, glacial sculptures, and even feeble specimens of glacier meadows and glacier lakes. I also observed less manifest glaciation on several other ranges. I have long guessed that this Great Basin was loaded with ice during the last cold period; but the rocks are as unresisting and the water spouts to which all the ranges have been exposed have not simply obscured the glacial scriptures here, but nearly buried and obliterated them, so that only the skilled observer would detect a single word, and he would probably be called a glaciated monomaniac. Now it is clear that this fiery inland region was icy prior to the lake period.

I have also been so fortunate as to settle that pine species we discussed, and found the nest and young of the Alpine sparrow. What do you think of all this—"A' that and a' that"? The sun heat has been intense. What a triangle of noses!—Captain Rodgers', Eimbeck's, and mine—mine sore, Eimbeck's sorer, Captain's

sorest—scaled and dry as the backs of lizards, and divided into sections all over the surface and turned up on the edges like the surface layers of the desiccated sections of adobe flats.

On Lone Mountain we were *thirsty*. How we thought of the cool singing streams of the Sierra while our blood fevered and boiled and throbbed! Three of us ascended the mountain against my counsel and remonstrances while forty miles from any known water. Two of the three nearly lost their lives. I suffered least, though I suffered as never before, and was the only one strong enough to ascend a sandy cañon to find and fetch the animals after descending the mountain. Then I had to find my two companions. One I found death-like, lying in the hot sand, scarcely conscious and unable to speak above a frightful whisper. I managed, however, to get him on his horse. The other I found in a kind of delirious stupor, voiceless, in the sagebrush. It was a fearfully exciting search, and I forgot my own exhaustion in it, though I never for a moment lost my will and wits, or doubted our ability to endure and escape. We reached water at daybreak of the second day—two days and nights in this fire without water! A lesson has been learned that will last, and we will not suffer so again. Of course we could not eat or sleep all this time, for we could not swallow food and the fever prevented sleep. Tomorrow we set out for the White Pine region.

Cordially yours J. Muir

To Mrs. John Strentzel

Bilmont, Nevada August 31st, 1876

Dear Mrs. Strentzel:

I wrote you a note the other day before receiving your letter of the 14th which reached me this morning. The men are packing up and I have only a moment, We have been engaged so long southward that we may not go to Eureka. If not we will make direct to Hamilton and the box the Doctor so kindly sent I will have forwarded.

The fiery sun is pouring his first beams across the gray Belmont hills, but so long as there is anything like a fair supply of any kind of water to keep my blood thin and flowing, it affects me but little. We are all well again, or nearly so—I quite. Our leader still shows traces of fever. The difference between wet and dry bulb thermometer here is often 40° or more, causing excessive waste from lungs and skin, and, unless water be constantly supplied, one's blood seems to thicken to such an extent that if Shylock should ask, "If you prick him, will he bleed?" I should answer, "I dinna ken." Heavens! if the juicy grapes had come manna-like from the sky that last thirst-night!

Farewell. We go.

Cordially and thankfully yours John Muir vening of the same day, on the reverse of the letter-sheet]

[The following note was written, probably the evening of the same day, on the reverse of the letter-sheet]

The very finest, softest, most ethereal purple hue tinges, permeates, covers, glorifies the mountains and the level. How lovely then, how suggestive of the best heaven, how unlike a desert now! While the little garden, the hurrying moths, the opening flowers, and the cool evening wind that now begins to flow and lave down the gray slopes above, heighten the peacefulness and loveliness of the scene.

To Dr. and Mrs. John Strentzel

Hamilton, Nevada September 11, 1878

Dear Strentzels:

All goes well in camp save that box of grapes you so kindly sent. I telegraphed for it, on arriving at this place, to be sent by Wells Fargo, but it has not come, and we leave here tomorrow. We had hoped to have been in Eureka by the middle of last month, but the unknown factors so abundant in our work have pushed us so far southward we will not now be likely to go there at all. Nevertheless I have enjoyed your kindness even in this last grape expression of it, but you must not try to send any more, because we will not again be within grape range of railroads until on our way home in October or November. Then, should there be any left, I will manifest for my own good and the edification of civilization a fruit capacity and fervor to be found only in savage camps.

Since our Lone Mountain experience we have not been thirsty. Our course hence is first south for eighty or ninety miles along the western flank of the White Pine Range, then east to the Snake Range near the boundary of the State, etc.

Our address will be Hamilton, Nevada, until the end of this month. Our movements being so uncertain, we prefer to have our mail forwarded to points where we chance to find ourselves. In southern Utah the greater portion of our course will be across deserts.

The roses are past bloom, but I'll send seeds from the first garden I find. Yesterday found on Mount Hamilton the *Pinus aristata* growing on limestone and presenting the most extravagant picturesqueness I have ever met in any climate or species. Glacial traces, too, of great interest. This is the famous White Pine mining region, now nearly dead. Twenty-eight thousand mining claims were located in the district, which is six miles by twelve. Now only fifteen are worked, and of these only one, the Eberhardt, gives much hope or money. Both Hamilton and Treasure City are silent now, but Nature goes on gloriously.

Cordially yours John Muir

To Dr. John Strentzel

Ward, Nevada, Saturday morning September 28th, 1878

Dear Doctor:

Your kind letter of the 8th ultimo reached me yesterday, having been forwarded from Hamilton. This is a little three-year-old mining town where we are making a few days' halt to transact some business and rest the weary animals. We arrived late, when it was too dark to set the tents, and we recklessly camped in a corral on a breezy hilltop. I have a great horror of sleeping upon any trodden ground near human settlements, not to say ammoniacal pens, but the Captain had his blankets spread alongside the wagon, and I dared the worst and lay down beside him. A wild equinoctial gale roared and tumbled down the mountain-side all through the night, sifting the dry fragrant snuff about our eyes and ears, notwithstanding all our care in tucking and rolling our ample blankets. The situation was not exactly distressing, but most absurdly and d—-dly ludicrous. Our camp traps, basins, bowls, bags, went speeding wildly past in screeching rumbling discord with the earnest wind-tones. A heavy mill-frame was blown down, but we suffered no great damage, most of our runaway gear having been found in fence corners. But how terribly we stood in need of deodorizers!—not dealkalizers, as you suggest.

Next morning we rented a couple of rooms in town where we now are and washed, rubbed, dusted, and combed ourselves back again into countenance. Half an hour ago, after reading your letter a second time, I tumbled out my pine tails, tassels, and burrs, and was down on my knees on the floor making a selection for you according to your wishes and was casting about as to the chances of finding a suitable box, when the Captain, returning from the post-office, handed me your richly laden grape box, and now the grapes are out

and the burrs are in. Now this was a coincidence worth noting, was it not?—better than most people's special providence The fruit was in perfect condition, every individual spheroid of them all fresh and bright and as tightly bent as drums with their stored-up sun-juices. The big bunch is hung up for the benefit of eyes, most of the others have already vanished, causing, as they fled, a series of the finest sensuous nerve-waves imaginable.

The weather is now much cooler—the nights almost bracingly cold—and all goes well, not a thirst trace left. We were weather-bound a week in a cañon of the Golden Gate Range, not by storms, but by soft, balmy, hazy Indian summer, in which the mountain aspens ripened to flaming yellow, while the sky was too opaque for observations upon the distant peaks.

Since leaving Hamilton, have obtained more glacial facts of great interest, very telling in the history, of the Great Basin. Also many charming additions to the thousand, thousand pictures of Nature's mountain beauty. I understand perfectly your criticism on the blind pursuit of every scientific pebble, wasting a life in microscopic examinations of every grain of wheat in a field, but I am not so doing. The history of this vast wonderland is scarce at all known, and no amount of study in other fields will develop it to the light. As to that special thirst affair, I was in no way responsible. I was fully awake to the danger, but I was not in a position to prevent it.

Our work goes on hopefully towards a satisfactory termination. Will soon be in Utah. All the mountains yet to be climbed have been seen from other summits save two on the Wasatch, viz. Mount Nebo and a peak back of Beaver. Our next object will be Wheeler's Peak, forty miles east of here.

The fir I send you is remarkably like the Sierra grandis, but much smaller, seldom attaining a greater height than fifty feet. In going east from the Sierra it was first met on the Hot Creek Range, and afterwards on all the higher ranges thus far. It also occurs on the Wasatch and Oquirrh Mountains. Of the two pines, that with the larger cones is called "White Pine" by the settlers. It was first met on Cory's Peak west of Walker Lake, and afterwards on all the mountains thus far that reached an elevation of ten thousand feet or more. This, I have no doubt, is the species so rare on the Sierra, and which I found on the eastern slope opposite the head of Owens Valley. Two years ago I saw it on the Wasatch above Salt Lake. I mean to send specimens to Gray and Hooker, as they doubtless observed it on the Rocky Mountains. The other species is the arislata of the southern portion of the Sierra above the Kern and Kings Rivers. Is but little known, though exceedingly interesting. First met on the Hot Creek Range, and more abundantly on the White Pine Mountains-called Fox-Tail Pine by the miners, on account of its long bushy tassels. It is by far the most picturesque of all pines, and those of these basin ranges far surpass those of the Sierra in extravagant and unusual beauty of the picturesque kind. These three species and the Fremont or nut pine and junipers are the only coniferous trees I have thus far met in the State. Possibly the Yellow Pine (ponderosa) may be found on the Snake Range. I observed it last year on the Wasatch, together with one Abies. Of course that small portion of Nevada which extends into the Sierra about Lake Tahoe is not considered in this connection, for it is naturally a portion of California,

Cordially yours John Muir

Upon his return from the mountains of Nevada Muir found that sickness had invaded the family of John Swett, with whom he had made his home for the last three years, and it became necessary for him to find new lodgings. In a letter addressed to Mrs. John Bidwell, under date of February 17, 1879, he writes: "I have settled for the winter at 920 Valencia Street [San Francisco], with my friend Mr. [Isaac] Upham, of Payot, Upham and Company, Booksellers; am comfortable, but not very fruitful thus far—reading more than writing." This remained his temporary abode until his marriage and removal to Martinez the following year.

The famous wooden clock shared also this last removal and continued its service as a faithful timepiece for many years to come.

To Dr. and Mrs. John Strentzel 920 Valencia St., San Francisco January 28th, 1879

Dear Friends:

The vast soul-stirring work of flitting is at length done and well done. Myself, wooden clock, and notebooks are once more planted for the winter out here on the outermost ragged edge of this howling metropolis of dwelling boxes.

And now, well what now? Nothing but work, bookmaking, brick-making, the transformation of raw bush sugar and mountain meal into magazine cookies and snaps. And though the spectacled critics who ken everything in wise ignorance say "well done, sir, well done," I always feel that there is something not quite honorable in thus dealing with God's wild gold—the sugar and meal, I mean.

Yesterday I began to try to cook a mess of bees, but have not yet succeeded in making the ink run sweet. The blessed brownies winna buzz in this temperature, and what can a body do about it? Maybe ignorance is the deil that is spoiling the—the—the broth—the nectar, and perhaps I ought to go out and gather some more Melissa and thyme and white sage for the pot.

The streets here are barren and beeless and ineffably muddy and mean-looking. How people can keep hold of the conceptions of New Jerusalem and immortality of souls with so much mud and gutter, is to me admirably strange. A Eucalyptus bush on every other comer, standing tied to a painted stick, and a geranium sprout in a pot on every tenth window sill may help heavenward a little, but how little amid so muckle down-dragging mud!

This much for despondency; per contra, the grass and grain is growing, and man will be fed, and the nations will be glad, etc., and the sun rises every day.

Helen [Swett] is well out of danger, and is very nearly her own sweet amiable engaging little self again, and I can see her at least once a week.

I'm living with Mr. Upham and am comfortable as possible. Summer will soon be again.

When you come to the city visit me, and see how bravely I endure; so touching a lesson of resignation to metropolitan evils and goods should not be lightly missed.

Hoping all goes well with you, I am,

Cordially your friend John Muir

Frequently, in letters to friends, Muir complains that in town he is unable to compel the right mood for the production of readable articles. "As yet I have accomplished very nearly nothing," he writes some weeks after the above letter; he had only "reviewed a little book, and written a first sketch of our bee pastures!... How astoundingly empty and dry—box-like!—is our brain in a house built on one of those precious 'lots' one hears so much about!"

The fact is that Muir's personal letters, like his conversation, flowed smoothly and easily; but when he sat down to write an article, his critical faculty was called into play, and his thoughts, to employ his own simile, began to labor like a laden wagon in a bog. There was a consequent loss of that spontaneity which made him such a fascinating talker. "John polishes his articles until an ordinary man slips on them," remarked his friend and neighbor John Swett when he wished to underline his own sense of the difference between Muir's spoken and written words. Such was the brilliance of his conversation during the decades of his greatest power that the fame of it still lingers as a literary tradition in California. Organizations and individuals vied with each other to secure his attendance at public and private gatherings, convinced that the announcement "John Muir will be there" would assure the success of any meeting. It was with this thought in mind that the manager of a great Sunday-School convention, scheduled to meet in Yosemite in June, 1879, offered him a hundred dollars just to come and talk.

It seems a pity that in his earlier years no one thought of having his vivid recitals of observations and adventures recorded by a stenographer and then placed before him for revision. By direction of the late E. H. Harriman, Muir's boyhood memoirs were taken down from his conversation at Pelican Lodge to be subsequently revised for publication. Though he often entirely rewrote the conversational first draft, the possession of the raw material in typed form acted as a stimulus to literary production, and enabled him to bring to completion what otherwise might have been lost to the world.

But, however much he chafed and groaned under the necessity of meeting his contracts for articles, the remarkable series which he wrote during the late seventies for "Harper's Magazine" and "Scribner's Monthly" are conclusive demonstrations of his power. Among them was "The Humming-Bird of the California Waterfalls" which loaded his mail with letters from near and far, and evoked admiration from the foremost writers of the time. Though Muir was not without self-esteem, the flood of praise that descended upon him gave him more embarrassment than gratification, especially when his sisters desired to know the identity of this or that lady who had dedicated a poem to him.

Scarcely any one knew at this time that there was a lady not far from San Francisco who, though not writing poems, was playing rival to the bee pastures of his articles, and that when, during the spring of 1879, he disappeared occasionally from the Upham household on Valencia Street, he could have been found, and not alone, in the Strentzel orchards at Martinez. "Every one," writes John to Miss Strentzel in April—"every one, according to the eternal unfitness of civilized things, has been seeking me and calling on me while I was away. John Swett, on his second failure to find me, left word with Mr. Upham that he was coming to Martinez some time to see me during the summer vacation! The other day I chanced to find in my pocket that slippery, fuzzy mesh you wear round your neck." The feminine world probably will recognize in the last sentence a characteristically masculine description of a kind of head-covering fashionable in those days and known as a "fascinator."

The same letter contains evidence that the orchards did not let him forget them when he returned to San Francisco, for after reporting that he had finished "Snow Banners" and is at work upon "Floods," he breaks off in the middle of a sentence to exclaim "Boo!!! aren't they lovely!!! The bushel of bloom, I mean. Just came this moment. Never was so blankly puzzled in making a guess before lifting the lid. An orchard in a band-box!!! Who wad ha thocht it? A swarm of bees and fifty humming-birds would have made the thing complete."

Early in the year Muir had carefully laid his plans for a new exploration trip, this time into the Puget Sound region. There doubtless was something in the circumstances and uncertainties of this new venture that brought to culmination his friendship with Miss Strentzel, for they became engaged on the eve of his departure, though for months no one outside of the family knew anything about it, so closely was the secret kept. Even to Mrs. Carr, who had ardently hoped for this outcome, he merely wrote: "I'm going home—going to my summer in the snow and ice and forests of the north coast. Will sail to-morrow at noon on the Dakota for Victoria and

Olympia. Will then push inland and alongland. May visit Alaska."

He did, as it turned out, go to Alaska that summer, and the first literary fruitage of this trip took the form of eleven letters to the "San Francisco Evening Bulletin." Written on the spot, they preserve the freshness of his first impressions, and were read with breathless interest by an ever-enlarging circle of readers. Toward the close of his life these vivid sketches were utilized, together with his journals, in writing the first part of his "Travels in Alaska." It was at Fort Wrangell that he met the Reverend S. Hall Young, then stationed as a missionary among the Thlinkit Indians. Mr. Young later accompanied him on various canoe and land expeditions, particularly the one up Glacier Bay, that resulted in the discovery of a number of stupendous glaciers, the largest of which was afterwards to receive the name of Muir. In his book, "Alaska Days with John Muir," Mr. Young has given a most readable and vivid account of their experiences together, and the interested reader will wish to compare, among other things, the author's own account of his thrilling rescue from certain death on the precipices of Glenora Peak with Muir's modest description of the heroic part he played in the adventure.

It is Young also who relates how Muir, by his daring and original ways of inquiring into Nature's every mood, came to be regarded by the Indians as a mysterious being whose motives were beyond all conjecture. A notable instance was the occasion on which, one wild, stormy night, he left the shelter of Young's house and slid out into the inky darkness and wind-driven sheets of rain. At two o'clock in the morning a rain-soaked group of Indians hammered at the missionary's door, and begged him to pray. "We scare. All Stickeen scare," they said, for some wakeful ones had seen a red glow on top of a neighboring mountain and the mysterious, portentous phenomenon had immediately been communicated to the whole frightened tribe. "We want you to play [pray] God; plenty play," they said.

The reader will not find it difficult to imagine what had happened, for Muir was the unconscious cause of their alarm. He had made his way through the drenching blast to the top of a forested hill, There he had contrived to start "a fire, a big one, to see as well as to hear how the storm and trees were behaving." At midnight his fire, sheltered from the village by the brow of the hill, was shedding its glow upon the low-flying storm-clouds, striking terror to the hearts of the Indians, who thought they saw something that "waved in the air like wings of a spirit." And while they were imploring the prayers of the missionary for their safety, Muir, according to his own account, was sitting under a bark shelter in front of his fire, with "nothing to do but look and listen and join the trees it. their hymns and prayers."

Meanwhile Muir's "Bulletin" letters had greatly enlarged its circulation and were being copied all over the country to the great delight of the editor, Sam Williams, who had long been a warm friend of Muir. The latter's descriptions reflected the boundless enthusiasm which these newfound wildernesses of Alaska aroused in him. In the Sierra Nevada his task was to reconstruct imaginatively, from vestiges of vanished glaciers, the picture of their prime during the ice period; but here he saw actually at work the stupendous landscape-making glaciers of Alaska, and in their action he found verified the conclusions of his "Studies in the Sierra." No wonder he tarried in the North months beyond the time he had set for his return. "Every summer," he wrote to Miss Strentzel from Fort Wrangell in October—"every summer my gains from God's wilds grow greater. This last seems the greatest of all. For the first few weeks I was so feverishly excited with the boundless exuberance of the lovely archipelagoes along the coast, that I could hardly settle down to the steady labor required in making any sort of Truth one's own. But I'm working now, and feel unable to leave the field. Had a most glorious time of it among the Stickeen glaciers, which in some shape or other will reach you."

Upon landing in Portland on his return in January, he was persuaded to give several public lectures and to make an observation trip up the Columbia River. At his lodgings in San Francisco there had gathered meanwhile an immense accumulation of letters, and among them one that bridged the memories of a dozen

eventful years. It was from Katharine Merrill Graydon, one of the three little Samaritans who used to visit him after the accidental injury to one of his eyes in an Indianapolis wagon factory. "The three children you knew best," said the writer, "the ones who long ago in the dark room delighted to read to you and bring you flowers, are now men and women. Merrill is a young lawyer with all sorts of aspirations. Janet is at home, a young lady of leisure. Your 'little friend Katie' is teacher in a fashionable boarding-school, which I know is not much of a recommendation to a man who turns his eyes away from all flowers but the wild rose and the sweetbrier." The main occasion of the letter was to introduce Professor David Starr Jordan and Mr. Charles Gilbert, who were going to the Pacific Coast. "I send this," continued the writer, "with a little quaking of the heart. What if you should ask, 'Who is Kate Graydon?' Still I have faith that even ten or twelve years have not obliterated the pleasant little friendship formed one summer so long ago. The remembrance on my part was wonderfully quickened one morning nearly two years ago when Professor Jordan read to our class the sweetest, brightest, most musical article on the 'Water Ouzel' from 'Scribner's.' The writer, he said, was John Muir. The way my acquaintance of long ago developed into friendship, and the way I proudly said I knew you, would have made you laugh."

This letter brought the following response:

To Miss Katharine Merrill Graydon

920 Valencia Street, San Francisco February 5th, 1880

My Dear Katie, Miss Kate Graydon,

Professor of Greek and English Literature, etc.

My Dear, Frail, Wee, Bashful Lassie and Dear Madam:

I was delighted with your bright charming letter introducing your friends Professor [David Starr] Jordan and Charles Gilbert. I have not yet met either of the gentlemen. They are at Santa Barbara, but expect to be here in April, when I hope to see them and like them for your sake, and Janet's, and their own worth.

Some time ago I learned that you were teaching Greek, and of all the strange things in this changeful world, this seemed the strangest, and the most difficult to get packed quietly down into my awkward mind. Therefore I will have to get you to excuse the confusion I fell into at the beginning of my letter, I mean to come to you in a year or two, or any time soon, to see you all in your new developments. The sweet blooming underbrush of boys and girls—Moores, Merrills, Graydons, etc.—was very refreshing and pleasant to me all my Indiana days, and now that you have all grown up into trees, strong and thrifty, waving your outreaching branches in God's Light, I am sure I shall love you all. Going to Indianapolis is one of the brightest of my hopes. It seems but yesterday since I left you all. And indeed, in very truth, all these years have been to me one unbroken day, one continuous walk in one grand garden.

I'm glad you like my wee dear ouzel. He is one of the most complete of God's small darlings. I found him in Alaska a month or two ago. I made a long canoe trip of seven hundred miles from Fort Wrangell northward, exploring the glaciers and icy fiords of the coast and inland channels with one white man and four Indians. And on the way back to Wrangell, while exploring one of the deep fiords with lofty walls like those of Yosemite Valley, and with its waters crowded with immense bergs discharged from the noble glaciers, I found a single specimen of his blessed tribe. We had camped on the shore of the fiord among huge icebergs that had been stranded at high tide, and next morning made haste to get away, fearing that we would be frozen in for the winter; and while pushing our canoe through the bergs, admiring and fearing the grand beauty of the icy wilderness, my blessed favorite came out from the shore to see me, flew once round the boat, gave one cheery note of welcome, while seeming to say, "You need not fear this ice and frost, for you see I am here," then flew back to the shore and alighted on the edge of a big white berg, not so far away but that I could see him doing his happy manners.

In this one summer in the white Northland I have seen perhaps ten times as many glacier's as there are in all Switzerland. But I cannot hope to tell you about them now, or hardly indeed at any time, for the best things and thoughts one gets from Nature we dare not tell. I will be so happy to see you again, not to renew my acquaintance, for that has not been for a moment interrupted, but to know you better in your new growth.

Ever your friend John Muir

Years afterwards Dr. Jordan, as he notes in his autobiography, *The Days of a Man*, took the opportunity to bestow the name Ouzel Basin on the old glacier channel "near which John Muir sketched his unrivaled biography of a water ouzel."

Any one who has heard the February merriment of Western meadowlarks in the Alhambra Valley must know that winter gets but a slight foothold there, for it tilts toward the sun, and is in full radiance of blossom and song during March and April. John Muir and Louie Wanda Strentzel chose the fourteenth of the latter flower month for their wedding day and were ready to share their secret with their friends. "Visited the immortals Brown and Swett," confesses John to his fiancée in one of his notes, and the announcement was followed immeately by shoals of congratulatory letters. The one from Mrs. John Swett, in whose home he had spent so many happy days, is not only fairly indicative of the common opinion, but draws some lines of Muir's character that make it worthy of a place here.

To Louie Wanda Strentzel

San Francisco, April 8, 1880

My Dear Miss Strentzel:

When Mr. Muir made his appearance the other night I thought he had a sheepish twinkle in his eye, but ascribed it to a guilty consciousness that he had been up to Martinez again and a fear of being rallied about it. Judge then of the sensation when he exploded his bombshell! At first laughing incredulity—it was April. We were on our guard against being taken in, but the mention of Dr. Dwinell's name and a date settled it, and I have hunted up a pen to write you a letter of congratulation. For John and I are jubilant over the match. It gratifies completely our sense of fitness, for you both have a fair foundation of the essentials of good health, good looks, good temper, etc. Then you both have culture, and to crown all you have "prospects" and he has talent and distinction.

But I hope you are good at a hair-splitting argument. You will need to be to hold your own with him. Five times to-day has he vanquished me. Not that I admitted it to him—no, never! He not only excels in argument, but always takes the highest ground—is always on the right side. He told Colonel Boyce the other night that his position was that of champion for a mean, brutal policy. It was with regard to Indian extermination, and that he (Boyce) would be ashamed to carry it with one Indian in personal conflict. I thought the Colonel would be mad, but they walked off arm in arm. Further, he is so truthful that he not only will never embellish sketch or word-picture by any imaginary addition, but even retains every unsightly feature lest his picture should not be true.

There, I have said all I can in his favor, and as an offset I must tell you that I have been trying all day to soften his hard heart of an old animosity and he won't yield an inch. It is sometimes impossible to please him. . . .

With hearty regard, I am

Yours very truly

Mary Louise Swett

The occasion of the following letter was one from Miss Graydon in which she rallied him on her sudden discovery of how much sympathy she had wasted on him because she had imagined him without friends or companions except glaciers and icebergs, and without even a mother to wear out her anxious heart about him. "I heard," she wrote, "that your mother was still living and that you had not been near her for twelve years. And then, while I supposed you had not a lady friend in the world, I heard you were the center of an adoring circle of ladie's in San Francisco. If you heard any one laugh about that time, it was I. See if I ever waste my sympathy on you again!"

To Miss Katharine Merrill Graydon

1419 Taylor St., San Francisco April 12th, 1880

My Dear Girl-woman, Katie and Miss Kate:

Your letter of March 28th has reached me, telling how much loving sympathy I am to have because I have a mother, and because of the story of my adoring circle of lady friends. Well, what is to become of me when I tell you that I am to marry one of those friends the day after to-morrow? What sympathy will be left the villain who has a mother and a wife also, and even a home and a circle, etc., and twice as muckle as a' that? But now, even now, Katie, don't, don't withdraw your sympathy. You know that I never did demand pity for the storm-beatings and rock-beds and the hunger and loneliness of all these years since you were a frail wee lass, for I have been very happy and strong through it all—the happiest man I ever saw; but, nevertheless, I want to hold on to and love all my friends, for they are the most precious of all my riches.

I hope to see you all this year or next, and no amount of marrying will diminish the enjoyment of meeting you again. And some of you will no doubt come to this side of the Continent, and then how happy I will be to welcome you to a warm little home in the Contra Costa hills near the bay.

I have been out of town for a week or two, and have not seen much of Professor Jordan and Mr. Gilbert. They are very busy about the fishes, crabs, clams, oysters, etc. Have called at his hotel two or three times, and have had some good Moores and Merrill talks, but nothing short of a good long excursion in the free wilderness would ever mix us as much as you seem to want.

Now, my brave teacher lassie, good luck to you. Heaven bless you, and believe me,

Ever truly your friend John Muir

It was fitting, perhaps, that one who loved Nature in her wildest moods, should have his wedding day distinguished by a roaring rainstorm through which he drove Dr. I. E. Dwinell, the officiating clergyman, back to the Martinez station in a manner described by the latter as "like the rush of a torrent down the cañon." Both relatives and friends, to judge by their letters, were so completely surprised by the happy event that it proved "a nine days' wonder." The social stir occasioned by the wedding was, however, far from gratifying to Mr. Muir, who had to summon all his courage to prevent his besetting bashfulness from driving him to the seclusion of the nearest cañon.

But lest the reader imagine that Muir's home was henceforward to be on the beaten crossways of annoying crowds, let me hasten to add that the old Strentzel home, which the bride's parents vacated for their daughter,

was a more than ordinarily secluded and quiet place. Cascades of ivy and roses fell over the corners of the wide verandas, and the slope upon which the house stood had an air of leaning upon its elbows and looking tranquilly down across hill-girt orchards to the blue waters of Carquinez Straits. There, a mile away, at the entrance of the valley, nestled the little town of Martinez, but scarcely a whisper of its activities might be heard above the contented hum of Alhambra bees. It was an ideal place for a honeymoon and there we leave the happy pair.

Chapter XIV The Second Alaska Trip and the Search for the Jeannette 1880-1881

I

After his marriage Muir rented from his father-in-law a part of the Strentzel ranch, and then proceeded with great thoroughness to master the art of horticulture, for which he possessed natural and perhaps inherited aptitude. But when July came, the homing instinct for the wilderness again grew strong within him. He doubtless had an understanding with his wife that he was to continue during the next summer the unfinished explorations of 1879. The lure of "something lost behind the ranges" was in his case a glacier, as Mr. Young reports in his "Alaska Days with John Muir." The more immediate occasion of his departure was a letter from his friend Thomas Magee, of San Francisco, urging him to join him on a trip to southeastern Alaska. The two had traveled together before, and he acted at once upon the suggestion, leaving for the North on July 30th.

To Mrs. Muir

Off Cape Flattery Monday, August 2d, 1880 10 A.M.

My Dear Wife:

All goes well. In a few hours we will be in Victoria. The voyage thus far has been singularly calm and uneventful. Leaving you is the only event that has marred the trip and it is marred sorely, but I shall make haste to you and reach you ere you have the time to grieve and weary. If you will only be calm and cheery all will be better for my short spell of ice-work.

The sea has been very smooth, nevertheless Mr. Magee has been very sick. Now he is better. As for me I have made no sign, though I have had some headache and heartache. We are now past the Flattery Rocks, where we were so roughly storm-tossed last winter, and Neah Bay, where we remained thirty-six hours. How placid it seems now—the water black and gray with reflections from the cloudy sky, fur seals popping their heads up here and there, ducks and gulls dotting the small waves, and Indian fishing-boats towards the shore, each with a small glaring red flag flying from the masthead.

Behind the group of white houses nestled in the deepest bend of the bay rise rounded, ice-swept hills, with mountains beyond them folding in and in, in beautiful braids, and all densely forested. We are so near the shore that with the mate's glasses I can readily make out some of the species of the trees. The forest is in the main scarce at all different from those of the Alaskan coast. Now the Cape Lighthouse is out of sight and we are fairly into the strait. Vancouver Island is on [the] left in fine clear view, with forests densely packed in every hollow and over every hill and mountain. How beautiful it is! How deep and shadowy its cañons, how eloquently it tells the story of its sculpture during the Age of Ice! How perfectly virgin it is! Ships loaded with Nanaimo coal and Puget Sound coal and lumber, a half-dozen of them, are about us, beating their way down

the strait, and here and there a pilot boat to represent civilization, but not one sear on the virgin shore, nor the smoke of a hut or camp.

I have just been speaking with a man who has spent a good deal of time on the island. He says that so impenetrable is the underbrush, his party could seldom make more than two miles a day though assisted by eight Indians. Only the shores are known.

Now the wind is beginning to freshen and the small waves are tipped with white, milk-white, caps, almost the only ones we have seen since leaving San Francisco. The Captain and first officer have been very attentive to us, giving us the use of their rooms and books, etc., besides answering all our questions anent the sea and ships.

We shall reach Victoria about two or three o'clock. The California will not sail before tomorrow sometime, so that we shall have plenty [of] time to get the charts and odds and ends we need before leaving. Mr. Magee will undoubtedly go on to Wrangell, but will not be likely to stop over.

Ten minutes past two by your clock

We are just rounding the Esquimalt Lighthouse, and in a few minutes more will be tied up at the wharf. Quite a lively breeze is blowing from the island, and the strait is ruffled with small shining wavelets glowing in the distance like silver. Hereabouts many lofty moutonnéed rock-bosses rise above the forests, bare of trees, but brown looking from the mosses that cover them. Since entering the strait, the heavy swell up and down, up and down, has vanished and all the sick have got well and are out in full force, gazing at the harbor with the excitement one always feels after a voyage, whether the future offers much brightness or not.

The new Captain of the California is said to be good and careful, and the pilot and purser I know well, so that we will feel at home during the rest of our trip as we have thus far; and as for the main objects, all Nature is unchangeable, loves us all, and grants gracious welcome to every honest votary.

I hope you do not feel that I am away at all. Any real separation is not possible. I have been alone, as far as [concerns] the isolation that distance makes, so much of my lifetime that separation seems more natural than absolute contact, which seems too good and indulgent to be true.

Her Majesty's ironclad Triumph is lying close alongside. How huge she seems and impertinently strong and defiant, with a background of honest green woods! Jagged-toothed wolves and wildcats harmonize smoothly enough, but engines for the destruction of human beings are only devilish, though they carry preachers and prayers and open up views of sad, scant tears. Now we are making fast. "Make fast that line there, make fast," "let go there," "give way."

We will go on to Victoria this afternoon, taking our baggage with us, and stay there until setting out on the California. The ride of three miles through the woods and round the glacial bosses is very fine. This you would enjoy. I shall look for the roses. Will mail this at once, and write again before leaving this grand old ice-ribbed island.

And now, my dear Louie, keep a good heart and do the bits of work I requested you to do, and the days in Alaska will go away fast enough and I will be with you again as if I had been gone but one day.

Ever your affectionate husband John Muir

To Mrs. Muir

Victoria, B.C. August 3, 1880, 3.45 P.M.

Dear Louie:

The Vancouver roses are out of bloom hereabouts but I may possibly find some near Nanaimo. I mailed you a letter yesterday which you will probably receive with this.

Arriving at Esquimalt we hired a carriage driven by a sad-eyed and sad-lipped negro to take us with all our baggage to Victoria, some three miles distant. The horses were also of melancholic aspect, lean and clipper-built in general, but the way they made the fire fly from the glacial gravel would have made Saint Jose and his jet beef-sides hide in the dust. By dint of much blunt praise of his team he put them 142 to their wiry spring-steel metal and we passed everything on the road with a whirr—cab, cart, carriage, and carryall. We put up at the Driard House and had a square, or cubical, meal. Put on a metallic countenance to the landlord on account of the money and experience we carried, nearly seared him out of his dignity and made him give us good rooms.

At 6.45 P.M. the California arrived, and we went aboard and had a chat with Hughes, the purser. He at once inquired whether I had *any one* with me, meaning you, as Vanderbilt had given our news. Learned that the California would not sail until this evening and made up our minds to take a drive out in the highways and byways adjacent to the town. While strolling about the streets last evening I felt a singular interest in the Thlinkit Indians I met and something like a missionary spirit came over me. Poor fellows, I wish I could serve them.

There is good eating, but poor sleeping here. My bed was but little like our own at home. Met Major Morris, the Treasury agent, this morning. He is going up with us. He is, you remember, the writer of that book on Alaska that I brought with me.

About nine o'clock we got a horse and buggy at the livery stable and began our devious drive by going back to the Dakota to call on First Officer Griffith and give him a box of weeds for his kind deeds. Then took any road that offered out into the green leafy country. How beautiful it is, every road banked high and embowered in dense, fresh, green, tall ferns six to eight feet high close to the wheels, then spiraea, two or three species, wild rose bushes, madroño, hazel, hawthorn, then a host of young Douglas spruces and silver firs with here and there a yew with its red berries and dark foliage, and a maple or two, then the tall firs and spruces forming the forest primeval. We came to a good many fields of grain, but all of them small as compared with the number of the houses. The oats and barley are just about ripe. We saw little orchards, too; a good many pears, little red-brown fellows, six hatfuls per tree, and the queerest little sprinkling of little red and yellow cherries just beginning to ripen. Many of the cottage homes about town are as lovely as a cottage may be, embowered in honeysuckle and green gardens and bits of lawn and orchard and grand oaks with lovely outlooks. The day has been delightful. How you would have enjoyed it—all three of you.

Our baggage is already aboard and the hour draws nigh. I must go. I shall write you again from Nanaimo.

Good-bye again, my love. Keep a strong heart and speedily will fly the hours that bring me back to thee. Love to mother and father. Farewell.

Ever your affectionate husband John Muir

To Mrs. Muir

On board the California 10 A.M., *August 4th*, 1880

Dear Louie:

We are still lying alongside the wharf at Victoria. It seems a leak was discovered in one of the

watertanks that had to be mended, and the result was that we could not get off on the seven o'clock tide last night.

Victoria seems a dry, dignified, half-idle town, supported in great part by government fees. Every erect, or more than erect, backleaning, man has an office, and carries himself with that peculiar aplomb that all the Hail Britannia people are so noted for. The wharf and harbor stir is very mild. The steamer Princess Louise lies alongside ours, getting ready for the trip to New Westminster on [the] Fraser River. The Hudson's Bay Company's steamer Otter, a queer old tubby craft, left for the North last night. A few sloops, plungers, and boats are crawling about the harbor or lying at anchor, doing or dreaming a business nobody knows. Yonder comes an Indian canoe with its one unique sail calling up memories, many, of my last winter's rambles among the icebergs. The water is ruffled with a slight breeze, scarce enough for small white-caps. Though clearer than the waters of most harbors, it is not without the ordinary drift of old bottles, straw, and defunct domestic animals. How rotten the piles of the wharf are, and how they smell, even in this cool climate!

They are taking hundreds of barrels of molasses aboard—for what purpose? To delight the Alaska younglings with 'lasses bread and smear their happy chubby cheeks, or to make cookies and gingerbread? No, whiskey, Indian whiskey! It will be bought by Indians, nine tenths of it and more; they will give their hard-earned money for it, and their hard-caught furs, and take it far away along many a glacial channel and inlet, and make it into crazing poison. Onions, too, many a ton, are coming aboard to boil and fry and raise a watery cry.

Alone on the wharf, I see a lone stranger dressed in shabby black. He has a kind of unnerved, drooping look, his shoulders coming together and his toes and his knees and the two ends of his vertebral column, something like a withering leaf in hot sunshine. Poor fellow, he looks at our ship as if he wanted to go again to the mines to try his luck. And here come two Indian women and a little girl trotting after them. They seem as if they were coming aboard, but turn aside at the edge of the wharf and descend rickety stairs to their canoe, tied to a pile beneath the wharf. Now they reappear with change of toilet, and the little girl is carrying a bundle, something to eat or sell or sit on.

Yonder comes a typical John Bull, grand in size and style, carmine in countenance, abdominous and showing a fine tight curve from chin to knee, when seen in profile, yet benevolent withal and reliable, confidence-begetting. And here just landed opposite our ship is a pile of hundreds of bears' skins, black and brown, from Alaska, brought here by the Otter, a few deer skins too, and wildcat and wolverine. The Hudson's Bay Company men are about them, showing their ownership.

Ten minutes to twelve o'clock

"Let go that line there," etc., tells that we are about to move. Our steamer swings slowly round and heads for Nanaimo. How beautiful the shores are! How glacial, yet how leafy! The day becomes calmer, and brighter, and everybody seems happy. Our fellow passengers are Major Morris and wife, whom I met last year, Judge Deady, a young Englishman, and [a] dreamy, silent old gray man like a minister.

8 P.M.

We are entering Nanaimo Harbor.

To Mrs. Muir

Departure Bay A Few Miles from Nanaimo 9 A.M., *August 5th*, 1880

Dear Louie:

We are coaling here, and what a rumble they are making! The shores here are very imposing, a beveled bluff, topped with giant cedar, spruce, and fir and maple with varying green; here and there a small madroño too, which here is near its northern limit.

We went ashore last eve at Nanaimo for a stroll, Magee and I, and we happened to meet Mr. Morrison, a man that I knew at Fort Wrangell, who told me particulars of the sad Indian war in which Toyatte was killed. He was present and gave very graphic descriptions.

We sailed hither at daylight this morning, and will probably get away, the Captain tells me, about eleven o'clock, and then no halt until we reach Wrangell, which is distant from here about sixty hours.

I hardly know, my lassie, what I've been writing, nothing, I fear, but very small odds and ends, and yet these may at least keep you from wearying for an hour, and the letters, poor though they be, shall yet tell my love, and that will redeem them. I mail this here, the other two were mailed in Victoria, my next from Wrangell.

Heaven bless you, my love, and mother and father. I trust that you are caring for yourself and us all by keeping cheery and strong, and avoiding the bad practice of the stair-dance. Once more, my love, farewell, I must close in haste. Farewell.

Ever your affectionate husband John Muir

Missionary S. Hall Young was standing on the wharf at Fort Wrangell on the 8th of August, watching the California coming in, when to his great joy he spied John Muir standing on the deck and waving his greetings. Springing nimbly ashore, Muir at once fired at him the question, "When can you be ready?" In response to Young's expostulations over his haste, and his failure to bring his wife, he exclaimed: "Man, have you forgotten? Don't you know we lost a glacier last fall? Do you think I could sleep soundly in my bed this winter with that hanging on my conscience? My wife could not come, so I have come alone and you've got to go with me to find the lost. Get your canoe and crew and let us be off."

To Mrs. Muir

Sitka on board the California August 10th, 1880 10.30 P.M. of your time My Own Dear Louie: I'm now about as far from you as I will be this

I'm now about as far from you as I will be this year—only this wee sail to the North and then to thee, my lassie. And I'm not away at all, you know, for only they who do not love may ever be apart. There is no true separation for those whose hearts and souls are together. So much for love and philosophy. And now I must trace you my way since leaving Nanaimo.

We sailed smoothly through the thousand evergreen isles, and arrived at Fort Wrangell at 4.30 A.M. on the 8th. Left Wrangell at noon of the same day and arrived here on the 9th at 6 A.M. Spent the day in friendly greetings and saunterings. Found Mr. Vanderbilt and his wife and Johnnie and not every way least, though last, little Annie, who is grown in stature and grace and beauty since last I kissed her.

To-day Mr. Vanderbilt kindly took myself and Mr. Magee and three other fellow passengers on an excursion on his steamer up Peril Strait, about fifty miles. (You can find it on one of the charts that I forgot to bring.) We returned to the California about half-past nine, completing my way thus far.

And now for my future plans. The California sails to-morrow afternoon some time for Fort Wrangell, and I mean to return on her and from there set out on my cance trip. I do not expect to be detained at Wrangell, inasmuch as I saw Mr. [S. Hall] Young, who promised to have a cance and crew ready. I mean to keep close along the mainland, exploring the deep inlets in turn, at least as far north as the Taku, then push across to Cross Sound and follow the northern shore, examining the glaciers that crowd into the deep inlet that puts back northward from near the south extremity of the Sound, where I was last year. Thence I mean to return eastward along the southern shore of the Sound to Chatham Strait, turn southward down the west shore of the Strait to Peril Strait, and follow this strait to Sitka, where I shall take the California. Possibly, however, I may, should I not be pushed for time return to Wrangell. Mr. Magee will, I think, go with me, though very unwilling to do so. . . .

August 11th, at noon

I have just returned from a visit to the Jamestown. The Commander, Beardslee, paid me a visit here last evening, and invited me aboard his ship. Had a pleasant chat, and an invitation to make the Jamestown my home while here.

I also found my friend Koshoto, the Chief of the Hoonas, the man who, I told you, had entertained Mr. Young and me so well last year on Cross Sound, and who made so good a speech. He is here trading, and seemed greatly pleased to learn that I was going to pay him another visit; said that meeting me was like meeting his own brother who was dead, his heart felt good, etc. . . .

I have been learning all about the death of the brave and good old Toyatte. I think that Dr. Corliss, one of the Wrangell missionaries., made a mistake in reference to the seizure of some whiskey, which caused the beginning of the trouble.

This is a bright, soft, balmy day. How you would enjoy it! You must come here some day when you are strong enough. . . . Everybody inquires first on seeing me, "Have you brought your wife?" and then "Have you a photograph?" and then pass condemnation for coming alone!. . .

The mail is about to close, and I must write to mother.

Affectionately your husband John Muir

How eagerly I shall look for news when I reach Fort Wrangell next month!

To Mrs. Muir

Residence of Mr. Young, Fort Wrangell 11.45 A.M., August 14th, 1880

Dear Louie:

I am back in my old quarters, and how familiar it all seems!—the lovely water, the islands, the Indians with their baskets and blankets and berries, the jet ravens prying and flying here and there, and the bland, dreamy, hushed air drooping and brooding kindly over all. I miss Toyatte so much. I have just been over the battleground with Mr. Young, and have seen the spot where he fell.

Instead of coming here direct from Sitka we called at Klawak on Prince of Wales Island for freight,—canned salmon, oil, furs, etc.,—which detained us a day. We arrived here last evening at half-past ten, Klawak is a fishing and trading station located in a most charmingly beautiful bay, and while lying there, the evening before last, we witnessed a glorious auroral display which lasted more than three hours. First we noticed long

white lance shaped streamers shooting up from a dark cloud-like mass near the horizon, then a well-defined arch, the corona, almost black, with a luminous edge appeared, and from it, radiating like spokes from a hub, the streamers kept shooting with a quick glancing motion, and remaining drawn on the dark sky, distinct, and white, as fine lines drawn on a blackboard. And when half the horizon was adorned with these silky fibrous lances of light reaching to and converging at the zenith, broad flapping folds and waves of the same white auroral light came surging on from the corona with astonishing energy and quickness, the folds and waves spending themselves near the zenith like waves on a smooth sloping sand-beach. But throughout the greater portion of their courses the motion was more like that of sheet lightning, or waves made in broad folds of muslin when rapidly shaken; then in a few minutes those delicate billows of light rolled up among the silken streamers, would vanish, leaving the more lasting streamers with the stars shining through them; then some of the seemingly permanent streamers would vanish also, and appear again in vivid white, like rockets shooting with widening base, their glowing shafts reflected in the calm water of the bay among the stars.

It was all so rare and so beautiful and exciting to us that we gazed and shouted like children at a show, and in the middle of it all, after I was left alone on deck at about half-past eleven, the whole sky was suddenly illumined by the largest meteor I ever saw. I remained on deck until after midnight, watching. The corona became crimson and slightly flushed the bases of the streamers, then one by one the shining pillars of the glorious structure were taken down, the foundation arch became irregular and broke up, and all that was left was only a faint structureless glow along the northern horizon, like the beginning of the dawn of a clear frosty day. The only sounds were the occasional shouts of the Indians, and the impressive roar of a waterfall.

Mr. Young and I have just concluded a bargain with the Indians, Lot and his friend, to take us in his canoe for a month or six weeks, at the rate of sixty dollars per month. Our company will be those two Indians, and Mr. Young and myself, also an Indian boy that Mr. Young is to take to his parents at Chilkat, and possibly Colonel Crittenden as far as Holkham Bay....

You will notice, dear, that I have changed the plan I formerly sent you in this, that I go on to the Chilkat for Mr. Young's sake, and farther; now that Mr. Magee is out of the trip, I shall not feel the necessity I previously felt of getting back to Sitka or Wrangell in time for the next steamer, though it is barely possible that I shall. Do not look for me, however, as it is likely I shall have my hands full for two months. To-morrow is Sunday, so we shall not get away before Monday, the 16th. How hard it is to wait so long for a letter from you! I shall not get a word until I return. I am trying to trust that you will be patient and happy, and have that work done that we talked of.

Every one of my old acquaintances seems cordially glad to see me. I have not yet seen Shakes, the Chief, though I shall ere we leave. He is now one of the principal church members, while Kadachan has been getting drunk in the old style, and is likely, Mr. Young tells me, to be turned out of the church altogether. John, our last year's interpreter, is up in the Cassiar mines. Mrs. McFarlane, Miss Dunbar, and the Youngs are all uncommonly anxious to know you, and are greatly disappointed in not seeing you here, or at least getting a peep at your picture. "Why could she not have come up and stayed with us while you were about your ice business?" they ask in disappointed tone of voice.

Now, my dear wife, the California will soon be sailing southward, and I must again bid you good-bye. I must go, but you, pay dear, will go with me all the way, How gladly when my work is done will I go back to thee! With love to mother and father, and hoping that God will bless and keep you all, I am ever in heart and soul the same,

John Muir

6 P.M. I have just dashed off a short "Bulletin" letter.

The events that followed are graphically narrated in Part II of "Travels in Alaska." Eight days after his arrival at Fort Wrangell, Muir and Mr. Young got started with their party, which consisted of the two Stickeen Indians—Lot Tyeen and Hunter Joe—a half-breed named Smart Billy. There was also Mr. Young's dog Stickeen, whom. Mr. Muir at first accepted rather grudgingly as a super-charge of the already crowded canoe, but who later won his admiration and became the subject of one of the noblest dog stories in English literature.

The course of the expedition led through Wrangell Narrows between Mitkoff and Kupreanof Islands, up Frederick Sound past Cape Fanshaw and across Port Houghton, and then up Stephens Passage to the entrance of Holkham Bay, also called Sumdum. Fourteen and a half hours up the Endicott Ann of this bay, which Muir was the first white man to explore, he found the glacier he had suspected there—a stream of ice three quarters of a mile wide and eight or nine hundred feet deep, discharging bergs with sounds of thunder. He had scarcely finished a sketch of it when he observed another glacial cañon on the west side of the fiord and, directing his crew to pull around a glaciated promontory, they came into full view of a second glacier, still pouring its ice into a branch of the fiord. Muir gave the first of these glaciers the name Young in honor of his companion, who complains that some later chart-maker substituted the name Dawes, thus committing the larceny of stealing his glacier.

In retracing their course, after some days spent in exploring the head of the fiord, they struck a side-arm through which the water was rushing with great force. Threading the narrow entrance, they found themselves in what Muir described as a new Yosemite in the making. He called it Yosemite Bay, and has fur. nished a charming description of its flora, fauna, and physical characteristics in his "Travels in Alaska."

On August 21st, Young being detained by missionary duties, Muir set out alone with the Indians to explore what is now known as the Tracy Arm of Holkham Bay. The second day he found another kingly glacier hidden within the benmost bore of the fiord. "There is your lost friend," said the Indians, laughing, and as the thunder of its detaching bergs reached their ears, they added, "He says, Sagh-a-ya?" (How do you do?)

After leaving Taku Inlet, Muir laid his course north through Stephens Passage and around the end of Admiralty Island, where a camp was made only with difficulty. The next morning he crossed the Lynn Canal with his boat and crew and pitched camp, after a voyage of twenty miles, on the west end of Farewell Island, now Pyramid Island. Early the following day they turned Point Wimbledon, crept along the lofty north wall of Cross Sound, and entered Taylor Bay. During a part of this trip, the canoe was exposed to a storm and swells rolling in past Cape Spencer from the open ocean. It was an undertaking that called for courage, skill, and hardihood of no mean order.

At the head of Taylor Bay, Muir found a great glacier consisting of three branches whose combined fronts had an extent of about eight miles. Camp was made near one of these fronts in the evening of August 29th. Early the following morning, Muir became aware that "a wild storm was blowing and calling," and before any one was astir he was off—too eager to stop for breakfast—into the rain-laden gale, and out upon the glacier. It was one of the great, inspired days of his life, immortalized in the story of "Stickeen," the brave little dog [Mr. Muir received so many letters inquiring about the dog's antecedents that he asked Mr. Young in 1897 to tell him what he knew of Stickeen's earlier history. Some readers may be interested in his reply, which was as follows: "Mrs. Young got him as a present from Mr. H—, that Irish sinner who lived in a cottage up the beach towards the Presbyterian Mission in Sitka."] that had become his inseparable companion.

Muir's time was growing short, so he hastened on with his party the next day into Glacier Bay, where among other great glaciers he had discovered the previous autumn the one that now bears his name. Several days were spent there most happily, exploring and observing glacial action, and then the canoe was turned Sitka-ward by way of Icy, Chatham, and Peril Straits, arriving in time to enable him to catch there the

monthly mail steamer to Portland. Thus ended the Alaska trip of 1880.

II

"After all, have you not found there is some happiness in this world outside of glaciers, and other glories of nature?" The friend who put this question to John Muir, in a letter full of pleasantries and congratulations, had just received from him a jubilant note announcing the arrival of a baby daughter on March 27th. His fondness of children now had scope for indulgence at home, and he became a most devoted husband and father.

But for the time being he was to be deprived of this new domestic joy. For when he received an invitation to accompany the United States Revenue steamer Corwin on an Arctic relief expedition in search of DeLong and the Jeannette, it was decided in family council that so unusual an opportunity to explore the northern parts of Alaska and Siberia must not be neglected. His preparations had to be made in great haste while the citizens of Oakland were giving a banquet in honor of Captain C. L. Hooper and the officers of the Corwin at the Galinda Hotel in Oakland on April 29th. Fortunately, the Captain was an old friend whom he had known in Alaska and to whom 161 he could entrust the purchase of the necessary polar garments from the natives in Bering Straits.

The Corwin sailed from San Francisco on May 4, 1881, and the following series of letters was written to his wife during the cruise. They supplement at many points the more formal account of his experiences published in "The Cruise of the Corwin." One of the objectives of the expedition was Wrangell Land in the Arctic Ocean, north of the Siberian coast, because it had been the expressed intention of Commander DeLong to reach the North Pole by traveling along its eastern coast, leaving cairns at intervals of twenty-five miles. It was not known at this time that Wrangell Land did not extend toward the Pole, but was an island of comparatively small extent. It was found later, by the log of the Jeannette, that the vessel had drifted, within sight of the island, directly across the meridians between which it lies. While the Corwin was still searching for her and her crew, the Jeannette was crushed in the ice and sank on June 12, 1881, in the Arctic Ocean, one hundred and fifty miles north of the New Siberian Islands.

Meanwhile Captain Hooper succeeded in penetrating, with the Corwin, the ice barrier that surrounded Wrangell Land. So far as known, the first human beings that ever stood upon the shores of this mysterious island were in Captain Hooper's landing party, August 12, 1881, and John Muir was of the number. The earliest news of the event, and of the fact that DeLong had not succeeded in touching either Herald Island or Wrangell Land, reached the world at large in a letter from Muir published in the "San Francisco Evening Bulletin," September 29, 1881.

Since the greater part of the first two letters, written to his wife at sea and while approaching Unalaska, was quoted in the writer's introduction to "The Cruise of the Corwin," they are omitted here for the sake of brevity.

To Mrs. Muir

Monday, 4 P.M., May 16, [1881]

Dear Louie:

Since writing this forenoon, we reached the mouth of the strait that separates Unalaska Island from the next to the eastward, against a strong headwind and through rough snow squalls, when the Captain told me that he thought he would not venture through the Strait to-day, because the swift floodtide setting through the Strait against the wind was surely raising a dangerously rough sea, but rather seek an anchorage somewhere in the lee of the bluffs, and wait the fall of the wind. As he approached the mouth of the Strait, however, he changed his mind and determined to try it.

When the vessel began to pitch heavily and the hatches and skylights were closed, I knew that we were in the Strait, and made haste to get on my overcoat and get up into the pilot-house to enjoy the view of the waves. The view proved to be far wilder and more exciting than I expected. Indeed, I never before saw water in so hearty a storm of hissing, blinding foam. It was all one leaping, clashing, roaring mass of white, mingling with the air by means of the long hissing streamers dragged from the wavetops, and the biting scud. Our little vessel, swept onward by the flood pouring into Bering's Sea and by her machinery, was being buffeted by the head-gale and the huge, white, overcombing waves that made her reel and tremble, though she stood it bravely and obeyed the helm as if in calm water. After proceeding about five or six miles into the heart of this grand uproar, it seemed to grow yet wilder and began to bid defiance to any farther headway against it. At length, when we had nearly lost our boats and [were] in danger of having our decks swept, we turned and fled for refuge before the gale. The giant waves, exulting in their 164 strength, seemed to be chasing us and threatening to swallow us at a gulp, but we finally made our escape, and were perhaps in no great danger farther than the risk of losing our boats and having the decks swept.

After going back about ten miles, we discovered a good anchorage in fifteen fathoms of water in the lee of a great bluff of lava about two thousand feet high, and here we ride in comfort while the blast drives past overhead. If we do not get off to-morrow, I will go ashore and see what I can learn.

Have learned already since the snow ceased falling that all the region hereabouts has been glaciated just like that thousand miles to the eastward. All the sculpture shows this clearly.

How pleasant it seems to be able to walk once more without holding on and to have your plate lie still on the table!

It is clearing up. The mountains are seen in groups rising back of one another, all pure white. The sailors are catching codfish. There are two waterfalls opposite our harbor.

Good-night to all. Oh, if I could touch my baby and thee!

This has been a very grand day-snow, waves, wind, mountains!

[John Muir]

To Mrs. Muir

Unalaska Harbor Tuesday, *May* 17,1881

Dear Louie:

The gale having abated early this morning, we left our anchorage on the south side of the island and steamed round into the Strait to try it again after our last evening's defeat, and this time we were successful, after a hard contest with the tide, which flows here at a speed of ten miles an hour.

The clouds lifted and the sun shone out early this morning, revealing a host of mountains nobly sculptured and grouped and robed in spotless white. Turn which way you would, the mountains were seen towering into the dark sky, some of them with streamers of mealy snow wavering in the wind, a truly glorious sight. The most interesting feature to me was the fine, clear, telling, glacial advertisement displayed everywhere in the trends of the numerous inlets and bays and valleys and ridges, in the peculiar shell-shaped névé amphitheaters and in the rounded valley bottoms and forms of the peaks and the cliff fronts facing the sea. No clearer glacial inscriptions are to be found in any mountain range, though I had been led to believe that these islands were all volcanic upheavals, scarce at all changed since their emergence from the waves, but on the contrary I have already discovered that the amount of glacial degradation has been so great as to cut the peninsula into islands. I have already been repaid for the pains of the journey.

My health is improving every day in this bracing cold, and you will hardly recognize me when I return. The summer will soon pass, and we hope to be back to our homes by October or November. . . . This is a beautiful harbor, white mountains shutting it in all around—white nearly to the water's edge. . . .

I will write again ere we leave, and then you will not hear again, probably, until near the middle of June, when we expect to meet the St. Paul belonging to the Alaska Commercial Company at St. Michael. Then I will write and you may receive my letter a month or two later.

Good-bye until to-morrow.

To Mrs. Muir

[John Muir]

Unalaska Wednesday, May 18th, 1881

Dear Louie:

The Storm-King of the North is again up and doing, rolling white, combing waves through the jagged straits between this marvelous chain of islands, circling them about with beaten, updashing foam, and piling yet more and more snow on the clustering cloud-wrapped peaks. But we are safe and snug in this land-locked haven enjoying the distant storm-roar of wave and wind. I have just been on deck; it is snowing still and the deep bass of the gale is sounding on through the mountains. How weird and wild and fascinating all this hearty work of the storm is to me. I feel a strange love of it all, as I gaze shivering up the dim white slopes as through a veil darkly, becoming fainter and fainter as the flakes thicken and at length hide all the land.

Last evening I went ashore with the Captain, and saw the chief men of the place and the one white woman, and a good many of the Aleuts. We were kindly and cordially entertained by the agent of the Alaska Commercial Company, Mr. Greenbaum, and while seated in his elegant parlor could hardly realize that we were in so remote and cold and silent a wilderness.

As we were seated at our ease discussing Alaskan and Polar affairs, a knock came to the door, and a tall, hoary, majestic old man slowly entered, whom I at once took for the Russian priest, but to whom I was introduced as Dr. Holman. He shook hands with me very heartily and said, "Mr. Muir, I am glad to see you. I had the pleasure of knowing you in San Francisco." Then I recognized him as the dignified old gentleman that I first met three or four years ago at the home of the Smiths at San Rafael, and we had a pleasant evening together. He has been in the employ of the Alaska Commercial Company here for a year, caring for the health of the Company's Aleuts. His own health has been suffering the meanwhile, and to-day I sent him half a dozen bottles of the Doctor's wine to revive him. This notable liberality under the circumstances was caused, first, by his having advised me years ago to take good care of my steps on the mountains; second, to get married; third, for his pictures, drawn for me, of the bliss of having children; fourth, for the sake of our mutual friends; fifth, for his good looks and bad health; and half-dozen, because fifteen or twenty years ago on a dark night, while seeking one of his patients in the Contra Costa hills, he called at the house of Doctor Strentzel for directions and was invited in and got a glass of good wine. A half-dozen bottles for a half-dozen reasons! "That's consistent, isn't it?" I mean to give a bottle to a friend of the Captain who is stationed at St. Michael, and save one bottle for our first contact with the polar ice-pack, and one with which to celebrate the hour of our return to home, friends, wives, bairns.

We had fresh-baked stuffed codfish for breakfast, of which I ate heartily, stuffing and all, though the latter was gray and soft and much burdened with minced onions, and then I held out my plate for a spoonful of opaque, oleaginous gravy! This last paragraph is for grandmother as a manifestation of heroic, all-enduring, all-engulfing health.

We have not yet commenced to coal, so that we will not get off for the North before Sunday. There is a schooner here that will sail for Shoalwater Bay, Oregon, in a few days, and by it I will send four or five letters. The three or four more that I intend writing ere we leave this port I will give to the agent of the Company here to be forwarded by the next opportunity in case the first batch should be lost. Then others will be sent from St. Michael by the Company's steamer, and still others from the Seal Islands and from points where we fall in with any vessel homeward bound.

Good-night to all. I am multiplying letters in case some be lost, A thousand kisses to in child. This is the fifth letter from Unalaska. Will write two more to be sent by other vessels. [John Muir]

To Mrs. Muir

Sunday afternoon, May 22, 1881

Dear Louie:

We left Unalaska this morning at four o'clock and are now in Bering Sea on our way to St. George and St. Paul Islands. . . . Next Tuesday or Wednesday we expect to come in sight of the ice, but hope to find open water, along the west shore, that will enable us to get through the Strait to Cape Serdze or there-abouts. In a month or so we expect to be at St. Michael, where we will have a chance to send more letters and still later by whalers.

You will, therefore, have no very long period of darkness, though on my side I fear I shall have to wait a long time for a single word, and it is only by trusting in you to be cheerful and busy for the sake of your health and for the sake of our little love and all of us that I can have any peace and rest throughout this trip, however long or short. Now you must be sure to sleep early to make up for waking during the night, and occupy all the day with light work and cheerful thoughts, and never brood and dream of trouble, and I will come back with the knowledge that I need and a fresh supply of the wilderness in my health. I am already quite well and eat with savage appetite whatsoever is brought within reach.

This morning I devoured half of a salmon trout eighteen inches long, a slice of ham, half a plateful of potatoes, two biscuits, and four or five slices of bread, with coffee and something else that I have forgotten, but which was certainly buried in me and lost. For lunch, two platefuls of soup, a heap of fat compound onion hash, two pieces of toast, and three or four slices of bread, with potatoes, and a big sweet cake, and now at three o'clock I am very hungry—a hunger that no amount of wave-tossing will abate. Furthermore, I look forward to fat seals fried and boiled, and to walrus steaks and stews, and doughnuts fried in train oil, and to all kinds of bears and fishy fowls with eager longing. There! Is that enough, grandmother? All my table whims are rapidly passing into the sere and yellow leaf and falling off.

I promise to comfort and sustain you beyond your highest aspirations when I return and fall three times a day on your table like a wolf on the fold. You know those slippery yellow custards—well, I eat those also!

You must not forget Sam Williams [Editor of the *San Francisco Evening Bulletin.*]. And now, my love, good-night. I hope you are feeling strong-hearted. I wish I could write anything, sense or nonsense, to cheer you up and brighten the outlook into the North. I will try to say one more line or two when we reach the Islands to-morrow.

Love to all. Kiss Annie for me.

To Mrs. Muir

[John Muir]

Plover Bay, Siberia June 16th, 1881

My Beloved Wife:

We leave this harbor to-morrow morning at six o'clock, for St. Michael, and the northward. The Corwin is in perfect condition, and since the season promises to be a favorable one, we hope to find the Jeannette and get home this fall. I have not yet seen the American shore, but hope to see it very thoroughly, as everything seems to work towards my objects. That the Asiatic and American continents were one a very short geological time ago is already clear to me, though I shall probably obtain much more available proof than I now have. This is a grand fact. While the crystal glaciers were creating Yosemite Valley, a thousand were uniting here to make Bering Strait and Bering Sea. The south side of the Aleutian chain of islands was the boundary of the continent and the ocean.

Since the Tom Pope came into the harbor, I have written five "Bulletin" letters, which are for you mostly, and therefore I need the less to write any detailed narrative of the cruise. She will sail at the same hour as we do, and her Captain, Mr. Millard, who has been many times in the Arctic both here and on the Greenland side, has promised to make you a visit, and will be able to give you much information.

If I could only get a line, one word, from you to know that you were all well, I would be content to await the end of the voyage with patience and fortitude. But, my dear, it's terrible at times to have to endure for so long a dark silence. We will not be likely to get a word before September. No doubt you have already received the six or seven letters that I sent from Unalaska and St. Paul, also the two or three "Bulletin" letters from Unalaska. Write [W.C.] Bartlett or the office for a dozen copies of each, and save them for me.

We are drifting in the harbor among cakes of ice about the size of the orchard, but they can do us no harm. The great mountains forming the walls are covered yet with snow, except on a few bare spots near their bases, and there is not a single tree. Scarce a hint of any spring or summer have I seen since leaving San Francisco and the orchard. I hope you will see Mr. Millard. You must keep Annie Wanda downstairs or she may fall; and now, my wife and child, daughter and mother, I must bid good-bye. Heaven bless you all! Send copies of my "Bulletin" letters to my mother, and put this letter with my papers and notebooks. You will get many other letters now that the whalers are returning.

My heart aches, not to go home ere I have done my work, but just to know that you are well.

Your affectionate husband

To Mrs. Muir

St. Michael, Alaska June 21, 1881

Sunshine, dear Louie, sunshine all the day, ripe and mellow sunshine, like that which feeds the fruits and vines! It came to us just [three] days ago when we were approaching this little old-fashioned trading post at the mouth of the Yukon River. . . .

On the day of our arrival from Plover Bay, a little steamer came into the harbor from the Upper Yukon, towing three large boats loaded with traders, Indians, and furs—all the furs they had gathered during the winter. We went across to the storeroom of the Company to see them. A queer lot they were, whites and Indians, as they unloaded their furs. It was worth while to look at the furs too—big bundles of bear skins brown and black, wolf, fox, beaver, marten, ermine, moose, wolverine, wildcat—many of them with claws spread and hair on end as if still alive and fighting for their lives. Some of the Indian chiefs, the wildest animals of all, and the more notable of the traders, not at all wild save in dress, but rather gentle and refined in manners, like village parsons. They held us in long interesting talks and gave us some valuable information concerning the broad wilds of the Yukon.

John Muir

Yesterday I took a long walk of twelve or fourteen miles over the tundra to a volcanic cone and back, leaving the ship about twelve in the forenoon and getting back at half-past eight. I found a great number of flowers in full bloom, and birds of many species building their nests, and a capital view of the surrounding country from the rim of an old crater, altogether making a delightful day, though a very wearisome one on account of the difficult walking.

The ground back of St. Michael stretches away in broad brown levels of boggy tundra promising fine walking, but proving about as tedious and exhausting as possible. The spongy covering [is] roughened with tussocks of grass and sedge and creeping heathworts and willows, among which the foot staggers about and sinks and squints, seeking rest and finding none, until far down between the rocking tussocks. This covering is composed of a plush of mosses, chiefly sphagnum, about eight inches or a foot deep, resting on ice that never melts, while about half of the surface of the moss is covered with white, yellow, red, and gray lichens, and the other half is planted more or less with grasses, sedges, heathworts, and creeping willows, and a flowering plant here and there such as primula and purple-spiked *Pedicularis*. Out in this grand solitude—solitary as far as man is concerned—we met a great many of the Arctic grouse, ptarmigan, cackling and screaming at our approach like old laying hens; also plovers, snipes, curlews, sandpipers, loons in ponds, and ducks and geese, and finches and wrens about the crater and rocks at its base. . . .

And now good-bye again, and love to all, wife, darling baby Anna, grandmother, and grandfather.

[John Muir]

To Mrs. Muir

Between Plover Bay and St. Lawrence Island, July 2d, 1881

My Beloved Wife:

After leaving St. Michael, on the twenty-second of June. . . we went again into the Arctic Ocean to Tapkan, twelve miles northwest of Cape Serdze, to seek the search party that we left on the edge of the ice-pack opposite Koliuchin Island, and were so fortunate as to find them there, having gone as far as the condition of the ice seemed to them safe, and after they had reached the fountain-head of all the stories we had heard concerning the lost whaler Vigilance and determined them to be in the main true. At Cape Wankarem they found three Chukchis who said that last year when the ice was just beginning to grow, and when the sun did not rise, they were out seal-hunting three or four miles from shore when they saw a broken ship in the drift ice, which they boarded and found some dead men in the cabin and a good many articles of one sort and another which they took home and which they showed to our party. This evidence reveals the fate of at least one of the ships we are seeking.

Our party, when they saw us, came out to the edge of the ice. which extended about three miles from shore, and after a good deal of difficulty reached the steamer. The north wind was blowing hard, sending huge black swells and combing waves against the jagged, grinding edge of the pack with terrible uproar, making it impossible for us to reach them with a boat. We succeeded, however, in throwing a line to them, which they made fast to a skin boat that they had pushed over the lee from the shore, and, getting into it, they were dragged over the stormy edge of ice waves and water waves and soon got safely aboard, leaving the tent, provisions, dogs, and sleds at the Indian village, to be picked up some other time.

Then we sailed southward again to take our interpreter Chukchi Joe to his home, which we reached two hours ago. Now we are steering for St. Michael again, intending to land for a few hours on the north side of St. Lawrence Island on the way. At St. Michael we shall write our letters, which will be carried to San Francisco by the Alaska Commercial Company's steamer St. Paul, take on more provisions, and then sail north again along the American shore, spending some time in Kotzebue Sound, perhaps exploring some of the rivers that

flow into it, and then push on around Point Barrow and out into the ocean northward as we can, our movements being always determined by the position and movements of the icepack.

Before making a final effort in August or September to reach Wrangell Land in search of traces of the Jeannette, we will return yet once more to St. Michael for coal and provisions which we have stored there in case we should be compelled to pass a winter north of Bering Strait. The season, however, is so favorable that we have sanguine hopes of finding an open way to Wrangell Land and returning to our homes in October. The Jeannette has not been seen, nor any of her crew, on the Asiatic coast as far west as Cape Yaken, and I have no hopes of the vessel ever escaping from the ice; but her crew, in case they saved their provisions, may yet be alive, though it is strange that they did not come over the ice in the spring. Possibly they may have reached the American coast, If so, they will be found this summer. Our vessel is in perfect condition, and our Captain is very cautious and will not take any considerable chances of being caught in the North pack.

How long it seems since I left home, and yet according to the almanac it will not be two months until the day after to-morrow! I have seen so much and gone so far, and the nightless days are so strangely joined, it seems more than a year. And yet how short a time is the busy month at home among the fruit and the work! My wee lass will be big and bright now, and by the time I can get her again in my arms she will be afraid of my beard. I have a great quantity of ivory dolls and toys—ducks, bears, seals, walruses, etc.—for her to play with, and some soft white furs to make a little robe for her carriage. But it is a sore, hard thing to be out of sight of her so long, and of thee, Lassie, but still sore and harder not to hear. Perhaps not one word until I reach San Francisco! You, however, will hear often. . . .

This is a lovely, cool, clear, bright day, and the mountains along the coast of Asia stand in glorious array, telling the grand old story of their birth beneath the sculpturing ice of the glacial period. But the snow still lingers here and there down to the water's edge, and a little beyond the mouth of Bering Strait the vast, mysterious ice-field of the North stretches of miles. I landed on East Cape yesterday and found unmistakable evidence of the passage over it of a rigid ice-sheet from the North, a fact which is exceedingly telling here....

My health is so good now that I never notice it. I climbed a mountain at East Cape yesterday, about three thousand feet high, a mile through snow knee-deep, and never felt fatigue, my cheeks tingling in the north wind. . . . I have a great quantity of material in my notebooks already, lots of sketches [of] glaciers, mountains, Indians, Indian towns, etc. So you may be sure I have been busy, and if I could only hear a word now and then from that home in the California hills I would be the happiest and patientest man in all Hyperborea.

I am alone in the cabin; the engine is grinding away, making the lamp that is never lighted now rattle, and the joints creak everywhere, and the good Corwin is gliding swiftly over smooth blue water about half way to St. Lawrence Island. And now I must to bed! But before I go I reach my arms towards you, and pray God to keep you all. Good-night.

To Mrs. Muir

[John Muir]

St. Michael, July 4th, 1881

Dear Louie:

We arrived here this afternoon at three o'clock and intend to stay about three days, taking in coal and provisions, and then to push off to the North. We intend to spend nearly a month along the American shore, perhaps as far north as Point Barrow, before we attempt to go out into the Arctic Ocean among the ice, for it is in August and September that the ice is most open. Then, if, as we hope from the favorableness of the season, we succeed in reaching Wrangell Land to search for traces of the Jeannette, or should find any sure tidings of her, we will be back in sunny, iceless California about the end of October, in grape-time. Otherwise

we will probably return to St. Michael and take on a fresh supply of coal and nine months' provisions, and go north again prepared to winter in case we should get caught in the north of Bering Strait.

A few miles to the north of Plover Bay some thirteen or fourteen canoe-loads of natives came out to trade; more than a hundred of them were aboard at once, making a very lively picture. When we proceeded on our way, they allowed us to tow them for a mile or two in order to take advantage of the northerly current in going back to their village. They were dragged along, five or six canoes on each side, making the Corwin look like a mother field-mouse with a big family hanging to her teats, one of the first country sights that filled me with astonishment when a boy.

In coming here I had very fine views of St. Lawrence Island from the north side, showing the trend of the ice-sheet very plainly, much to my delight. The middle of the island is crowded with volcanic cones, mostly post-glacial, and therefore regular in form and but little wasted, and I counted upwards of fifty from one point of view. Just in front of this volcanic portion on the coast there is a dead Esquimo village where we landed and found that every soul of the population had died two years ago of starvation. More than two hundred skeletons were seen lying about like rubbish, in one hut thirty, most of them in bed. Mr. E. W. Nelson, a zealous collector for the Smithsonian Institution, gathered about one hundred skulls as specimens, throwing them together in heaps to take on board, just as when a boy in Wisconsin I used to gather pumpkins in the fall after the corn was shocked. The boxfuls on deck looked just about as unlike a cargo of cherries as possible, but I will not oppress you with grim details.

Some of the men brought off guns, axes, spears, etc., from the abandoned huts, and I found a little box of child's playthings which might please Anna Wanda, but which, I suppose, you will not let into the house. Well, I have lots of others that I bought, and when last here I engaged an Indian to make her a little fur suit, which I hope is ready so that I can send it down by the St. Paul. I hope it may fit her. I wish she were old enough to read the stories that I should like to write her.

Love to all. Good-night.

Ever yours John Muir

To Mrs. Muir

St. Michael, July 9th, 1881

My Dear Wife:

We did not get away last evening, as we expected, on account of the change in plans—as to taking all our winter stores on board, instead of leaving them until another visit in September. It is barely possible we might get caught off Point Barrow or on Wrangell [Land] by movements in the ice-pack that never can be anticipated. Therefore we will be more comfortable with abundance of bread about us. In the matter of coal, there is a mine on the north coast where some can be obtained in case of need, and also plenty of driftwood.

Our cruise, notwithstanding we have already made two trips into a portion of the Arctic usually blocked most of the summer, we consider is just really beginning. For we have not yet made any attempt to get to the packed region about Herald Island and Wrangell Land. Perhaps not once in twenty years would it be possible to get a ship alongside the shores of Wrangell Land, although its southern point is about nine degrees south of points attained on the eastern side of the continent. To find the ocean ice thirty or forty feet thick away from its mysterious shores seems to be about as hopeless as to find a mountain glacier out of its cañon. Still, this has been so remarkably open and mild a winter, and so many north gales have been blowing this spring, [gales] calculated to break up the huge packs and grind the cakes and blocks against one another, that we have sanguine hopes of accomplishing all that we are expected to do and get home by the end of October. If I can

see as much of the American coast as I have of the Asiatic, I will be satisfied, and should the weather be as favorable I certainly shall....

We may, possibly, be home ere you receive any more [letters]. If not, think of me, dear, as happily at work with no other pain than the pain of separation from you and my wee lass. I have many times been weighing chances as to whether you have sent letters by the Mary-and-Helen, now called the "Rodgers," which was to sail about the middle of June. She is a slow sailer, and has to go far out of her course by Petropavlovskii, the capital of Kamchatka, for dogs, and will not be through the Strait before the end of the season nearly. Yet a letter by her is my only hope for hearing from you this season.

How warm and bland the weather is here, 60° in the shade, and how fine a crop of grass and flowers is growing up along the shores and back on the spongy tundra! The Captain says I can have a few hours on shore this afternoon. I mean to go across the bay three miles to a part of the tundra I have not yet seen. I shall at least find a lot of new flowers and see some of the birds. Once more, good-bye. I send Anna's parka by the St. Paul. Give my love to Sam Williams. You must not forget him.

[John Muir]

A month and three days after the date of the preceding letter the Corwin succeeded in making a landing on Wrangell Land. From some unpublished notes of Muir under the heading "Our New Arctic Territory" we excerpt the following account of the event:

Next morning [August 12th] the fog lifted, and we were delighted to see that though there was now about eight miles of ice separating us from the shore, it was less closely packed, and the Corwin made her way through it without great difficulty until within two miles of the shore, where the craggy berg-blocks were found to be extremely hard and wedged closely together. But a patch of open water near the beach, now plainly in sight, encouraged a continuance of the struggle, and with a full head of steam on, the barrier was forced. By 10 o'clock A.M. our little ship was riding at anchor less than a cable's length from the beach, opposite the mouth of a river.

This landing point proved to be in latitude 71° 4', longitude 177° 40' 30" W., near the East Cape. After taking formal possession of the country, one party examined the level beach about the mouth of the river, and the left bank for a mile or two, and a hillside that slopes gently down to the river, while another party of officers, after building a cairn, depositing records in it, and setting the flag on a conspicuous point of the bluff facing the ocean, proceeded northwestward along the brow of the short bluff to a marked headland, a distance of three or four miles, searching attentively for traces of the Jeannette expedition and of any native inhabitants that might chance to be in the country. Then all were hurriedly recalled and a way was forced to open water through ten miles of drift ice which began to close upon us.

To Mrs. Muir

Point Barrow, August 16th, 1881

My Beloved Wife:

Heaven only knows my joy this night in hearing that you were well. Old as the letter is and great as the number of days and nights that have passed since your love was written, it yet seems as if I had once more been upstairs and held you and Wanda in my arms. Ah, you little know the long icy days, so strangely nightless, that I have longed and longed for one word from you. The dangers, great as they were, while groping and grinding among the vast immeasurable ice-fields about that mysterious Wrangell Land would have seemed as nothing before I knew you. But most of the special dangers are past, and I have grand news for you,

my love, for we have succeeded in landing on that strange ice-girt country and our work is nearly all done and I am coming home by the middle of October. No thought of wintering now and attempting to cross the frozen ocean from Siberia. We will take no more risks. All is well with our stanch little ship. She is scarce at all injured by the pounding and grinding she has undergone, and sailing home seems nothing more than crossing San Francisco Bay. We have added a large territory [Wrangell Land] to the domain of the United States and amassed a grand lot of knowledge of one sort and another.

Now we sail from here to-morrow for Cape Lisburne, or, if stormy, to Plover Bay, to coal and repair our rudder, which is a little weak. Thence we will go again around the margin of the main polar pack about Wrangell Land, but not into it, and possibly discover a clear way to land upon it again and obtain more of its geography; then leave the Arctic about the loth of September, call at St. Michael, at Unalaska, and then straight home.

I shall not write at length now, as this is to go down by the Legal Tender, which sails in a few days and expects to reach San Francisco by the 20th of September, but we may reach home nearly as soon as she. I have to dash off a letter for the "Bulletin" to-night, though I ought to go to bed. Not a word of it is yet written.

We came poking and feeling our way along this icy shore a few hours ago through the fog, little thinking that a letter from you was just ahead. Then the fog lifted, and we saw four whalers at anchor and a strange vessel. When the Captain of the Belvidere shouted, "Letters for you, Captain, by the Legal Tender," which was the strange vessel, our hearts leaped, and a boat was speedily sent alongside. I got the letter package and handed them round, and yours, love, was the very last in the package, and I dreaded there was none. The Rodgers had not yet been heard from. One of the whale ships was caught here and crushed in the ice and sank in twenty minutes a month ago.

Good-bye, love. I shall soon be home. Love to all. My wee lass-love—she seems already in my arms. Not in dreams this time! From father and husband and lover.

John Muir

Muir's collection of plants, gathered in the Arctic lands touched by the Corwin, was naturally of uncommon interest to botanists. Asa Gray returned from a European trip in November, and in response to an inquiry from Muir at once wrote him to send on his Arctic plants for determination. Those from Herald Island and Wrangell Land, represented by a duplicate set in the Gray Herbarium at Harvard, are still the only collections known to science from those regions. In determining the plants, Gray found among them a new species of erigeron, and in reporting it to the American Academy of Arts and Sciences named it *Erigeron Muirii* in honor of its discoverer. Muir found it in July at Cape Thompson on the Arctic shore of Alaska. [A complete list of his various collections and of his glacial observations will be found in the appendix to The Cruise of the Corwin (1917).]

This cruise in the Arctic Ocean, as it turned out, was to be the last of his big expeditions for some time. Domestic cares and joys, and the development of the fruit ranch, absorbed his attention more and more. The old freedom was gone, but the following paragraph, from a letter written to Mrs. John Bidwell, of Rancho Chico, on January 2nd, 1882, suggests that he had found a satisfying substitute for the independence of earlier years:

I have been anxious to run up to Chico in the old free way to tell you about the majestic icy facts that I found last summer in the Lord's Arctic palaces, but as you can readily guess, it is not now so easy a matter to wing hither and thither like a bird, for here is a wife and a baby and a home, together with the old press of field studies and literary work, which I by no means intend to lose sight of even in the bright bewitching smiles of my wee bonnie lassie. Speaking of brightness, I have been busy, for a week or two just past letting more light into

the house by means of dormer windows, and in making two more open brick fireplaces. Dormer-windows, open wood-fires, and perfectly happy babies make any home glow with warm sunny brightness and bring out the best that there is in us.

Chapter XV Winning a Competence 1881-1891

There was an interval of ten years during which Mr. Muir devoted himself with great energy and success to the development of the Alhambra fruit ranch. According to a fictitious story, still encountered in some quarters, he was penniless at the time of his marriage. On the contrary, he had several thousand dollars at interest and, according to a fragment of uncompleted memoirs, was receiving from one hundred to two hundred and fifty dollars for each of his magazine articles. "After my first article," he wrote, "I was greatly surprised to find that everything else I offered was accepted and paid for. That I could earn money simply with written words seemed very strange."

In the same memoirs Muir generalizes as follows on the decade between 1881 and 1891:

About a year before starting on the Arctic expedition I was married to Louie Strentzel, and for ten years I was engaged in fruit-raising in the Alhambra Valley, near Martinez, clearing land, planting vineyards and orchards, and selling the fruit, until I had more money than I thought I would ever need for my family or for all expenses of travel and study, however far or however long continued. But this farm work never seriously interrupted my studies. Every spring when the snow on the mountains had melted, until the approach of winter, my explorations were pushed farther and farther. Only in the early autumn, when the table grapes were gathered, and in winter and early spring, when the vineyards and orchards were pruned and cultivated, was my personal supervision given to the work. After these ten years I sold part of the farm and leased the balance, so as to devote the rest of my life, as carefree as possible, to travel and study. Thus, in 1891, I was again free from the farm and all bread winning cares.

In the extant correspondence of the early eighties one gets only indirect and fugitive hints of Muir's activities. Worthy of notice is the fact that during July, 1884, he took his wife to the Yosemite Valley, and their joint letters to the grandparents and the little daughter, left at home, afford amusing glimpses of a husband who has never played courier to a wife and of a wife who mistakes trout for catfish and suspects a bear behind every bush. It should be added that in Mrs. Muir's letters there is a note of concern for her husband's health, which had begun to suffer under the exacting cares of the ranch. "I am anxious about John," she writes. "The journey was hard for him, and he looks thin and pale and tired. He must not leave the mountains until he is well and strong again."

The arrival, in 1886, of a second daughter, believed to have been of frail health during her infant years, brought an increase of parental cares and anchored the family to the ranch more closely than ever. Mrs. Muir was naturally disinclined to travel, and both of them were full of misgivings regarding anything that might imperil the safety of the children. Under the circumstances Muir became more and more absorbed in the management of the ranch and care for his own.

Meanwhile time was working changes in the Wisconsin family circle from which John had gone out in 1867. Nearly eighteen years had gone by since he had seen his father and mother, brothers and sisters. His brother-in-law David Galloway died suddenly in September, 1884, his father and mother were growing

infirm, the wife of his brother David was smitten with an incurable malady, and death was thinning the ranks of the friends of his youth. In view of these circumstances he began to feel more and more strongly the desire to revisit the scenes and friends of his boyhood. "I mean to see you all some time this happy new year [1885]," he wrote to his brother David at the close of December. "Seeing you after so long a journey in earth's wildest wildernesses will make [the experience] indeed new to me. I could not come now without leaving the ranch to go to wreck, a score of workmen without a head, and no head to be found, though I have looked long for a foreman. Next spring after the grapes are pruned and sulphured, etc., and the cherry crop sold, I mean to pay off all but a half-dozen or so and leave things to take their course for a month or two. Can't you send me some good steady fellow to learn this fruit business and take some of the personal supervision off my shoulders? Such a person could be sure of a job as long as he liked."

It seems worth while to record, in this connection, an incident of dramatic and pathetic interest which occurred during the summer of 1885, just before Muir made his first return trip to his old Wisconsin home. Helen Hunt Jackson had come to San Francisco in June after months of illness, caused, as she thought, by defective sanitation in a Los Angeles boarding-house. Having recently been appointed Special Commissioner to inquire into the conditions surrounding the Mission Indians of California, she gave herself with devotion and ability to the righting of their wrongs. Among her particular friends was Mrs. Carr, at whose suburban Pasadena home, "Carmelita," she had written a part of her Indian story "Ramona." It was quite natural, therefore, that she should apply to John Muir for help in planning a convalesent's itinerary in the mountains. "I know with the certainty of instinct," she wrote, "that nothing except three months out of doors night and day will get this poison out of my veins. The doctors say that in six weeks I may be strong enough to be laid on a bed in a wagon and drawn about."

It is easy to imagine the surprise and amusement of Muir when he read her statement of the conditions and equipment required for her comfort. She wished to be among trees where it was moist and cool, being unable to endure heat. She wanted to keep moving, but the altitudinal range must not exceed four thousand feet, and, above all, she must not get beyond easy reach of express and post-offices. Her outfit was to consist of eight horses, an ambulance, two camp-wagons for tents, and a phaeton buggy. The attendants were to comprise four servants, a maid, and a doctor.

"Now do you know any good itinerary," she inquired, "for such a cumbrous caravan as this? How you would scorn such lumbering methods! I am too ill to wish any other. I shall do this as a gamester throws his last card!" In conclusion she stated that she had always cherished the hope of seeing him some time. "I believe," she adds, "I know every word you have written. I never wished myself a man but once. That was when I read how it seemed to be rocked in the top of a pine tree in a gale!"

Muir's reply to this request, according to the draft of a letter found among his papers, was as follows:

To Helen Hunt Jackson

Martinez, June 16th, 1885

My Dear Mrs. Jackson:

Your letter of June 8th has shown me how sick you are, but also that your good angel is guiding you to the mountains, and therefore I feel sure that you will soon be well again.

When I came to California from the swamps of Florida, full of malarial poison, I crawled up the mountains over the snow into the blessed woods about Yosemite Valley, and the exquisite pleasure of convalescence and exuberant rebound to perfect health that came to me at once seem still as fresh and vivid after all these years as if enjoyed but yesterday.

The conditions you lay down for your itinerary seem to me desperately forbidding. No path accessible to your compound congregation can be traced across the range, maintaining anything like an elevation of four thousand feet, to say nothing of coolness and moisture, while along the range the topography is still less compliant to your plans. When I was tracing the Sequoia belt from the Calaveras to the Kern River I was compelled to make a descent of nine thousand feet in one continuous swoop in crossing the Kings River Valley, while the ups and downs from ridge to ridge throughout the whole course averaged nearly five thousand feet.

No considerable portion of the middle and southern Sierra is cool and moist at four thousand feet during late summer, for there you are only on the open margin of the main forest zone, which is sifted during the day by the dry warm winds that blow across the San Joaquin plains and foothills, though the night winds from the summit of the range make the nights delightfully cool and refreshing.

The northern Sierra is considerably cooler and moister at the same heights. From the end of the Oregon Railroad beyond Redding you might work up by a gentle grade of fifty miles or so to Strawberry Valley where the elevation is four thousand feet. There is abundance of everything, civilized as well as wild, and from thence circle away all summer around Mount Shasta where the circumference is about one hundred miles, and only a small portion of your way would lie much above or below the required elevation, and only the north side, in Shasta Valley, would you find rather dry and warm, perhaps, while you would reach an express station at every round or a good messenger could find you in a day from the station at any point in your orbit. And think how glorious a center you would have!—so glorious and inspiring that I would gladly revolve there, weary, afoot, and alone for all eternity.

The Kings River yosemite would be a delightful summer den for you, abounding in the best the mountains have to give. Its elevation is about five thousand feet, length nine miles, and it is reached by way of Visalia and Hyde's Mills among the Sequoias of the Kaweah, but not quite accessible to your wheels and pans, I fear. Have you considered the redwood region of the Coast Range about Mendocino? There you would find coolness, moist air, and spicy woods at a moderate elevation.

If an elevation of six thousand feet were considered admissible, I would advise your going on direct to Truckee by rail, rather than to Dutch Flat, where the climate may be found too dry and hot. From Truckee by easy stages to Tahoe City and thence around the Lake and over the Lake all summer. This, as you must know, is a delightful region—cool and moist and leafy, with abundance of food and express stations, etc.

What an outfit you are to have—terrible as an army with banners! I scarce dare think of it. What will my poor Douglas squirrels say at the sight? They used to frisk across my feet, but I had only two feet, which seemed too many have a hundred, besides wooden spokes and spooks. Under ordinary circumstances they would probably frighten the maid and stare the doctor out of countenance, but every tail will be turned in haste and hidden at the bottom of the deepest knot-holes. And what shuffling and haste there will be in the chaparral when the bears are getting away! Even the winds might hold their breath, I fancy, "pause and die," and the great pines groan aghast at the oncoming of so many shining cans and carriages and strange colors.

But go to the mountains where and how you will, you soon will be free from the effects of this confusion, and God's sky will bend down about you as if made for you alone, and the pines will spread their healing arms above you and bless you and make you well again, and so delight the heart of

John Muir

"If nothing else comes of my camping air-castle," she wrote from 1600 Taylor Street, San Francisco, two days after receiving Muir's answer, "I have at least one pleasure from it—your kind and delightful letter. I have

read it so many times I half know it. I wish Mrs. Carr were here that I might triumph over her. She wrote me that I might as well ask one of the angels of heaven as John Muir, 'so entirely out of his line' was the thing I proposed to do. I knew better, however, and I was right. You are the only man in California who could tell me just what I needed to know about ranges of climate, dryness, heat, etc., also roads."

But the author of "Ramona" was never to have an opportunity to play her last card, for she was beyond even the healing of the mountains if she could have reached them. Indeed, one detects a presentiment of her doom in the closing lines of her letter to the man who had fired her imagination with his contagious faith in the restorative powers of nature. "If you could see me," she writes, "you would only wonder that I have courage to even dream of such an expedition. I am not at all sure it is not of the madness which the gods are said to send on those whom they wish to destroy. They tell me Martinez is only twenty miles away: do you never come into town? The regret I should weakly feel at having you see the 'remains' (ghastly but inimitable word) of me would, I think, be small in comparison with the pleasure I should feel in seeing you. I am much too weak to see strangers—but it is long since you were a stranger." Whether the state of his own health had permitted him to call on "H. H.," as she was known among her friends, before he started East, in August, to see his parents, is not clear. Certain it is that by a singular coincidence he was ringing her door-bell almost at the moment when the brave spirit of this noble friend of the Indians was taking flight. "Mrs. Jackson may have gone away somewhere," he remarked in writing to his wife the next day: "could get no response to my ringing—blinds down."

The immediate occasion of his decision to go East is best told in some further pages from unpublished memoirs under the title of "Mysterious Things." Though Muir's boyhood was passed in communities where spooks, and ghosts, and clairvoyance were firmly believed in, he was as a man singularly free from faith in superstitions of this kind. But there were several occasions when he acted upon sudden and mysterious impulses for which he knew no explanation, and which he contents himself simply to record. One of these relates to the final illness and death of his father and is told as follows:

In the year 1885, when father was living with his youngest daughter in Kansas City, another daughter, who was there on a visit, wrote me that father was not feeling as well as usual on account of not being able to take sufficient exercise. Eight or ten years before this, when he was about seventy years of age, he fell on an icy pavement and broke his leg at the hip joint, a difficult break to heal at any time, but in old age particularly so. The bone never knitted, and he had to go on crutches the balance of his life.

One morning, a month or two after receiving this word from my sister, I suddenly laid down my pen and said to my wife: "I am going East, because somehow I feel this morning that if I don't go now I won't see father again." At this time I had not seen him for eighteen years. Accordingly I went on East, but, instead of going direct to Kansas City, I first went to Portage, where one of my brothers and my mother were living.

As soon as I arrived in Portage, I asked mother whether she thought she was able to take the journey to Kansas City to see father, for I felt pretty sure that if she didn't go now she wouldn't see him again alive. I said the same to my brother David. "Come on, David: if you don't go to see father now, I think you will never see him again." He seemed greatly surprised and said: "What has put that in your head? Although he is compelled to go around on crutches, he is, so far as I have heard, in ordinary health." I told him that I had no definite news, but somehow felt that we should all make haste to cheer and comfort him and bid him a last good-bye. For this purpose I had come to gather our scattered family together. Mother, whose health had long been very frail, said she felt it would be impossible for her to stand the journey. David spoke of his business, but I bought him a railway ticket and compelled him to go.

On the way out to Kansas City I stopped at Lincoln, Nebraska, where my other brother, Daniel, a practicing physician, was living. I said, "Dan, come on to Kansas City and see father." "Why?" he asked. "Because if you don't see him now, you never will see him again. I think father will leave us in a few days." "What makes you think so?" said he; "I have not heard anything in particular." I said, "Well, I just kind of feel it. I have no reason." "I cannot very well leave my patients, and I don't see any necessity for the journey." I said, "Surely you can turn over your patients to some brother physician. You will not probably have to be away more than four or five days, or a week, until after the funeral." He said, "You seem to talk as though you knew everything about it." I said, "I don't know anything about it, but I have no time to lose." Then I sent the same word to two sisters living in Kearney and Crete, Nebraska, who arrived about as soon as we did.

Thus seven of the eight in our family assembled around father for the first time in more than twenty years. Father showed no sign of any particular illness, but simply was confined to his bed and spent his time reading the Bible. We had three or four precious days with him before the last farewell. He died just after we had had time to renew our acquaintance with him and make him a cheering, comforting visit. And after the last sad rites were over, we all scattered again to our widely separated homes.

The reader who recalls, from the opening chapters of this work, the paternal severity which embittered for John Muir the memory of the youthful years he spent on the farm, will be interested in a few additional details of this meeting of father and son after eighteen years. In spite of the causes which had estranged them so long ago, John had never withheld his admiration for the nobler traits of his father's character, and he apparently cherished the hope that some day he might be able to sit down quietly with him and talk it all out. It seemed futile to do this so long as the old man was actively engaged in evangelistic work, which shut out from calm consideration anything that seemed to him to have been or to be an embarrassment of his calling. Now that he was laid low, John deemed that the proper time had arrived, but for this purpose he had come too late.

"Father is very feeble and helpless," he wrote to his wife from the aged man's bedside. "He does not know me, and I am very sorry. He looks at me and takes my hand and says, 'Is this my dear John?' and then sinks away on the pillow, exhausted, without being able to understand the answer. This morning when I went to see him and was talking broad Scotch to him, hoping to stir some of the old memories of Scotland before we came here, he said, 'I don't know much aboot it noo,' and then added, 'You're a Scotchman, aren't you?' When I would repeat that I was his son John that went to California long ago and came back to see him, he would start and raise his head a little and gaze fixedly at me and say, 'Oh, yes, my dear wanderer,' and then lose all memory again. . . . I'm sorry I could not have been here two or three months earlier, though I suppose all may be as well, as it is."

A few months earlier, when Daniel Muir was still in full possession of his faculties, he had particularly mentioned to his daughter Joanna some of the cruel things he had said and done to his "poor wandering son John." This wanderer, crossing the mountains and the plains, in response to a mysterious summons, had gathered the scattered members of the former Fountain Lake home to his dying father's bedside, and, as the following letter shows, was keeping solitary vigil there, when the hour of dissolution came.

To Mrs. Muir

803 Wabash Avenue Kansas City, Missouri October 6th, 1885

Dear Louie:

You will know ere this that the end has come and father is at rest. He passed away in a full summer day evening peace, and with that peace beautifully expressed, and remaining on his

countenance as he lies now, pure and clean like snow, on the bed that has borne him so long.

Last evening David and I made everybody go to bed and arranged with each other to keep watch through the night, promising the girls to give warning in time should the end draw near while they slept. David retired in an adjoining room at ten o'clock, while I watched alone, he to be called to take my place at two or three in the morning, should no marked change take place before that time.

About eleven o'clock his breathing became calm and slow, and his arms, which had been moved in a restless way at times, at length were folded on his breast. About twelve o'clock his breathing was still calmer, and slower, and his brow and lips were slightly cold and his eyes grew dim. At twelve-fifteen I called David and we decided to call up the girls, Mary, Anna, and Joanna, but they were so worn out with watching that we delayed a few minutes longer, and it was not until about one minute before the last breath that all were gathered together to kiss our weary affectionate father a last good-bye, as he passed away into the better land of light.

Few lives that I know were more restless and eventful than his—few more toilsome and full of enthusiastic endeavor onward towards light and truth and eternal love through the midst of the devils of terrestrial strife and darkness and faithless misunderstanding that well-nigh overpowered him at times and made bitter burdens for us all to bear.

But his last years as he lay broken in body and silent were full of calm divine light, and he oftentimes spoke to Joanna of the cruel mistakes he had made in his relations towards his children, and spoke particularly of me, wondering how I had borne my burdens so well and patiently, and warned Joanna to be watchful to govern her children by love alone. . . .

Seven of the eight children will surely be present [at the funeral]. We have also sent telegrams to mother and Sarah, though I fear neither will be able to endure the fatigues of the journey.... In case they should try to be present, David or I would meet them at Chicago. Then the entire family would be gathered once more, and how gladly we would bring that about, for in all our devious ways and wanderings we have loved one another.

In any case, we soon will be scattered again, and again gathered together. In a few days the snow will be falling on father's grave and one by one we will join him in his last rest, all our separating wanderings done forever.

Love to all, Wanda, Grandma, and Grandpa. Ever yours, Louie

John Muir

To Mrs. Muir

Portage City, Wisconsin September 10th, 1885

Dear Louie:

I have just returned from a visit to the old people and old places about our first home in America, ten or twelve miles to the north of this place, and am glad to hear from you at last. Your two letters dated August 23d and 28th and the Doctor's of September 1st have just been received, one of them having been forwarded from the Yellowstone, making altogether four letters from home besides Wanda's neat little notes which read and look equally well whichever side is uppermost. Now I feel better, for I had begun to despair of hearing from you at all, and the weeks since leaving home, having been crowded with novel scenes and events, seemed about as long as years.

As for the old freedom I used to enjoy in the wilderness, that, like youth and its enthusiasms, is evidently a thing of the past, though I feel that I could still do some good scientific work if the necessary leisure could be secured. Your letters and the Doctor's cheer and reassure me, as I felt that I was staying away too long and leaving my burdens for others to carry who had enough of their own, and though you encourage me to prolong my stay and reap all the benefit I can in the way of health and pleasure and knowledge, I cannot shut my eyes to the fact that the main vintage will soon be on and require my presence, to say nothing of your uncertain state of health. Therefore I mean to begin the return journey next Saturday morning by way of Chicago and Kansas City. . . .

Still another of your letters has just arrived, dated August 31st, by which I learn that Wanda is quite well and grandma getting stronger, while you are not well as you should be. I have tried to get you conscious of the necessity of the utmost care of your health—especially at present—and again remind you of it.

The Yellowstone period was, as you say, far too short, and it required bitter resolution to leave all. The trip, however, as a whole has been far from fruitless in any direction. I have gained telling glimpses of the Continent from the car windows, and have seen most of the old friends and neighbors of boyhood times, who without exception were almost oppressively kind, while a two weeks' visit with mother and the family is a great satisfaction to us all, however much we might wish it extended....

I saw nearly all of the old neighbors, the young folk, of course, grown out of memory and unrecognizable; but most of the old I found but little changed by the eighteen years since last I saw them, and the warmth of my welcome was in most instances excruciating. William Duncan, the old Scotch stone-mason who loaned me books when I was little and always declared that "Johnnie Moor will mak a name for himsel some day," I found hale and hearty, eighty-one years of age, and not a gray hair in his curly, bushy locks—erect, firm of step, voice firm with a clear calm ring to it, memory as good as ever apparently, and his interest in all the current news of the world as fresh and as far-reaching. I stopped overnight with [him] and talked till midnight.

We were four days in making the round and had to make desperate efforts to get away. We climbed the Observatory that used to be the great cloud-capped mountain of our child's imagination, but it dwindled now to a mere hill two hundred and fifty feet high, half the height of that vineyard hill opposite the house. The porphyry outcrop on the summit is very hard, and I was greatly interested in finding it grooved and polished by the ice-sheet. I began to get an appetite and feel quite well. Tell Wanda I'll write her a letter soon. Everybody out in the country seemed disappointed not seeing you also. Love to all.

Ever yours

John Muir

Early in 1887 a letter from Janet Moores, one of the children who had visited Muir in his dark-room in Indianapolis many years ago, brought him news that she had arrived in Oakland. She was the daughter of his friend Mrs. Julia Merrill Moores, and a sister of Merrill Moores, who spent a season with John in Yosemite and in 1915 was elected a member of Congress from Indiana.

To Miss Janet Douglass Moores

Martinez, California February 23, 1887

My dear Friend Janet:

Have you really turned into a woman, and have you really come to California, the land of the sun, and Yosemite and a' that, through the whirl of all those years! Seas between us braid hae

roared, my lassie, sin' the auld lang syne, and many a storm has roared over broad mountains and plains since last we parted. Yet, however, we are but little changed in all that signifies, saved from many dangers that we know, and from many more that we never shall know—kept alive and well by a thousand, thousand miracles!

Twenty years! How long and how short a time that seems to-day! How many times the seas have ebbed—and flowed—with their breaking waves around the edges of the continents and islands in this score of years, how many times the sky has been light and dark, and the ground between us been shining with rain, and sun, and snow: and how many times the flowers have bloomed, but for a' that and a' that you seem just the same to me, and time and space and events hide you less than the thinnest veil. Marvelous indeed is the permanence of the impressions of those sunrise days, more enduring than granite mountains. Through all the landscapes I have looked into, with all their wealth of forests, rivers, lakes, and glaciers, and happy living faces, your face, Janet, is still seen as clear and keenly outlined as on the day I went away on my long walk.

Aye, the auld lang syne is indeed young. Time seems of no avail to make us old except in mere outer aspects. To-day you appear the same little fairy girl, following me in my walks with short steps as best you can, stopping now and then to gather buttercups, and anemones, and erigenias, sometimes taking my hand in climbing over a fallen tree, threading your way through tall grasses and ferns, and pushing through very small spaces in thickets of underbrush. Surely you must remember those holiday walks, and also your coming into my dark-room with light when I was blind! And what light has filled me since that time, I am sure you will be glad to know—the richest sun-gold flooding these California valleys, the spiritual alpenglow steeping the high peaks, silver light on the sea, the white glancing sunspangles on rivers and lakes, light on the myriad stars of the snow, light sifting through the angles of sun-beaten icebergs, light in glacier caves, irised spray wafting from white waterfalls, and the light of calm starry nights beheld from mountain-tops dipping deep into the clear air. Aye, my lassie, it is a blessed thing to go free in the light of this beautiful world, to see God playing upon everything, as a man would play on an instrument, His fingers upon the lightning and torrent, on every wave. of sea and sky, and every living thing, making all together sing and shine in sweet accord, the one love-harmony of the Universe. But what need to write so far and wide, now you are so near, and when I shall so soon see you face to face?



A Self-Portrait Drawing in letter of February 23, 1887 to Miss Janet Douglass Moores

I only meant to tell you that you were not forgotten. You think I may not know you at first sight, nor will you be likely to recognize me. Every experience is recorded on our faces in characters of some sort, I suppose, and if at all telling, my face should be quite picturesque and marked enough to be readily known by anybody looking for me: but when I look in the glass, I see but little more than the marks of rough weather and fasting. Most people would see only a lot of hair, and two eyes, or one and a half, in the middle of it, like a hillside with small open spots, mostly overgrown with shaggy chaparral, as this portrait will show [drawing]. Wanda, peeping past my elbow, asks, "Is that you, Papa?" and then goes on to say that it is just like me, only the hair is not curly enough; also that the little ice and island sketches are just lovely, and that I must draw a lot just like them for her. I think that you will surely like her. She remarked the other day that she was well worth seeing now, having got a new gown or something that pleased her. She is six years old.

The ranch and the pasture hills hereabouts are not very interesting at this time of year. In bloom-time, now approaching, the orchards look gay and Dolly Vardenish, and the home garden does the best it can with rose bushes and so on, all good in a food and shelter way, but about as far from the forests and gardens of God's wilderness as bran-dolls are from children. I should like to show you my wild lily and Cassiope and Bryanthus gardens, and homes not made with hands, with their daisy carpets and woods and streams and other fine furniture, and singers, not in cages; but the legs and ankles are immensely important on such visits. Unfortunately most girls are like flowers that have to stand and take what comes, or at best ride on iron rails around and away from what is worth seeing; then they are still something like flowers in pots carried by express.

I advised you not to come last Friday because the weather was broken, and the telephone was broken, and the roads were muddy, but the weather will soon shine again, and then you and Mary can come, with more comfort and safety. Remember me to Mary, and believe me,

Ever truly your friend

John Muir

Muir's literary unproductiveness during the eighties began to excite comment among his friends if one may judge by several surviving letters in which they inquire whether he has forsaken literature. His wife, also, was eager to have him continue to write, and it was, perhaps, due to this gentle pressure from several quarters that he accepted in 1887 a proposal from the J. Dewing Company to edit and contribute to an elaborately illustrated work entitled "Picturesque California." As usual with such works, it was issued in parts, sold by subscription, and while it bears the publication date of 1888, it was not finished until a year or two later.

As some of the following letters show, Muir found it a hard grind to supply a steady stream of copy to the publishers and to supervise his corps of workmen on the ranch at the same time. I am all nerve-shaken and lean as a crow—loaded with care, work, and worry," he wrote to his brother David after a serious illness of

his daughter Helen in August, 1887. "The care and worry will soon wear away, I hope, but the work seems rather to increase. There certainly is more than enough of it to keep me out of mischief forever. Besides the ranch I have undertaken a big literary job, an illustrated work on California and Alaska, I have already written and sent in the two first numbers and the illustrations, I think, are nearly ready."

The prosecution of this task involved various trips, and on some of them he was accompanied by his friend William Keith, the artist. Perhaps the longest was the one on which they started together early in July, 1888, traveling north as far as Vancouver and making many halts and side excursions, both going and coming. Muir was by no means a well man when he left home, but in a train letter to his wife he expressed confidence that he would "be well at Shasta beneath a pine tree." The excursion took him to Mount Hood, Mount Rainier, Snoqualmie and Spokane Falls, and Victoria, up the Columbia, and to many places of minor interest in the Puget Sound region. In spite of his persistent indisposition he made the ascent of Mount Rainier. "Did not mean to climb it," he wrote to his wife, "but got excited and soon was on top."

It did not escape the keen eyes of his devoted wife that the work of the ranch was in no small measure responsible for the failure of his health. "A ranch that needs and takes the sacrifice of a noble life," she wrote to her husband on this trip, "ought to be flung away beyond all reach and power for harm. . . . The Alaska book and the Yosemite book, dear John, must be written, and you need to be your own self, well and strong, to make them worthy of you. There is nothing that has a right to be considered beside this except the welfare of our children."

Muir's health, however, improved during the following winter and summer, notwithstanding the fact that the completion of "Picturesque California" kept him under tension all the time. By taking refuge from the tasks of the ranch at a hotel in San Francisco, during periods of intensive application, he learned to escape at least the strain of conflicting responsibilities. But even so he had to admit at times that he was "hard at work on the vineyards and orchards while the publishers of 'Picturesque California' are screaming for copy." In letters written to his wife, during periods of seclusion in San Francisco, Muir was accustomed to quote choice passages for comment and approval. The fact is of interest because it reveals that he had in her a stimulating and appreciative helper.

To Mrs. Muir

Grand Hotel, San Francisco, Cal. July 4th, 1889

Dear Louie:

I'm pegging away and have invented a few good lines since coming here, but it is a hard subject and goes slow. However, I'll get it done somehow and sometime. It was cold here last evening and I had to put on everything in my satchel at once....

Last evening an innocent-looking "Examiner" reporter sent up his card, and I, really innocent, told the boy to let him come up. He began to speak of the Muir Glacier, but quickly changed the subject to horned toads, snakes, and Gila monsters. I asked him what made him change the subject so badly and what there was about the Muir Glacier to suggest such reprobate reptiles. He said snakes were his specialty and wanted to know if I had seen many, etc. I talked carelessly for a few minutes, and judge of my surprise in seeing this villainous article. "John Muir says they kill hogs and eat rabbits, but don't eat hogs because too big, etc." What poetry! It's so perfectly ridiculous, I have at least had a good laugh out of it. "The toughness of the skin makes a difference," etc.—should think it would!

The air has been sulphurous all day and noisy as a battlefield. Heard some band music, but kept my room and saw not the procession.

Hope your finger is not going to be seriously sore and that the babies are well. I feel nervous about them after reading about those geological snakes of John Muir. . . .

My room is better than the last, and I might at length feel at home with my Puget Sound scenery had I not seen and had nerves shaken with those Gila monsters. I hope I'll survive, though the "Examiner" makes me say, "If the poison gets into them it takes no time at all to kill them" (the hogs), and my skin is not as thick. Remember me to Grandma, Grandpa, and the babies, and tell them not the sad story of the snakes of Fresno.

Ever yours

To Mrs. Muir

John Muir

Grand Hotel, San Francisco Cal. July 5th, 1889

Dear Louie:

Here are more snakes that I found in the "Call" this morning! The curly, crooked things have fairly gained the papers and bid fair to crawl through them all, leaving a track never, I fear, to be obliterated. The "Chronicle's" turn will come next, I fancy, and others will follow. I suppose I ought to write a good post-glacial snake history for the "Bulletin," for just see how much better this lady's snakes are than mine in the "Examiner!" "The biggest snake that ever waved a warning rattle"—almost poetry compared with "John Muir says they don't eat sheep." "Wriggling and rattling aborigines!" I'm ashamed of my ramshackle "Examiner" prose. The Indians "tree the game" and "hang up his snakeship" "beautifully cured" in "sweet fields arrayed in living green," "and very beautiful they are," etc., etc., oh, dear, how scrawny and lean and mean my snake composition seems! Worse in its brutal simplicity than Johnnie's composition about "A Owl." Well, it must be borne.

I'm pegging away. Saw Upham to-day. Dr. Vincent is at the Palace. Haven't called on him; too busy. Love to all. Don't tell anybody about my poor snakes, Kiss the babies.

J. M.

To Mrs. Muir

Grand Hotel, *July* 6, 1889 Oh, dear Louie, here are more of "them snakes"—"whirled and whizzed like a wheel," "big as my thigh, and head like my fist," all of them, you see, better and bigger than John Muir's.

And when, oh, when, is that fatal interview to end? How many more idiotic articles are to grow out of it? "Muir's Strange Story," "Elephants' bones are sticking in the Yukon River, says geologist John Muir"! "Bering Straits may be bridged because Bering Sea is shallow!" Oh! Oh! if the Examiner would only examine its logic!!! Anyhow, I shall take fine cautious care that the critter will not examine me again.

Oh, dear Louie, here's more, and were these letters not accompanied by the documentary evidence, you might almost think that these reptiles were bred and born in alcohol! "The Parson and the Snakes!" Think of that for Sunday reading! What is to become of this nation and the "Examiner"?

It's Johnson, too. Who would have thought it? And think of Longfellow's daughter being signed to such an article!

Well, I'm pegging away, but very slowly. Have got to the thirtieth page. Enough in four days for fie minutes' reading. And yet I work hard, but the confounded subject has got so many arms and branches, and I am so cruelly severe on myself as to quality and honesty of work, that I can't go fast. I just get tired in the head and

lose all power of criticism—until I rest awhile.

It's very noisy here, but I don't notice it. I sleep well, and eat well, and my queer throat feeling has nearly vanished. The weather is very cool. Have to put my overcoat on the bed to reinforce the moderate cover. . . . Good-night. Love to babies and all.

Grand Hotel, San Francisco, Cal. July 11, 1889

J. M.

Dear Louie:

I was very glad to get your letter to-day, for as if, instead of a week, I had been gone a year and had nothing but lonesome silence all the time.

You must see, surely, that I am getting literary, for I have just finished writing for the day and it is half-past twelve. Last evening I went to bed at this time and got up at six and have written twenty pages to-day, and feel proud that now I begin to see the end of this article that has so long been a black, growling cloud in my sky. Some of the twenty pages were pretty good, too, I think. I'll copy a little bit for you to judge. Of course, you say, "go to bed." Well, never mind a little writing more or less, for I'm literary now, and the fountains flow. Speaking of climate here, I say:

The Sound region has a fine, fresh, clean climate, well washed, both winter and summer with copious rains, and swept with winds and clouds from the mountains and the sea. Every hidden nook in the depths of the woods is searched and refreshed, leaving no stagnant air. Beaver-meadows, lake-basins, and low, willowy bogs are kept wholesome and sweet, etc.

Again:

The outer sea margin is sublimely drenched and dashed with ocean brine, the spicy scud sweeping far inland in times of storm over the bending woods, the giant trees waving and chanting in hearty accord, as if surely enjoying it all.

Here's another bit: [Quotes what is now the concluding paragraph of Chapter XVII in "Steep Trails," beginning "The most charming days here are days of perfect calm," etc.].

Well, I may be dull to-morrow, and then too, I have to pay a visit to that charming, entertaining, interesting [dentist] "critter" of files and picks, called Cutlar. So much, I suppose, for cold wind in my jaw. Good-night.

Love to all,

To Mrs. Muir

J. M.

Grand Hotel, San Francisco July 12, 1889

Dear Louie:

Twelve and a half o'clock again, so that this letter should be dated the 13th. Was at the dentist's an hour and a half.... Still, have done pretty well, seventeen pages now, eighty-six altogether. Dewing is telegraphing like mad from New York for Muir's manuscript. He will get it ere long. Most of the day's work was prosy, except the last page just now written. Here it is, Speaking of masts sent from Puget Sound, I write.

Thus these trees, stripped of their leaves and branches, are raised again, transplanted and set firmly erect, given roots of iron, bare cross-poles for limbs, and a new foliage of flapping canvas, and then sent to sea, where they go merrily bowing and waving, meeting the same winds that rocked them when they stood at home in the woods. After standing in one place all their lives, they now, like sightseeing tourists, go round the world, meeting many a relative from the old home forest, some, like themselves, arrayed in broad canvas foliage, others planted close to shore, head downward in the mud, holding whares platforms aloft to receive the wares of all nations.

Imaginative enough, but I don't know what I'll think of it in the sober morning. I see by the papers that [John] Swett is out of school, for which I am at once glad, sorry, and indignant, if not more.

Love to all. Good-night

To Mrs. Muir

J. M.

Grand Hotel, San Francisco July 14, 1889

Dear Louie:

It is late, but I will write very fast a part of to-day's composition. Here is a bit you will like:

The upper Snoqualmie Fall is about seventy-five feet high, with bouncing rapids at head and foot, set in a romantic dell thatched with dripping mosses, and ferns and embowered in dense evergreens and blooming bushes. The road to it leads through majestic woods with ferns ten feet long beneath the trees, and across a gravelly plain disforested by fire many years ago, where orange lilies abound and bright shiny mats of kinnikinick sprinkled with scarlet berries. From a place called "Hunt's," at the end of the wagon road, a trail leads through fresh dripping woods never dry—Merten, Menzies, and Douglas spruces and maple and Thuja. The ground is covered with the best moss-work of the moist cool woods of the north, made up chiefly of the various species of hypnum, with *Marchantia jungermannia*, etc., in broad sheets and bosses where never a dust particle floated, and where all the flowers, fresh with mist and spray, are wetter than water-lilies.

In the pool at the foot of the fall there is good trout-fishing, and when I was there I saw some bright beauties taken. Never did angler stand in a spot more romantic, but strange it seemed that anyone could give attention to hooking in a place so surpassingly lovely to look at—the enthusiastic rush and song of the fall; the venerable trees over-head leaning forward over the brink like listeners eager to catch every word of their white refreshing waters; the delicate maidenhairs and aspleniums, with fronds outspread, gathering the rainbow spray, and the myriads of hooded mosses, every cup fresh and shining. Here's another kind—starting for Mount Rainier:

The guide was well mounted, Keith had bones to ride, and so had small queer Joe, the camp boy, and I. The rest of the party traveled afoot. The distance to the mountain from Yelm in a straight line is about fifty miles. But by the Mule-and-Yellow Jacket trail, that we had to follow, it is one hundred miles. For, notwithstanding a part of the trail runs in the air where the wasps work hardest, it is far from being an air-line as commonly understood.

At the Soda Springs near Rainier.

Springs here and there bubble up from the margin of a level marsh, both hot and cold, and likely to tell in some way on all kinds of ailments. At least so we were assured by our kind buxom hostess, who advised us to drink without ceasing from all in turn because "every one of 'em had medicine in it and [was] therefore sure to do good!" All our party were sick, perhaps from indulging too freely in "canned goods" of uncertain age. But whatever the poison might have been, these waters failed to wash it away though we applied them freely and faithfully internally and externally, and almost eternally as one of the party said.

Next morning all who had come through the ordeal of yellowjackets, ancient meats, and medicinal waters with sufficient strength, resumed the journey to Paradise Valley and Camp of the Clouds, and, strange to say, only two of the party were left behind in bed too sick to walk or ride. Fortunately at this distressing crisis, by the free application of remedies ordinary and extraordinary, such as brandy, paregoric, pain-killer, and Doctor some-body-or-other's Golden Vegetable Wonder, they were both wonderfully relieved and joined us at the Cloud Camp next day, etc., etc., the dentist is still hovering like an angel or something over me. The writing will be finished to-morrow if all goes well. But punctuation and revision will take some time, and as there is now enough to fill two numbers, I suppose it will have to be cut down a little. Guess I'll get home Thursday, but will try for Wednesday. Hoping all are well, I go to slumber.

With loving wishes for all

[John Muir]

To James Davis Butler

Martinez, September 1, 1889

My dear old friend Professor Buttler:

You are not forgotten, but I am stupidly busy, too much so to be able to make good use of odd hours in writing. All the year I have from fifteen to forty men to look after on the ranch, besides the selling of the fruit, and the editing of "Picturesque California," and the writing of half of the work or more. This fall I have to contribute some articles to the "Century Magazine," so you will easily see that I am laden.

It is delightful to see you in your letters with your family and books and glorious surroundings. Every region of the world that has been recently glaciated is pure and wholesome and abounds in fine scenery, and such a region is your northern lake country. How gladly I would cross the mountains to join you all for a summer if I could get away! But much of my old freedom is now lost, though I run away right or wrong at times. Last summer I spent a few months in Washington Territory studying the grand forests of Puget Sound. I then climbed to the summit of Mount Rainier, about fifteen thousand feet high, over many miles of wildly shattered and crevassed glaciers. Some twenty glaciers flow down the flanks of this grand icy cone, most of them reaching the forests ere they melt and give place to roaring turbid torrents. This summer I made yet another visit to my old Yosemite home, and out over the mountains at the head of the Tuolumne River. I was accompanied by one of the editors of the "Century," and had a delightful time. When we were passing the head of the Vernal Falls I told our thin, subtle, spiritual story to the editor.

In a year or two I hope to find a capable foreman to look after this ranch work, with its hundreds of tons of grapes, pears, cherries, etc., and find time for book-writing and old-time wanderings in the wilderness. I hope also to see you ere we part at the end of the day.

You want my manner of life. Well, in short, I get up about six o'clock and attend to the farm work, go to bed about nine and read until midnight. When I have a literary task I leave home, shut myself up in a room in a San Francisco hotel, go out only for meals, and peg away awkwardly and laboriously until the wee sma' hours

or thereabouts, working long and hard and accomplishing little. During meals at home my little girls make me tell stories, many of them very long, continued from day to day for a month or two. . . .

Will you be likely to come again to our side of the continent? How I should enjoy your visit! To think of little Henry an alderman! I am glad that you are all well and all together. Greek and ozone holds you in health. . . .

With love to Mrs. Butler and Henry, James, the girls, and thee, old friend, I am ever

Your friend

John Muir

The event of greatest ultimate significance in the year 1889 was the meeting of Muir with Robert Underwood Johnson, the Century editor mentioned in the preceding letter. Muir had been a contributor to the magazine ever since 1878, when it still bore the name of "Scribner's Monthly," and therefore he was one of the men with whom Mr. Johnson made contact upon his arrival in San Francisco. Muir knew personally many of the early California pioneers and so was in a position to give valuable advice in organizing for the "Century" a series of articles under the general title of "Gold-Hunters." This accomplished, it was arranged that Muir was to take Mr. Johnson suggested to Muir that he initiate a project for the establishment of the Yosemite National Park. [For a very readable account of this eventful incident see Robert Underwood Johnson's *Remembered Yesterdays* (1923).] In order to further the movement it was agreed that he contribute a series of articles to the "Century," setting forth the beauties of the region. Armed with these articles and the public sentiment created by them, Johnson proposed to go before the House Committee on Public Lands to urge the establishment of a national park along the boundaries to be outlined by Muir.

Our country has cause for endless congratulation that the plan was carried out with ability and success. In August and September, 1890, appeared Muir's articles "The Treasures of Yosemite" and "Features of the Proposed Yosemite National Park," both of which aroused strong public support for the project. A bill introduced in Congress by General William Vandever embodied the limits of the park as proposed by Mr. Muir, and on October 1, 1890 the Yosemite National Park became an accomplished fact. The following letters relate to the beginning and consummation of his far-sighted beneficial project.

To Mrs. Muir

Yosemite Valley, Cal. June 3, 1889

Dear Louie:

We arrived here about one o'clock after a fine glorious ride through the forests; not much dust, not very hot. The entire trip very delightful and restful and exhilarating. Johnson was charming all the way. I looked out as we passed Martinez about eleven o'clock, and it seemed strange I should ever go past that renowned town. I thought of you all as sleeping and safe. Whatever more of travel I am to do must be done soon, as it grows ever harder to leave my nest and young.

The foothills and all the woods of the Valley are flowery far beyond what I could have looked for, and the sugar pines seemed nobler than ever. Indeed, all seems so new I fancy I could take up the study of these mountain glories with fresh enthusiasm as if I were getting into a sort of second youth, or dotage, or something of that sort. Governor W——- was in our party, big, burly, and somewhat childishly jolly; also some other jolly fellows and fellowesses.

Chapter XV Winning a Competence 1881-1891

Saw Hill and his fine studio. He has one large Yosemite—very fine, but did not like it so well as the one you saw. He has another Yosemite about the size of the Glacier that I fancy you would all like. It is sold for five hundred dollars, but he would paint another if you wished.

Everybody is good to us. Frank Pixley is here and Ben Truman that wrote about Tropical California. I find old Galen Clark also. He looks well, and is earning a living by carrying passengers about the Valley. Leidig's and Black's old hotels are torn down, so that only Bernards' and the new Stoneman House are left. This last is quite grand; still it has a silly look amid surroundings so massive and sublime. McAuley and the immortal twins still flounder and flourish in the ethereal sky of Glacier Point.

I mean to hire Indians, horses, or something and make a trip to the Lake Tenaya region or Big [Tuolumne] Meadows and Tuolumne Cañon. But how much we will be able to accomplish will depend upon the snow, the legs, and the resolution of the Century. Give my love to everybody at the two houses and kiss and keep the precious babies for me as for thee.

Will probably be home in about a week.

Ever thine J. M.

To Robert Underwood Johnson

Martinez, March 4, 1890

Dear Mr. Johnson:

... The love of Nature among Californians is desperately moderate; consuming enthusiasm almost wholly unknown. Long ago I gave up the floor of Yosemite as a garden, and looked only to the rough taluses and inaccessible or hidden benches and recesses of the walls. All the flowers are wallflowers now, not only in Yosemite, but to a great extent throughout the length and breadth of the Sierra. Still, the Sierra flora is not yet beyond redemption, and much may be done by the movement you are making.

As to the management, it should, I think, be taken wholly out of the Governor's hands. The office changes too often and must always be more or less mixed with politics in its bearing upon appointments for the Valley. A commission consisting of the President of the University, the President of the State Board of Agriculture, and the President of the Mechanics Institute would, I think, be a vast improvement on the present commission. Perhaps one of the commissioners should be an army officer. Such changes would not be likely, as far as I can see, to provoke any formidable opposition on the part of Californians in general. Taking back the Valley on the part of the Government would probably be a troublesome job. . . . Everybody to whom I have spoken on the subject sees the necessity of a change, however, in the management, and would favor such a commission as I have suggested. For my part, I should rather see the Valley in the hands of the Federal Government. But how glorious a storm of growls and howls would rend our sunny skies, bursting forth from every paper in the state, at the outrage of the "Century" Editor snatching with unholy hands, etc., the diadem from California's brow! Then where, oh, where would be the "supineness" of which you speak? These Californians now sleeping in apathy, caring only for what "pays," would then blaze up as did the Devil when touched by Ithuriel's spear. A man may not appreciate his wife, but let her daddie try to take her back!

... As to the extension of the grant, the more we can get into it the better. It should at least comprehend all the basins of the streams that pour into the Valley. No great opposition would be encountered in gaining this much, as few interests of an antagonistic character are involved. On the Upper Merced waters there are no mines or settlements of any sort, though some few land claims have been established. These could be easily extinguished by purchase. All the basins draining into Yosemite are really a part of the Valley, as their streams are a part of the Merced. Cut off from its branches, Yosemite is only a stump. However gnarly and picturesque, no tree that is beheaded looks well. But like ants creeping in the furrows of the bark, few of all the visitors to the Valley see more than the stump, and but little of that. To preserve the Valley and leave all

its related rocks, waters, forests to fire and sheep and lumbermen is like keeping the grand hall of entrance of a palace for royalty, while all the other apartments from cellar to dome are given up to the common or uncommon use of industry—butcher-shops, vegetable-stalls, liquor-saloons, lumberyards, etc.

But even the one main hall has a hog-pen in the middle of the floor, and the whole concern seems hopeless as far as destruction and desecration can go. Some of that stink, I'm afraid, has got into the pores of the rocks even. Perhaps it was the oncoming shadow of this desecration that caused the great flood and earthquake—"Nature sighing through all her works giving sign of woe that all was lost." Still something may be done after all. I have indicated the boundary line on the map in dotted line as proposed above. A yet greater extension I have marked on the same map, extending north and south between Lat. 38° and 37° 30' and from the axis of the range westward about thirty-six or forty miles. This would include three groves of Big Trees, the Tuolumne Cañon, Tuolumne Meadows, and Hetch Hetchy Valley. So large an extension would, of course, meet more opposition. Its boundary lines would not be nearly so natural, while to the westward many claims would be encountered; a few also about Mounts Dana and Warren, where mines have been opened.

Come on out here and take another look at the Cañon. The earthquake taluses are all smooth now and the chaparral is buried, while the river still tosses its crystal arches aloft and the ouzel sings. We would be sure to see some fine avalanches. Come on. I'll go if you will, leaving ranch, reservations, Congress bills, "Century" articles, and all other terrestrial cares and particles.

In the meantime I am

Cordially yours John Muir

To Robert Underwood Johnson

Martinez, April 19th, 1890

My dear Mr. Johnson:

I hope you have not been put to trouble by the delay of that manuscript. I have been interrupted a thousand times, while writing, by coughs, grippe, business, etc. I suppose you will have to divide the article. I shall write a sketch of the Tuolumne Cañon and Kings River yosemite, also the charming yosemite of the Middle Fork of Kings River, all of which may, I think, be got into one article of ten thousand words or twenty. If you want more than is containied in the manuscript sent you on the peaks and glaciers to the east of Yosemite, let me know and I will try to give what is wanted with the Tuolumne Cañon.

The Yosemite "Century" leaven is working finely, even thus far, throughout California. I enclose a few clippings. The "Bulletin" printed the whole of Mack's "Times" letter on our honest Governor. [Charles Howard] Shinn says that the "Overland" is going out into the battle henceforth in full armor. The "Evening Post" editorial, which I received last night and have just read, is a good one and I will try to have it reprinted. .

Mr. Olmsted's paper was, I thought, a little soft in some places, but all the more telling, I suppose, in some directions. Kate, like fate, has been going for the Governor, and I fancy he must be dead or at least paralyzed ere this.

How fares the Bill Vandever? I hope you gained all the basin. If you have, then a thousand trees and flowers will rise up and call you blessed, besides the other mountain people and the usual "unborn generations," etc,

In the meantime for what you have already done I send you a reasonable number of Yosemite thanks, and remain

Very truly your friend

To Mr. and Mrs. John Bidwell

John Muir

Martinez, California April 19th, 1890

Dear Mrs. Bidwell and General:

I've been thinking of you every day since dear Parry [Charles C. Parry, 1823-90, Explored and collected on the Mexican boundary, in the Rocky Mountains, and in California. The other botanists mentioned are John Torrey, 1796-1873; Asa Gray, 1810-88; and Albert Kellogg, who died in 1887.] died. It seems as if all the good flower people, at once great and good, have died now that Parry has gone—Torrey, Gray, Kellogg, and Parry. Plenty more botanists left, but none we have like these. Men more amiable apart from their intellectual power I never knew, so perfectly clean and pure they were—pure as lilies, yet tough and unyielding in mental fibre as live-oaks. Oh, dear, it makes me feel lonesome, though many lovely souls remain. Never shall I forget the charming evenings I spent with Torrey in Yosemite, and with Gray, after the day's rambles were over and they told stories of their lives, Torrey fondly telling all about Gray, Gray about Torrey, all in one summer; and then, too, they told me about Parry for the first time. And then how fine and how fruitful that trip to Shasta with you! Happy days, not to come again! Then more than a week with Parry around Lake Tahoe in a boat; had him all to myself—precious memories. It seems easy to die when such souls go before. And blessed it is to feel that they have indeed gone before to meet us in turn when our own day is done.

The Scotch have a proverb, "The evenin' brings a' hame." And so, however separated, far or near, the evening of life brings all together at the last. Lovely souls embalmed in a thousand flowers, embalmed in the hearts of their friends, never for a moment does death seem to have had anything to do with them. They seem near, and are near, and as if in bodily sight I wave my hand to them in loving recognition.

Ever yours

To Robert Underwood Johnson

John Muir

Martinez, May 8th, 1890

My dear Mr. Johnson:

... As I have urged over and over again, the Yosemite Reservation ought to include all the Yosemite fountains. They all lie in a compact mass of mountains that are glorious scenery, easily accessible from the grand Yosemite center, and are not valuable for any other use than the use of beauty. No other interests would suffer by this extension of the boundary. Only the summit peaks along the axis of the range are possibly gold-bearing, and not a single valuable mine has yet been discovered in them. Most of the basin is a mass of solid granite that will never be available for agriculture, while its forests ought to be preserved. The Big Tuolumne Meadows should also be included, since it forms the central camping-ground for the High Sierra adjacent to the Valley. The Tuolumne Cañon is so closely related to the Yosemite region it should also be included, but whether it is or not will not matter much, since it lies in rugged rocky security, as one of Nature's own reservationis.

As to the lower boundary, it should, I think, be extended so far as to include the Big Tree groves below the Valley, thus bringing under Government protection a section of the forest containing specimens of all the principal trees of the Sierra, and which, if left unprotected, will vanish like snow in summer. Some private claims will have to be bought, but the cost will not be great.

Yours truly

John Muir

While traveling about with Keith in the Northwest during July, 1888, gathering materials for "Picturesque California," Muir was one day watching at Victoria the departure of steamers for northern ports. Instantly he heard the call of the "red gods" of Alaska and began to long for the old adventurous days in the northern wildernesses. "Though it is now ten years since my last visit here," he wrote to his wife in the evening, "Alaska comes back into near view, and if a steamer were to start now it would be hard indeed to keep myself from going aboard. I must spend one year more there at the least. The work I am now doing seems much less interesting and unimportant. . . . Only by going alone in silence, without baggage, can one truly get into the heart of the wilderness. All other travel is mere dust and hotels and baggage and chatter."

The longed-for opportunity came two years later. During the winter of 1890 he had suffered an attack of the grippe which brought on a severe bronchial cough. He tried to wear it out at his desk, but it grew steadily worse. He then, as he used to relate with a twinkle in his eye, decided upon the novel experiment of trying to wear it out by going to Alaska and exploring the upper tributaries of the Muir Glacier. In the following letter we get a glimpse of him after two weeks of active exploration around Glacier Bay.

To Mrs. Muir

Glacier Bay Camp near eastern end of ice wall July 7th, [1890]

Dear Louie:

The steamer Queen is in sight pushing up Muir Inlet through a grand crowd of bergs on which a clear sun is shining. I hope to get a letter from you to hear how you and the little ones and older ones are.

I have had a good instructive and exciting time since last I wrote you by the Elder a week ago. The weather has been fine and I have climbed two mountains that gave grand general views of the immense mountain fountains of the glacier and also of the noble St. Elias Range along the coast mountains, La Pérouse, Crillon, Lituya, and Fairweather. Have got some telling facts on the forest question that has so puzzled me these many years, etc., etc. Have also been making preliminary observations on the motion of the glacier. Loumis and I get on well, and the Reid [Professor Harry Fielding Reid.] and Cushing party camped beside us are fine company and energetic workers. They are making a map of the Muir Glacier and Inlet, and intend to make careful and elaborate measurements of its rate of motion, size, etc. They are well supplied with instruments and will no doubt do good work.

I have yet to make a trip round Glacier Bay, to the edge of the forest and over the glacier as far as I can. Probably Reid and Cushing and their companions will go with me. If this weather holds, I shall not encounter serious trouble. Anyhow, I shall do the best I can. I mean to sew the bear skin into a bag, also a blanket and a canvas sheet for the outside. Then, like one of Wanda's caterpillars, I can lie warm on the ice when night overtakes me, or storms rather, for here there is now no night. My cough has gone and my appetite has come, and I feel much better than when I left home. Love to each and all.

If I have time before the steamer leaves I will write to my dear Wanda and Helen. The crowd of visitors are gazing at the grand blue crystal wall, tinged with sunshine. Ever thine

The crowning experience of this Alaska trip was the sled trip which he made across the upper reaches of the Muir Glacier between the 11th and the 21st of July. Setting out from his little cabin on the teriminal moraine, Muir pushed back on the east side of the glacier toward Howling Valley, fifteen miles to the northward, examined and sketched some of the lesser tributaries, then turned to the westward and crossed the glacier near the confluence of the main tributaries, and thence made his way down the west side to the front. No one was willing to share this adventure with him so he faced it, as usual, alone.

Chapter XVIII of "Travels in Alaska" gives, in journal form, an account of Muir's experiences and observations on this trip. To this may be added his description of two incidents as related in fragments of unpublished memoirs:

In the course of this trip I encountered a few adventures worth mention apart from the common dangers encountered in crossing crevasses. Large timber wolves were common around Howling Valley, feeding apparently on the wild goats of the adjacent mountains.

One evening before sundown I camped on the glacier about a mile above the head of the valley, and, sitting on my sled enjoying the wild scenery, I scanned the grassy mountain on the west side above the timber-line through my field glasses, expecting to see a good many wild goats in pastures so fine and wild. I discovered only two or three at the foot of a precipitous bluff, and as they appeared perfectly motionless, and were not lying down, I thought they must be held there by attacking wolves. Next morning, looking again, I found the goats still standing there in front of the cliff, and while eating my breakfast, preparatory to continuing my journey, I heard the dismal long-drawn out howl of a wolf, soon answered by another and another at greater distances and at short intervals coming nearer and nearer, indicating that they had discovered me and were coming down the mountain to observe me more closely, or perhaps to attack me, for I was told by my Indians while exploring in 1879 and 1880 that these wolves attack either in summer or winter, whether particularly hungry or not; and that no Indian hunter ever ventured far into the woods alone, declaring that wolves were much more dangerous than bears. The nearest wolf had evidently got down to the margin of the glacier, and although I had not vet been able to catch sight of any of them, I made haste to a large square from behind, in the same manner as the hunted goats. I had no firearms, but thought I could make a good fight with my Alpine ice axe. This, however, was only a threatened attack, and I went on my journey, though keeping a careful watch to see whether I was followed.

At noon, reaching the confluence of the eastmost of the great tributaries and observing that the ice to the westward was closely crevassed, I concluded to spend the rest of the day in ascending what is now called Snow Dome, a mountain about three thousand feet high, to scan the whole width of the glacier and choose the route that promised the fewest difficulties. The day was clear and I took the bearings of what seemed to be the best route and recorded them in my notebook so that in case I should be stopped by a blinding snowstorm, or impassable labyrinth of crevasses, I might be able to retrace my way by compass.

In descending the mountain to my sled camp on the ice I tried to shorten the way by sliding down a smooth steep fluting groove nicely lined with snow; but in looking carefully I discovered a bluish spot a few hundred feet below the head, which I feared indicated ice beneath the immediate surface of the snow; but inasmuch as there were no heavy boulders at the foot of the slope, but only a talus of small pieces an inch or two in diameter, derived from disintegrating metamorphic slates, lying at as steep an angle as they could rest, I felt confident that even if I should lose control of myself and be shot swiftly into them, there would be no risk of broken bones. I decided to encounter the adventure. Down I glided in a smooth comfortable swish until I struck the blue spot. There I suddenly lost control of myself and went rolling and bouncing like a boulder until stopped by plashing into the loose gravelly delta.

As soon as I found my legs and senses I was startled by a wild, piercing, exulting, demoniac yell, as if a pursuing assassin long on my trail were screaming: "I've got you at last." I first imagined that the wretch might be an Indian, but could not believe that Indians, who are afraid of glaciers, could be tempted to venture so far into the icy solitude. The mystery was quickly solved when a raven descended like a thunderbolt from the sky and alighted on a jag of a rock within twenty or thirty feet of me. While soaring invisible in the sky, I presume that he had been watching me all day, and at the same time keeping an outlook for wild goats, which were sometimes driven over the cliffs by the wolves. Anyhow, no sooner had I fallen, though not a wing had been seen in all the clear mountain sky, than I had been seen by these black hunters who now were eagerly looking me over and seemed sure of a meal. The explanation was complete, and as they eyed me with a hungry longing stare I simply called to them: "Not yet!"

Chapter XVI Trees and Travel 1891-1897



The Upper Ranch Home of John Muir about 1890 Wanda Muir on the Porch

The sudden death of Dr. Strentzel on the last of October, 1890, brought in its train a change of residence for the Muir family. At the time of his marriage, Muir had first rented and later purchased from his father-in-law the upper part of the Alhambra ranch. Dr. Strentzel thereupon left the old home to his daughter, and removed to the lower half of the ranch, where he and his wife built and occupied a large new frame house on a sightly hill-top. Since Mrs. Strentzel, after her husband's death, needed the care of her daughter, the Muirs left the upper ranch home, in which they had lived for ten years, and moved to the more spacious, but on the whole less comfortable, house which thereafter became known as the Muir residence.

At the beginning of his father-in-law's illness, Muir was on the point of starting on a trip up the Kings River Cañon in order to secure additional material for a "Century" article. The project, naturally, had to be abandoned. "It is now snowy and late," he wrote to Mr. Johnson in November, I fear I shall not be able to get into the canyons this season. I think, however, that I can write the article from my old notes. I made three trips through the Kings River Canyon, and one through the wild Middle Fork Canyon with its charming Yosemite." The deeper purpose of this article was to serve as a starter for another national park. It means that two weeks after the successful issue of the campaign for the creation of the Yosemite National Park, Muir, ably assisted by Mr. R. U. Johnson, began to advocate the enlargement of the Sequoia National Park so as to embrace the Kings River region and the Kaweah and Tule Sequoia groves. John W. Noble was then Secretary of the Interior (1889-93), and it is fair to say that, measured by the magnitude of benefits conferred upon the country, no more useful incumbent has ever filled that office. He at once declared himself ready to withdraw the region from entry if Muir would delimit upon Land Office maps the territory that should go into a park.

"I am going to San Francisco this morning," Muir wrote to Johnson on May 13, 1891, "and will get the best map I can and will draw the boundaries of the proposed new park. . . . This map I shall send you tomorrow." During the same month he made another trip up the cañon of the Kings River, particularly the South Fork, and

afterwards wrote for the "Century" [November, 1891.] an unusually telling description of it under the title of "A Rival of the Yosemite." "This region," he said in concluding the article, "contains no mines of consequence; it is too high and too rocky for agriculture, and even the lumber industry need suffer no unreasonable restriction. Let our law-givers then make haste, before it is too late, to save this surpassingly glorious region for the recreation and well-being of humanity, and the world will rise up and call them blessed."

Advance sheets of the article, placed in the hands of Secretary Noble, moved him to bring Muir's proposal to the immediate attention of Congress with the recommendation of "favorable consideration and action." But over thirty years have passed since then, and Muir's dream of good still awaits realization at the hands of our law-givers. The Roosevelt-Sequoia National Park bill, now before Congress, is substantially Muir's original proposal, and fittingly recognizes the invaluable service which Theodore Roosevelt rendered to the cause of forests and parks, partly in cooperation with Muir, as shown in a succeeding chapter. This bill should be speedily passed, over the paltering objections of adventurers who place their private farthing schemes above the immeasurable public benefit of a national playground that not only rivals the already overcrowded Yosemite in beauty and spaciousness, but is, in the words of Muir, "a veritable song of God."

Muir had now reached the stage in his career when he had not only the desire, but also the power, to translate his nature enthusiasms into social service. Increasing numbers of progressive citizens, both East and West, were looking to him for leadership when corrupt or incompetent custodians of the public domain needed to be brought to the bar of public opinion. And there was much of this work to be done by a man who was not afraid to stand up under fire. Muir's courageous and outspoken criticism of the mismanagement of Yosemite Valley by the State Commissioners aroused demands in Washington for an investigation of the abuses and a recession of the Valley to the Federal Government as part of the Yosemite National Park.

Since there was likelihood of a stiff battle over this and other matters, Muir's friends, particularly Mr. R. U. Johnson, urged him to get behind him a supporting organization on the Pacific Coast through which men of kindred aims could present a United front. This led to the formal organization of the Sierra Club on the 4th of June, 1892. It declared its purpose to be a double one: first, "to explore, enjoy, and render accessible the mountain regions of the Pacific Coast," and "to publish authentic information concerning them"; and, second, "to enlist the support and cooperation of the people and government in preserving the forests and other natural features of the Sierra Nevada Mountains." The Club, in short, was formed with two sets of aims, and it gathered into its membership on the one hand persons who were primarily lovers of mountains and mountaineering, and on the other hand those whose first interest was to conserve the forests and other natural features for future generations. In no single individual were both these interests better represented than in the person of Muir, who became the first president of the Club, and held the office continuously until his death twenty-two years later. Among the men who deserve to be remembered in connection with the organization and early conservation activities of the Club were Warren Olney, Sr., and Professors Joseph LeConte, J. H. Senger, William Dallam Armes, and Cornelius Beach Bradley.

One of the first important services of the Club was its successful opposition to the so-called "Caminetti Bill," a loosely drawn measure introduced into Congress in 1892 with the object of altering the boundaries of the Yosemite National Park in such a way as to eliminate about three hundred alleged mining claims, and other large areas desired by stockmen and lumbermen. The bill underwent various modifications, and finally, in 1894, it was proposed to authorize the Secretary of the Interior to make the alterations. Muir's public interviews and the organized resistance of the Club, fortunately, repelled this contemplated raid upon the new park; for watchful guardians of the public domain regarded it as of ill omen that Secretary Hoke Smith, who had succeeded John W. Noble in 1893, reported that he had no objection to interpose to the bill's passage.

It should be recorded to the lasting honor of President Harrison and the Honorable John W. Noble that they established the first forest reserves under an Act of Congress [The authorization of the President to make forest reservations is contained in a clause inserted in the Sundry Civil Bill of that year. The credit of it belongs to Edward A. Bowers, whose

name deserves to be held in rememberance for other noble services to the cause of forest conservation.] passed March 3, 1891. It was the first real recognition of the practical value of forests in conserving water-flow at the sources of rivers. The Boone and Crockett Club on April 8, 1891, made it the occasion of a special vote of thanks addressed to the President and Secretary Noble on the ground that "this society recognizes in these actions the most important steps taken in recent years for the preservation of our forests." Though not so recognized at the time, it was a happy augury for the future that the resolution was inspired, signed, and transmitted by Theodore Roosevelt.

Among the few surviving Muir letters of the early nineties is the following one to his Indianapolis friend Mrs. Graydon, who had expressed a hope that, if he returned to her home city during the current year, she might be able to arrange for a social evening with the poet James Whitcomb Riley.

To Mrs. Mary Merrill Graydon

Martinez, February 28, 1893

My Dear Mrs. Graydon:

I am glad to hear from you once more. You say you thought on account of long silence we might be dead, but the worst that could be fairly said is "not dead but sleeping"—hardly even this, for, however silent, sound friendship never sleeps, no matter how seldom paper letters fly between.

My heart aches about Janet—one of the sad, sad, sore cases that no human wisdom can explain. We can only look on the other side through tears and grief and pain and see that pleasure surpasses the pain, good the evil, and that, after all, Divine love is the sublime boss of the universe.

The children greatly enjoy the [James Whitcomb] Riley book you so kindly sent. I saw Mr. Riley for a moment at the close of one of his lectures in San Francisco, but I had to awkwardly introduce myself, and he evidently couldn't think who I was. Professor [David Starr] Jordan, who happened to be standing near, though I had not seen him, surprised me by saying, "Mr. Riley, this man is the author of the Muir Glacier." I invited Mr. Riley to make us a visit at the ranch, but his engagements, I suppose, prevented even had he cared to accept, and so I failed to see him save in his lecture.

I remember my visit to your home with pure pleasure, and shall not forget the kindness you bestowed, as shown in so many ways. As to coming again this year, I thank you for the invitation, but the way is not open so far as I can see just now.

I think with Mr. Jackson that Henry Riley [One of his fellow workmen in the wagon factory in Indianapolis, 1866-67, "Your name is a household word with us," wrote Mr. Riley in acknowledging Muir's pngt. "The world has traveled on at a great rate in the twenty-five years since you and I made wheels together, and you, I am proud to say, have traveled with it."] shows forth one of the good sides of human nature in so vividly remembering the little I did for him so long ago. I send by mail with this letter one of the volumes of "Picturesque California" for him in your care, as I do not know his address. Merrill Moores knows him, and he can give him notice to call for the book. It contains one of my articles on Washington, and you are at liberty to open and read it if you wish.

Katie [Graydon] I have not seen since she went to Oakland, though only two hours away. But I know she is busy and happy through letters and friends. I mean to try to pass a night at McChesney's, and see her and find out all about her works and ways. The children and all of us remember her stay with us as a great blessing,

Remember me to the Hendricks family, good and wholesome as sunshine, to the venerable Mr. Jackson, and all the grand Merrill family, your girls in particular, with every one of whom I fell in love, and believe me, noisy or silent.

Ever your friend John Muir

Muir had long cherished the intention of returning to Scotland in order to compare his boyhood memories of the dingles and dells of his native land with what he described, before the California period of his life, as "all the other less important parts of our world." In the spring of 1893 he proceeded to carry out the plan. The well-remembered charms of the old landscapes were still there, but he was to find that his standards of comparison had been changed by the Sierra Nevada. On the way East he paid a visit to his mother in Wisconsin, lingered some days at the Chicago World's Fair, and then made his first acquaintance with the social and literary life of New York and Boston. The following letters give some hint of the rich harvest of lasting friendships which he reaped during his eastern sojourn.

To Mrs. Muir

3420 Michigan Ave., Chicago *May* 29, 1893, 9 A.M.

Dear Louie:

I leave for New York this evening at five o'clock and arrive there to-morrow evening at seven, when I expect to find a letter from you in care of Johnson at the "Century" Editorial Rooms. The Sellers' beautiful home has been made heartily my own, and they have left nothing undone they could think of that would in any way add to my enjoyment. Under their guidance I have been at the [World's] Fair every day, and have seen the best of it, though months would be required to see it all.

You know I called it a "cosmopolitan rat's [Refers to the wood rat or pack rat (*Neotoma*) which builds large mound-like nests and "packs" into them all kinds of amusing odds and ends.] nest," containing much rubbish and commonplace stuff as well as things novel and precious. Well, now that I have seen it, it seems just such a rat's nest still, and what, do you think, was the first thing I saw when I entered the nearest of the huge buildings? A high rat's nest in a glass case about eight feet square, with stuffed wood rats looking out from the mass of sticks and leaves, etc., natural as life? So you see, as usual, I am "always right."

I most enjoyed the art galleries. There are about eighteen acres of paintings by every nation under the sun, and I *wandered* and *gazed* until I was ready to fall down with utter exhaustion. The Art Gallery of the California building is quite small and of little significance, not more than a dozen or two of paintings all told four by Keith, not best, and four by Hill, not his best, and a few others of no special character by others, except a good small one by Yelland. But the National Galleries are perfectly overwhelming in grandeur and bulk and variety, and years would be required to make even the most meager curiosity of a criticism.

The outside view of the buildings is grand and also beautiful. For the best architects have done their best in building them, while Frederick Law Olmsted laid out the grounds. Last night the buildings and terraces and fountains along the canals were illuminated by tens of thousands of electric lights arranged along miles of lines of gables, domes, and cornices, with glorious effect. It was all fairyland on a colossal scale and would have made the Queen of Sheba and poor Solomon in all their glory feel sick with helpless envy. I wished a hundred times that you and the children and Grandma could have seen it all, and only the feeling that Helen would have been made sick with excitement prevented me from sending for you.

I hope Helen is well and then all will be well. I have worked at my article at odd times now and then, but it still remains to be finished at the "Century" rooms. Tell the children I'll write them from New York to-morrow or next day. Love to all. Good-bye.

Ever yours John Muir

To Mrs. Muir

The Thorndike Boston, Mass., *June* 12, 1893

Dear Louie:

I have been so crowded and overladen with enjoyments lately that I have lost trace of time and have so much to tell you I scarce know where and how to begin. When I reached New York I called on Johnson, and told him I meant to shut myself up in a room and finish my articles and then go with Keith to Europe. But he paid no attention to either my hurry or Keith's, and quietly ordered me around and took possession of me.

New York, June 13 Dear Louie:

I was suddenly interrupted by a whole lot of new people, visits, dinners, champagne, etc., and have just got back to New York by a night boat by way of Fall River. So I begin again. Perhaps this is the 13th, Tuesday, for I lose all track of time.

First I was introduced to all the "Century" people, with their friends also as they came in. Dined with Johnson first. Mrs. J. is a bright, keen, accomplished woman. . . .

Saw Burroughs the second day. He had been at a Walt Whitman Club the night before, and had made a speech, eaten a big dinner, and had a headache. So he seemed tired, and gave no sign of his fine qualities. I chatted an hour with him and tried to make him go to Europe with me. The "Century" men offered him five hundred dollars for some articles on our trip as an inducement, but he answered to-day by letter that he could not go, he must be free when he went, that he would above all things like to go with me, etc., but circumstances would not allow it. The "circumstances" barring the way are his wife. I can hardly say I have seen him at all.

Dined another day with [Richard Watson] Gilder. He is charming every way, and has a charming home and family. . . . I also dined in grand style at Mr. Pinchot's, whose son is studying forestry. The home is at Gramercy Park, New York. Here and at many other places I had to tell the story of the minister's dog. Everybody seems to think it wonderful for the views it gives of the terrible crevasses of the glaciers as well as for the recognition of danger and the fear and joy of the dog, I must have told it at least twelve times at the request of Johnson or others who had previously heard it. I told Johnson I meant to write it out for "St. Nicholas," but he says it is too good for "St. Nick," and he wants it for the "Century" as a separate article. When I am telling it at the dinner-tables, it is curious to see how eagerly the liveried servants listen from behind screens, half-closed doors, etc.

Almost every day in town here I have been called out to lunch and dinner at the clubs and soon have a crowd of notables about me. I had no idea I was so well known, considering how little I have written. The trip up the Hudson was delightful. Went as far as West Point, to Castle Crags, the residence of the [Henry Fairfield] Osborns. Charming drives in the green flowery woods, and, strange to say, all the views, are familiar, for the landscapes are all freshly glacial. Not a line in any of the scenery that is not a glacial line. The same is true of all the region hereabouts. I found glacial scoring on the rocks of Central Park even.

Last Wednesday evening Johnson and I started for Boston, and we got back this morning, making the trip both ways in the night to economize time. After looking at the famous buildings, parks, monuments, etc., we took the train for Concord, wandered through the famous Emerson village, dined with Emerson's son, visited the Concord Bridge, where the first blood of the Revolution was shed, and where "the shot was fired heard round the world." Went through lovely, ferny, flowery woods and meadows to the hill cemetery and laid

flowers on Thoreau's and Emerson's graves. I think it is the most beautiful graveyard I ever saw. It is on a hill perhaps one hundred and fifty feet high in the woods of pine, oak, beech, maple, etc., and all the ground is flowery. Thoreau lies with his father, mother, and brother not far from Emerson and Hawthorne. Emerson lies between two white pine trees, one at his head, the other at [his] feet, and instead of a mere tombstone or monument there is a mass of white quartz rugged and angular, wholly uncut, just as it was blasted from the ledge. I don't know where it was obtained. There is not a single letter or word on this grand natural monument. It seems to have been dropped there by a glacier, and the soil he sleeps in is glacial drift almost wholly unchanged since first this country saw the light at the close of the glacial period. There are many other graves here, though it is not one of the old cemeteries. Not one of them is raised above ground. Sweet kindly Mother Earth has taken them back to her bosom whence they came. I did not imagine I would be so moved at sight of the resting places of these grand men as I found I was, and I could not help thinking how glad I would be to feel sure that I would also rest here. But I suppose it cannot be, for Mother will be in Portage. . . .

After leaving Thoreau and Emerson, we walked through the woods to Walden Pond. It is a beautiful lake about half a mile long, fairly embosomed like a bright dark eye in wooded hills of smooth moraine gravel and sand, and with a rich leafy undergrowth of huckleberry, willow, and young oak bushes. etc. and grass and flowers in rich variety. No wonder Thoreau lived here two years. I could have enjoyed living here two hundred years or two thousand. It is only about one and a half or two miles from Concord, a mere saunter, and how people should regard Thoreau as a hermit on account of his little delightful stay here I cannot guess.

We visited also Emerson's home and were shown through the house. It is just as he left it, his study, books, chair, bed, etc., and all the paintings and engravings gathered in his foreign travels. Also saw Thoreau's village residence and Hawthorne's old manse and other home near Emerson's. At six o'clock we got back from Walden to young Emerson's father-in-law's place in Concord and dined with the family and Edward Waldo Emerson. The latter is very like his father—rather tall, slender, and with his father's sweet perennial smile. Nothing could be more cordial and loving than his reception of me. When we called at the house, one of the interesting old colonial ones, he was not in, and we were received by his father-in-law, a college mate of Thoreau, who knew Thoreau all his life. The old man was sitting on the porch when we called. Johnson introduced himself, and asked if this was Judge Keyes, etc. The old gentleman kept his seat and seemed, I thought, a little cold and careless in his manner. But when Johnson said "This is Mr. Muir," he jumped up and said excitedly, "John Muir! Is this John Muir?" and seized me as if I were a long-lost son. He declared he had known me always, and that my name was a household word. Then he took us into the house, gave us refreshments, cider, etc., introduced us to his wife, a charming old fashioned lady, who also took me for a son. Then we were guided about the town and shown all the famous homes and places. But I must hurry on or I will be making a book of it.

We went back to Boston that night on a late train, though they wanted to keep us, and next day went to Professor Sargent's grand place, where we had a perfectly wonderful time for several days. This is the finest mansion and grounds I ever saw. The house is about two hundred feet long with immense verandas trimmed with huge flowers and vines, standing in the midst of fifty acres of lawns, groves, wild woods of pine, hemlock, maple, beech, hickory, etc., and all kinds of underbrush and wild flowers and cultivated flowers—acres of rhododendrons twelve feet high in full bloom, and a pond covered with lilies, etc., all the ground waving, hill and dale, and clad in the full summer dress of the region, trimmed with exquisite taste.

The servants are in livery, and everything is fine about the house and in it, but Mr. and Mrs. Sargent are the most cordial and unaffected people imaginable, and in a few minutes I was at my ease and at home, sauntering where I liked, doing what I liked, and making the house my own. Here we had grand dinners, formal and informal, and here I told my dog story, I don't know how often, and described glaciers and their works. Here, the last day, I dined with Dana, of the New York "Sun," and Styles, of the "Forest and Stream," Parsons, the Superintendent of Central Park, and Matthews, Mayor of Boston. Yesterday the Mayor came with carriages and drove us through the public parks and the most interesting streets of Boston, and he and Mr. and Mrs.

Sargent drove to the station and saw us off. While making Sargent's our headquarters, Mr. Johnson took me to Cambridge, where we saw the classic old shades of learning, found Royce, who guided us, saw Porter, and the historian Parkman, etc., etc. We called at Eliot's house, but he was away.

We also went to the seaside at Manchester, forty miles or so from Boston, to visit Mrs. [James T.] Fields, a charming old lady, and how good a time! Sarah Orne Jewett was there, and all was delightful. Here, of course, Johnson made me tell that dog story as if that were the main result of glacial action and all my studies, but I got in a good deal of ice-work better than this, and never had better listeners.

Judge Howland, whom I met in Yosemite with a party who had a special car, came in since I began this letter to invite me to a dinner to-morrow evening with a lot of his friends. I must get that article done and set the day of sailing for Europe, or I won't get away at all. This makes three dinners ahead already. I fear the tail of my article will be of another color from the body. Johnson has been most devoted to me ever since I arrived, and I can't make him stop. I think I told you the "Century" wants to publish my book. They also want me to write articles from Europe.

Must stop. Love to all. How glad I was to get Wanda's long good letter this morning, dated June 2! All letters in Johnson's care will find me wherever I go, here or in Europe.

To Mrs. Muir

[John Muir]

Dunbar, Scotland July 6, 1893

Dear Louie:

I left Liverpool Monday morning, reached Edinburgh early the same day, went to a hotel, and then went to the old book-publisher David Douglas, to whom Johnson had given me a letter. He is a very solemn-looking, dignified old Scotchman of the old school, an intimate friend and crony of John Brown, who wrote "Rab and His Friends," knew Hugh Miller, Walter Scott, and indeed all the literary men, and was the publisher of Dean Ramsay's "Reminiscences of Scottish Life and Character," etc. He had heard of me through my writings, and, after he knew who I was, burst forth into the warmest cordiality and became a perfect gushing fountain of fun, humor, and stories of the old Scotch writers. Tuesday morning he took me in hand, and led me over Edinburgh, took me to all the famous places celebrated in Scott's novels, went around the Calton Hill and the Castle, into the old churches so full of associations, to Queen Mary's Palace Museum, and I don't know how many other places.

In the evening I dined with him, and had a glorious time. He showed me his literary treasures and curiosities, told endless anecdotes of John Brown, Walter Scott, Hugh Miller, etc., while I, of course, told my icy tales until very late—or early—the most wonderful night as far as humanity is concerned I ever had in the world. Yesterday forenoon he took me out for another walk and filled me with more wonders. His kindness and warmth of heart, once his confidence is gained, are boundless. From feeling lonely and a stranger in my own native land, he brought me back into quick and living contact with it, and now I am a Scotchman and at home again.

In the afternoon I took the train for Dunbar and in an hour was in my own old town. There was no carriage from the Lorne Hotel that used to be our home, so I took the one from the St. George, which I remember well as Cossar's Inn that I passed every day on my way to school. But I'm going to the Lorne, if for nothing else [than] to take a look at that dormer window I climbed in my nightgown, to see what kind of an adventure it really was.

I sauntered down the street and went into a store on which I saw the sign Melville, and soon found that the proprietor was an old playmate of mine, and he was, of course, delighted to see me. He had been reading my articles, and said he had taken great pride in tracing my progress through the far-off wildernesses. Then I went to William Comb, mother's old friend, who was greatly surprised, no doubt, to see that I had changed in forty years. "And this is Johnnie Muir! Bless me, when I saw ye last ye were naething but a small mischievous lad." He is very deaf, unfortunately, and was very busy. I am to see him again to-day.

Next I went in search of Mrs. Lunam, my cousin, and found her and her daughter in a very pretty home half a mile from town. They were very cordial, and are determined to get me away from the hotel. I spent the evening there talking family affairs, auld lang syne, glaciers, wild gardens, adventures, etc., till after eleven, then returned to the hotel.

Here are a few flowers that I picked on the Castle hill on my walk with Douglas, for Helen and Wanda. I pray Heaven in the midst of my pleasure that you are all well. Edinburgh is, apart from its glorious historical associations, far the most beautiful town I ever saw. I cannot conceive how it could be more beautiful. In the very heart of it rises the great Castle hill, glacier-sculptured and wild like a bit of Alaska in the midst of the most beautiful architecture to be found in the world. I wish you could see it, and you will when the babies grow up. . . .

Good-bye. J. M.

To Helen Muir

Dunbar, Scotland July 12, 1893

Hello, Midge, My sweet Helen:

Are you all right? I'm in Scotland now, where I used to live when I was a little boy, and I saw the places where I used to play and the house I used to live in. I remember it pretty well, and the school where the teacher used to whip me so much, though I tried to be good all the time and learn my lessons. The round tower on the hill in the picture at the beginning of the letter is one of the places I used to play at on Saturdays when there was no school.

Here is a little sprig of heather a man gave me yesterday and another for Wanda. The heather is just beginning to come into bloom. I have not seen any of it growing yet, and I don't know where the man found it. But I'm going pretty soon up the mountains, and then I'll find lots of it, and won't it be lovely, miles and miles of it, covering whole mountains and making them look purple. I think I must camp out in the heather.

I'm going to come home just as soon as I get back from Switzerland, about the time the grapes are ripe, I expect. I wish I could see you, my little love.

Your papa John Muir

To Mrs. Muir

Dunbar, Scotland July 12, 1893

Dear Louie:

I have been here nearly a week and have seen most of my old haunts and playgrounds, and more than I expected of my boy playmates. Of course it is all very interesting, and I have enjoyed it more than I anticipated. Dunbar is an interesting place to anybody, beautifully located on a plateau above the sea and with a background of beautiful hills and dales, green fields in the very highest state of cultivation, and many belts and blocks of woods so arranged as to appear natural. I have had a good many rides and walks into the country among the fine farms and towns and old castles, and had long talks with people who listen with wonder to the

stories of California and far Alaska.

I suppose, of course, you have received my Edinburgh letter telling the fine time with David Douglas. I mean to leave here next Monday for the Highlands, and then go to Norway and Switzerland.

I am stopping with my cousin, who, with her daughter, lives in a handsome cottage just outside of town. They are very cordial and take me to all the best places and people, and pet me in grand style, but I must on and away or my vacation time will be past ere I leave Scotland.

At Haddington I visited Jeamie Welch Carlyle's grave in the old abbey. Here are two daisies, or gowans, that grew beside it.

I was on a visit yesterday to a farmer's family three miles from town—friends of the Lunams. This was a fine specimen of the gentleman-farmers' places and people in this, the best part of Scotland. How fine the grounds are, and the buildings and the people!...

I begin to think I shall not see Keith again until I get back, except by accident, for I have no time to hunt him up; but anyhow I am not so lonesome as I was and with David Douglas's assistance will make out to find my way to fair advantage.

The weather here reminds me of Alaska, cool and rather damp. Nothing can surpass the exquisite fineness and wealth of the farm crops, while the modulation of the ground stretching away from the rocky, foamy coast to the green Lammermoor Hills is charming. Among other famous places I visited the old castle of the Bride of Lammermoor and the field of the battle of Dunbar. Besides, I find fine glacial studies everywhere.

I fondly hope you are all well while I am cut off from news.

Ever yours John Muir

To Wanda Muir

Dunbar, Scotland July 13, 1893

Dear Wanda:

It is about ten o'clock in the forenoon here, but no doubt you are still asleep, for it is about midnight at Martinez, and sometimes when it is to-day here it is yesterday in California on account of being on opposite sides of the round world. But one's thoughts travel fast, and I seem to be in California whenever I think of you and Helen. I suppose you are busy with your lessons and peaches, peaches especially. You are now a big girl, almost a woman, and you must mind your lessons and get in a good store of the best words of the best people while your memory is retentive, and then you will go through the world rich.

Ask mother to give you lessons to commit to memory every day. Mostly the sayings of Christ in the gospels and selections from the poets. Find the hymn of praise in Paradise Lost "These are thy glorious works, Parent of Good, Almighty," and learn it well.

Last evening, after writing to Helen, I took a walk with Maggie Lunam along the shore on the rocks where I played when a boy. The waves made a grand show breaking in sheets and sheaves of foam, and grand songs, the same old songs they sang to me in my childhood, and I seemed a boy again and all the long eventful years in America were forgotten while I was filled with that glorious ocean psalm.

I stayed about ten days at Dunbar, thinking I should not slight my old home and cousins. I

found an extra cousin in Dunbar, Jane Mather, that I had not before heard of, and she is one to be proud of, as are the Lunams. I also found a few of the old schoolmates, now gray old men, older-looking, I think, and grayer than I, though I have led so hard a life. I went with Maggie Lunam to the old school-house where I was so industriously thrashed half a century ago. The present teacher, Mr. Dick, got the school two years after I left, and has held it ever since. He had been reading the "Century," and was greatly interested. I dined with him and at table one of the guests said, "Mr. Dick, don't you wish you had the immortal glory of having whipped John Muir?"

I made many short trips into the country, along the shores, about the old castle, etc. Then I went back to Edinburgh, and then to Dumfries, Burns's country for some years, where I found another cousin, Susan Gilroy, with whom I had a good time. Then I went through Glasgow to Stirling, where I had a charming walk about the castle and saw the famous battle-field, Bruce's and Wallace's monuments, and glacial action.

This morning I left Stirling and went to Callander, thence to Inversnaid by coach and boat, by the Trossachs and Loch Katrine, thence through Loch Lomond and the mountains to a railroad and on to this charming Oban. I have just arrived this day on Lochs Katrine and Lomond, and the drives through the passes and over the mountains made famous by Scott in the "Lady of the Lake" will be long remembered—"Ower the muir amang the heather."

The heather is just coming into bloom and it is glorious. Wish I could camp in it a month. All the scenery is interesting, but nothing like Alaska or California in grandeur. To-morrow I'm going back to Edinburgh and next morning intend to start for Norway, where I will write. Possibly I may not be able to catch the boat, but guess I will. Thence I'll return to Edinburgh and then go to Switzerland. Love to all. Dear Wanda and Helen, here is some bell heather for you.

Ever yours

To Mrs. Muir

Euston Hotel, London September 1, 1893

Dear Louie:

Dear Louie:

Yesterday afternoon I went to the home of Sir Joseph Hooker at Sunningdale with him and his family.... I am done with London and shall take the morning express to Edinburgh to-morrow, go thence to the High-lands and see the heather in full bloom, visit some friends, and go back to Dunbar for a day....

I have been at so many places and have seen so much that is new, the time seems immensely long since I left you. Sir Joseph and his lady were very cordial. They have a charming country residence, far wilder and more retired than ours, though within twenty-five miles of London. We had a long delightful talk last evening on

Chapter XVI Trees and Travel 1891-1897

The Life and Letters of John Muir by William Frederic Badè — John Muir Writings

Tell Maggie I'm going to-day to see Miss Jaffry, the minister's daughter who went to school with us. And tell mamma that the girl Agnes Purns, that could outrun me, married a minister and is now a widow living near Prestonpans. I may see her. Good-bye, dear. Give my love to grandma and everybody.

Your loving father John Muir

To Mrs. Muir Station Hotel, Oran, N.B *July* 22, 1893

223

J. M.

science and scientific men, and this forenoon and afternoon long walks and talks through the grounds and over the adjacent hills. Altogether this has been far the most interesting day I have had since leaving home. I never knew before that Sir Joseph had accompanied Ross in his famous Antarctic expedition as naturalist. He showed me a large number of sketches he made of the great ice-cap, etc., and gave me many facts concerning that little known end of the world entirely new to me. Long talks, too, about Huxley, Tyndall, Darwin, Sir Charles Lyell, Asa Gray, etc. My, what a time we had! I never before knew either that he had received the Copley Medal, the highest scientific honor in the world.

I hope to hear from you again before sailing, as I shall order my mail forwarded from London the last thing, I feel that my trip is now all but done, though I have a good many people to see and small things to do, ere I leave. The hills in full heather bloom, however, is not a small thing.

Much love

To Helen Muir

Killarney, Ireland September 7, 1893

John Muir

My own dear Helen:

After papa left London he went to the top of Scotland to a place called Thurso, where a queer Scotch geologist [Robert Dick] once lived; hundreds of miles thereabouts were covered with heather in full bloom. Then I went to Inverness and down the canal to Oban again. Then to Glasgow and then to Ireland to see the beautiful bogs and lakes and Macgillicuddy's Reeks. Now I must make haste tomorrow back towards Scotland and get ready to sail to New York on the big ship Campania, which leaves Liverpool on the sixteenth day of this month, and then I'll soon see darling Helen again. Papa is tired traveling so much, and wishes he was home again, though he has seen many beautiful and wonderful places, and learned a good deal about glaciers and mountains and things. It is very late, and I must go to bed. Kiss everybody for me, my sweet darling, and soon I'll be home.

[John Muir]

To James and Hardy Hay

Cunard Royal Mail Steamship Campania September 16, 1893

James and Hardy Hay and all the glorious company about them, young and old.

Dear Cousins:

I am now fairly aff and awa' from the old home to the new, from friends to friends, and soon the braid sea will again roar between us; but be assured, however far I go in sunny California or icy Alaska, I shall never cease to love and admire you, and I hope that now and then you will think of your lonely kinsman, whether in my bright home in the Golden State or plodding after God's glorious glaciers in the Storm-beaten mountains of the North.

Among all the memories that I carry away with me this eventful summer none stand out in so divine a light as the friends I have found among my own kith and kin: Hays, Mathers, Lunams, Gilroys. In particular I have enjoyed and admired the days spent with the Lunams and you Hays. Happy, Godful homes; again and again while with you I repeated to myself those lines of Burns: "From scenes like these old Scotia's grandeur springs, that makes her loved at home, revered abroad."

Don't forget me and if in this changing world you or yours need anything in it that I can give, be sure to call on

Your loving and admiring cousin

From George W. Cable

John Muir

Dryads' Green Northampton, Massachusetts *December* 18, 1893

My Dear Mr. Muir: I am only now really settled down at home for a stay of a few weeks. I wanted to have sent to you long ago the book I mail now and which you kindly consented to accept from me Lanier's poems. There are in Lanier such wonderful odors of pine, and hay, and salt sands and cedar, and corn, and such whisperings of Eolian strains and every outdoor sound—think you would have had great joy in one another's personal acquaintance.

And this makes me think how much I have in yours. Your face and voice, your true, rich words, are close to my senses now as I write, and I cry hungrily for more. The snow is on us everywhere now, and as I look across the white, crusted waste I see such mellowness of yellow sunlight and long blue and purple shadows that I want some adequate manly partnership to help me reap the rapture of such beauty. In one place a stretch of yellow grass standing above the snow or blown clear of it glows golden in the slant light. The heavens are blue as my love's eyes and the elms are black lace against their infinite distance.

Last night I walked across the frozen white under a moonlight and starlight that made the way seem through the wastes of a stellar universe and not along the surface of one poor planet.

Write and tell me, I pray you, what those big brothers of yours, the mountains, have been saying to you of late. It will compensate in part, but only in part, for the absence of your spoken words.

Yours truly

To Robert Underwood Johnson

G. W. Cable

Martinez, *April* 3, 1894 My Dear Mr. Johnson:

The book, begotten Heaven knows when, is finished and out of me, therefore hurrah, etc., and thanks-to you, very friend, for benevolent prodding. Six of the sixteen chapters are new, and the others are nearly so, for I have worked hard on every one of them, leaning them against each other, adding lots of new stuff, and killing adjectives and adverbs of redundant growth the *verys, intenses, gloriouses, ands,* and *buts*, by the score. I feel sure the little alpine thing will not disappoint you. Anyhow I've done the best I could. Read the opening chapter when you have time. In it I have ventured to drop into the poetry that I like, but have taken good care to place it between bluffs and buttresses of bald, glacial, geological facts.

Mrs. Muir keeps asking me whether it is possible to get Johnson to come out here this summer, She seems to regard you as a Polish brother. Why, I'll be hanged if I know. I always thought you too cosmically good to be of any clannish nation. By the way, during these last months of abnormal cerebral activity I have written another article for the "Century" which I'll send you soon.

John Muir

The book mentioned in the preceding letter was his "Mountains of California," which appeared in the autumn of 1894 from the press of the Century Company. "I take pleasure in sending you with this a copy of my first book," he wrote to his old friend Mrs. Carr. "You will say that I should have written it long ago; but I begrudged the time of my young mountain-climbing days." To a Scotch cousin, Margaret Hay Lunam, he characterized it as one in which he had tried to describe and explain what a traveler would see for himself if he were to come to California and go over the mountain-ranges and through the forests as he had done.

The warmth of appreciation with which the book was received by the most thoughtful men and women of his time did much to stimulate him to further literary effort. His friend Charles S. Sargent, director of the Arnold Arboretum, then at work upon his great work "The Silva of North America," wrote as follows: "I am reading your Sierra book and I want to tell you that I have never read descriptions of trees that so picture them to the mind as yours do. No fellow who was at once a poet, naturalist, and keen observer has to my knowledge ever written about trees before, and I believe you are the man who ought to have written a silva of North America. Your book is one of the great productions of its kind and I congratulate you on it."

Equally enthusiastic was the great English botanist J. D. Hooker. "I have just finished the last page of your delightful volume," he wrote from his home at Sunningdale, "and can therefore thank you with a full heart. I do not know when I have read anything that I have enjoyed more. It has brought California back to my memory with redoubled interest, and with more than redoubled knowledge. Above all it has recalled half-forgotten scientific facts, geology, geography, and vegetation that I used to see when in California and which I have often tried to formulate in vain. Most especially this refers to glacial features and to the conifers; and recalling them has recalled the scenes and surroundings in which I first heard them."

The acclaim of the book by reviewers was so enthusiastic that the first edition was soon exhausted. It was his intention to bring out at once another volume devoted to the Yosemite Valley in particular. With this task he busied himself in 1895, revisiting during the summer his old haunts at the headwaters of the Tuolumne and passing once more alone through the cañon to Hetch-Hetchy Valley. As in the old days he carried no blanket and a minimum of provisions, so that he had only a handful of crackers and a pinch of tea left when he reached Hetch-Hetchy. "The bears were very numerous," he wrote to his wife on August 17th, "this being berry time in the cañon. But they gave no trouble, as I knew they wouldn't. Only in tangled underbrush I had to shout a good deal to avoid coming suddenly on them."

Having no food when he reached Hetch-Hetchy, he set out to cover the twenty miles from there to Crocker's on foot, but had gone only a few miles when he met on the trail two strangers and two well-laden pack-animals. The leader, T. P. Lukens, asked his name, and then told him that he had come expressly to meet John Muir in the hope that he might go back with him into Hetch-Hetchy. "On the banks of the beautiful river beneath a Kellogg oak" the bonds of a new mountain friendship were sealed while beautiful days rolled by un-noticed. "I am fairly settled at home again," he wrote to his aged mother on his return, "and the six weeks of mountaineering of this summer in my old haunts are over, and now live only in memory and notebooks like all the other weeks in the Sierra. But how much I enjoyed this excursion, or indeed any excursion in the wilderness, I am not able to tell. I must have been born a mountaineer and the climbs and 'scootchers' of boyhood days about the old Dunbar Castle and on the roof of our house made fair beginnings. I suppose old age will put an end to scrambling in rocks and ice, but I can still climb as well as ever. I am trying to write another book, but that is harder than mountaineering."

During the spring of the following year, Mr. Johnson saw some article on Muir which moved him to ask whether he had ever been offered a professorship at Harvard, and whether Professor Louis Agassiz had declared him to be "the only living man who understood glacial action in the formation of scenery."

To Robert Underwood Johnson

Martinez, May 3, 1895

My Dear Mr. Johnson:

To both your questions the answer is, No. I hate this personal rubbish, and I have always sheltered myself as best I could in the thickest shade I could find, celebrating only the glory of God as I saw it in nature.

The foundations for the insignificant stories you mention are, as far as I know, about as follows. More than twenty years ago Professor Runkle was in Yosemite, and I took him into the adjacent wilderness and, of course, night and day preached to him the gospel of glaciers. When he went away he urged me to go with him, saying that the Institute of Technology in Boston was the right place for me, that I could have the choice of several professorships there, and every facility for fitting myself for the duties required, etc., etc.

Then came Emerson and more preaching. He said, Don't tarry too long in the woods. Listen for the word of your guardian angel. You are needed by the young men in our colleges. Solitude is a sublime mistress, but an intolerable wife. When Heaven gives the sign, leave the mountains, come to my house and live with me until you are tired of me and then I will show you to better people.

Then came Gray and more fine rambles and sermons. He said, When you get ready, come to *Harvard*. You have good and able and enthusiastic friends there and we will gladly push you ahead, etc., etc. So much for *Ha-a-a-rvard*, But you must surely know that I never for a moment thought of leaving God's big show for a mere profship, call who may.

The Agassiz sayings you refer to are more nearly true than the college ones. Yosemite was my home when Agassiz was in San Francisco, and I never saw him. When he was there I wrote him a long icy letter, telling what glorious things I had to show him and urging him to come to the mountains. The reply to this letter was written by Mrs. Agassiz, in which she told me that, when Agassiz read my letter, he said excitedly, "Here is the first man I have ever found who has any adequate conception of glacial action." Also that he told her to say in reply to my invitation that if he should accept it now he could not spend more than six weeks with me at most. That he would rather go home now, but next year he would come and spend all summer with me. But, as you know, he went home to die.

Shortly afterward I came down out of my haunts to Oakland and there met Joseph LeConte, whom I had led to the Lyell Glacier a few months before Agassiz's arrival. He (LeConte) told me that, in the course of a conversation with Agassiz on the geology of the Sierra, he told him that a young man by the name of Muir studying up there perhaps knew more about the glaciation of the Sierra than any one else. To which Agassiz replied warmly, and bringing his fist down on the table, "He knows all about it." Now there! You've got it all, and what a mess of mere J. M. you've made me write. Don't you go and publish it. Burn it.

Ever cordially yours

John Muir

What of the summer day now dawning? Remember you have a turn at the helm. How are you going to steer? How fares Tesla and the auroral lightning? Shall we go to icy Alaska or to the peaks and streets and taluses of the Sierra? That was a good strong word you said for the vanishing forests.

To Robert Underwood Johnson

Martinez, September 12,1895

My Dear Mr. Johnson:

I have just got home from a six weeks' ramble in the Yosemite and Yosemite National Park. For three years the soldiers have kept the sheepmen and sheep out of the park, and I looked sharply at the ground to learn the value of the military influence on the small and great flora. On the sloping portions of the forest floor, where the soil was loose and friable, the vegetation has not yet recovered from the dibbling and destructive action of the sheep feet and teeth. But where a tough sod on meadows was spread, the grasses and blue gentians and erigerons, are again blooming in all their wild glory.

The sheepmen are more than matched by the few troopers in this magnificent park, and the wilderness rejoices in fresh verdure and bloom. Only the Yosemite itself in the middle of the grand park is downtrodden, frowsy, and like an abandoned backwoods pasture. No part of the Merced and Tuolumne wilderness is so dusty, downtrodden, abandoned, and pathetic as the Yosemite. It looks ten times worse now than when you saw it seven years ago. Most of the level meadow floor of the Valley is fenced with barbed and unbarbed wire and about three hundred head of horses are turned loose every night to feed and trample the flora out of existence. I told the hotel and horsemen that they were doing all they could to prevent lovers of wild beauties from visiting the Valley, and that soon all tourist travel would cease. This year only twelve hundred regular tourists visited the Valley, while two thousand campers came in and remained a week or two....

I have little hope for Yosemite. As long as the management is in the hands of eight politicians appointed by the ever-changing Governor of California, there is but little hope. I never saw the Yosemite so frowsy, scrawny, and downtrodden as last August, and the horsemen began to inquire, "Has the Yosemite begun to play out?"...

Ever yours John Muir

At the June Commencement in 1896, Harvard bestowed upon Muir an honorary M. A. degree. [President Eliot's salutation, spoken in Latin, was as follows: "Johannem Muir, locorum incognitorum exploratorem insignem; fluminum qui sunt in Alaska serratisque montibus conglaciatorum studiosum; diligentem silvaxum et rerum agrestium ferarumque indagatorem, artiurm magistruln."] The offer of the honor came just as he was deciding, moved by a strange presentiment of her impending death, to pay another visit to his mother. Among Muir's papers, evidently intended for his autobiography, I find the following description of the incident under the heading of "Mysterious Things".

As in the case of father's death, while seated at work in my library in California in the spring of 1896, I was suddenly possessed with the idea that I ought to go back to Portage, Wisconsin, to see my mother once more, as she was not likely to live long, though I had not heard that she was failing. I had not sent word that I was coming. Two of her daughters were living with her at the time, and, when one of them happened to see me walking up to the house through the garden, she came running out, saying, "John, God must have sent you, because mother is very sick." I was with her about a week before she died, and managed to get my brother Daniel, the doctor, to come down from Nebraska, to be with her. He insisted that he knew my mother's case very well, and didn't think that there was the slightest necessity for his coming. I told him I thought he would never see her again if he didn't come, and he would always regret neglecting this last duty to mother, and finally succeeded in getting him to come. But brother David and my two eldest sisters, who had since father's death moved to California, were not present.

The following letter gives a brief summary of his Eastern experiences up to the time when he joined the Forestry Commission in Chicago. It should be added that Muir went along unofficially at the invitation of C.

S. Sargent, the Chairman of the Commission. Of the epochal work of this Commission and Muir's relation to it, more later.

To Helen Muir

S. W. Cor. LaSalle and Washington Streets Chicago, July 3d, 1896

My Dear little Helen:

I have enjoyed your sweet, bright, illustrated letters ever and ever so much; both the words and the pictures made me see everything at home as if I was there myself—the peaches, and the purring pussies, and the blue herons flying about, and all the people working and walking about and talking and guessing on the weather.

So many things have happened since I left home, and I have seen so many people and places and have traveled so fast and far, I have lost the measure of time, and it seems more than a year since I left home. Oh, dear! how tired I have been and excited and swirly! Sometimes my head felt so benumbed, I hardly knew where I was. And yet everything done seems to have been done for the best, and I believe God has been guiding us. . . .

I went to New York and then up the Hudson, a hundred miles to see John Burroughs and Professor Osborn, to escape being sunstruck and choked in the horrid weather of the streets and then, refreshed. I got back to New York and started for Boston and Cambridge and got through the Harvard business all right and caught a fast train. . . back to Portage in time for the funeral. Then I stopped three or four days to settle all the business and write to Scotland, and comfort Sarah and Annie and Mary; then I ran down a half-day to Madison, and went to Milwaukee and stayed a night with William Trout, with whom I used to live in a famous hollow in the Canada woods thirty years ago. Next day I went to Indianapolis and saw everybody there and stopped with them one night. Then came here last night and stopped with [A. H.] Sellers. I am now in his office awaiting the arrival of the Forestry Commission, with whom I expect to start West tonight at half-past ten o'clock. It is now about noon. I feel that this is the end of the strange lot of events I have been talking about, for when I reach the Rocky Mountains I'll feel at home. I saw a wonderful lot of squirrels at Osborn's, and Mrs. Osborn wants you and Wanda and Mamma to visit her and stay a long time.

Good-bye, darling, and give my love to Wanda and Mamma and Grandma and Maggie. Go over and comfort Maggie and tell Mamma to write to poor Sarah. Tell Mamma I spent a long evening with [Nicola] Tesla and I found him quite a wonderful and interesting fellow.

To Wanda Muir

[John Muir]

Hot Springs, S.D. July 5th, 1896

My Dear Wanda:

I am now fairly on my way West again, and a thousand miles nearer you than I was a, few days ago. We got here this morning, after a long ride from Chicago. By *we* I mean Professors Sargent, Brewer, Hague, and General Abbot—all interesting wise men and grand company. It was dreadfully hot the day we left Chicago, but it rained before morning of the 4th, and so that day was dustless and cool, and the ride across Iowa was delightful. That State is very fertile and beautiful. The cornfields and wheatfields are boundless, or appear so as we skim through them on the cars, and all are rich and bountiful-looking. Flowers in bloom line the roads, and tall grasses and bushes. The surface of the ground is rolling, with hills beyond hills, many of them crowned with trees. I never before knew that Iowa was so beautiful and inexhaustibly rich.

Nebraska is monotonously level like a green grassy sea—no hills or mountains in sight for hundreds of miles. Here, too, are cornfields without end and full of promise this year, after three years of famine from drouth.

South Dakota, by the way we came, is dry and desert-like until you get into the Black Hills. The latter get their name from the dark color they have in the distance from the pine forests that cover them. The pine of these woods is the ponderosa or yellow pine, the same as the one that grows in the Sierra, Oregon, Washington, Nevada, Utah, Colorado, Montana, Idaho, Wyoming, and all the West in general. No other pine in the world has so wide a range or is so hardy at all heights and under all circumstances and conditions of climate and soil. This is near its eastern limit, and here it is interesting to find that many plants of the Atlantic and Pacific slopes meet and grow well together. . . .

To Helen and Wanda Muir

[John Muir]

Sylvan Lake Hotel Custer, S. D., July 6, 1896

Hello, Midge! Hello, Wanda!

My!! if you could only come here when I call you how wonderful you would think this hollow in the rocky Black Hills is! It is wonderful even to me after seeing so many wild mountains—curious rocks rising alone or in clusters, gray and jagged and rounded in the midst of a forest of pines and spruces and poplars and birches, with a little lake in the middle and carpet of meadow gay with flowers. It is in the heart of the famous Black Hills where the Indians and Whites quarreled and fought so much. The whites wanted the gold in the rocks, and the Indians wanted the game—the deer and elk that used to abound here. As a grand deer pasture this was said to have been the best in America, and no wonder the Indians wanted to keep it, for wherever the white man goes the game vanishes.

We came here this forenoon from Hot Springs, fifty miles by rail and twelve by wagon. And most of the way was through woods fairly carpeted with beautiful flowers. A lovely red lily, *Lilium Pennsylvanicum*, was common, two kinds of spiraea and a beautiful wild rose in full bloom, anemones, calochortus, larkspur, etc., etc., far beyond time to tell. But I must not fail to mention linnaea. How sweet the air is! I would like to stop a long time and have you and Mamma with me. What walks we would have!!

We leave to-night for Edgemont. Here are some mica flakes and a bit of spiraea I picked up in a walk with Professor Sargent.

Good-bye, my babes. Sometime I must bring you here. I send love and hope you are well.

John Muir

The following. letter expresses Muir's stand in the matter of the recession of Yosemite Valley by the State of California to the Federal Government. The mismanagement of the Valley under ever-changing political appointees of the various Governors had become a national scandal, and Muir was determined that, in spite of some objectors, the Sierra Club should have an opportunity to express itself on the issue. The bill for recession was reported favorably in the California Assembly in February, but it encountered so much pettifogging and politically inspired opposition that it was not actually passed until 1905.

To Warren Olney, Sr.

Martinez, January 18, 1897

My Dear Olney:

I think with you that a resolution like the one you offered the other day should be thoroughly studied and discussed before final action is taken and a close approximation made to unanimity, if possible. Still, I don't see that one or two objectors should have the right to kill all action of the Club in this way or any other matter rightly belonging to it. Professor Davidson's objection is also held by Professor LeConte, or was, but how they can consistently sing praise to the Federal Government in the management of the National Parks, and at the same time regard the same management of Yosemite as degrading to the State, I can't see. For my part, I'm proud of California and prouder of Uncle Sam, for the U.S. is all of California and more. And as to our Secretary's objection, it seemed to me merely political, and if the Sierra Club is to be run by politicians, the sooner mountaineers get out of it the better. Fortunately, the matter is not of first importance, but now it has been raised, I shall insist on getting it squarely before the Club. I had given up the question as a bad job, but so many of our members have urged it lately I now regard its discussion as a duty of the Club.

John Muir

Chapter XVII Unto the Last I 1897-1905

Though little evidence of the fact appears in extant letters, the year 1897 was one of great importance in Muir's career. So significant, indeed, was his work in defending [This service was specially recognized in 1897 by the University of Wisconsin, his *alma mater*, in the bestowal of an LL.D. degree.] the recommendations of the National Forest Commission of 1896 that we must reserve fuller discussion of it for a chapter on Muir's service to the nation. With the exception of his story of the dog Stickeen and a vivid description of an Alaska trip, appearing respectively in the August and September numbers of the "Century," nearly the entire output of his pen that year was devoted to the saving of the thirteen forest reservations proclaimed by President Cleveland on the basis of the Forest Commission's report.

During the month of August he joined Professor C. S. Sargent and Mr. William M. Canby on an expedition to study forest trees in the Rocky Mountains and in Alaska. To this and other matters allusion is made in the following excerpt from a November letter to Professor Henry Fairfield Osborn.

I spent a short time [he writes] in the Rocky Mountain forests between Banff and Glacier with Professor Sargent and Mr. Canby, and then we went to Alaska, mostly by the same route you traveled. We were on the Queen and had your state-rooms. The weather was not so fine as during your trip. The glorious color we so enjoyed on the upper deck was wanting, but the views of the noble peaks of the Fairweather Range were sublime, They were perfectly clear, and loomed in the azure, ice-laden and white, like very gods. Canby and Sargent were lost in admiration as if they had got into a perfectly new world, and so they had, old travelers though they are.

I've been writing about the forests, mostly, doing what little I can to save them. "Harper's Weekly" ["Forest Reservations and National Parks," June 5, 1897.] and the "Atlantic Monthly" have published something; the latter published an article ["American Forests."] last August. I sent another two weeks ago and am pegging away on three others for the same magazine on the national parks—Yellowstone, Yosemite, and Sequoia—and I want

this winter to try some more Alaska. But I make slow, hard work of it—slow and hard as glaciers. . . . When are you coming again to our wild side of the continent and how goes your big book? I suppose it will be about as huge as Sargent's Silva." One of the pleasant by-products of Muir's spirited defense of the reservations was the beginning of a warm friendship with the late Walter Hines Page, then editor of the "Atlantic." The latter, like Robert Underwood Johnson, stimulated his literary productiveness and was largely responsible for his final choice of Houghton, Mifflin & Company as his publishers. Some years later, in 1905, Mr. and Mrs. Page paid a visit to Muir at his home in the Alhambra Valley. The articles contributed to the "Atlantic" during the nineties were in 1901 brought out in book form under the title of "Our National Parks."

Apropos of Muir's apologetic references to the fact that he found writing a slow, hard task, Page remarked: "I thank God that you do not write in glib, acrobatic fashion: anybody can do that. Half the people in the world are doing it all the time, to my infinite regret and confusion. . . . The two books on the Parks and on Alaska will not need any special season's sales, nor other accidental circumstances: they'll be Literature!" On another occasion, in October, 1897, Page writes: "Mr. John Burroughs has been spending a little while with me, and he talks about nothing else so earnestly as about you and your work. He declares in the most emphatic fashion that it will be a misfortune too great to estimate if you do not write up all those bags of notes which you have gathered. He encourages me to put it in his own words, to 'keep firing at him, keep firing at him."

In February, 1898, Professor Sargent wrote Muir that he was in urgent need of the flowers of the red fir to be used for an illustrative plate in his "Silva." The following letter is in part a report on Muir's first futile effort to secure them. Ten days later, above Deer Park in the Tahoe region, he succeeded in finding and collecting specimens of both pistillate and staminate flowers, which up to that time, according to Sargent, "did not exist in any herbarium in this country or in Europe."

To Charles Sprague Sargent

Martinez, June 7, 1898

My dear Professor Sargent:

Yesterday I returned from a week's trip to Shasta and the Scott Mountains for [*Abies*] *magnifica* flowers, but am again in bad luck. I searched the woods, wallowing through the snow nearly to the upper limit of the fir belt, but saw no flowers or buds that promised anything except on a few trees. I cut down six on Shasta and two on Scott Mountains west of Sissons. On one of the Shasta trees I found the staminate flowers just emerging from the scales, but not a single pistillate flower. I send the staminate, though hardly worth while, Last year's crop of cones was nearly all frost. killed and most of the leaf buds also, so there is little chance for flowers thereabouts this year.

Sonne writes that the Truckee Lumber Company is to begin cutting Magnifica in the Washoe Range ten miles east of Truckee on the 8th or 10th of this month, and he promises to be promptly on hand among the fresh-felled trees to get the flowers, while Miss Eastwood starts this evening for the Sierra summit above Truckee, and I have a friend in Yosemite watching the trees around the rim of the Valley, so we can hardly fail to get good flowers even in so bad a year as this is.

I have got through the first reading of your Pine volume. [Volume XI of Sargent's Silva, devoted to the Coniferae. The author's dedication reads, "To John Muir, lover and interpreter of nature, who best has told the story of the Sierra forests, this eleventh volume of The Silva of North America is gratefully dedicated."] It is bravely, sturdily, handsomely done. Grand old Ponderosa you have set forth in magnificent style, describing its many forms and allowing species-makers to name as many as they like, while showing their inseparable characters. But you should have mentioned the thick, scaly, uninflammable bark with which, like a wandering warrior of King Arthur's time, it is clad, as accounting in great part for its wide distribution and endurance of extremes of climate. You seem to rank it above the sugar pine. But in youth and age, clothed with beauty and majesty, Lambertiana is easily King of all

the world-wide realm of pines, while Ponderosa is the noble, unconquerable mailed knight without fear and without reproach.

By brave and mighty Proteus-Muggins [Probably Pinus contorta of the Silva, one of its variants being the Murray or Tamarac Pine of the High Sierra.] you have also done well, though you might have praised him a little more loudly for hearty endurance under manifold hardships, defying the salt blasts of the sea from Alaska to the California Golden Gate, and the frosts and fires of the Rocky Mountains—growing patiently in mossy bogs and on craggy mountain-tops crouching low on glacier granite pavements, holding on by narrow cleavage joints, or waving tall and slender and graceful in flowery garden spots sheltered from every wind among columbines and lilies, etc. A line or two of sound sturdy Mother Earth poetry such as you ventured to give Ponderosa in no wise weakens or blurs the necessarily dry, stubbed, scientific description, and I'm sure Muggins deserves it. However, I'm not going faultfinding. It's a grand volume—a kingly Lambertiana job, and on many a mountain trees now seedlings will be giants and will wave their shining tassels two hundred feet in the sky ere another pine book will be made. So you may well sing your nunc dimittis, and so, in sooth, may I, since you have engraved my name on the head of it.

That Alleghany trip you so kindly offer is mighty tempting. It has stirred up wild lover's longings to renew my acquaintance with old forest friends and gain new ones under such incomparable auspices. I'm just dying to see basswood and shell-bark and liriodendron once more. When could you start, and when would you have me meet you? I think I might get away from here about the middle of July and go around by the Great Northern and lakes, stopping a few days on old familiar ground about the shores of Georgian Bay. I want to avoid cities and dinners as much as possible and travel light and free. If tree-lovers could only grow bark and bread on their bodies, how fine it would be, making even handbags useless!

Ever yours John Muir

While trying to avoid people as much as possible and seeing only you and trees, I should, if I make this Eastern trip, want to call on Mrs. Asa Gray, for I heartily love and admire Gray, and in my mind his memory fades not at all,

The projected trip into the Alleghanies with Sargent and Canby was undertaken during September and October when the Southern forests were in their autumn glory. Muir had entered into the plan with great eagerness. "I don't want to die," he wrote to Sargent in June, "without once more saluting the grand, godly, round-headed trees of the east side of America that I first learned to love and beneath which I used to wee for joy when nobody knew me." The task of mapping a route was assigned by Sargent to Mr. Canby on account of his special acquaintance with the region. "Dear old streak o' lightning on ice," the latter wrote to Muir in July, "I was delighted to hear from the glacial period once more and to know that you were going to make your escape from Purgatory and emerge into the heavenly forests of the Alleghanies. . . . Have you seen the Luray Caverns or the Natural Bridge? If not, do you care to? I should like to have you look from the summit of Salt Pond Mountain in Virginia and the Roan in North Carolina."

For a month or more the three of them roamed through the Southern forests, Muir being especially charmed by the regions about Cranberry, Cloudland, and Grandfather Mountain, in North Carolina. From Roan Mountain to Lenoir, about seventy-five miles, they drove in a carnage—in Muir's judgment "the finest drive of its kind in America." In Tennessee, Georgia, and Alabama he crossed at various times his old trail of 1867.

On his return to Boston, he "spent a night at Page's home and visited Mrs. Gray and talked over old botanic times." On the first of November he is at "Four Brook Farm," R. W. Gilder's country-place at Tyringham in the Berkshire Hills, whence he writes to his daughter Wanda: "Tell mamma that I have enjoyed Mr. and Mrs.

Gilder ever so much. On the way here, on the car, I was introduced to Joseph Choate, the great lawyer, and on Sunday Mr. Gilder and I drove over to his fine residence at Stockbridge to dinner, and I had a long talk with him about forests as well as glaciers. To-day we all go back to New York. This evening I dine with Johnson, and to-morrow I go up the Hudson to the Osborns'."

To Helen Muir

"Wing-and-Wing" Garrisons-on-Hudson November 4, 1898

My darling Helen:

This is a fine calm thoughtful morning, bracing and sparkling, just the least touch of hoar-frost, quickly melting where the sunbeams, streaming through between the trees, fall in yellow plashes and lances on the lawns. Every now and then a red or yellow leaf comes swirling down, though there is not the slightest breeze. Most of the hickories are leafless now, but the big buds on the ends of the twigs are full of baby leaves and flowers that are already planning and thinking about next summer. Many of the maples, too, and the dogwoods are showing leafless branches; but many along the sheltered ravines are still rejoicing in all their glory of color, and look like gigantic goldenrods. God's forests, my dear, are among the grandest of terrestrial things that you may look forward to. I have not heard from Professor Sargent since he left New York a week ago, and so I don't know whether he is ready to go to Florida, but I'll hear soon, and then I'll know nearly the time I'll get home. Anyhow, it won't be long.

I am enjoying a fine rest, I have "the blue room" in this charming home, and it has the daintiest linen and embroidery I ever saw. The bed is so soft and fine I like to lie awake to enjoy it, instead of sleeping. A servant brings in a cup of coffee before I rise. This morning when I was sipping coffee in bed, a red squirrel looked in the window at me from a branch of a big tulip-tree, and seemed to be saying as he watched me. "Oh, John Muir! camping, traeping, tree-climbing scrambler! Churr, churr I why have you left us? Chip churr, who would have thought it?"

Five days after the date of the above letter he writes to his wife:

"Dear Lassie, it is settled that I go on a short visit to Florida with Sargent. . . . I leave here [Wing-and-Wing] to-morrow for New York, dine with Tesla and others, and then meet Sargent at Wilmington, Wednesday. I've had a fine rest in this charming home and feel ready for Florida, which is now cool and healthy. I'm glad to see the South again and may write about it."

The trip to Florida, replete with color and incident, is too full of particularity for recital here. A halt in Savannah, Georgia, stirred up old memories, for "here," he writes in a letter to his wife, "is where I spent a hungry, weary, yet happy week camping in Bonaventure graveyard thirty one years ago. Many changes, I'm told, have been made in its groves and avenues of late, and how many in my life!"

A dramatic occurrence was the finding at Archer of Mrs. Hodgson, who had nursed him back to health on his thousand-mile walk to the Gulf. The incident is told in the following excerpt from a letter to his wife under date of November 21, 1898:

The day before yesterday we stopped at Palatka on the famous St. Johns River, where I saw the most magnificent magnolias, some four feet in diameter and one hundred feet high, also the largest and most beautiful hickories and oaks. From there we went to Cedar Keys. Of

course I inquired for the Hodgsons, at whose house I lay sick so long. Mr. Hodgson died long ago, also the eldest son, with whom I used to go boating, but Mrs. Hodgson and the rest of the family, two boys and three girls, are alive and well, and I saw them all to-day, except one of the boys. I found them at Archer, where I stopped four hours on my way from Cedar Keys. Mrs. Hodgson and the two eldest girls remembered me well. The house was pointed out to me, and I found the good old lady who nursed me in the garden. I asked her if she knew me. She answered no, and asked my name. I said Muir. *"John Muir?"* she almost screamed. *"My* California John Muir? My California John?" I said, *"Why, yes, I promised to come back and visit you in about twenty-five years, and though a little late I've come." I stopped to dinner and we talked over old times in grand style, you may be sure.*

The following letter, full of good-natured badinage and new plans for travel, was written soon after his return home in December:

To Charles Sprague Sargent

Martinez, December 28, 1898

My dear Professor Sargent:

I'm glad you're miserable about not going to Mexico, for it shows that your heartwood is still honest and loving towards the grand trees down there, though football games and Connecticut turkey momentarily got the better of you. The grand Taxodiums were object enough for the trip, and I came pretty near making it alone—would certainly have done it had I not felt childishly lonesome and woe-begone after you left me. No wonder I looked like an inland coot to friend Mellichamp. But what would that sharp observer have said to the Canby huckleberry party gyrating lost in the Delaware woods, and splashing along the edge of the marshy bay "froggin' and crabbin" with devout scientific solemnity!!!

Mellichamp I liked ever so much, and blessed old Mohr more than ever. For these good men and many, many trees I have to thank you, and I do over and over again as the main blessings of the passing year. And I have to thank you also for Gray's writings—Essays, etc.—which I have read with great interest. More than ever I want to see Japan and eastern Asia. I wonder if Canby could be converted to sufficient sanity to go with us on that glorious dendrological trip. . . . Confound his Yankee savings bank! He has done more than enough in that line. It will soon be dark. Soon our good botanical pegs will be straightened in a box and planted, and it behooves us as reasonable naturalists to keep them trampling and twinkling in the woods as long as possible. .

Wishing you and family and "Silva" happy New Year, I am,

Ever yours John Muir

There were not a few among Muir's literary friends, men like Walter Hines Pagee and Richard Watson Gilder, who as early as 1898 began to urge him to write his autobiography. "I thank you for your kind suggestions about 'Recollections of a Naturalist,'" he replies to Gilder in March, 1899. "Possibly I may try something of the sort some of these days, though my life on the whole has been level and uneventful, and therefor hard to make a book of that many would read. I am not anxious to tell what I have done, but what Nature has done—an infinitely more important story."

In April, 1899, he accepted an invitation to join the Harriman Alaska Expedition. During the cruise a warm friendship sprang up between him and Mr. Harriman, who came to value highly not only his personal qualities, but also his sturdy independence. It was some years afterward, while he was the guest of Mr. Harriman at Pelican Lodge on Klamath Lake, that Muir was persuaded to dictate his memoirs to Mr. Harriman's private secretary. We owe it to the use of this expedient that Muir was enabled to complete at least a part of his autobiography before he passed on. The little book [Edward Henry Harriman, by John Muir. 1916.] written by Muir in appreciation of Mr. Harriman after his death sprang from memories of many kindnesses, and unheralded occasions too, when Mr. Harriman's influence turned the scales in favor of some important conservation measure dear to Muir's heart. Both held in warm regard Captain P. A. Doran, of the Elder, which in 1899 carried the expetionary party. "I am deeply touched at your letter of the second just received," wrote Mr. Harriman to Muir on August 8, 1907, shortly after a tragedy of the sea in which Captain Doran perished. "We all grieved much over poor Doran. I had grown to look upon him as a real friend and knew him to be a true man. I am glad to have shared his friendship with you. I am fortunate in having many friends and am indeed proud to count you among the best. My troubles are not to be considered with yours and some others, for they are only passing and will be eventually cleared up and understood even by the 'some' to whom you refer. The responsibilities weigh most when such misfortunes occur as the loss of the poor passenger who passed on with brave Doran."

To Charles Sprague Sargent

Martinez, April 30, 1899

My dear Professor Sargent:

You are no doubt right about the little Tahoe reservation—a scheme full of special personalities, pushed through by a lot of lawyers, etc., but the more we get the better anyhow. It is a natural park, and because of its beauty and accessibility is visited more than any other part of the Sierra except Yosemite.

All I know of the Rainier and Olympic reservations has come through the newspapers. The Olympic will surely be attacked again and again for its timber, but the interests of Seattle and Tacoma will probably save Rainier. I expect to find out something about them soon, as I am going north from Seattle to Cook Inlet and Kodiak for a couple months with a "scientific party."... This section of the coast is the only one I have not seen, and I'm glad of the chance.

Good luck to you. I wish I were going to those leafy woods instead of icy Alaska. Be good to the trees, you tough, sturdy pair. Don't frighten the much-enduring Crataeguses and make them drop their spurs, and don't tell them quite eternally that you are from Boston and the Delaware Huckleberry Peninsula.

My love to Canby—keep his frisks within bounds. Remember me to the Biltmore friends and blessed Mohr and Mellichamp. And remember me also to the Messrs. Hickory and Oak, and, oh, the magnolias in bloom! Heavens, how they glow and shine and invite a fellow! Good-bye. I'll hope to see you in August.

Ever yours John Muir

To Walter Hines Page

[Martinez, California, May, 1899]

My dear Page:

I send the article on Yosemite Park to-day by registered mail. It is short, but perhaps long enough for this sort of stuff. I have three other articles on camping in the park, and on the trees and shrubs, gardens, etc., and on Sequoia Park, blocked out and more than half written. I wanted to complete these and get the book put together and off my hands this summer, and, now that I have all the material well in hand and on the move, I hate to leave it.

I start to-morrow on a two months' trip with Harriman's Alaska Expedition. John Burroughs and Professor [W. H.] Brewer and a whole lot of good naturalists are going. But I would not have gone, however tempting, were it not to visit the only part of the coast I have not seen and one of the scenes that I would have to visit sometime anyhow. This has been a barren year, and I am all the less willing to go, though the auspices are so good. I lost half the winter in a confounded fight with sheep and cattlemen and politicians on behalf of the forests. During the other half I was benumbed and interrupted by sickness in the family, while in word works, even at the best, as you know, I'm slow as a glacier. You'll get these papers, however, sometime, and they will be hammered into a book—if I live long enough.

I was very glad to get your letter, as it showed you were well enough to be at work again.

With best wishes, I am, Faithfully yours J. M.

To Mrs. Muir

Victoria, June 1, 1899

Dear Louie:

We sail from here in about two hours, and I have just time to say another good-bye. The ship is furnished in fine style, and I find we are going just where I want to go—Yakutat, Prince William Sound, Cook Inlet, etc. I am on the Executive Committee, and of course have something to say as to routes, time to be spent at each point, etc. The company is very harmonious for scientists. Yesterday I tramped over Seattle with John Burroughs. At Portland the Mazamas were very demonstrative and kind. I hope you are all busy with the hay. Helen will keep it well tumbled and tramped with Keenie's help. I am making pleasant acquaintances. Give my love to Maggie. Good-bye. Ever your affectionate husband John Muir

To Wanda and Helen Muir

Fort Wrangell, *June* 5, [1899,] 7 A.M. How are you all? We arrived here last evening. This is a lovely morning—water like glass. Looks like home. The flowers are in bloom, so are the forests. We leave in an hour for Juneau. The mountains are pure white. Went to church at Metlakatla, heard Duncan preach, and the Indians sing. Had fine ramble in the woods with Burroughs. He is ashore looking and listening for birds. The song sparrow, a little dun, speckledy muggins, sings best. Most of the passengers are looking at totem poles.

Have letters for me at Seattle. No use trying to forward them up here, as we don't know where we will touch on the way down home.

I hope you are all well and not too lonesome. Take good care of Stickeen and Tom. We landed at four places on the way up here. I was glad to see the woods in those new places,

Love to all. Ever your loving papa

J. M.

To Louie, Wanda, and Helen

Juneau, June 6, [1899,] 9 A. M.

Cold rainy day. We stop here only a few minutes, and I have only time to scribble love to my darlings. The green mountains rise into the gray cloudy sky four thousand feet, rich in trees and grass and flowers and wild goats.

We are all well and happy. Yesterday was bright and the mountains all the way up from Wrangell were passed in review, opening their snowy, icy recesses, and closing them, like turning over the leaves of a grand picture

book. Everybody gazed at the grand glaciers and peaks, and we saw icebergs floating past for the first time on the trip.

We landed on two points on the way up and had rambles in the woods, and the naturalists set traps and caught five whitefooted mice. We were in the woods I wandered in twenty years ago, and I had many questions to answer. Heaven bless you. We go next to Douglas Mine, then to Skagway, then to Glacier Bay.

Good-bye John Muir

To Mrs. Muir and daughters Sitka, Alaska, *June 10, 1899*

Dear Louie, Wanda, and Helen:

I wrote two days ago, and I suppose you will get this at the same time as the other. We had the Governor at dinner and a society affair afterward that looked queer in the wilderness. This eve we are to have a reception at the Governor's, and to-morrow we sail for Yakutat Bay, thence to Prince William Sound, Cook Inlet, etc. We were at the Hot Springs yesterday, fifteen miles from here amid lovely scenery.

The Topeka arrived last eve, and sails in an hour or so. I met Professor Moses and his wife on the wharf and then some Berkeley people besides; then the Raymond agent, who introduced a lot of people, to whom I lectured in the street. The thing was like a revival meeting, The weather is wondrous fine, and all goes well. I regret not having [had] a letter forwarded here, as I long for a word of your welfare. Heaven keep you, darlings. Ever yours

John Muir

To Mrs. Muir

Sitka, June 14, 1899

Dear Louie and bairns:

We are just entering Sitka Harbor after a delightful sail down Peril Straits, and a perfectly glorious time in Glacier Bay—five days of the most splendid weather I ever saw in Alaska. I was out three days with Gilbert and Palache revisiting the glaciers of the upper end of the Bay. Great changes have taken place. The Pacific Glacier has melted back four miles and changed into three separate glaciers, each discharging bergs in grand style. One of them, unnamed and unexplored, I named last evening, in a lecture they made me give in the social hall, the Harriman Glacier, which was received with hearty cheers. After the lecture Mr. Harriman came to me and thanked me for the great honor I had done him. It is a very beautiful glacier, the front discharging bergs like the Muir—about three quarters of a mile wide on the sea wall.

Everybody was delighted with Glacier Bay and the grand Muir Glacier, watching the beautiful bergs born in thunder, parties scattered out in every direction in rowboats and steam and naphtha launches on every sort of quest. John Burroughs and Charlie Keeler climbed the mountain on the east side of Muir Glacier, three thousand feet, and obtained a grand view far back over the mountain to the glorious Fairweather Range. I tried hard to get out of lecturing, but was compelled to do it. All seemed pleased. Lectures every night. The company all good-natured and harmonious. Our next stop will be Yakutat.

I'm all sunburned by three bright days among the bergs. I often wish you could have been with us. You will see it all some day. Heaven bless you. Remember me to Maggie. Good-bye

[John Muir]

To Mrs. Muir

Off Prince William Sound June 24, 1899

Dear Louie and darlings:

We are just approaching Prince William Sound—the place above all others I have long wished to see. The snow and ice-laden mountains loom grandly in crowded ranks above the dark, heaving sea, and I can already trace the courses of some of the largest of the glaciers, It is 2 P.M., and in three or four hours we shall be at Orca, near the mouth of the bay, where I will mail this note.

We had a glorious view of the mountains and glaciers in sailing up the coast along the Fairweather Range from Sitka to Yakutat Bay. In Yakutat and Disenchantment Bays we spent four days, and I saw their three great glaciers discharging bergs and hundreds of others to best advantage. Also the loveliest flower gardens. Here are a few of the most beautiful of the rubuses. This charming plant covers acres like a carpet. One of the islands we landed on, in front of the largest thundering glacier, was so flower-covered that I could smell the fragrance from the boat among the bergs half a mile away.

I'm getting strong fast, and can walk and climb about as well as ever, and eat everything with prodigious appetite.

I hope to have a good view of the grand glaciers here, though some of the party are eager to push on to Cook Inlet. I think I'll have a chance to mail another letter ere we leave the Sound.

Love to all J. M.

To Wanda Muir

Unalaska, July 8, 1899

My dear Wanda and Helen and Mama:

We arrived here this cloudy, rainy, foggy morning after a glorious sail from Sand Harbor on Unga Island, one of the Shumagin group, all the way along the volcano-dotted coast of the Alaska Peninsula and Unimak Island. The volcanoes are about as thick as haycocks on our alfalfa field in a wet year, and the highest of them are smoking and steaming in grand style. Shishaldin is the handsomest volcanic cone I ever saw and it looked like this last evening.



I'll show you a better sketch in my notebook when I get home. About nine thousand feet high, snow and ice on its slopes, hot and bare at the top. A few miles from Shishaldin there is a wild rugged old giant of a volcano that blew or burst its own head off a few years ago, and covered the sea with ashes and cinders and killed fish and raised a tidal wave that lashed the shores of San Francisco—and even Martinez.

There is a ship, the Loredo, that is to sail in an hour, so Pin in a hurry, as usual. We are going to the Seal Islands and St. Lawrence Island from here, and a point or two on the Siberian coast—then home. We are taking on coal, and will leave in three or four hours. I hope fondly that you are all well....I'll soon be back,

my darlings. God bless you.

Good-bye [John Muir]

"To the 'Big Four': the Misses Mary and Cornelia Harriman, and the Misses Elizabeth Averell and Dorothea Draper, who with Carol and Roland [Harriman], the 'Little Two,' kept us all young on the never-to-be-forgotten H.A.E." [Harriman Alaska Expedition.]

[Martinez,] August 30, 1899

Dear Girls:

I received your kind compound letter from the railroad washout with great pleasure, for it showed, as I fondly thought, that no wreck, washout, or crevasse of any sort will be likely to break or wash out the memories of our grand trip, or abate the friendliness that sprung up on the Elder among the wild scenery of Alaska during these last two memorable months. No doubt every one of the favored happy band feels, as I do, that this was the grandest trip of his life. To me it was peculiarly grateful and interesting because nearly all my life I have wandered and studied alone. On the Elder, I found not only the fields I liked best to study, but a hotel, a club, and a home, together with a floating University in which I enjoyed the instruction and companionship of a lot of the best fellows imaginable, culled and arranged like a well-balanced bouquet, or like a band of glaciers flowing smoothly together, each in its own channel, or perhaps at times like a lot of round boulders merrily swirling and chafing against each other in a glacier pothole.

And what a glorious trip it was for you girls, flying like birds from wilderness to wilderness, the wildest and brightest of America, tasting almost every science under the sun, with fine breezy exercise, scrambles over mossy logs and rocks in the spruce forests, walks on the crystal prairies of the glaciers, on the flowery boggy tundras, in the luxuriant wild gardens of Kodiak and the islands of Bering Sea, and plashing boat rides in the piping bracing winds, all the while your eyes filled with magnificent scenery—the Alexander Archipelago with its thousand forested islands and calm mirror waters, Glacier Bay, Fairweather Mountains, Yakutat and Enchantment Bays, the St. Elias Alps and glaciers and the glorious Prince William Sound, Cook Inlet, and the Aleutian Peninsula with its flowery, ley, smoky volcanoes, the blooming banks and bracs and mountains of Unalaska, and Bering Sea with its seals and Innuits, whales and whalers, etc., etc.

It is not easy to stop writing under the exhilaration of such an excursion, so much pure wildness with so much fine company. It is a pity so rare a company should have to be broken, never to be assembled again. But many, no doubt, *will* meet again. On your side of the continent perhaps half the number may be got together. Already I have had two trips with Merriam to the Sierra Sequoias and Coast Redwoods, during which you may be sure the H.A.E. was enjoyed over again. A few days after I got home, Captain Doran paid me a visit, most of which was spent in a hearty review of the trip. And last week Gannett came up and spent a couple of days, during which we went over all our enjoyments, science and fun, mountain ranges, glaciers, etc., discussing everything from earth sculpture to Cassiope and rhododendron gardens—from Welsh rarebit and jam and cracker feasts to Nunatak. I hope to have visits from Professor Gilbert and poet Charlie ere long, and Earlybird Ritter, and possibly I may see a whole lot more in the East this coming winter or next. Anyhow, remember me to all the Harrimans and Averells and every one of the party you chance to meet, Just to think of them!! Ridgway with wonderful bird eyes, all the birds of America in them; Funny Fisher ever flashing out wit; Perpendicular E., erect and majestic as a Thlinket totem pole Old-sea-beach G., hunting upheavals, downheavals, sideheavals, and hanging valleys, the Artists reveling in color beauty like bees in flower-beds; Ama-a-merst tripping along shore like a sprightly sandpiper, pecking kelp-bearded boulders for a meal of

fossil molluscs; Genius Kincaid among his beetles and butterflies and "red tailed bumble-bees that sting awful hard"; Innuit Dall smoking and musing, flowery Trelease and Coville; and Seaweed Saunders our grand big-game Doctor, and how many more! Blessed Brewer of a thousand speeches and stories and merry ha-has, and Genial John Burroughs, who growled at and scowled at good Bering Sea and me, but never at thee. I feel pretty sure that he is now all right at his beloved Slabsides and I have a good mind to tell his whole Bering story in his own sort of good-natured, gnarly, snarly, jungle, jangle rhyme.

There! But how unconscionably long the thing is! I must stop short. Remember your penitential promises. Kill as few of your fellow beings as possible and pursue some branch of natural history at least far enough to see Nature's harmony. Don't forget me. God bless you. Good-bye.

Ever your friend John Muir

To Julia Merrill Moores

July 25, 1900

My dear friends:

I scarce need say that I have been with you and mourned with you every day since your blessed sister was called away, and wished I could do something to help and comfort you. Before your letter came, I had already commenced to write the memorial words you ask for, and I'll send them soon.

Her beautiful, noble, helpful life on earth was complete, and had she lived a thousand years she would still have been mourned, the more the longer she stayed. Death is as natural as life, sorrow as joy. Through pain and death come all our blessings, life and immortality.

However clear our faith and hope and love, we must suffer—but with glorious compensation. While death separates, it unites, and the Sense of loneliness grows less and less as we become accustomed to the new light, communing with those who have gone on ahead in spirit, and feeling their influence as if again present in the flesh. Your own experience tells you this, however. The Source of all Good turns even sorrow and seeming separation to our advantage, makes us better, drawing us closer together in love, enlarging, strengthening, brightening our views of the spirit world and our hopes of immortal union. Blessed it is to know and feel, even at this cost, that neither distance nor death can truly separate those who love.

My friends, whether living or dead, have always been with me in my so-called lonely wanderings, so kind and wonderful are God's compensations. Few, dear friends, have greater cause for sorrow, or greater cause for joy, than you have. Your sister lives in a thousand hearts, and her influence, pure as sunshine and dew, can never be lost. . . .

Read again and again those blessed words, ever old, ever new: "Who redeemeth thy life from destruction; who crowneth thee with loving kindness and tender mercy," who pities you "like as a father pitieth his children, for He knoweth our frame, He knoweth that we are dust. Man's days are as grass, as a flower of the field the wind passeth over it and it is gone, but the mercy of the Lord is from everlasting to everlasting."

In His strength we must live on, work on, doing the good that comes to heart and hand, looking forward to meeting in that City which the streams of the River of Life make glad.

Ever your loving friend J.M.

To Walter Hines Page

Martinez, June 12, 1900

My Dear Mr. Page:

I sent by mail to-day manuscript of ice article for the Harriman book, the receipt of which

please acknowledge, and as it is short I hope you will read it, not for wandering words and sentences out of plumb, but for the ice of it. Coming as you do from the unglacial South, it may "fill a long-felt want." And before you settle down too hopelessly far in book business take a trip to our western Iceland. Go to Glacier Bay and Yakutat and Prince William Sound and get some pure wildness into your inky life. Neglect not this glacial advice and glacial salvation this hot weather, and believe me

Faithfully yours John Muir

Very many letters of appreciation were written to Muir by persons who were strangers to him, except in spirit. One such came during the autumn of 1900 from an American woman resident in Yokohama. "More than twenty years ago," said the writer," when I was at my mountain home in Siskiyou County, California, I read a short sketch of your own, in which you pictured your sense of delight in listening to the wind, with its many voices, sweeping through the pines. That article made a lifelong impression on me, and shaped an inner perception for the wonders of Nature which has gladdened my entire life since. . . . It has always seemed that I must some time thank you."

To Mrs. Richard Swain

Martinez, California October 21, 1900

Mrs. Richard Swain:

That you have so long remembered that sketch of the windstorm in the forest of the Yuba gives me pleasure and encouragement in the midst of this hard life work, for to me it is hard, far harder than tree or mountain climbing. When I began my wanderings in God's wilds, I never dreamed of writing a word for publication, and since beginning literary work it has never seemed possible that much good to others could come of it. Written descriptions of fire or bread are of but little use to the cold or starving. Descriptive writing amounts to little more than "Hurrah, here's something! Come!" When my friends urged me to begin, saying, "We cannot all go to the woods and mountains; you are free and love wildness; go and bring it to us," I used to reply that it was not possible to see and enjoy for others any more than to eat for them or warm for them. Nature's tables are spread and fires burning. You must go warm yourselves and eat. But letters like yours which occasionally come to me show that even nature writing is not altogether use-less.

Some time I hope to see Japan's mountains and forests. The flora of Japan and Manchuria is among the richest and most interesting on the globe. With best wishes, I am

Very truly yours J. M.

To Katherine Merrill Graydon

Martinez, October 22, 1900

My dear Miss Graydon:

... Of course you know you have my sympathy in your loneliness—loneliness not of miles, but of loss—the departure from earth of your great-aunt Kate, the pole-star and lode" stone of your life and of how many other lives. What she was to me and what I thought of her I have written and sent to your Aunt Julia for a memorial book [*The Man Shakespeare, and Other Essays*. By Catharine Merrill. The Bowen-Merrill Company, 1902.] her many friends are preparing. A rare beloved soul sent of God, all her long life a pure blessing. Her work is done; and she has gone to the Better Land, and now you must get used to seeing her there and hold on to her as your guide as before....

Wanda, as you know, is going to school, and expects soon to enter the University. She is a faithful, steady scholar, not in the least odd or brilliant, but earnest and unstoppable as an avalanche. She comes home every

Friday or Saturday by the new railway that crosses the vineyards near the house. Muir Station is just above the Reid house. What sort of a scholar Helen will be I don't know. She is very happy and strong. My sister Sarah is now with us, making four Muirs here, just half the family....

Ever your friend John Muir

To Dr. C. Hart Merriam

Martinez, Cal. *October* 23, 1900

My dear Dr. Merriam:

I am very glad to get your kind letter bringing back our big little Sierra trip through the midst of so many blessed chipmunks and trees. Many thanks for your care and kindness about the photographs and for the pile of interesting bird and beast Bulletins. No. 3 [*North American Fauna, No. 3*—Results of a Biological Survey of San Francisco Mountains and the Desert of the Little Colorado, Arizona, by C. Hart Merriam, September, 1900.] contains lots of masterly work and might be expanded into a grand book. This you should do, adding and modifying in accordance with the knowledge you have gathered during the last ten years. But alas! Here you are pegging and puttering with the concerns of others as if in length of life you expect to rival Sequoia. That stream and fountain ["Fountains and Stream of the Yosemite National Park," *Atlantic*, April, 1901.] article, which like Tennyson's brook threatened to "go on forever," is at last done, and I am now among the Big Tree parks. Not the man with the hoe, but the poor toiler with the pen, deserves mile-long commiseration in prose and rhyme.

Give my kindest regards to Mrs. and Mr. Bailey, and tell them I'll go guide with them to Yosemite whenever they like unless I should happen to be hopelessly tied up in some way.

With pleasant recollections from Mrs. Muir and the girls, I am

Very truly yours John Muir

To Mrs. Henry Fairfield Osborn

Martinez, California November 18, 1900

My dear Mrs. Osborn

Nothing could be kinder than your inventation to Wing-and-Wing, and how gladly we would accept, you know. But grim Duty, like Bunyan's Apollyon, is now "straddling across the whole breadth of the way," crying "No."...

I am at work on the last of a series of park and forest articles to be collected and published in book form by Houghton, Mifflin & Company and which I hope to get off my hands soon, But there is endless work in sight ahead—Sierra and Alaska things to follow as fast as my slow, sadly interrupted pen can be spurred to go.

Yes, I know it is two years since I enjoyed the dainty chickaree room you so kindly call mine. Last summer as you know I was in Alaska. This year I was in the Sierra, going up by way of Lake Tahoe and down by Yosemite Valley, crossing the range four times along the headwaters of the Truckee, Carson, Mokelumne, Stanislaus, Calaveras, Walker, Tuolumne and Merced Rivers, revisiting old haunts, examining forests, and learning what I could about birds and mammals with Dr. Merriam and his sister and Mr. Bailey—keen naturalists with infinite appetite for voles, marmots, squirrels, chipmunks, etc. We had a delightful time, of course, and in Yosemite I remembered your hoped-for visit to the grand Valley and wished you were with us. I'm sorry I missed Sir Michael Foster. Though prevented now, I hope ere long to see Wing-and-Wing in autumn glory. In the mean time and always

I am ever your friend John Muir

To Walter Hines Page

Martinez, Cal. *January* 10, 1902

Big thanks, my dear Page, for your great letter. The strength and shove and hearty ringing inspiration of it is enough to make the very trees and rocks write. The Park book, the publishers tell me, is successful. To you and Sargent it owes its existence; for before I got your urgent and encouraging letters I never dreamed of writing such a book. As to plans for others, I am now at work on—

1. A small one, "Yosemite and Other Yosemites," which Johnson has been trying to get me to write a long time and which I hope to get off my hands this year. I'll first offer it to the Century Company, hoping they will bring it out in good shape, give it a good push toward readers and offer fair compensation. . . .

2. The California tree and shrub book was suggested by Merriam last summer, but I have already written so fully on forest trees and their underbrush I'm not sure that I can make another useful book about them. Possibly a handy volume, with short telling descriptions and illustrations of each species, enabling the ordinary observer to know them at sight, might be welcomed. This if undertaken will probably be done season after next, and you shall have the first sight of it.

3. Next should come a mountaineering book—all about walking, climbing, and camping, with a lot of illustrative excursions,

4. Alaska-glaciers, forests, mountains, travels, etc.

5. A book of studies—the action of landscape-making forces, earth sculpture, distribution of plants and animals, etc. My main real book in which I'll have to ask my readers to cerebrate. Still I hope it may be made readable to a good many.

6. Possibly my autobiography which for ten years or more all sorts of people have been begging me to write. My life, however, has been so smooth and regular and reasonable, so free from blundering exciting adventures, the story seems hardly worth while in the midst of so much that is infinitely more important. Still, if I should live long enough I may be tempted to try it. For I begin to see that such a book would offer fair opportunities here and there to say a good word for God.

The Harriman Alaska book is superb and I gladly congratulate you on the job. In none of the reviews I have seen does Dr. Merriam get half the credit due him as editor.

Hearty thanks for the two Mowbray volumes. I've read them every word. The more of such nature books the better. Good luck to you. May your shop grow like a sequoia and may I meet you with all your family on this side the continent amid its best beauty.

Ever faithfully yours John Muir

To Dr. C. Hart Merriam

[*January*, 1902]

My dear Dr. Merriam:

I send these clippings to give a few hints as to the sheep and forests. Please return them. If you have a file of "The Forester" handy, you might turn to the February and July numbers of 1898, and the one of June, 1900, to solemn discussions of the "proper regulation" of sheep

grazing.

With the patronage of the business in the hands of the Western politician, the so-called proper regulation of sheep grazing by the Forestry Department is as hopelessly vain as, would be laws and regulations for the proper management of ocean currents and earthquakes.

The politicians, in the interest of wealthy mine, mill, sheep, and cattle owners, of course nominate superintendents and supervisors of reservations supposed to be harmlessly blind to their stealings. Only from the Military Department, free from political spoils poison, has any real good worth mention been gained for forests, and so, as far as I can see, it will be, no matter how well the Forestry Department may be organized, until the supervisors, superintendents, and rangers are brought under Civil Service Reform. Ever yours

John Muir

To Charles Sprague Sargent

Martinez, September 10, 1902

My dear Sargent:

What are you so wildly "quitting" about? I've faithfully answered all your letters, and as far as I know you are yourself the supreme quitter—Quitter gigantea—quitting Mexico, quitting a too trusting companion in swamps and sand dunes of Florida, etc., etc. Better quit quitting, though since giving the world so noble a book you must, I suppose, be allowed to do as you like until time and Siberia effect a cure.

I am and have been up to the eyes in work, insignificant though it be. Last spring had to describe the Colorado Grand Cañon—the toughest job I ever tackled, strenuous enough to disturb the equanimity of even a Boston man. Then I had to rush off to the Sierra with [the Sierra] Club outing. Then had to explore Kern River Cañon, etc. Now I'm at work on a little Yosemite book. Most of the material for it has been published already, but a new chapter or two will have to be written. Then there is the "Silva" review, the most formidable job of all, which all along I've been hoping some abler, better equipped fellow would take off my hands. Can't you at least give me some helpful suggestions as to the right size, shape, and composition of this review?

Of course I want to take that big tree trip with you next season, and yet I should hate mortally to leave either of these tasks unfinished. Glorious congratulations on the ending of your noble book!

Ever faithfully yours John Muir

To Mrs. Anna R. Dickey

Martinez, October 12, 1902

Dear Mrs. Dickey:

I was glad to get your letter. It so vividly recalled our memorable ramble, merry and nobly elevating, and solemn in the solemn aboriginal woods and gardens of the great mountains—commonplace, sublime, and divine. I seemed to hear your voice in your letter, and see your gliding, drifting, scrambling along the trails with all the gay good company, or seated around our many camp-fires in the great illuminated groves, etc., etc.—altogether a good trip in which everybody was a happy scholar at the feet of Nature, and all learned something direct from earth and sky, bird and beast, trees, flowers, and chanting winds and waters; hints, suggestions, little-great lessons of God's infinite power and glory and goodness. No wonder your youth is renewed and Donald goes to his studies right heartily.

To talk plants to those who love them must ever be easy and delightful. By the way, that little fairy, airy, white-flowered plant which covers sandy dry ground on the mountains like a mist, which I told you was a near relative to Eriogonum, but whose name I could never recall, is *Oxytheca spergulina*. There is another rather

common species in the region we traveled, but this is the finest and most abundant.

I'm glad you found the mountain hemlock, the loveliest of conifers. You will find it described in both my books. It is abundant in Kings River Cañon, but not beside the trails. The "heather" you mention is no doubt Bryanthus or Cassiope. Next year you and Donald should make collections of at least the most interesting plants. A plant press, tell Donald, is lighter and better than a gun. So is a camera., and good photographs of trees and shrubs are much to be desired.

I have heard from all the girls. Their enthusiasm, is still fresh, and they are already planning and plotting for next year's outing in the Yosemite, Tuolumne, and Mono regions. . . . Gannett stayed two days with us, and is now, I suppose at home. I was hoping you might have a day or two for a visit to our little valley. Next time you come to the city try to stop off at "Muir Station" on the Santa Fé. We are only an hour and a half from the city. I should greatly enjoy a visit at your Ojai home, as you well know, but when fate and work will let me I dinna ken. . . . Give my sincere regard to Donald.

Ever faithfully yours John Muir

To Robert Umderwood Johnson

Martinez, September 15, 1902

Dear Mr. Johnson:

On my return from the Kern region I heard loud but vague rumors of the discovery of a giant sequoia in Converse Basin on Kings River, one hundred and fifty-three feet in circumference and fifty feet in diameter, to which I paid no attention, having heard hundreds of such "biggest-tree-inthe-world" rumors before. But at Fresno I met a surveyor who assured me that he had himself measured the tree and found it to be one hundred and fifty-three feet in circumference six feet above ground. So of course I went back up the mountains to see and measure for myself, carrying a steel tape-line.

At	one	foot	above	ground	it	is	108	feet	in	circur	nfer	ence
"	four	feet		w	"	"	97	w	6	inches	in	**
"	six		"	w	"	"	93	w			"	**

One of the largest and finest every way of living sequoias that have been measured. But none can say it is certainly *the largest*. The immensely larger dead one that I discovered twenty-seven years ago stands within a few miles of this new wonder, and I think I have in my notebooks measurements of living specimens as large as the new tree, or larger. I have a photo of the tree and can get others, I think, from a photographer who has a studio in Converse Basin. I'll write a few pages on Big Trees in general if you like; also touching on the horrible destruction of the Kings River groves now going on fiercely about the mills.

As to the discovery of a region grander than Yosemite by the Kelly brothers in the Kings Cañon, it is nearly all pure bosh. I explored the Cañon long ago. It is very deep, but has no El Capitan or anything like it.

Ever yours faithfully John Muir

To Henry Fairfield Osborn

Martinez, California July 16, 1904

Dear Mr. Osborn:

In the big talus of letters, books, pamphlets, etc., accumulated on my desk during more than a year's absence, I found your Boone and Crockett address ["Preservation of the Wild Animals of North America," *Forest and Stream*, April 16, 1904, pp. 312-13.] and have heartily enjoyed it. It is an admirable plea for our poor horizontal fellow-mortals, so fast passing away in ruthless

starvation and slaughter. Never before has the need for places of refuge and protection been greater. Fortunately, at the last hour, with utter extinction in sight, the Government has begun to act under pressure of public opinion, however slight. Therefore your address is timely and should be widely published. I have often written on the subject, but mostly with non-effect. The murder business and sport by saint and sinner alike has been pushed ruthlessly, merrily on, until at last protective measures are being called for, partly, I suppose, because the pleasure of killing is in danger of being lost from there being little or nothing left to kill, and partly, let us hope, from a dim glimmering recognition of the rights of animals and their kinship to ourselves.

How long it seems since my last visit to Wing-and-Wing! and how far we have been! I got home a few weeks ago from a trip more than a year long. I went with Professor Sargent and his son Robeson through Europe visiting the principal parks, gardens, art galleries, etc. From Berlin we went to St. Petersburg, thence to the Crimea, by Moscow, the Caucasus, across by Dariel Pass from Tiflis, and back to Moscow. Thence across Siberia, Manchuria, etc., to Japan and Shanghai.

At Shanghai left the Sargents and set out on a grand trip alone and free to India, Egypt, Ceylon, Australia, New Zealand. Thence by way of Port Darwin, Timor, through the Malay Archipelago to Manila. Thence to Hong Kong again and Japan and home by Honolulu. Had perfectly glorious times in India, Australia, and New Zealand. The flora of Australia and New Zealand is so novel and exciting I had to begin botanical studies over again, working night and day with endless enthusiasm. And what wondrous beasts and birds, too, are there!

Do write and let me know how you all are. Remember me with kindest regards to Mrs. Osborn and the children and believe me ever

Faithfully yours John Muir

ll 1905-1914

The closing period of Muir's life began with a great triumph and a bitter sorrow—both in the same year. His hour of triumph came with the successful issue of a seventeen-year campaign to rescue his beloved Yosemite Valley from the hands of spoilers. His chief helpers were Mr. Johnson in the East and Mr. William E. Colby in the West. The latter had, under the auspices of the Sierra Club, organized and conducted for many years summer outings of large parties of Club members into the High Sierra. These outings, by their simple and healthful camping methods, by their easy mobility amid hundreds of miles of superb mountain scenery, and by the deep love of unspoiled nature which they awakened in thousands of hearts, not only achieved a national reputation, but trained battalions of eager defenders of our national playgrounds. No one was more rejoiced by the growing success of the outings than John Muir, and the evenings when he spoke at the High Sierra camp-fires are treasured memories in many hearts.

When the battle for the recession of the Yosemite Valley grew keen during January and February, 1905, Mr. Muir and Mr. Colby went to Sacramento in order to counteract by their personal presence the propaganda of falsehoods which an interested opposition was industriously spreading. The bill passed by a safe majority and the first of the two following letters celebrates the event; the second relates to the later acceptance of the Valley by Congress, as an integral part of the Yosemite National Park.

On the heels of this achievement came a devastating bereavement—the death of his wife. Earlier in the year his daughter Helen had been taken seriously ill, and when she became convalescent she had to be removed to the dry air of Arizona. While there with her, a telegram called him back to the bedside of his wife, in whose

case a long-standing illness had suddenly become serious. She died on the sixth of August, 1905, and thereafter the old house on the hill was a shelter and a place of work from time to time, but never a home again. "Get out among the mountains and the trees, friend, as soon as you can," wrote Theodore Roosevelt. "They will do more for you than either man or woman could." But anxiety over the health of his daughter Helen bound him to the Arizona desert for varying periods of time. There he discovered remnants of a wonderful petrified forest, which he studied—with great eagerness. He urged that it be preserved as a national monument, and it was set aside by Theodore Roosevelt in 1906 under the name of the Petrified Forest National Monument.

These years of grief and anxiety proved comparatively barren in literary work. But part of the time he probably was engaged upon a revised and enlarged edition of his "Mountains of California," which appeared in 1911 with an affectionate dedication to the memory of his wife. In some notes, written during 1903, for his autobiography, Muir alludes to this period of stress with a pathetic foreboding that he might not live long enough to gather a matured literary harvest from his numerous notebooks.

The letters of the closing years of his life show an increasing sense of urgency regarding the unwritten books mentioned in his letter to Walter Hines Page, and he applied himself to literary work too unremittingly for the requirements of his health. Much of his writing durinig this period was done at the home of Mr. and Mrs. J. D. Hooker in Los Angeles and at the summer home of Mr. and Mrs. Henry Fairfield Osborn at Garrison's-on-the-Hudson. The last long journey, in which he realized the dreams of a lifetime, was undertaken during the summer of 1911. It was the trip to South America, to the Amazon—the goal which he had in view when he set out on his thousand-mile walk to the Gulf in 1867. His chief object was to see the araucaria forests of Brazil. This accomplished, he went from South America to South Africa in order to see the Baobab tree in its native habitat.

During these few later years of domestic troubles and anxieties [he wrote in 1911] but little writing or studying of any sort has been possible. But these, fortunately, are now beginning to abate, and I hope that something worth while may still be accomplished before the coming of life's night. I have written but three [*Mountains of California, Our National Parks*, and *My First Summer in the Sierra*.] books as yet, and a number of scientific and popular articles in magazines, news-papers, etc. In the beginning of my studies I never intended to write a word for the press. In my life of lonely wanderings I was pushed and pulled on and on through everything by unwavering never-ending love of God's earth plans and works, and eternal, immortal,, all-embracing Beauty; and when importuned to "write, write, and give your treasures to the world," I have always said that I could not stop field work until too old to climb mountains; but now, at the age of seventy, I begin to see that if any of the material collected in notebooks, already sufficient for a dozen volumes, is to be arranged and published by me, I must make haste.

To Robert Underwood Johnson

Martinez, February 24, [1905]

Dear Mr. Johnson:

I wish I could have seen you last night when you received my news of the Yosemite victory, which for so many years, as commanding general, you have bravely and incessantly fought for.

About two years ago public opinion, which had long been on our side, began to rise into effective action. On the way to Yosemite [in 1903] both the President and our Governor [President Theodore Roosevelt and Governor George C. Pardee.] were won to our side, and since then the movement was like Yosemite avalanches. But though almost everybody was with us, so active was the opposition of those pecuniarily and politically interested, we might have failed to get the bill through the Senate but for the help of Mr. H— [Harriman], though, of course, his name or his company were never in sight through all the fight. About the beginning of

January I wrote to Mr. H—— [Harriman]. He promptly telegraphed a favorable reply.

Wish you could have heard the oratory of the opposition—fluffy, nebulous, shrieking, howling, threatening like sandstorms and dust whirlwinds in the desert. Sometime I hope to tell you all about it.

I am now an experienced lobbyist; my political education is complete. Have attended Legislature, made speeches, explained, exhorted, persuaded every mother's son of the legislators, newspaper reporters, and everybody else who would listen to me. And now that the fight is finished and my education as a politician and lobbyist is finished, I am almost finished my-self.

Now, ho! for righteous management. . . . Of course you'll have a long editorial in the "Century."

Faithfully yours [John Muir]

To Robert Underwood Johnson

Adamana, Arizona July 16, 1906 Yes, my dear Johnson, sound the loud timbrel and let every Yosemite tree and stream rejoice!

You may be sure I knew when the big bill passed. Getting Congress to accept the Valley brought on, strange to say, a desperate fight both in the House and Senate. Sometime I'll tell you all the story. You don't know how accomplished a lobbyist I've become under your guidance. The fight you planned by that famous Tuolumne camp-fire seventeen years ago is at last fairly, gloriously won, every enemy down derry down.

Write a good, long, strong, heart-warming letter to Colby. He is the only one of all the Club who stood by me in downright effective fighting.

I congratulate you on your successful management of Vesuvius, as Gilder says, and safe return with yourself and family in all its far-spreading branches in good health. Helen is now much better. Wanda was married last month, and I am absorbed in these enchanted carboniferous forests. Come and let me guide you through them and the great Cañon.

Ever yours John Muir

To Francis Fisher Browne

[Editor of *The Dial* from 1880 to his death in 1913. A tribute by Muir under the title "Browne the Beloved" appeared in *The Dial* during June, 1913.]

325 West Adams Street Los Angeles, California June 1, 1910

My dear Mr. Browne:

Good luck and congratulations on the "Dial's" thirtieth anniversary, and so Scottishly and well I learned to know you two summers ago, with blessed John Burroughs & Co., that I seem to have known you always.

I was surprised to get a long letter from Miss Barrus written at Seattle, and in writing to Mr. Burroughs later I proposed to him that he follow to this side of the continent and build a new Slabsides "where rolls the Oregon," and write more bird and bee books instead of his new-fangled Catskill Silurian and Devonian geology on which he at present seems to have gane gite, clean gite, having apparently forgotten that there is a single bird or bee in the sky. I also proposed that in his ripe, mellow, autumnal age he go with me to the basin of the Amazon for new ideas, and also to South Africa and Madagascar, where he might see something that would bring his early bird and bee days to mind.

I have been hidden down here in Los Angeles for a month or two and have managed to get off a little book to Houghton Mifflin, which they propose to bring out as soon as possible. It is entitled "My First Summer in the Sierra." I also have another book nearly ready, made up of a lot of animal stories for boys, drawn from my experiences as a boy in Scotland and in the wild oak openings of Wisconsin. I have also rewritten the autobiographical notes dictated at Harriman's Pelican Lodge on Klamath Lake two years ago, but that seems to be an endless job, and, if completed at all, will require many a year. Next month I mean to bring together a lot of Yosemite material into a hand-book for travelers, which ought to have been written long ago.

So you see I am fairly busy, and precious few trips will I be able to make this summer, although I took Professor Osborn and family into the Yosemite for a few days, and Mr. Hooker and his party on a short trip to the Grand Cañon.

Are you coming West this year? It would be delightful to see you once more.

I often think of the misery of Mr. Burroughs and his physician, caused by our revels in Burns' poems, reciting verse about in the resonant board chamber whose walls transmitted every one of the blessed words to the sleepy and unwilling ears of John.... Fun to us, but death and broken slumbers to Oom John!

With all best wishes, my dear Browne, and many warmly cherished memories, I am

Ever faithfully your friend John Muir



Wapama Falls (1700 feet) in Hetch-Hetch Valley

To Henry Fairfield Osborn

325 West Adams Street Los Angeles, California June 1, 1910

My dear Mr. Osborn:

Many thanks for the copy you sent me of your long good manly letter to Mr. Robert J. Collier on the Hetch-Hetchy Yosemite Park. As I suppose you have seen by the newspapers, San Francisco will have until May 1, 1911, to show cause why Hetch-Hetchy Valley should not

be eliminated from the permit which the Government has given the city to develop a water supply in Yosemite Park. Meantime the municipality is to have detailed surveys made of the Lake Eleanor watershed, of the Hetch-Hetchy, and other available sources, and furnish such data and information as may be directed by the board of army engineers appointed by the President to act in an advisory capacity with Secretary Ballinger. Mr Ballinger said to the San Francisco proponents of the damming scheme, "I want to know, what is necessary so far as the Hetch-Hetchy is concerned." He also said, "What this Government wants to know and the American people want to know is whether it is a matter of absolute necessity for the people of San Francisco to have this water supply. Otherwise it belongs to the people for the purpose of a national park for which it has been set aside." Ballinger suggested that the Lake Eleanor plans should be submitted to the engineers at once so that they could have them as a basis for ascertaining if the full development of that watershed is contemplated, and to make a report of its data to the engineers as its preparation proceeded so that they may be kept in immediate touch with what is being done. Of the outcome of this thorough examination of the scheme there can be no doubt, and it must surely put the question at rest for all time, at least as far as our great park is concerned, and perhaps all the other national parks.

I have been hidden down here in Los Angeles a month or two working hard on books. Two or three weeks ago I sent the manuscript of a small book to Houghton Mifflin Company, who expect to bring it out as soon as possible. It is entitled "My First Summer in the Sierra," written from notes made forty-one years ago. I have also nearly ready a lot of animal stories for a boys' book, drawn chiefly from my experiences as a boy in Scotland and in the wild oak openings of Wisconsin. I have also rewritten a lot of autobiographical notes dictated at Mr. Harriman's Pelican Lodge on Klamath Lake two years ago. Next month I hope to bring together a lot of Yosemite sketches for a sort of travelers' guidebook, which ought to have been written many years ago.

So you see, what with furnishing illustrations, reading proof, and getting this Yosemite guidebook off my hands, it will not be likely that I can find time for even a short visit to New York this summer. Possibly, however, I may be able to get away a few weeks in the autumn. Nothing, as you well know, would be more delightful than a visit to your blessed Garrison's-on-the-Hudson, and I am sure to make it some time ere long, unless my usual good luck should fail me utterly.

With warmest regards to Mrs. Osborn and Josephine and all the family, I am, my dear Mr. Osborn,

Ever faithfully your friend John Muir

To Mrs. J. D. Hooker

Martinez, September 15, 1910

Dear Mrs Hooker:

Be of good cheer, make the best of whatever befalls; keep as near to headquarters as you may, and you will surely triumph over the ills of life, its frets and cares, with all other vermin of either earth or sky.

I'm ashamed to have enjoyed my visit so much. A lone good soul can still work miracles, charm an outlandish, crooked, zigzag flat into a lofty inspiring Olympus.

Do you know these fine verses of Thoreau?

"I will not doubt for evermore, Nor falter from a steadfast faith, For though the system be turned o'er, God takes not back the word which once he saith.

"I will, then, trust the love untold

Which not my worth nor want has bought,

Which wooed me young and wooes me old,

And to this evening hath me brought."

Ever your friend John Muir

To Mrs. J. D. Hooker

Martinez, December 17,1910

Dear Mrs. Hooker:

I'm glad you're at work on a book, for as far as I know, however high or low Fortune's winds may blow o'er life's solemn main, there is nothing so saving as good hearty work. From a letter just received from the Lark I learn the good news that Mr. Hooker is also hard at work with his pen.

As for myself, I've been reading old musty dusty Yosemite notes until I'm tired and blinky blind, trying to arrange them in something like lateral, medial, and terminal moraines on my den floor. I never imagined I had accumulated so vast a number. The long trains and embankments and heaped-up piles are truly appalling. I thought that in a quiet day or two I might select all that would be required for a guidebook; but the stuff seems enough for a score of big jungle books, and it's very hard, I find, to steer through it on anything like a steady course in reasonable time. Therefore, I'm beginning to see that I'll have to pick out only a moderate-sized bagful for the book and abandon the bulk of it to waste away like a snowbank or grow into other forms as time and chance may determine.

So, after all, I may be able to fly south in a few days and alight in your fine cañon garret. Anyhow, with good will and good wishes, to you all, I am

Ever faithfully, affectionately John Muir

To Mrs. J. D. Hooker

[*June* 26, 1911]

... I went to New Haven Tuesday morning, the 20th, was warmly welcomed and entertained by Professor Phelps and taken to the ball game in the afternoon. Though at first a little nervous, especially about the approaching honorary degree ceremony, I quickly caught the glow of the Yale enthusiasm. Never before have I seen or heard anything just like it. The alumni, assembled in classes from all the country, were arrayed in wildly colored uniforms, and the way they rejoiced and made merry, capered and danced, sang and yelled, marched and ran, doubled, quadrupled, octupled is utterly indescribable; autumn leaves in whirlwinds are staid and dignified in comparison,

Then came memorable Wednesday when we donned our radiant academic robes and marched to the great hall where the degrees were conferred, shining like crow blackbirds. I was given perhaps the best seat on the platform, and when my name was called I arose with a grand air, shook my massive academic plumes into finest fluting folds, as became the occasion, stepped

forward in awful majesty and stood rigid and solemn like an ancient sequoia while the orator poured praise on the honored wanderer's head—and in this heroic attitude I think I had better leave him. Here is what the orator said. Pass it on to Helen at Daggett.

My love to all who love you.

Faithfully, affectionately John Muir

To John Burroughs

Garrison, N. Y. July 14, 1911

Dear John Burroughs:

When I was on the train passing your place I threw you a hearty salute across the river, but I don't suppose that you heard or felt it. I would have been with you long ago if I had not been loaded down with odds and ends of duties, bookmaking, book-selling at Boston, Yosemite and Park affairs at Washington, and making arrangements for getting off to South America, etc., etc. I have never worked harder in my life, although I have not very much to show for it. I have got a volume of my autobiography finished. Houghton Mifflin are to bring it out. They want to bring it out immediately, but I would like to have at least part of it run through some suitable magazine, and thus gain ten or twenty times more readers than would be likely to see it in a book.

I have been working for the last month or more on the Yosemite book, trying to finish it before leaving for the Amazon, but I am not suffering in a monstrous city. I am on the top of as green a hill as I have seen in all the State, with hermit thrushes, woodchucks, and warm hearts, something like those about yourself.

I am at a place that I suppose you know well, Professor Osborn's summer residence at Garrison's, opposite West Point. After Mrs. Harriman left for Arden I went down to the "Century" Editorial Rooms, where I was offered every facility for writing in Gilder's room, and tried to secure a boarding-place. near Union Square, but the first day was so hot that it made my head swim, and I hastily made preparations for this comfortable home up on the hill here, where I will remain until perhaps the 15th of August, when I expect to sail.

Nothing would be more delightful than to go from one beautiful place to another and from one friend to another, but it is utterly impossible to visit a hundredth part of the friends who are begging me to go and see them and at the same time get any work done. I am now shut up in a magnificent room pegging away at that book, and working as hard as I ever did in my, life.. making so many books all at once. It is not natural....

With all good wishes to your big and happy family, I am ever

Faithfully your friend John Muir

To Mrs. Henry Fairfield Osborn

Para, Brazil, *August* 29, 1911

Dear Mrs. Osborn:

Here at last is The River and thanks to your and Mrs. Harriman's loving care I'm well and

strong for all South American work in sight that looks like mine.

Arrived here last eve—after a pleasant voyage—a long charming slide all the way to the equator between beautiful water and beautiful sky.

Approaching Para, had a glorious view of fifty miles or so of forest on the right bank of the river. This alone is noble compensation for my long desired and waited-for Amazon journey, even should I see no more.

And it's delightful to contemplate your cool restful mountain trip which is really a part of this equator trip. The more I see of our goodly Godly star, the more plainly comes to sight and mind the truth that it is all one like a face, every feature radiating beauty on the others.

I expect to start up the river to Manaos in a day or two on the Dennis. Will write again on my return before going south—and will hope to get a letter from you and Mr. Osborn, who must be enjoying his well-earned rest. How often I've wished him with me. I often think of you and Josephine among the Avalanche Lake clintonias and linnaeas. And that lovely boy at Castle Rock. Virginia played benevolent mother delightfully and sent me off rejoicing.

My love to each and all; ever, dear friend and friends,

Faithfully, gratefully John Muir

To Mrs. J. D. Hooker

Para Brazil September 19,1911

... Of course you need absolute rest. Lie down among the pines for a while, then get to plain, pure, white love-work with Marian, to help humanity and other mortals and the Lord—heal the sick, cheer the sorrowful, break the jaws of the wicked, etc. But this Amazon delta sermon is growing too long. How glad I am that Marian was not with me, on account of yellow fever and the most rapidly deadly of the malarial kinds so prevalent up the river.

Nevertheless, I've had a most glorious time on this trip, dreamed of nearly half a century—have seen more than a thousand miles of the noblest of Earth's streams, and gained far more telling views of the wonderful forests than I ever hoped for. The Amazon, as you know, is immensely broad, but for hundreds of miles the steamer ran so close to the bossy leafy banks I could almost touch the out-reaching branches—fancy how I stared and sketched.

I was a week at Manaos on the Rio Negro tributary, wandered in the wonderful woods, got acquainted with the best of the citizens through Mr. Sanford, a graduate of Yale, was dined and guided and guarded and befriended in the most wonderful way, and had a grand telling time in general. I have no end of fine things for you in the way of new beauty. The only fevers I have had so far are burning enthusiasms, but there's no space for them in letters.

Here, however, is something that I must tell right now. Away up in that wild Manaos region in the very heart of the vast Amazon basin I found a little case of books in a lonely house. Glancing over the titles, none attracted me except a soiled volume at the end of one of the shelves, the blurred title of which I was unable to read, so I opened the glass door, opened the book, and out of it like magic jumped Katharine and Marian Hooker, apparently in the very flesh. The book, needless to say, was "Wayfarers in Italy." The joy-shock I must not try to tell

in detail, for medical Marian might call the whole story an equatorial fever dream.

Dear, dear friend, again good-bye. Rest in God's peace.

Affectionately John Muir

To Mrs. J. D. Hooker

Pyramides Hotel, Montevideo December 6, 1911

My Dear Friend:

Your letter of October 4th from San Francisco was forwarded from Para to Buenos Aires and received there at the American Consulate. Your and Marian's letter, dated August 7th, were received at Para, not having been quite in time to reach me before I sailed, but forwarded by Mrs. Osborn. I can't think how I could have failed to acknowledge them. I have them and others with me, and they have been read times numberless when I was feeling lonely on my strange wanderings in all sorts of places.

But I'm now done with this glorious continent, at least for the present, as far as hard journeys along rivers, across mountains and tablelands, and through strange forests are concerned. I've seen all I sought for, and far, far, far more. From Para I sailed to Rio de Janeiro and at the first eager gaze into its wonderful harbor saw that it was a glacier bay, as unchanged by weathering as any in Alaska, every rock in it and about it a glacial monument, though within 23° of the equator, and feathered with palms instead of spruces, while every mountain and bay all the way down the coast to the Rio Grande do Sul corroborates the strange icy story. From Rio I sailed to Santos, and thence struck inland and wandered most joyfully a thousand miles or so, mostly in the State of Parana, through millions of acres of the ancient tree I was so anxious to find, *Araucaria Brasiliensis*. Just think of the glow of my joy in these noble aboriginal forests—the face of every tree marked with the inherited experiences of millions of years. From Paranagua I sailed for Buenos Aires; crossed the Andes to Santiago, Chile; thence south four or five hundred miles; thence straight to the snow-line, and found a glorious forest of *Araucaria imbricata*, the strangest of the strange genus.

The day after to-morrow, December 8th, I intend to sail for Teneriffe on way to South Africa; then home some way or other. But I can give no address until I reach New York. I'm so glad your health is restored, and, now that you are free to obey your heart and have your brother's help and Marian's cosmic energy, your good-doing can have no end. I'm glad you are not going to sell the Los Angeles garret and garden. Why, I hardly know. Perhaps because I'm weary and lonesome, with a long hot journey ahead, and I feel as if I were again bidding you all good-bye. I think you may send me a word or two to Cape Town, care the American Consul. It would not be lost, for it would follow me.

It's perfectly marvelous how kind hundreds of people have been to this wanderer, and the new beauty stored up is far beyond telling. Give my love to Marian, Maude, and Ellie and all who love you. I wish you would write a line now and then to darling Helen. She has a little bungalow of her own now at 233 Formosa Avenue, Hollywood, California.

It's growing late, and I've miserable packing to do. Goodnight. And once more, dear, dear friend, good-bye.

John Muir

To Mr. and Mrs. Henry Fairfield Osborn

Near Zanzibar January 31, 1912

Dear Friends:

What a lot of wild water has been roaring between us since those blessed, Castle Rock days! But, roll and roar as it might, you have never been out of heart-sight.

How often I've wished you with me on the best of my wanderings so full of good things guided by wonderful luck, or shall I reverently, thankfully say Providence? Anyhow, it seems that I've had the most fruitful time of my life on this pair of hot continents. But I must not try to write my gains, for they are utterly unletterable both in size and kind. I'll tell what I can when I see you, probably in three months or less. From Cape Town I went north to the Zambesi baobab forests and Victoria Falls, and thence down through a glacial wonderland to Beira, where I caught this steamer, and am on my way to Mombasa and the Nyanza Lake region. From Mombasa I intend starting homeward via Suez and Naples and New York, fondly hoping to find you well. In the meantime I'm sending lots of wireless, tireless love messages to each and every Osborn, for I am

Ever faithfully yours John Muir

To Mrs. Anna R. Dickey

Martinez *May* 1, 1912

Dear cheery, exhilarating Mrs. Dickey:

Your fine lost letter has reached me at last. I found it in the big talus heap awaiting me here. The bright, shining, faithful, hopeful way you bear your crushing burdens is purely divine, out of darkness cheering everybody else with noble godlike sympathy. I'm so glad you have a home with the birds in the evergreen oaks—the feathered folk singing for you and every leaf shining, reflecting God's love. Donald, too, is so brave and happy. With youth on his side and joyful work, he is sure to grow stronger and under every disadvantage do more as a naturalist than thousands of others with every resource of health and wealth and special training.

I'm in my old library den, the house desolate, nobody living in it save a hungry mouse or two. . . . [I hold] dearly cherished memories about it and the fine garden grounds full of trees and bushes and flowers that my wife and fatherin-law and I planted—fine things from every land.

But there's no good bread hereabouts and no housekeeper, so I may never be able to make it a home, fated, perhaps, to wander until sun. down. Anyhow, I've had a glorious life, and I'll never have the heart to complain. The roses now are overrunning all bounds in glory of full bloom, and the Lebanon and Himalaya cedars, and the palms and Australian trees and shrubs, and the oaks on the valley hills seem happier and more exuberant than ever.

The Chelan trip would be according to my own heart, but whether or no I can go I dinna ken. Only lots of hard pen work seems certain. Anywhere, anyhow, with love to Donald, I am,

Ever faithfully, affectionately yours

John Muir

To William E. Colby and Mr. and Mrs. Edward T. Parsons

> 1525 Formosa Avenue Hollywood, California June 24, 1912

Dear Mr. Colby and Mr. and Mrs. Parsons:

I thank you very much for your kind wishes to give me a pleasant Kern River trip, and am very sorry that work has been so unmercifully piled upon me that I find it impossible to escape from it, so I must just stay and work.

I heartily congratulate you and all your merry mountaineers on the magnificent trip that lies before you. As you know, I have seen something of nearly all the mountain-chains of the world, and have experienced their varied climates and attractions of forests and rivers, lakes and meadows, etc. In fact, I have seen a little of all the high places and low places of the continents, but no mountain-range seems to me so kind, so beautiful, or so fine in its sculpture as the Sierra Nevada. If you were as free as the winds are and the light to choose a campground in any part of the globe, I could not direct you to a single place for your outing that, all things considered, is so attractive, so exhilarating and uplifting in every way as just the trip that you are now making. You are far happier than you know. Good luck to you all, and I shall hope to see you all on your return —boys and girls, with the sparkle and exhilaration of the mountains still in your eyes. With love and countless fondly cherished memories,

Ever faithfully yours John Muir Of course, in all your camp-fire preaching and praying you will never forget Hetch-Hetchy.

To Howard Palmer

Martinez, Cal. *December* 12, 1912

Mr. Howard Palmer:

Secretary American Alpine Club New London, Conn.

Dear Sir:

At the National Parks conference in Yosemite Valley last October, called by the Honorable Secretary of the Interior, comparatively little of importance was considered. The great question was, "Shall automobiles be allowed to enter Yosemite?" It overshadowed all others, and a prodigious lot of gaseous commercial eloquence was spent upon it by auto-club delegates from near and far.

The principal objection urged against the puffing machines was that on the steep Yosemite grades they would cause serious accidents. The machine men roared in reply that far fewer park-going people would be killed or wounded by the auto-way than by the old prehistoric wagon-way. All signs indicate automobile victory, and doubtless, under certain precautionary restrictions, these useful, progressive, blunt-nosed mechanical beetles will hereafter be allowed to puff their way into all the parks and mingle their gas-breath with the breath of the pines and waterfalls, and, from the mountaineer's standpoint, with but little harm or good.

In getting ready for the Canal-celebration visitors the need of opening the Valley gates as wide as possible was duly considered, and the repair of roads and trails, hotel and camp

building, the supply of cars and stages and arrangements in general for getting the hoped-for crowds safely into the Valley and out again. But the Yosemite Park was lost sight of, as if its thousand square miles of wonderful mountains, cañons, glaciers, forests, and songful falling rivers had no existence.

In the development of the Park a road is needed from the Valley along the upper cañon of the Merced, across to the head of Tuolumne Meadows, down the great Tuolumne Cañon to Hetch-Hetchy valley, and thence back to Yosemite by the Big Oak Flat road. Good walkers can go anywhere in these hospitable mountains without artificial ways. But most visitors have to be rolled on wheels with blankets and kitchen arrangements.

Of course the few mountaineers present got in a word now and then on the need of park protection from commercial invasion like that now threatening Hetch-Hetchy. In particular the Secretary of the American Civic Association and the Sierra Club spoke on the highest value of wild parks as places of recreation, Nature's cathedrals, where all may gain inspiration and strength and get nearer to God.

The great need of a landscape gardener to lay out the roads and direct the work of thinning out the heavy undergrowth was also urged.

With all good New Year wishes, I am Faithfully yours

John Muir

To Asa K. McIlhaney

Martinez, California January 10, 1913

Mr. Asa K. McIlhaney
Bath, Penn.
Dear Sir:
I thank you for your fine letter, but in reply I can't tell which of all God's trees I like best, though I should write a big book trying to. Sight-seers often ask me which is best, the Grand Cañon of Arizona or Yosemite. I always reply that I know a show better than either of them—both of them.

Anglo-Saxon folk have inherited love for oaks and heathers. Of all I know of the world's two hundred and fifty oaks perhaps I like best the *macrocarpa, chrysolepis, lobata, Virginiana, agrifolia*, and *Michauxii*. Of the little heather folk my favorite is Cassiope; of the trees of the family, the Menzies arbutus, one of the world's great trees. The hickory is a favorite genus—I like them all, the pecan the best. Of flower trees, magnolia and liriodendron and the wonderful baobab; of conifers, *Sequoia gigantea*, the noblest of the whole noble race, and sugar pine, king of pines, and silver firs especially *magnifica*. The grand larch forests of the upper Missouri and of Manchuria and the glorious deodars of the Himalaya, araucarias of Brazil and Chile and Australia. The wonderful eucalyptus, two hundred species, the New Zealand metrosideros and agathis. The magnificent eriodendron of the Amazon and the palm and tree fern and tree grass forests, and in our own country the delightful linden and oxydendron and maples and so on, without end. I may as well stop here as anywhere.

Wishing you a happy New Year and good times in God's woods,

Faithfully yours John Muir

To Miss M. Merrill

Martinez, California *May* 31, 1913 Dear Mina Merrill:

I am more delighted with your letter than I can tell—to see your handwriting once more and know that you still love me. For through all life's wanderings you have held a warm place in my heart, and I have never ceased to thank God for giving me the blessed Merrill family as lifelong friends. As to the Scotch way of bringing up children, to which you refer, I think it is often too severe or even cruel. And as I hate cruelty, I called attention to it in the boyhood book while at the same time pointing out the value of sound religious training with steady work and restraint.

I'm now at work on an Alaska book, and as soon as it is off my hands I mean to continue the autobiography from leaving the University to botanical excursions in the northern woods, around Indianapolis, and thence to Florida, Cuba, and California. This will be volume number two.

It is now seven years since my beloved wife vanished in the land of the leal. Both of my girls are happily married and have homes and children of their own. Wanda has three lively boys, Helen has two and is living at Daggett, California. Wanda is living on the ranch in the old adobe, while I am alone in my library den in the big house on the hill where you and sister Kate found me on your memorable visit long ago.

As the shadows lengthen in life's afternoon, we cling all the more fondly to the friends of our youth. And it is with the warmest gratitude that I recall the kindness of all your family when I was lying in darkness. That Heaven may ever bless you, dear Mina, is the heart prayer of your—

Affectionate friend John Muir

July 3, 1913

To Mrs. Henry Fairfield Osborn

Martinez

Dear Mrs. Osborn:

Warm thanks, thanks, thanks for your July invitation to blessed Castle Rock. How it goes to my heart all of you must know, but wae's me! see no way of escape from the work piled on me here—the gatherings of half a century of wilderness wanderings to be sorted and sifted into something like clear, useful form. Never mind—for, anywhere, every-where in immortal soul sympathy, I'm always with my friends, let time and the seas and continents spread their years and miles as they may,

Ever gratefully, faithfully John Muir

To Henry Fairfield Osborn

Martinez

July 15,1913

Dear Friend Osborn:

I had no thought of your leaving your own great work and many-fold duties to go before the

House Committee on the everlasting Hetch-Hetchy fight, but only to write to members of Congress you might know, especially to President Wilson, a Princeton man. This is the twenty-third year of almost continual battle for preservation of Yosemite National Park, sadly interrupting my natural work. Our enemies now seem to be having most everything their own wicked way, working beneath obscuring tariff and bank clouds, spending millions of the people's money for selfish ends. Think of three or four ambitious, shifty traders and politicians calling themselves "The City of San Francisco," bargaining with the United States for half of the Yosemite Park like Yankee horse-traders, as if the grandest of all our mountain playgrounds, full of God's best gifts, the joy and admiration of the world, were of no more account than any of the long list of tinker tariff articles.

Where are you going this summer? Wish I could go with you. The pleasure of my long lovely Garrison-Hudson Castle Rock days grows only the clearer and dearer as the years flow by.

My love to you, dear friend, and to all who love you.

Ever gratefully, affectionately John Muir

To Mr. and Mrs. Henry Fairfield Osborn

Martinez January 4, 1914

Dear Friends Osborns:

With all my heart I wish you a happy New Year. How hard you have fought in the good fight to save the Tuolumne Yosemite I well know. The battle has lasted twelve years, from Pinchot and Company to President Wilson, and the wrong has prevailed over the best aroused sentiment of the whole country.

That a lane lined with lies could be forced through the middle of the U.S. Congress is truly wonderful even in these confused political days—a devil's masterpiece of logrolling road-making. But the approval of such a job by scholarly, virtuous, Princeton Wilson is the greatest wonder of all! Fortunately wrong cannot last; soon or late it must fall back home to Hades, while some compensating good must surely follow.

With the new year to new work right gladly we will go—you to your studies of God's lang-syne people in their magnificent Wyoming-Idaho mausoleums, I to crystal ice.

So devoutly prays your grateful admiring friend John Muir

To Andrew Carnegie

Martinez, California January 22, 1914

Many thanks, dear Mr. Carnegie, for your admirable "Apprenticeship." To how many fine godly men and women has our stormy, craggy, glacier-sculptured little Scotland given birth, influencing for good every country under the sun! Our immortal poet while yet a boy wished that for poor auld Scotland's sake he might "sing a sang at least." And what a song you have sung with your ringing, clanging hammers and furnace fires, blowing and flaming like volcanoes—a truly wonderful Caledonian performance. But far more wonderful is your coming forth out of that tremendous titanic iron and dollar work with a heart in sympathy with all humanity.

Like John Wesley, who took the world for his parish, you are teaching and preaching over all the world in your own Scotch way, with heroic benevolence putting to use the mine and mill wealth won from the iron bills. What wonderful burdens you have carried all your long life, and seemingly so easily and naturally, going right ahead on your course, steady as a star! How strong you must be and happy in doing so much good, in being able to illustrate so nobly the national character founded on God's immutable righteousness that makes Scotland loved at home, revered abroad! Everybody blessed with a drop of Scotch blood must be proud of you and bid you godspeed.

Your devoted admirer John Muir

To Dr. C. Hart Merriam

Martinez, California February 11, 1914

Dear Dr. Merriam:

I was very glad to hear from you once more last month, for, as you say, I haven't heard from you for an age. I fully intended to grope my way to Lagunitas in the fall before last, but it is such ancient history that I have only very dim recollections of the difficulty that hindered me from making the trip, I hope, however, to have better luck next spring for I am really anxious to see you all once more.

I congratulate Dorothy on her engagement to marry Henry Abbot. If he is at all like his blessed old grandfather he must prove a glorious prize in life's lottery. I have been intimately acquainted with General Abbot ever since we camped together for months on the Forestry Commission, towards the end of President Cleveland's second administration.

Wanda, her husband, and three boys are quite well, living on the ranch here, in the old adobe, while I am living alone in the big house on the bill.

After living a year or two in Los Angeles, Helen with her two fine boys and her husband returned to the alfalfa ranch on the edge of the Mojave Desert near Daggett, on the Santa Fé Railway. They are all in fine health and will be glad to get word from you.

Our winter here has been one of the stormiest and foggiest I have ever experienced, and unfortunately I caught the grippe. The last two weeks, however, the weather has been quite bright and sunny and I hope soon to be as well as ever and get to work again.

That a few ruthless ambitious politicians should have been able to run a tunnel lined with all sorts of untruthful bewildering statements through both houses of Congress for Hetch-Hetchy is wonderful, but that the President should have signed the Raker Bill is most wonderful of all. As you say, it is a monumental mistake, but it is more, it is a monumental crime.

I have not heard a word yet from the Baileys. Hoping that they are well and looking forward with pleasure to seeing you all soon in California, I am as ever

Faithfully yours John Muir

Despite his hopeful allusion to the grippe which he had caught early in the winter of 1914, the disease made farther and farther inroads upon his vitality. Yet he worked away steadily at the task of completing his Alaska

book. During the closing months he had the aid of Mrs. Marion Randall Parsons, at whose home the transcription of his Alaska journals had been begun in November, 1912. Unfortunately the Hetch-Hetchy conspiracy became acute again, and the book, barely begun, had to be laid aside that be might save, if possible, his beloved "Tuolumne Yosemite." "We may lose this particular fight," he wrote to William E. Colby, "but truth and right must prevail at last. Anyhow we must be true to ourselves and the Lord."

This particular battle, indeed, was lost because the park invaders had finally got into office a Secretary of the Interior who had previously been on San Francisco's payroll as an attorney to promote the desired Hetch-Hetchy legislation; also, because various other politicians of easy convictions on such fundamental questions of public policy as this had been won over to a concerted drive to accomplish the "grab" during a special summer session when no effective representation of opposing organizations could be secured. So flagrant was the performance in every aspect of it that Senator John D. Works of California afterwards introduced in the Senate a bill to repeal the Hetch-Hetchy legislation and in his vigorous remarks accompanying the same set forth the points on which he justified his action. But the fate of the Valley was sealed.

John Muir turned sadly but courageously to his note-books and memories of the great glacier-ploughed wilderness of Alaska. Shortly before Christmas, 1914, he set his house in order as if he had a presentiment that he was leaving it for the last time, and went to pay a holiday visit to the home of his younger daughter at Daggett. Upon his arrival there he was smitten with pneumonia and was rushed to a hospital in Los Angeles, where all his wanderings ended on Christmas Eve. Spread about him on the bed, when the end came, were manuscript sheets of his last book—"Travels in Alaska"—to which he was bravely struggling to give the last touches before the coming of "the long sleep."

Chapter XVIII His Public Service

"The last rays of the setting sun are shining into our window at the Palace Hotel and perhaps it is the last sunset we shall ever see in this city of the Golden Gate. I could not think of leaving the Pacific Coast without saying good-bye to you who so much love all the world about here. California, you may say, has made you, and you in return have made California, and you are both richer for having made each other." The concluding sentence of this parting message of former travel companions, sent to John Muir in 1879 when he was exploring the glaciers of Alaska, has grown truer each Succeeding decade since then.

Intimately as his name was already identified with the natural beauty of California in 1879, the service which Muir was ultimately to render to the nation was only beginning at that time. Then there was only one national park, that of the Yellowstone, and no national forest reserves at all. Amid such a wealth of beautiful forests and wildernesses as our nation then possessed it required a very uncommon lover of nature and of humanity to advocate provision against a day of need. But that friend of generations unborn arose in the person of John Muir. Before he or any one had ever heard of national parks the idea of preserving some sections of our natural flora in their unspoiled wildness arose spontaneously in his mind,

It was a lovely carex meadow beside Fountain Lake, on his father's first Wisconsin farm, that gave him the germinal idea, of a park in which plant societies were to be protected in their natural state. During the middle sixties, as he was about to leave his boyhood home forever, he found unbearable the thought of leaving this precious meadow unprotected, and offered to purchase it from his brother-in-law on condition that cattle and hogs be kept securely fenced out. Early correspondence shows that he pressed the matter repeatedly, but his relative treated the request as a sentimental dream, and ultimately the meadow was trampled out of existence. More than thirty years later, at a notable meeting of the Sierra Club in 1895, he for the first time made public

this natural park dream of his boyhood. It was the national park idea in miniature, and the proposal was made before even the Yellowstone National Park had been established.

This was the type of man who during the decade between 1879 and 1889 wrote for "Scribner's Monthly" and the "Century Magazine" a series of articles the like of which had never been written on American forests and scenery. Such were Muir's articles entitled "In the Heart of the California Alps," "Wild Sheep of the Sierra," "Coniferous Forests of the Sierra Nevada," and "Bee-Pastures of California." There was also the volume, edited by him, entitled "Picturesque California," with numerous articles by himself. The remarkably large correspondence which came to him as a result of this literary activity shows how deep was its educative effect upon the public mind.

Then came the eventful summer of 1889, during which he took Robert Underwood Johnson, one of the editors of the "Century," camping about Yosemite and on the Tuolumne Meadows, where, as Muir says, he showed him how uncountable sheep had eaten and trampled out of existence the wonderful flower gardens of the seventies. We have elsewhere shown how the two then and there determined to make a move for the establishment of what is now the Yosemite National Park, and to make its area sufficiently comprehensive to include all the headwaters of the Merced and the Tuolumne. This was during President Harrison's administration, and, fortunately for the project, John W. Noble, a faithful and far-sighted servant of the American people, was then Secretary of the Interior.

One may imagine with what fervor Muir threw himself into that campaign. The series of articles on the Yosemite region which he now wrote for the "Century" are among the best things he has ever done. Public-spirited men all over the country rallied to the support of the National Park movement, and on the first of October, 1890, the Yosemite National Park bill went through Congress, though bitterly contested by all kinds of selfishness and pettifoggery. A troop of cavalry immediately came to guard the new park; the "hoofed locusts" were expelled, and the flowers and undergrowth gradually returned to the meadows and forests.

The following year (1891) Congress passed an act empowering the President to create forest reserves. This was the initial step toward a rational forest conservation policy, and President Harrison was the first to establish forest reserves—to the extent of somewhat more than thirteen million acres. We cannot stop to go into the opening phases of this new movement, but the measure in which the country is indebted to John Muir also for this public benefit may be gathered from letters of introduction to scientists abroad which influential friends gave to Muir in 1893 when he was contemplating extensive travels in Europe. "It gives me great pleasure," wrote one of them, "to introduce to you Mr. John Muir, whose successful struggle for the reservation of about one-half of the western side of the Sierra Nevada has made him so well known to the friends of the forest in this country."

During his struggle for the forest reservations and for the establishment of the Yosemite National Park Muir had the effective cooperation of a considerable body of public-spirited citizens of California, who in 1892 were organized into the Sierra Club, in part, at least, for the purpose of assisting in creating public sentiment and in making it effective. During its long and distinguished public service this organization never swerved from one of its main purposes, to enlist the support and cooperation of the people and the government in preserving the forests and other features of the Sierra Nevada Mountains," and when that thrilling volume of Muir's, "My First Summer in the Sierra," appeared in 1911, it was found to be dedicated "To the Sierra Club of California, Faithful Defender of the People's Playgrounds."

The assistance of this Club proved invaluable when Muir's greatest opportunity for public service came in 1896. It was then that our Federal Government began to realize at last the imperative necessity of doing something at once to check the appalling waste of our forest resources. Among the causes which led up to this development of conscience was the report of Edward A. Bowers, Inspector of the Public Land Service. He

estimated the value of timber stolen from the public lands during six years in the eighties at thirty-seven million dollars. To this had to be added the vastly greater loss annually inflicted upon the public domain by sheepmen and prospectors, who regularly set fire to the forests in autumn, the former to secure open pasturage for their flocks, the latter to lay bare the outcrops of mineral-bearing rocks. But the most coinsequential. awakening of the public mind followed the appearance of Muir's "Mountains of California" in 1894. All readers of it knew immediately that the trees had found a defender whose knowledge, enthusiasm, and pngt of expression made his pen more powerful than a regiment of swords. Here at last was a man who had no axes to grind by the measures he advocated and thousands of new conservation recruits heard the call and enlisted under his leadership. One remarkable thing about the numerous appreciative letters he received is the variety of persons, high and low, from whom they came.

The reader will recall that, as early as 1876, Muir had proposed the appointment of a national commission to inquire into the fearful wastage of forests, to take a survey of existing forest lands in public ownership, and to recommend measures for their conservation. Twenty years later, in June, 1896, Congress at last took the required action by appropriating twenty-five thousand dollars "to enable the Secretary of the Interior to meet the expenses of an investigation and report by the National Academy of Sciences on the inauguration of a national forestry policy for the forested lands of the United States." In pursuance of this act Wolcott Gibbs, President of the National Academy of Sciences, appointed as members of this Commission Charles S. Sargent, Director of the Arnold Arboretum; General Henry L. Abbot, of the United States Engineer Corps; Professor, William H. Brewer of Yale University; Alexander Aggasiz, Arnold Hague of the United States Geological Survey; and Gifford Pinchot, practical forester. It should be said to the credit of these men that they all accepted this appointment on the understanding that they were to serve without pay.

It is not surprising, in view of the circumstances, that Charles S. Sargent, the Chairman of the newly appointed Commission, immediately invited John Muir to accompany the party on a tour of investigation, and it was fortunate, as it turned out afterwards, that he went as an member of the party. During the summer of 1896, this Commission visited nearly all of the great forest areas of the West and the Northwest, and letters written to him later by individual members testify to the invaluable character of Muir's personal contribution to its work.

A report, made early in 1897, embodied the preliminary findings and recommendations of the Commission, and on Washington's Birthday of that year President Cleveland created thirteen forest reservations, comprising more than twenty-one million acres. This action of the President created a rogues' panic among the mining, stock, and lumber companies of the Northwest, who were fattening on the public domain. Through their subservient representatives in Congress they moved unitedly and with great alacrity against the reservations. In less than a week after the President's proclamation they had secured in the United States Senate, without opposition, the passage of an amendment to the Sundry Civil Bill whereby "all the lands set apart and reserved by Executive orders of February 22, 1897," were "restored to the public domain. . . the same as if said Executive orders and proclamations had not been made." To the lasting credit of California let it be said that the California reservations were expressly exempted from the provisions of this nullifying amendment at the request of the California Senators, Perkins and White, behind whom was the public sentiment of the State, enlightened by John Muir and many like-minded friends.

The great battle between the public interest and selfish special interests, or between "landscape righteousness and the devil," as Muir used to say, was now joined for a fight to the finish. The general public as yet knew little about the value of forests as conservers and regulators of water-flow in streams. They knew even less about their effect upon rainfall, climate, and public welfare, and the day when forest reserves would be needed to meet the failing timber supply seemed far, far off.

But there is nothing like a great conflict between public and private interests to create an atmosphere in which enlightening discussion can do its work, and no one knew this better, than John Muir. "This forest battle," he

wrote, "is part of the eternal conflict between right and wrong. . . . sooner it is stirred up and debated before the people the better, for thus the light will be let into it." When traveling with the Forestry Commission he had on one occasion seen an apparently well-behaved horse suddenly take a fit of bucking, kicking, and biting that made every one run for safety. Its strange actions were a mystery until a yellow jacket emerged from its ear!

Muir seized the occurrence for an explanation of the sudden and insanely violent outcry against forest reservations. "One man," he said, "with a thousand-dollar yellow jacket in his ear will make more bewildering noise and do more effective kicking and fighting on certain public measures than a million working men minding their own business, and whose cash interests are not visibly involved. But as soon as the light comes the awakened million creates a public opinion that overcomes wrong however cunningly veiled."

He was not mistaken, as we shall see, though for a time wrong seemed triumphant. The amendment nullifying the forest reservations died through lack of President Cleveland's signature. But in the extra session, which followed the inauguration of President McKinley, a bill was passed in June, 1897, that restored to the public domain, until March 1, 1898, all the forest reservations created by Cleveland, excepting those of California. This interval, of course, was used shamelessly by all greedy forest-grabbers, while Congress was holding the door open! Emboldened by success, certain lumbermen even tried to secure Congressional authority to cut the wonderful sequoia grove in the General Grant National Park.

But John Muir's Scotch fighting blood was up now. Besides, his friends, East and West, were calling for the aid of his eagle's quill to enlighten the citizens of our country on the issues involved in the conflict. "No man in the world can place the forests' claim before them so clearly and forcibly as your own dear self," wrote his friend Charles Sprague Sargent, Chairman of the Commission now under fire. "No one knows so well as you the value of our forests—that their use for lumber is but a small part of the value." He proposed that Muir write syndicate letters for the public press. "There is no one in the United States," he wrote, "who can do this in such a telling way as you can, and in writing these letters you will perform a patriotic service."

Meanwhile the public press was becoming interested in the issue. To a request from the editor of "Harper's Weekly" Muir responded with an article entitled "Forest Reservations and National Parks," which appeared opportunely in June, 1897. The late Walter Hines Page, then editor of the "Atlantic Monthly," opened to him its pages for the telling contribution entitled "The American Forests." In both these articles Muir's style rose to impassioned oratory of a Hebrew prophet arraigning wickedness in high places, and preaching the sacred duty of so using the country we live in that we may not leave it ravished by greed and ruined by ignorance, but may pass it on to future generations undiminished in richness and beauty.

Unsparingly he exposed to public scorn the methods by which the government was being defrauded. One typical illustration must suffice. "It was the practice of one lumber company," be writes, "too hire the entire crew of every vessel which might happen to touch at any port in the redwood belt, to enter one hundred and sixty acres each and immediately deed the land to the company, in consideration of the company's paying all expenses and giving the jolly sailors fifty dollars apiece for their trouble."

This was the type of undesirable citizens who, through their representatives in Congress, raised the hue and cry that poor settlers, looking for homesteads, were being driven into more hopeless poverty by the forest reservations—a piece of sophistry through which Muir's trenchant language cut like a Damascus blade.

The outcries we hear against forest reservations [he wrote] come mostly from thieves who are wealthy and steal timber by wholesale. They have so long been allowed to steal and destroy in peace that any impediment to forest robbery is denounced as a cruel and irreligious interference with "vested rights," likely to endanger the repose of all ungodly welfare. Gold, gold, gold! How strong a voice that metal has!... Even in Congress, a sizable chunk of gold,

carefully concealed will outtalk and outfight all the nation on a subject like forestry. . . in which the money interests of only a few are conspicuously involved. Under these circumstances the bawling, blethering oratorical stuff drowns the voice of \$od himself. . . Honest citizens see that only the rights of the government are being trampled, not those of the settlers. Merely what belongs to all alike is reserved, and every acre that is left should be held together under the federal government as a basis for a general policy of administration for the public good. The people will not always be deceived by selfish opposition, whether from lumber and mining corporations or from sheepmen and prospectors, however cunningly brought forward underneath fables of gold.

He concluded this article with a remarkable peroration which no tree-lover could read without feeling, like the audiences that heard the philippies of Demosthenes, that something must be done immediately.

Any fool [he wrote] can destroy trees. They cannot run away; and if they could, they would still be destroyed—chased and hunted down as long as fun or a dollar could be got out of their bark hides, branching horns, or magnificent bole backbones. Few that fell trees plant them; nor would planting avail much towards getting back anything like the noble primeval forests. During a man's life only saplings can be grown, in the place of the old trees—tens of centuries old—that have been destroyed. It took more than three thousand years to make some of the trees in these Western woods trees that are still standing in perfect strength and beauty, waving and singing in the mighty forests of the Sierra. Through all the wonderful, eventful centuries since Christ's time—and long before that—God has cared for these trees, saved them from drought, disease, avalanches, and a thousand straining, leveling tempests and floods; but He cannot save them from fools—only Uncle Sam can do that.

The period of nine months during which the Cleveland reservations had been suspended came to an end on the first of March, 1898. Enemies of the reservation policy again started a move in the Senate to annul them all. "In the excitement and din of this confounded [Spanish-American] War, the silent trees stand a poor show for justice," wrote Muir to his friend C. S. Sargent, who was sounding the alarm. Meanwhile Muir was conducting a surprisingly active campaign by post and telegraph, and through the Sierra Club. At last his efforts began to take effect and his confidence in the power of light to conquer darkness was justified. "You have evidently put in some good work," wrote Sargent, who was keeping closely in touch with the situation. "On Saturday all the members of the Public Lands Committee of the House agreed to oppose the Senate amendment wiping out the reservations." A large surviving correspondence shows how he continued to keep a strong hand on the helm. On the eighth of July the same friend, who was more than doing his own part, wrote, "Thank Heaven! the forest reservations are safe. . . for another year." As subsequent events have shown, they have been safe ever since. One gets directly at the cause of this gratifying result in a sentence from a letter of John F. Lacey, who was then Chairman of the Public Lands Committee of the House. In discussing the conflicting testimony of those who were urging various policies of concession toward cattle and sheep men in the administration of the reserves he said, "Mr. Muir's judgment will probably be better than that of any one of them."

We have been able to indicate only in the briefest possible manner the decisive part that Muir played in the establishment and defence of the thirty-nine million acres of forest reserves made during the Harrison and Cleveland administrations. But even this bare glimpse of the inside history of that great struggle reveals the magnitude of the service John Muir rendered the nation in those critical times.

There were not lacking those who charged him with being an advocate of conservatism without use. But this criticism came from interested persons—abusers, not legitimate users—and is wholly false.

The United States Government [he said] has always been proud of the welcome it has extended to good men of every nation seeking freedom and homes and bread. Let them be welcomed still as nature welcomes them, to the woods as well as the prairies and plains. . . . The ground will be glad to feed them, and the pines will come down from the mountains for their homes as willingly as the cedars came from Lebanon for Solomon's temple. Nor will the woods be the worse for this use, or their benign influences be diminished any more than the sun is diminished by shining. Mere destroyers, however, tree-killers, spreading death and confusion in the fairest groves and gardens ever planted, let the government hasten to cast them out and make an end of them. For it must be told again and again, and be burningly borne in mind, that just now, while protective measures are being deliberated languidly, destruction and use are speeding on faster and, farther everyday. The axe and saw are insanely busy, chips are flying thick as snowflakes, and every summer thousands of acres of priceless forests, with their underbrush, soil, springs, climate, scenery, and religion, are vanishing away in clouds of smoke, while, except in the national parks, not one forest guard is employed.

Stripped of metaphor, this moving appeal of John Muir to Uncle Sam was an appeal to the intelligence of the American people, and they did not disappoint his faith in their competence to deal justly and farsightedly with this problem. Great as was the achievement of rescuing in eight years more than thirty-nine million acres of forest from deliberate destruction by sheeping, lumbering, and burning, it was only an earnest of what awakened public opinion was— prepared to do when it should find the right representative to carry it into force. That event occurred when Theodore Roosevelt came to the Presidency of the United States, and it is the writer's privilege to supply a bit of unwritten history on the manner in which Muir's informed enthusiasm and Roosevelt's courage and love of action were brought into coöperation for the country's good. In March, 1903, Dr. Chester Rowell, a Senator of the California Legislature, wrote to Muir confidentially as follows: "From private advices from Washington I learn that President Roosevelt is desirous of taking a trip into the High Sierra during his visit to California, and has expressed a wish to go with you practically alone. . . . If he attempts anything of the kind, he wishes it to be entirely unknown, carried out with great secrecy so that the crowds will not follow or annoy him, and he suggested that he could foot it and rough it with you or anybody else."

John Muir had already engaged passage for Europe in order to visit, with Professor Sargent, the forests of Japan, Russia, and Manchuria, and felt constrained to decline. But upon the urgent solicitation of President Benjamin Ide Wheeler, and following the receipt of a friendly letter from President Roosevelt, he postponed his sailing date, writing to Professor Sargent, "An influential man from Washington wants to make a trip into the Sierra with me, and I might be able to *do some forest good* in freely talking around the camp-fire."

By arrangement Muir Joined the President at Raymond on Friday, the fifteenth of May, and at the Mariposa Big Trees the two inexorably separated themselves from the company and disappeared in the woods until the following Monday. Needless to say this was not what the disappointed politicians would have chosen, but their chagrin fortunately was as dust in the balance against the good of the forests.

In spite of efforts to keep secret the President's proposed trip to Yosemite, he had been met at Raymond by a big crowd. Emerging from his car in rough camp costume, he said. "Ladies and Gentlemen: I did not realize that I was to meet you to-day, still less to address an audience like this! I had only come prepared to go into Yosemite with John Muir, so I must ask you to excuse my costume." This statement was met by the audience with cries of "It is all right!" And it was all right. For three glorious days Theodore Roosevelt and John Muir were off together in Yosemite woods and on Yosemite trails. Just how much was planned by them, in those days together, for the future welfare of this nation we probably never shall fully know. for death has sealed the closed accounts of both. But I am fortunately able to throw some direct light upon the attendant circumstances and results of the trip.

While I was in correspondence with Theodore Roosevelt in 1916 over a book I had published on the Old Testament, he wrote, "Isn't there some chance of your getting to this side of the continent before you write your book on Muir? Then you'll come out here to Sagamore Hill; and I'll tell you all about the trip, and give you one very amusing instance of his quaint and most unworldly forgetfulness."

In November of the same year it was my privilege to go for a memorable visit to Sagamore Hill, and while Colonel Roosevelt and I were pacing briskly back and forth in his library, over lion skins and other trophies, he told about the trip with John Muir, and the impression which his deep solicitude over the destruction of our great forests and scenery had made upon his mind. Roosevelt had shown himself a friend of the forests before this camping trip with Muir, but he came away with a greatly quickened conviction that vigorous action must be taken speedily, ere it should be too late. Muir's accounts of the wanton forest-destruction he had witnessed, and the frauds that had been perpetrated against the government in the acquisition of redwood forests, were not without effect upon Roosevelt's statesmanship, as we shall see. Nor must we, in assessing the near and distant public benefits of this trip, overlook the fact that it was the beginning of a lifelong friendship between these two men. By a strange fatality Muir's own letter accounts of what occurred on the trip went from hand to hand until they were lost. There survives a passage in a letter to his wife in which he writes "I had a perfectly glorious time with the President and the mountains. I never before had a more interesting, hearty, and manly companion." To his friend Merriam he wrote: "Camping with the President was a memorable experience. I fairly fell in love with him." Roosevelt, John Muir, the Big Trees, and the lofty summits that make our "Range of Light"!---who could think of an association of men and objects more elementally great and more fittingly allied for the public good? In a stenographically reported address delivered by Roosevelt at Sacramento immediately after his return from the mountains, we have a hint of what the communion of these two greatest outdoor men of our time was going to mean for the good of the country.

I have just come from a four days' rest in Yosemite [he said], and I wish to say a word to you here in the capital city of California about certain of your great natural resources, your forests and your water supply coming from the streams that find their sources among the forests of the mountains. . . . No small part of the prosperity of California in the hotter and drier agricultural regions depends upon the preservation of her water supply; and the water supply cannot be preserved unless the forests them preserved because they are the only things of their kind in the world. Lying out at night under those giant sequoias was lying in a temple built by no hand of man, a temple grander than any human architect could by any possibility build, and I hope for the preservation of the groves of giant trees simply because it would be a shame to our civilization to let them disappear. They are monuments in themselves.

I ask for the preservation of other forests on grounds of wise and far-sighted economic policy. I do not ask that lumbering be stopped. . . only that the forests be so used that not only shall we here, this generation, get the benefit for the next few years, but that our children and our children's children shall get the benefit. In California I am impressed by how great the State is, but I am even more impressed by the immensely greater greatness that lies in the future, and I ask that your marvelous natural resources be handed on unimpaired to your posterity. We are not building this country of ours for a day. It is to last through the ages.

Let us now recall Muir's modest excuse for postponing a world tour in order to go alone into the mountains with Theodore Roosevelt—that he "might be able to do some forest good in freely talking around the camp-fire." It was in the glow of those camp-fires that Muir's enlightened enthusiasm and Roosevelt's courage were fused into action for the public good. The magnitude of the result was astonishing and one for which this country can never be sufficiently grateful. When Roosevelt came to the White House in 1901, the total National Forest area amounted to 46,153,119 acres, and we have already seen what a battle it cost Muir and his friends to prevent enemies in Congress from securing the annulment of Cleveland's twenty-five

million acres of forest reserves. When he left the White House, in the spring of hundred and forty-eight million acres of additional National Forests—more than three times as much as Harrison, Cleveland, and McKinley combined! Similarly the number of National Parks was doubled during his administration.

But the Monuments and Antiquities Act, passed by Congress during Roosevelt's administration, gave him a new, unique opportunity. During the last three years of his presidency he created by proclamation sixteen National Monuments. Among them was the Grand Cañon of the Colorado with an area of 806,400 acres. Efforts had been made, ever since the days of Benjamin Harrison, to have the Grand Cañon set aside as a national park, but selfish opposition always carried the day. Sargent and Johnson and Page had repeatedly appealed to Muir to write a description of the Cañon. "It is absolutely necessary," wrote Page in 1898, "that this great region as well as the Yosemite should be described by you, else you will not do the task that God sent you to do." When in 1902 his masterly description did appear, it led to renewed, but equally futile, efforts to have this wonder of earth sculpture included among our national playgrounds. Then Muir passed on to Roosevelt the suggestion that he proclaim the Cañon a national monument. A monument under ground was a new idea, but there was in it nothing inconsistent with the Monuments and Antiquities Act, and so Roosevelt, with his characteristic dash, in January, 1908, declared the whole eight hundred thousand acres of the Cañon a National Monument and the whole nation smiled and applauded. Subsequently Congress, somewhat grudgingly, changed its status to that of a national park, thus realizing the purpose for which Roosevelt's proclamation reserved it at the critical time.

The share of John Muir in the splendid achievements of these Rooseveltian years would be difficult to determine precisely, for his part was that of inspiration and advice—elements as imponderable as sunlight, but as all-pervasively powerful between friends as the pull of gravity across stellar spaces. And fast friends they remained to the end, as is shown by the letters that passed between them. Neither of them could feel or act again as if they had not talked "forest good" together beside Yosemite camp-fires. "I wish I could see you in person," wrote Roosevelt in 1907 at the end of a letter about national park matters. "I wish I could see you in person; and how I do wish I were again with you camping out under those great sequoias, or in the snow under the silver firs!"

In 1908 occurred an event that threw a deep shadow of care and worry and heart-breaking work across the last six years of Muir's life—years that otherwise would have gone into books which perforce have been left forever unwritten. We refer to the granting of a permit by James R. Garfield, then Secretary of the Interior, to the city of San Francisco to invade the Yosemite National Park in order to convert the beautiful Hetch-Hetchy Valley into a reservoir. In Muir's opinion it was the greatest breach of sound conservation principles in a whole century of improvidence, and in the dark and devious manner of its final accomplishment a good many things still wait to be brought to light. The following letter to Theodore Roosevelt, then serving his second term in the White House, is a frank presentation of the issues involved.

To Theodore Roosevelt

[Martinez, California April 21, 1908]

Dear Mr. President:

I am anxious that the Yosemite National Park may be saved from all sorts of commercialism and marks of man's work other than the roads, hotels, etc., required to make its wonders and blessings available. For as far as I have seen there is not in all the wonderful Sierra, or indeed in the world, another so grand and wonderful and useful a block of Nature's mountain handiwork.

There is now under consideration, as doubtless you well know, an application of San Francisco supervisors for the use of the Hetch-Hetchy Valley and Lake Eleanor as storage reservoirs for a city water supply. This application should, I think, be denied, especially the Hetch-Hetchy part, for this Valley, as you will see by the

inclosed description, is a counter-part of Yosemite, and one of the most sublime and beautiful and important features of the Park, and to dam and submerge it would be hardly less destructive and deplorable in its effect on the Park in general than would be the damming of Yosemite itself. For its falls and groves and delightful camp-grounds are surpassed or equaled only in Yosemite, and furthermore it is the hall of entrance to the grand Tuolumne Cañon, which opens a wonderful way to the magnificent Tuolumne-Meadows, the focus of pleasure travel in the Park and the grand central camp-ground. If Hetch-Hetchy should be submerged, as proposed, to a depth of one hundred and seventy-five feet, not only would the Meadows be made utterly inaccessible along the Tuolumne, but this glorious cañon way to the High Sierra would be blocked.

I am heartily in favor of a Sierra or even a Tuolumne water supply for San Francisco, but all the water required can be obtained from sources outside the Park, leaving the twin valleys, Hetch-Hetchy and Yosemite, to the use they were intended for when the Park was established. For every argument advanced for making one into a reservoir would apply with equal force to the other, excepting the cost of the required dam.

The few promoters of the present scheme are not unknown around the boundaries of the Park, for some of them have been trying to break through for years. However able they may be as capitalists, engineers, lawyers, or even philanthropists, none of the statements they have made descriptive of Hetch-Hetchy dammed or undammed is true. but they all show forth the proud sort of confidence that comes of a good, sound, substantial, irrefragable ignorance.

For example, the capitalist Mr. James D. Phelan says, "There are a thousand places in the Sierra equally as beautiful as Hetch-Hetchy: it is inaccessible nine months of the year, and is an unlivable place the other three months because of mosquitoes." On the contrary, there is not another of its kind in all the Park excepting Yosemite. It is accessible all the year, and is not more mosquitoful than Yosemite. "The conversion of Hetch-Hetchy into a reservoir will simply mean a lake instead of a meadow." But Hetch-Hetchy is not a meadow: it is a Yosemite Valley. . . . These sacred mountain temples are the holiest ground that the heart of man has consecrated, and it behooves us all faithfully to do our part in seeing that our wild mountain parks are passed on unspoiled to those who come after us, for they are national properties in which every man has a right and interest.

I pray therefore that the people of California be granted time to be heard before this reservoir question is decided, for I believe that as soon as light is cast upon it, nine tenths or more of even the citizens of San Francisco would be opposed to it. And what the public opinion of the world would be may be guessed by the case of the Niagara Falls.

Faithfully and devotedly yours

John Muir

O for a tranquil camp hour with you like those beneath the sequoias in memorable 1903!

Muir did not know at the time, and it was a discouraging shock to discover the fact, that Chief Forester Gifford Pinchot had on May 28, 1906, written a letter to a San Francisco city official not only suggesting, but urging, that San Francisco "make provision for a water supply from the Yosemite National Park." In the work of accomplishing this scheme, he declared, "I will stand ready to render any assistance in my power." Six months later be wrote again to the same official, saying: "I cannot, of course, attempt to forecast the action of the new Secretary of the Interior [Mr. Garfield] on the San Francisco watershed question, but my advice to you is to assume that his attitude will be favorable, and to make the necessary preparations to set the case before him. I had supposed from an item in the paper that the city had definitely given up the Lake Eleanor plan and had purchased one of the other systems."

It was not surprising that his forecast of an action, which he already stood pledged to further with any means in his power, although he knew other sources to be available, proved correct. Neither Mr. Pinchot nor Mr. Garfield had so much as seen the Valley, and the language of the latter's permit shows that his decision was reached on partisan misrepresentations of its character which were later disproved in public hearings when the San Francisco authorities, unable to proceed with the revocable Garfield permit, applied to Congress for a confirmation of it through an exchange of lands. To take one of the two greatest wonders of the Yosemite National Park and hand it over, as the New York "Independent" justly observed, "without even the excuse of a real necessity, to the nearest hungry municipality that asks for it, is nothing less than conservation buried and staked to the ground. Such guardianship of our national resources would make every national park the back-yard annex of a neighboring city."

Muir's letter to Roosevelt showed him that his official advisers were thinking more of political favor than of the integrity of the people's playground; that, in short, a mistake had been made; and he wrote Muir that he would endeavor to have the project confined to Lake Eleanor. But his administration came to an end without definite steps taken in the matter one way or another. President Taft, however, and Secretary Ballinger directed the city and county of San Francisco, in 1910, "to show why the Hetch-Hetchy Valley should not be eliminated from the Garfield permit," President Taft also directed the War Department to appoint an Advisory Board of Army Engineers to assist the Secretary of the Interior in passing upon the matters submitted to the Interior Department under the order to show cause.

In March, 1911, Secretary Ballinger was succeeded by Walter L. Fisher, during whose official term the city authorities requested and obtained five separate continuances, apparently in the hope that a change of administration would give them the desired political pull at Washington. Meantime the Advisory Board of Army Engineers reported: "The Board is of the opinion that there are several sources of water supply that could be obtained and used by the City of San Francisco and adjacent communities to supplement the near-by supplies as the necessity develops. From any one of these sources the water is sufficient in quantity and is, or can be made suitable in quality, while the engineering difficulties are not insurmountable. The determining factor is principally one of cost."

Under policies of National Park protection now generally acknowledged to be binding upon those who are charged to administer them for the public good, the finding of the army engineers should have made it impossible to destroy the Hetch-Hetchy Valley for a mere commercial difference in the cost of securing a supply of water from any one of several other adequate sources. But, as Muir states in one of his letters, "the wrong prevailed over the best aroused sentiment of the entire country."

The compensating good which he felt sure would arise, even out of this tragic sacrifice, must be sought in the consolidation of public sentiment against any possible repetition of such a raid. In this determined public sentiment, aroused by Muir's leadership in the long fight, his spirit still is watching over the people's playgrounds.

The End

