

Je ele ele ele ele



Class ___ F 781

Book _____

Copyright No.

COPYRIGHT DEPOSIT









CAMPING IN COLORADO

WITH

SUGGESTIONS

TO

GOLD-SEEKERS, TOURISTS AND INVALIDS

BY

S. ANNA GORDON

AUTHOR OF "MUSIC OF WATERS" "MISSING GEMS" "PEBBLES" ETO





NEW YORK
THE AUTHORS' PUBLISHING COMPANY
BOND STREET

Colory ?-

F781 .G66 Copy 2

Entered, according to Act of Congress, in the year 1879, by

THE AUTHORS' PUBLISHING COMPANY,

In the Office of the Librarian of Congress, at Washington, D. C.

TO

MY HUSBAND, W. A. GORDON, M.D., AND CHILDREN, FLORA, BELL, AND WILLIE SYD,

THIS BOOK

IS

LOVINGLY INSCRIBED.

BY

S. A. G.



INTRODUCTORY PREFACE.

It has been the intention of the author of this volume to briefly portray the real features of a journey by rail over the great American Plains into the popular and more inviting resorts of the Rocky Mountains.

It has been a careful endeavor to make it attractive with incident of both journey and camp; and instructive and suggestive, by imparting such knowledge as it was her opportunity to gain from experience, observation, or otherwise; and to make it desirable, by noting those points of interest that might hereafter be of practical importance to the reader, either as citizen, invalid, or tourist.

Herein are pen sketches of what we saw along the way, some of which other travellers too have seen; and it may be one pleasant mission of this book to serve in recalling to mind and to aid in memorizing the experiences of others under like circumstances; while to many it delineates real scenes in unseen lands.

If, in the efforts of this work, the author has succeeded to the satisfaction of those who may peruse its pages, her aspirations have been partially reached. If she has failed, their regrets cannot exceed hers.

To the faithful reader and the just critic, then, this book is trustingly presented by the AUTHOR.



CONTENTS.

CHAPTER I.

PAGE

Leaving Home—An Event long anticipated—Scenery by Night—Mountain Scenery beyond—Realization of Happy Anticipations—All Aboard — Travelling by Night—Lost Opportunities — Hurry characterizes us as a Nation—Morning Twilight—Nearing Kansas—Late Rains—By Water in a Railway Car—Missouri River—Wyandotte—Kansas or Kaw River—Union Depot at Kansas City—Awaiting the Train—Kansas City—Inevitable Lackeys—Surrounded by Productive Country—Songs of its Waters—Its Motto: "Go ahead"—That of the Traveller: "Push on"—Commercial Advantages—Population—Lost Gem—Terminating a Weary Delay—Colliding of Passengers—Boarding the Train under Difficulties—Companions en route.

19

CHAPTER II.

Through Kansas—Historic Associations of the Bleeding State—Its Drought—The Grasshopper Plague—Soil—Drainage—Timber—Coal — Magnesian Limestone — The Planting of Forests—Tranquillity of its Landscapes—Elevations usually rolling; but more marked in Outline before entering the Plains—Every Feature of Enterprise in the Fresh Bloom of Health—Crops—A Wheat-field said to contain 2600 Acres—Corn the Principal Production—Thousands of Bushels at almost every Station awaiting Shipment—Fruit-trees—Kansas Fruit in Eastern Markets

PAGE

—From Poverty and Distress to Wealth and Prosperity—
Enterprise of the People—The Representative School-house
—Over 4000 Free-school Buildings—Shallow Soil above the
Limestone a Source of Drought—Government Land—The
Kansas Pacific Road lays along the Kansas River—It takes
in the Capital of the State and the Oldest Cities—New
Towns springing up along the Road—Lawrence—Topeka
—St. Mary's College—Ogden—Growth of Kansas......

CHAPTER III.

Taking Leave of a Rich Farming Country—Refreshing Sleep—First View of the American Land Sea—Its Appearance—Its Extent and Monotony—Its Fauna—Bison—Antelopes—Prairie-dogs—Rabbits—Badgers—Coyotes—Reptiles—Birds of Prey.....

37

CHAPTER IV.

Cacti-Mexican Silver-white Prickly Poppy-Sage-brush-Grapes-How Meadows of Native Grass may be obtained-Inducements for Stock-raisers-Flocks and Herds -Herders - Stampedes - Moving Clouds of Life that shadow the Plains-How Herds are provided with Water -Appearance of Water that has stood for a Long Time-Problem of utilizing the Plains—Experiments—Wells: too expensive for Irrigating Purposes-Artificial Basins-One More Suggestion-Rain-belt extending over the Plains—Causes of this Meteorological Change—The Waiting Army ready to respond to Marching Orders-Dugouts--Natural Aversion to Premature Burials-Settlements upon the Plains—Trains stop for Meals at Regular Hours -The Plains once an Open Sea or Ocean--Evidences of this Fact—Haze—It marks Electrical Conditions—Mirage -Change of Air from the Valley to the Mountain.....

43

CHAPTER V.

PAGE Serving Dinner-Passengers intent upon Discovery-First View of the Mountains-Pike's Peak-A Veil of Mist-Other Peaks greet the Expectant Gaze-Nearing Denver, the Bride of the Plains-Its Appearance in the Distance—It is built upon the Plains—Wealth awaiting this Coming Queen of an Unpeopled Kingdom-Rest and Recreation; Health and Pleasure-Denver, the Great Railway Centre west of the Plains-Its Schools-Churches-Holly Water - Irrigating Channels - Fountains - Gas-Street-cars—Boulevards — Natural Drives — Shade-trees —

CHAPTER VI.

Native Jewelry-Museums-Amusements-Smelting-works -No Picture without its Shades-Character of Schools foretells the Character of Future Statesmen-Cemeteries-Tourists and Invalids-Pioneer Advances-Pioneer's Mission-Fortune does not always favor the Brave-The First Habitation erected in Colorado was within the Limits of Denver-It still serves as a Model for the Pioneer of the Mountains—Scenery—Winds.....

60

CHAPTER VII.

Climate of Colorado—Idealized—Dealing with Facts—Resort for Invalids-Who are benefited-Consumptives-Asthmatics—The Stage of Disease in which an Invalid should be taken there—The Stage of Disease when Death is hastened by the Change-Consumption may be cured, or Life perpetuated many Years-Altitude-Its Effect upon Invalids-Effects of Climate upon Asthmatics-Its Cause, and its Cure-Longevity-Rejuvenating Influences of Climate-Stimulating Effects of Climate-Its Effects upon Chronic Diseases-Agents essential in producing

PAGE

Climatic Change—How far determined by Air—How far determined by Water—How far determined by Food—Hygienic Hints—The Number of Invalids who resort there increasing—The same is true of Tourists	67
CHAPTER VIII.	
eaving Denver—Preparations necessary—All our Jewelry and finer Dress Goods to be left—Conveyance—A Difficult Question practically solved—Effects of Attenuated Atmosphere upon Vision—The Eye is educated—Yet it may be, and often is, deceived—Our Way lay along the Foot-hills—Night still finds us out upon the Plains—We go into Camp for the First Time—Our Campingground—Boulder City—Reception—The City rests upon the Plains—Its Population—Brief Description of the City—State University—How it was secured to that Place—Surrounding Country—Watered by Irrigation—Crops superior in Quality—Produce all sold by Weight—No Dew—Coal—Leaving Boulder—Sugar-loaf Mountain—Table Mountain—Long Mountain—Long's Peak—Hog Back—Farming Country.	81
CHAPTER IX.	
Gearing Night—St. Vrain Cañon—St. Vrain River—The Bridge Three Miles below—Dangers in crossing threatening—Should we take our Chances?—But little Time to decide—Railroad Ties being floated from the Timber Regions above—Evidence of Recent Fordings—A Ranchman demonstrates the Possibility of crossing—We risk our Lives in the Undertaking—Brave Mountaineers—Their Noble Conduct—Consequent Suffering—Entering the Gates of God's Beautiful Temples—Contemplation—Grandeur of	

the Scenery...... 87

CHAPTER X.

PAGE

Going into Camp on the Evening of the Second Day out from Denver-We pitch our Tents upon the Banks of the St. Vrain River—Precipitous Bank upon the Opposite Shore -Fairy Land-Sweet Incantations of Nature-Unexpected Calamity—Our Little Boy narrowly escapes Death—The Alarm-Consciousness restored-Eventful Night-Distress outside the Camp—A Child supposed to be lying at the Point of Death—Calls for Professional Help—Unable to respond—The Tedious Hours of Night slowly wear away -The Morning finds our Child better-We make a Hurried Start—Professional Aid rendered the Sick Child—We dine at the Toll-gate—Elk Park—Ranches—Enterprises that engage the Mountaineer-Cottages-Built for the Accommodation of Tourists—Can be secured with or without Board-Unique Groups, or Miniature Towns-The Advantages they afford—Portable Mills.....

92

CHAPTER XI.

Rattlesnakes the Great Dread of all Campers—Entering Muggin's Gulch—Native Plants—Many of the Plants, Trees, and Shrubs are found native of the New England, Middle, and Western States—Latitude versus Altitude—The Number and Variety of Plants and Shrubs become less as either the Altitude or Latitude increases—Pine Belt—Over Fifty Varieties of Pine Trees—Timber below the Pine Belt—Flowers in the Regions of Perpetual Snow—People sit upon Snow-banks to gather them—Beautiful Nooks—Columns of Gray Sandstone—Their Origin—Natural Masonry—A Legacy to Science—Continuous Changes, through Erosion—We ride in the Shade of the Mountains at Mid-day—Photograph Stones—Losing Sight of the Sandstones—Night comes on—We miss the Sunset View at the Entrance of the Park, and Pitch our Tents for the Night...

98

CHAPTER XII.

PAGE

CHAPTER XIII.

Making the Summit—We accompany the Reader there on an Imaginaay Expedition—Every Season represented—Distance—An Unnatural Effort to breathe—Hunger—Attenuated Air—Its Effects upon Persons afflicted with Nervous or Pulmonary Diseases—Electrical Storms—Shocks—Nerous Fever-Natural Electrometers-First Glimpse of Day -A New Elysium-That Life is measured by Heart-beatings, a Demonstrated Fact-Momentary Delights-Five States and Territories contribute to the View-Poetry of Art-Scenography, Meteorological-Land Scenery-Lakelets bespangle the View-Threads of Silver-Above the Clouds—Ruins of Mountains—Mountain Slopes in Mosaic -The Morning in Purple Robes--Unfinished Picture-Disappointments, Incidental—Storms—Seen from a Picturesque Stand-point—Sunset reverses the Shadows—The Storm-king-Above all that makes Earth Home-The Object of One's Pilgrimage to this Summit—An Adorning for the Palace of Memory-Time to leave-The Reign of

CHAPTER XIV.

PAGE

The Transformation of a Planet—Twilight of an Era—The Destiny of Worlds known only to their Creator-One of God's Great Days' Work done—A Link in the Chain of the Eternal Progression of Matter has been forged—The Evening Fires lighted-The Telescope of the Sun directed to its Planet-child—Heavenly Bodies marching to their Posts of Duty-Electrical Currents disturbed-The Axis of the Universe is changing-Throes which give Birth to a New Era-Electric Wires stretched between and uniting all Worlds-Has Thought its more Subtle Agent, by which it is transmitted ?-Dawn of the New Morning-All has changed -Races have accomplished their Mission-They have been swept away—New Edens and New Pairs—Creation wears its Crown Jewel-The Footsteps of Man seen in the Pale Light of the New Dawn-The Hour of Revolution past-The Stars sing a New Song-Nothing lost in Change;

CHAPTER XV.

The Great Divide-Why so called-Its General Course-Its Extent—The Coronet of the Continent-Its Productions-A Comparison—Average Altitude—Aggregate Length in Colorodo—Saw-mills along the Timber Line—Utilizing the Forests-The Demands upon their Resources-Mineral-Soil Rich in Mineral Constituents—Grain-raising not recommended in the Mountains-Dairying-The Mountains

CHAPTER XVI.

Cascade Park-Its Location-Surface-Features-Surroundings - Roaring River - Cascade - Echo Grove - Water Nymplis in Crystal Chambers—Fall River—Nature's Minstrelsy-Restoring Cordials-Twin Lakelets-Mountain

Jim's Rock—Deserted Habitation—Recent Claims—The Park still without a Human Tenant—New Claims and Surveys—Hunter's Ambuscades—Practised Chasseurs—We dine in this Delightful Solitude--We there spend a Day -Visit to the Cascade-We pluck Wild Flowers in Echo Grove—And drink Water transformed from Rainbows— Sunshine to a Grateful Memory—We make our Way campward—Night comes on—The Moon arises in Solemn Grandeur-Scenery by Moonlight-Fall River Cañon...... 136 CHAPTER XVII. Our Camp-ground—Song current of the Big Thompson— Hemmed in by Mountains—Cottages in the Foreground— Camps and Campers—Man's Necessities compared with his Desires—How Time was spent in Camp—Piscatorial Pleasures-Buffalo Gnats-They follow in the Wake of our Retreating Footsteps—Description of these Insects—Effects of their Poisonous Bites—Sports of the Chase—A Favorite Amusement with the Gentlemen-Scenes in Real Life-A Serious Warning to Expectant Nimrods...... 141 CHAPTER XVIII. Social Customs—External Appearances deceiving—Brother shakes Hands with Brother-Residents-Manner of Travelling-A Party from the "Heart of the Mountains"-" Hale and hearty"-The Traveller observes much in Little Time -Persons in search of Rest-The Adventurer-The Explorer—The Poet—The Minstrel—The Artist—The Chemist-The Geologist-The Divine-The Statesman-History in Nature-Worth a Voyage around the World-What might have been—Hieroglyphs...... 149

CHAPTER XIX.

PAGE

CHAPTER XX.

The Mountain Tramp—A Prominent Feature of our Campground — Ground-squirrels — A Colony — Subterranean Town—Communication with the World above—Interviewing the Town—The Result—Pastimes of these Rodents— Easily domesticated—They served us as Scavengers—We were obliged to defend ourselves against them-They burglarize our Tents-Our Juveniles trap them-Other Nocturnal Guests—Canine Burglars—Our Supplies begin to disappear—The Gentlemen assume the Rôle of Detectives-They make a Discovery-Stolen Articles identified-Offenders put under Surveillance-They prove their own Guilt-Culprits go unpunished-Their Instinct admired-It is so near to Human Reason-Our Loss weighed in a Balance with our Necessities—Wild Animals—The Success of the Chase still serves to reimburse the Treasures of the Settlers.... 153

CHAPTER XXI.

PAGE

Cloudscapes of the Mountains—The Divining Prophet—Chromatic Rays—Cloud-land, and Real Land among the Clouds -Height of Clouds may be approximated by the Height of Mountains-Instantaneous Formation of a Cloud-How produced—Three Conditions necessary—A Theory—From what are these Sources derived ?- The Range of Moun tains a Natural, Complicated, Exhaustless Battery—Natural Galvanic Piles-Different Causes to produce Electricity-Note-Chemical Agents at Work-Oxygen and Hydrogen Gases constantly elaborated—The Great Forces of Nature at Work to produce this Result—Results of Careful Study-The Sea beneath which we live-Nature places its Agents where it has Use for them-One of the Principal Uses of the Battery of the Rocky Mountains -Poetry of the Skies-The Universe a Poem of Creative Work—Man in Harmony with Nature—Prof. Tice's "Farewell to the Mountains"-Others have sung their Rapt Measures in Silence to the World--Physical Conditions influence Character..... 163

CHAPTER XXII.

CHAPTER XXIII.

PAGE

Adieu to the Mountains—Nearly the last to take Leave—
Rural Music—Psalms of the Mountains—Birthright, as handed down from our First Parents—Our Personal Effects packed—Disappointment—The Team non est—Volunteer Service in the Search for the Equines—Difficulties attending the same—Discovery of the Lost Animals—Taking Leave—
On our Way—En Bivouac—Fires in the Mountains—
Their Terrible March of Destruction, Danger, and Death,
—Formation of Clouds from the Vapor of these Fires—
Sunset—How these Fires originate—The Law prescribes Punishment.

CHAPTER XXIV.

Rest in Open Air—The Day on which we were to reach the Plains—we visit the Sick Child again, having spent the Night upon her Father's Ranch—Convalescent—Moving forward—Reaching Boulder—We were pleasantly entertained—Back to Home Life—We pursue our Journey over the Plains to Denver—Boulder River—Coal-mines—Onslaught upon Colorado Grasshoppers—We capture a few Specimens—Lizards—Our Last Dinner in the Capacity of Camp-life—Bill of Fare—A Stranger calls upon us—We meet again the Next Day without being recognized—Another Tourist—The Dryness of the Plains—A Dilemna—Arrival at Denver—Supper—Most Places of Popular Resort now accessible by Rail—Other Facilities for travelling.... 188

CHAPTER XXV.

En route—Eagerness to discover a Herd of Bison—Our Ambition partially rewarded—Difference between a Wild and a Tame Buffalo—Frequent Discovery of Antelopes—Cowpunchers—Cow-punchers' Saddles, cheap—Instrument

PAGE

used in driving Stock-Lonely Life of the Herdsmen-Shepherds—Shut out from the World of Men—Shepherds of Old-God's Preference for One of their Number-His Eye still keepeth watch over the Shepherds of the Plains-Utes-Tragedy in Frontier Life-Government defends the Settlers against them-They are now considered friendly-No Argument with them persuasive save that dictated by War-Snow-sheds-Plains on Fire-Kansas—Its Wealth of Harvest in Store—Missouri—Its Storehouses filled-The Hum of Industry, and the Ring of Prosperity—The Lever by which the Poor are raised— Evening—The Benediction—Night—Rest, with Little Sleep

CAMPING IN COLORADO.

CHAPTER I.

Leaving Home—An Event long anticipated—Scenery by Night—Mountain Scenery and Rest—Realization of happy Anticipations—All aboard—Travelling by Night—Lost Opportunities—Hurry characterizes us as a Nation—Morning Twilight—Nearing Kansas—Late Rains—By Water in a Railway Car—Missouri River—Wyandotte—Kansas or Kaw River—Union Depot in Kansas City—Awaiting the Train—Kansas City—Inevitable Lackeys—Surrounded by a fertile Country—Language of its Waters—Translated into Song—Its Motto: Go Ahead—That of the Traveller: Push On—Commercial Advantages—Population—Lost Gem—Termination of a weary delay—Colliding of Passengers—Boarding the Train under difficulties—Companions en route.

Shall bid the quiet, sweet good-bye; Or say the cold farewell?

It was a bright beautiful evening, about the middle of July, in the summer of 18—, when, after a day of wearisome excitement, such as usually precedes the advent of a season trip, a small party might have been seen to enter a depot in the city of H——. The long anticipated tour of the Rocky Mountains had ceased to be a subject of anticipation, expectation, and anxiety, and had really come to be a pleasure of present enjoyment.

That we had encountered and overcome the objectionable features of the journey was evident, by our having started; and, though not yet out of sight of home, the distance before us bore no comparative difficulties with those already vanquished.

The evening was warm, and the semi-tropical skies that hung over us were radiant with the gems unveiled by night to light the pathway of worlds through the infinitudes of space. In the background, bounded on the east by the sparkling waters of the Mississippi river (adown whose current brilliantly lighted palaces might, at that hour, have been seen floating gulfward), and otherwise picturesquely environed by hills, nestling close to the valley, lay the city we were about to leave, in the quiet dreams of the sweet repose of night; while before us lay, hidden by the dark veil of distance, a vast, varied, and, to us, unexplored outstretch of land, bounded on the west by mountain scenery and rest. In the near future was the realization of some of our most fondly cherished anticipations; fancies were already entering the vestibule of realities; and we were, even then, bidding adieu to the poetry of the ideal, for the more sublime enjoyment of the real.

We had not long here to wait; for the shrill neigh of the approaching iron steed soon gave swift warning to those outside, to clear the track, as the long train of passenger coaches was drawn up before the depot. At precisely ten o'clock P.M., we responded to the call "all aboard," and immediately found ourselves under

way. Beautiful country lay everywhere along the route, dotted with thriving cities and villages, of which we caught only occasional glimpses through the window of our sleeping car, at intervals between short snatches of sleep.

We were unable to form any correct estimate of their characteristic enterprise and wealth, from the partial view we were able to command of them, so silent and inactive they lay, in the embrace of night, under the shadows half uplifted by the rising moon, or in the more obscure starlight. Educated as our American people are to the idea that everything must be done in a hurry, travelling has not been made an exception to this general rule. We, as a nation, work in a hurry; we eat in a hurry; we sleep in a hurry; hardly losing consciousness of the impression that we must awaken long before nature is willing to relinquish her claims to rest. We live in a hurry, wear out the machinery of life in a hurry, and die prematurely. American travel is a good illustration of two evils. The first is that of going through the world in a hurry; and the second is that of going through the world with one's eyes shut. What can be more blind? Such a practice, when avoidable, should at once exclude the idea of reading books of travel, and discourage any attempt to gain a practical knowledge of a country, as unworthy our time or consideration.

Early twilight at once gave wings to sleep; and as the rising sun chased away the shadows of night, and painted the landscape afresh with color, and the wind shook out here and there a spray of bloom, and the birds arose from their tiny nests in the joy of their morning songs, and the crickets began their merry chirp, and the bees commenced their busy hum, we forsook our berths, and ventured upon the platform of the car, where we, too, could drink in the freshness of the morning, enjoy the fragrance of its balms, and the delights of the beautifully diversified landscape, that lay on all sides sparkling with the liquid jewels which the night queen had shaken from her sandals.

The sky overhead was clear and radiant with the warm tints of a July atmosphere, and sultry with its heat, from which the principal relief was that obtained by the motion of the train. We were nearing the Kansas boundary, and were about to bid adieu to the rich and fertile commonwealth of Missouri, and to the famous thoroughfare whose well-tried bridges had borne us so safely over imaginary as well as real dangers. Here the late rains had filled the beds of the streams and overflowed their embankments, flooding the low grounds on either side.

About eight o'clock A.M., a steamboat ride was proposed by one of the passengers, with the assurance that there would soon be an opportunity for a free ride, by water, for all who were willing to embark. Scarcely was there time to assent to the proposition, before the train slackened its rate of motion, until motion was hardly perceptible, and we found ourselves in the midst of a temporary inland sea. The rails seemed to yield beneath us, and we feared that

the ties had been washed away in places, rendering our escape from threatening disaster doubtful. At length the train reeled, and then halted. The steed panted, snorted, and was again under motion. We soon reached shore, having made a trip by water in a railway car.

A little way beyond flowed the Missouri River—majestic in size, but uninviting in appearance. The muddy waters of this stream are of a clay color, resembling that of the bank, on either shore, from the wash of which its color is principally due. Of the four billions of cubic feet of earth annually washed down the Mississippi River into the Gulf of Mexico, thus extending the Southwest Pass into that body of water three hundred and forty feet per annum, judging from the number of miles of embankment of the Missouri River and its tributaries, nearly one third of the deposit must be conducted into the Mississippi River through this stream.

This water is wholly unfit for use unless filtered or allowed to stand until the sediment has been precipitated. The channel of this river is constantly changing, and so unreliable is it that it becomes necessary to examine its course where it is navigable, every year, before steamers commence their regular trips. We crossed this stream near its junction with the Kaw, or Kansas River, just before entering Kansas City.

Wyandotte lay just above on the west bank of the stream, separated from the former place by the Kansas River.

We reached Kansas City about nine o'clock A.M., where we were obliged to remain during the next two hours, awaiting the train. The spacious sitting-rooms of this palatial depot were uncomfortably filled with passengers likewise detained, many of whom were obliged to remain standing, or to construct temporary seats of their baggage. It required little, if any, stretch of the imagination to fancy ourselves in a Chicago depot awaiting the advent of a passenger train east. city, of a quarter of a century, reposing in the lap of luxuriant wealth, is endowed with almost unrivalled enterprise. As you enter it and leave the train you meet with a crowd of passengers, outside the depot, waiting to exchange places, for the time being, with you. Then comes the list of inevitable lackeys, with their discordant phrases and assuring style. Knowing your own business, you listen to them or you do not, as the case may be. If you are bound for the mountains you have no relish for cosmopolitan airs, of whatever nature. Your only anxiety is to "push on" as fast as possible. You hardly desire to stop long enough to acquaint yourself with the city in which you are temporarily detained—one of the most active centres of the West.

The traveller seems, even here, in the valley of the Missouri River, to feel the invigoration of the western winds, from the far off Rocky Mountains, as they are wafted over the plains, though robbed of much of their crispness, and otherwise modified by their long journey.

The productive fields lying northward are watered

by a stream, some of whose tributaries have their rise in the yet happy hunting grounds of the red man; among which is the Dacotah River and others, whose melodies are the unwritten music accompanying the legends which Longfellow has so beautifully translated into song

On other sides the fertile meadow lands, as richly laden with their burden of wealth, are watered by streams that sing of thriving cities and of the arts and industries of civilization; streams that sing the pastoral songs of rural retreats, and of beautiful homes whose emerald lawns are shaded by luxuriant groves and bordered with perpetual bloom, and whose cultivated gardens yield their abundant harvests of fruit and vegetation—streams that bear upon their bosoms the productions and manufactures of one city to the markets of another.

Here the echoes of the voice of civilization and the refined language of educated society, is intermingled with those of the untutored dialect of nature's children in the blending of these waters.

But if you are a traveller whose study is the world, you will ascertain, before leaving, that you are in a city whose motton is "Go ahead"—that you are in a city of vigorous growth; a city that opens the doors of first-class hotels to the traveller, and offers him the convenience of street cars to any desirable point within its limits; a city of rare commercial advantages, holding a large share of the commercial patronage of Western Missouri, Kansas, Eastern Colorado, New Mexico, Texas, Nebraska, and the Indian territories; a city

possessed of rare advantages for transportation and for storage. Its seven elevators could in time handle the wealth of the seven hills of Rome, were it converted into grain. It presents an opera house capable of seating two thousand people. Its school buildings are spacious and well ventilated. Its church edifices are pronounced "elegant," and many of its private residences are mansions of wealth.

When this city, now numbering 45,000 inhabitants, was founded, it was supposed to be upon Kansas soil; hence its name; but it was afterwards ascertained to be within the limits of Missouri. While Kansas misses a gem from her bosom, Missouri proudly wears the jewel.

Terminating a weary delay, the western bound train signalled its approach. Scarcely had we time to gather up our baggage before it came to a halt; and the passengers, having taken an undue amount of intoxicating American spirits, which manifests itself in hurry, were soon to be seen colliding with each other in their egress and ingress during the delay and change of passengers.

Under these circumstances, with difficulty we made our way to the train; where our party soon found themselves grouped together, near the centre of an easy Pullman. Close by, and destined to be our companions en route, were three prominent bishops of the Episcopal Church, another eminent divine and wife of the same persuasion, an author, and several other passengers, whom we found to be most agreeable travelling companions.

CHAPTER II.

Through Kansas—Historic Associations of the "Bleeding State" -Its Drouth-The Grasshopper Plague-Soil-Drainage-Timber—Coal—Magnesian Limestone—The planting of Forests—Passive Landscapes—Elevations usually rolling—More marked in Outline before entering the Plains—Every Feature of enterprise in the fresh Bloom of Health-Crops-A Wheat Field of twenty-six hundred Acres-Corn the principal Produet—Thousands of Bushels at almost every Station awaiting shipment—Fruit Trees—Kansas Fruits in Eastern Markets— From Poverty and Distress to Wealth and Prosperity—Enterprise of the People—The representative School-house—Over four thousand free School Buildings-A prolific Source of Drouth—Government Land—The K. P. Road lays along the Kansas River—It takes in the Capital of the State, and the oldest Cities--New Towns along the Road-Lawrence and other Cities—St. Mary's College—Growth of Kansas.

Before us the once bleeding State—
Thrice tried; by war, and drouth, and plague;
And purged by every bitter fate,
Of men corrupt, and human hate,
And wrongs, refusing to be stayed—
Freely unbars its fettered gate.

That part of our journey lying through Kansas was of special interest to us. The historic associations of the "bleeding State," during the reign of squatter sovereignty, was vividly recalled, and hastily reviewed. The more recent drouth, that consumed so much promised wealth and blighted so many hopes, throwing a dark shadow over the prospects of that young

State, forced itself upon our memory. The grass-hopper plague, and the destruction that followed in its wake, threatening to depopulate that portion of the country, was still fresh upon our minds; and as we discoursed or mused in turn, taking in the retrospect, we were whirled precipitately on over the boundary line of the two States into its classic domain.

The soil of this State is mostly of rich loam. It produces heavy crops of prairie grass, where it is yet uncultivated and unproductive of timber. The natural drainage is good (the surface being mostly undulating or rolling), as can be seen by tracing its river courses.

Native timber grows in belts along the streams or in groves, as a rule; and of this resource of wealth and convenience there is, in many places, a great This deficiency is, however, in part being compensated for by the discovery of rich beds of coal, and by an almost exhaustless supply of magnesian limestone. While fuel and building material are being thus supplied, and forests are being planted and successfully grown in some portions of the State, there will necessarily remain a dearth of shade, and long distances where the wind may pursue its course with undisturbed sway (there being only a smooth surface of ground to offer it resistance), for a few years in the immediate future. But the hand of art, so long at work to remedy this deficiency, will soon remove the objection, when cultivated forests will instead constitute one of the most inviting phases of Kansas scenery.

The landscape in a general way impresses one with a quiet sense of the beautiful. In viewing it no rapturous exclamations find cause for utterance; but, in looking over its tranquil, picturesque surface, one naturally becomes thoughtful or meditative. The traveller never finds himself indifferent to its points of interest, which everywhere present themselves, its native charms or embellishing graces. The eastern portion is mostly rolling prairie, belted with quiet streams; but before entering the plains the rolling elevations assume bolder heights and more marked outlines. Some of these reach an eminence of from seventy to eighty feet, having the appearance of truncated cones whose sections are surrounded with rocks resembling natural masonry, and whose superficies are covered with native grass.

The vital forces of this young State had so often and so recently been weakened, that we were unprepared to see every feature of enterprise under the fresh bloom of health again. Farms, so short a time ago left tenantless and desolate, were laden with renewed harvests of wealth and promise.

We have never seen finer crops awaiting the sickle of the husbandman than we saw standing upon the soil of Kansas. We passed through one field of wheat, said to contain twenty-six hundred acres, and we saw others that approximated it in size. This crop was in every respect one that promised an abundant

yield and a rich reward to the tillers of the soil. The wheat crop of 1878 amounted to 95,000,000 bushels. "Kansas already takes rank among the first wheat-growing States in the Union;" while her extensive cultivated acreage places her also as the fourth corn growing State. We saw several fields, said to contain from one to two sections each, of the latter staple grain, which grew to a height of from twelve to four-teen feet, bearing well-filled ears, that hung bending from their parent stalks, apparently about to be severed from them by their own weight.

At almost every town and station we passed we saw immense cribs holding thousands of bushels of corn, that remained over from the crop of the previous year, awaiting shipment. The crop of the past year amounted to about 89,500,000 bushels.

Fruit trees are being grown extensively in some sections. The older orchards are already producing good yields of delicious fruits, some of which have found their way into the Eastern markets.

This almost incredibly rapid rebound from poverty and distress to wealth and prosperity, affords ample evidence that the recuperative forces of that unfortunate State have been sufficient to meet the extreme emergencies into which it has been plunged. No better logic can be made use of to convince any doubting mind of the true value of these then territorial lands, than the resort to arms in times of peace to obtain possession of them. The people there, though representing almost or quite every civilized nation,

now seem united in their common interests, and work with energy and with undaunted courage and perseverance. They work in harmony, grasping herculean enterprises with certain success.

Their school-house is the prominent building of nearly every town. It is decidedly the best building, and the one most delightfully situated. It serves not only for school purposes, but as a place where the citizens may come together in unity to worship God, where church edifices have not been erected. Judging from external appearances, it is a clean temple of thought, the sarcophagus of ignorance, and a beautiful tribute to the enterprise of the living, active, progressive spirit of the present.

Too much credit cannot be given to the wise legislation of this new State in setting apart 3,000,000 acres of public land as a fund for public schools, in consideration of the golden harvests of this vast acreage, when the future shall gather in its immortal Kansas claims 5000 free school buildings. fruitage. The amount of its revenues already reaches nearly \$350,000, which, aggregated with the district taxes, reaches the sum of upwards of \$1,000,000 per annum. It is estimated that when the lands have all been sold, the State will have a standing fund of \$10,000,000. The total value of school buildings, furniture, apparatus, and grounds is already fixed at about \$5,000,000, and the amount per annum paid to the support of schools at \$1,500,000 more.

The State has three normal schools, besides which are

five denominational colleges, belonging respectively to the Presbyterians (Highland University in Doniphan County), Baptists (Ottawa University, Ottawa), Congregationalists (Washburn College, Topeka), Methodist Episcopal (Baker University, Baldwin City). In addition to these are several ladies' seminaries, and over a hundred and fifty private schools.

The churches furnish a favorable record. The following are represented by numerous organizations: Methodists, Baptists, Presbyterians, United Presbyterians, Congregationalists, Episcopalians, Catholics, Lutherans, and Universalists. The total number of church organizations is at present estimated at about one thousand. Small towns are springing up in various parts of the State, attracting those in search of homes to their nuclei.

Kansas is rapidly extending its railroads, the companies of which offer to the emigrant some of the choicest land in the State. Besides these desirable tracts of land along the principal thoroughfares of the West, government land may still be obtained. We were reliably informed that within fifteen or twenty miles of the Kansas Pacific there lay tracts of government lands equally as fertile as any we had seen. While we could not doubt the truth of the assertion, it having been given by unquestionable authority, in view of the wealth, cultivation, and improvements that characterize the country along this route, it would seem incredible to one unacquainted with the characteristic features of the West.

Several thousand acres of land belonging to the Kansas Pacific road yet remain unsold, some of which is situated in the oldest and richest counties in the State. The prices charged for the best tracts, situated where the essential public improvements have been made, is estimated at less than the "homesteader" will pay for the same advantages.

The older cities manifest a precocious development while they preserve a youthful freshness. Lawrence, the victim of both fire and sword, is perhaps the most beautiful gem adorning the bosom of the State. It has been tried in the crucible, but its crippled energies soon rebounded, and the city now stands rebuilt upon a more enduring basis than formerly. It claims a population of 12,000 inhabitants. It is located upon both shores of the Kansas River, where it commands superior water power. It is the seat of the State University, and, in common with larger cities, has its street railways, gas, etc.

Topeka, the capital of the State, is situated upon the same stream as her sister city, Lawrence. The Capitol building is of native or magnesian limestone, and in architectural design and finish does great credit to this young commonwealth.

We noticed other public buildings and private residences of the same material. Aside from its public schools this city has two institutions of learning—viz., a female seminary and Washburn College. The population is estimated at 10,000 inhabitants. Located in Potawatamie County, in the midst of a beautiful

farming country, is St. Mary's College, or the Seminary of the Sacred Heart. As might be inferred from its name, it is under the auspices of the Catholic Church. The spacious buildings are of brick, and afford advantages to several hundred students.

Wamego, one of the principal shipping points along this route, located a few miles further west, is a thriving centre, around which emigration is rapidly concentrating.

Manhattan, the seat of the State Agricultural College, is by many pronounced the most beautiful town in the State. It is surrounded by attractive scenery and the best of agricultural advantages.

Ogden, a town still further west, is memorable for having been the place where the first territorial legislature of Kansas convened, twenty-six years ago.

Fort Riley is yet a rendezvous for some of our Western cavalry; as is also Fort Wallace. The latter is situated near a station of the same name.

Salina, a prominently enterprising town, and capital of a county bearing the same name, has a population of from 2000 to 2500 inhabitants. It is the headquarters of the Land Department of the Kansas Pacific Railway. Like other Western towns, it presents the attraction of fine school buildings.

Only a few of the most distinguished places through which one passes in the delightful journey across the State by way of the Kansas Pacific road have been mentioned, while many enterprising cities in the State here remain unnoticed, they not having come under our observation.

The industries of Kansas are largely in agricultural pursuits and stock raising.

A silk colony has been established at Williamsburg, in Franklin County. It has associated, with the object and pursuit of silk producing, three thousand acres of land. The enterprise was established on the Fourier plan. The farm combines, with the leading feature, that of dairying, raising of mulberry trees, horticulture, grain raising, and gardening.

Lead and zinc mining have been attempted, but failed. Manufacturing is in its infancy, but promises to compete well with other enterprises.

Persons who contemplate making Kansas their home will find it in many ways desirable to locate near some stream of water. By streams a rich growth of timber is usually attainable in the present. This timber is not only valuable as such, but as a shelter from winds, and as a means by which their dreaded consequences are averted. Then there is not only the ready convenience of water, but the conditions that best insure against drouth.

In selecting soil the depth of earth above the underlying rock should always be considered, as this condition greatly influences moisture, the more shallow depths being more liable to drouth.

Unless one goes there for the express purpose of raising stock, it will pay the difference of cost to settle near by a railroad, where the produce of the soil can readily and inexpensively be brought into neighboring or foreign markets.

Notwithstanding all its misfortunes, the growth of Kansas has been that of almost unprecedented vigor; and the rapid development of its resources is more than promise fulfilled.



CHAPTER III.

Onward—Close of Day—Night and Sleep—Plains in the Fore-ground—To which we are approaching—First view of the great Land Sea—Its Extent—Its Appearance—Its Monotony—Its Fauna—Bison—Antelopes—Prairie Dogs—Rabbits—Badgers—Coyotes—Reptiles.

Ye golden harvests, spread your feasts;
We dine as guests to-day,
Upon thy bounty; or, at least,
Beholding such array
Of fruits and viands, fresh and rare,
Upon thy festive board,
We take of all thou hast to spare,
Before thy wealth is stored:
For, when, in eve, the day declines,
We leave thy ripened field,
And sweetest juices of thy vines,
For thirsting plains, of stinted yield.

As the day closed its eyes, and the shadows of night came creeping over the landscape, and the outlines of vision became less distinct and less distant, we gradually lost sight of the beautiful and productive fields around us, which were so soon to be exchanged for the comparative monotony of the plains. Night closed around us, and the poppies of rest brought us refreshing sleep.

The first morning view from our window introduced us to the far-reaching plains—to a tract of land stretching westward six hundred miles, and extending, from north to south, a distance of twenty-two hundred miles.

The billows of this great land sea were clothed with sea green verdure, flecked here and there with spray of native bloom. This vast expanse of country, formerly recognized as the Great American Desert, is, in extent and monotony, incomparable to anything upon the continent. Yet it is not without its points of interest. Its limited fauna and flora were mostly new to us, and afforded a pleasant study, giving swift flight to the hours that might otherwise have lingered tediously.

We watched eagerly for Bison, the native king of his domain, until our eyes wearied of their fruitless effort; when upon inquiry we learned that they had fled the, to them, fatal effects of civilizing influence. They had receded from the road to such distances as seldom to be seen by travellers, long before; but the trails they had previously followed were well worn and distinctly visible in many places.

About nine o'clock A.M. we first discovered antelopes; which were, at that season, traversing the plains in pairs. They fled rapidly before the approaching train, whenever we came in close proximity to them, thereby showing that they too preferred to remain strangers to the arts of civilization.

The antelope Americana, or the prong-horn—in other words, the antelope of the plains—is yellowish brown on its upper portions, white on its under and

rear parts, and black upon its nose, horns, and hoofs. Its eyes are bright and beautiful in expression. The deer scarcely surpasses it in fleetness.

The next object that particularly attracted our attention was a prairie dog. These canines (?) abound everywhere upon the plains. We could not understand why these quadrupeds should have been thus named. It was a question at once raised by all who had never seen them before. So unlike are they to the race of canines, that, from any point of comparison, the appellation would seem a misnomer. In size they compare favorably with the common gray squirrel. From the tip of the nose to the root of the tail the distance varies, being from twelve to fourteen inches. The length of the tail is from two and a half to three and one eighth inches, and the distance between the eyes about one and three eighths inches. The color is nearly that of the fox or red squirrel, only more subdued. They live in municipalities, giving evidence, to those who have most carefully studied their habits, of a system of established regulations. When an alarm is given by a sentinel, or by any of their number who chance to discover real or seeming danger, it is taken up and repeated throughout the town, and the cries then uttered are said to be boisterous and pitiful. At the same time not a moment is lost in reaching their burrows, which most of them enter at once; but the more courageous ones sometimes straighten themselves up at full length and take in the general survey

before entering, ofttimes remaining outside. I have ventured to call these exceptions the more courageous ones. It is generally so considered; but I have thought it possible, if not probable, that they were the guards, who, perhaps by appointment, protected the safety of their towns.

At the approach of the train we have seen them rush suddenly into their subterranean homes, and then put their heads out to see us pass; while the exceptional ones straightened themselves up and watched us as long as we could see them. Naturalists who have made the most critical observations of them, say that when they come above ground for a general entertainment, they always have one of their number stationed in the most sightly place, where he remains keeping vigilant watch over the rest of the assembly, holding, at times, conversation with those who approach him; while those in the arena of amusements seem to enjoy its pleasures with intense interest and delight.

Their towns are said to be laid out with care and kept scrupulously clean. Most of their travel is upon underground thoroughfares, their paths being scarcely marked above ground.

Their towns present to the traveller a section of mounds about five feet in diameter and ten inches high, in the centre of which is left an entrance of about ten inches in circumference. Their companionship is of a character that their intelligence would seem to forbid, did we not consider their want

of power on one hand and their protection on the other.

Rattlesnakes and owls occupy their domiciles with undisputed rights. With the former they are never known to contend, probably owing to the fact that they have no natural protection against them. latter is not only a natural enemy to his snakeship, but is asserted to be his destroyer. Hence the advantage of encouraging this strange relationship. Prairie dogs are said to be very affectionate in their regards for each other. If one is wounded, others rush forth from their subterranean homes at any risk of danger, and drag it back with them to their retreats of safety. Instances of this kind have so often been witnessed by those who have attempted to kill and make use of them for food, that the very fact of the grief that the death of one of their number occasions, has become almost a guarantee for their protection.

Nearly every naturalist has proposed a name for this quadruped, each in accordance with his own peculiar ideas of adaptation. The one at present adopted is *Cynomis* (dog mouse) *Ludovicianus* (Lewis). This rodent, which has been many times christened, is yet by some considered nameless, and still stands a fair chance for another opportunity of this kind.

Rabbits abound upon the plains, and are on very friendly terms with the prairie dog. It is asserted by some observers that they are sometimes honored with the mayoralty of the towns of the latter.

The badger and coyote are also natives of the same locality. Many species of reptiles, including several varieties each of both snakes and lizards, are to be found there, the most formidable and dreaded of which is the rattlesnake, Crotilidæ. The most prominent of the family, Iquimdae, is the horned frog, genus Phrynosoma. It is so called from the sharp spines about its head. The body is covered with tuberculated scales, and terminated with a conical The head is triangular in shape. The color of the upper surface of its body is dark gray, marked with black, while that of the under surface is nearly a silver white. Its whole length varies, being from four to five inches. They imbed themselves in holes dug by rodents, where they pass the winter in a state of lethargy. We afterward saw and collected other species of saureans, near Denver, which escaped us before they gave us time for classification.

Birds that inhabit or frequent the plains are mostly birds of prey, including hawks, eagles, buzzards, and owls. They come down from the mountains, swoop their prey, and then return to their more congenial resorts. The burrowing owl is recognized as an exception to this rule.



CHAPTER IV.

Flora—Cacti — Mexican silver white prickly Poppy — Sage Brush—Grasses—How Meadows of native Grasses may be obtained—Inducements to stock raising—Flocks and Herds—Herders—Stampedes—Moving Clouds of Life that shadow the Plains—How Herds are provided with Water—Appearance of Water that has stood for a long Time—Problem of utilizing the Plains—Experiments—Wells—Artificial Basins—One more Suggestion—Rain Belt extending over the Plains—Causes of this meteorological Change—The waiting Army—Dugouts—Natural Aversion to premature Burials—Settlements upon the Plains—Trains stop for Meals at regular Hours—The Plains once an open Sea or Ocean—Evidences of this Fact—Haze—Electrical Conditions—Mirages—Change of Air from the Valley to the Mountains.

There's scarce a waste 'mid desert air, But bloom of promise lingers there.

Having sketched in hasty outline the most prominent fauna of this undeveloped region of country, over which man as yet exercises but little sway, I shall give but an unfinished sketch of its flora.

Cacti (Cactacea) are everywhere to be found upon the plains. Of these the species vary in size and number in different locations, being influenced by both latitude and altitude. The prickly pear (Cactus opuntia) is one of the most common to be met with in the higher latitudes. Echino cactus is also found in the same districts with the former. The Melocactus (cushion round) is very common, but somewhat dwarfed in the more northern localities. We not only found it growing in large beds upon the plains, but found it thickly scattered among the mountains at an altitude of eight thousand feet. At this height, latitude 40° N., other species had nearly or quite become extinct. This family of plants are not only sometimes used as food, but are highly appreciated for their medicinal properties. Cattle often feed upon their succulent stems; but from the amount we saw standing on that portion of the plains where herds were feeding (seemingly undisturbed), we judged that it was not selected by them as a favorite article of forage. Antelopes find subterfuge from danger, when pursued by the coyote, by occupying the larger beds of cacti.

The Mexican silver white prickly poppy (Papaveracea) is a native of the plains, and grows in great luxuriance there. The flower is large and single. Its petals are silky in appearance, and of the purest silver white. The stalk is somewhat bushy, and the leaves are of a blue green. Callirrha verticelli, Phlox, and several species of Leguminacea, were abundant all along the plains. Sage brush is a native of both plains and mountains. It is a shrub, and grows to the height of from two to five feet. Its color is blue green, and that of its bloom yellow, resembling the flower of tansy, except that it grows along the stalk of the plant. Cattle and horses feed upon it voraciously.

The principal grasses are mesquite and buffalo. The

mesquite matures early, and was, at that time dead and sere. The buffalo grass is short, and stands very thick. The roots are long and sweet, and are devoured with as much seeming relish as are the tops. It cures while standing, and in all stages is very nutritious. Cattle fatten rapidly upon it, and the milk of cows thus fed is far richer in nutriment than when provided with tame grass. We learned that good meadows could be obtained (after three years of irrigating the soil of the plains) from this grass.

In leaving the native flora of this uncultivated tract of country thus partially referred to, we pass from a delightful field of study, regretting that we can linger

no longer upon its confines.

This vast acreage, neither desert or prairie, neither pampas or meadow, but at present a pasture where any man may feed as large a flock or herd as he pleases, without real estate investment, interest, rent, or taxes, still offers its miles of territory to those who are willing to avail themselves of its free income.

We saw herds of horses and cattle, and flocks of sheep, each of which was estimated by its hundreds or its thousands, where on all sides the boundary line of vision included no human habitation. We looked upon vast pastures, where herdsmen found no grateful shade from the summer sun, and but temporary, if any, shelter from the storms. Summer and winter find them at their post and on duty.

At all seasons of the year the moving clouds of life that shadow this lonely region of country may be seen scattered in immense groups, roaming about in quest of forage. During the colder months the stock feed upon patches of dried grass, where the winds have rent the shroud of winter and exposed the earth to view. Should herds become snow-bound, greater suffering is in store than that arising alone from exposure to the elements, and more terrible are the results when whole herds perish, pierced by cold, for want of food or water. During some of the more severe storms stampedes often occur, when the animals, becoming desperate, take the same direction of the wind, and travel long distances (followed by the herdsmen) before stopping. They have been known to go as far as two hundred miles, when, either finding protection among the foot hills, or from exhaustion, desisting their quest of relief, they yield, to suffer further the inclemencies of the weather. Large basins are dug there, which are filled during the rainy seasons, and stock is thus provided with water, when not herded by a stream, during the dry weather. was nearing the rainy season when we passed these artificial basins, and the water, from long standing upon the strongly alkaline soil, had the appearance and taste of lye.

The great problem of utilizing the plains has been as yet but indifferently solved. For grazing purposes successful experiment has proven its practical adaptation. Actual experiment, we were informed, has also been made in growing cereals, the crops having been sown in November which ripened the follow-

ing June. But a succession of crops successfully grown would be required to prove a reliability upon its farming resources; and as yet no one seems to have had sufficient faith to make a repetition of the first trial.

We asked why the plains could not be irrigated from the descending tides of the mountains; and were told that the amount of water was insufficient. We were informed that wells had only to be dug from twelve to one hundred and fifty feet deep, to afford an exhaustless supply of water; but these were considered too expensive for irrigating purposes. then occurred to us that if water could be furnished in basins for herds, it might be practical to increase the size of these basins and use them as reservoirs, to store the water from the mountains and also to collect it during the storms. Fearing this plan is not gigantic enough, I will make one more suggestion, by way of introducing one, the magnitude of which would seem to compare favorably with that of the emergency it is intended to meet, or at least to bear some proportion to it; which is to cut an irrigating ditch from Lake Michigan, through which the waters of the lake chain may be conveyed to moisten this nine hundred millions of acres of arid territory. Here I am met with the argument that the topography of the country is against me.

Having no other resource at hand, I go to nature, that practical teacher, who tells me that, in time, her waste places shall be redeemed.

The rain belt is said to be extending westward, at

an average rate of from fifteen to twenty miles per annum. This being true, the time will come when the thirsting soil will there receive its baptismal benediction from the hand of nature, and this extensive area will thereby become a populated country, with its trade centres, its cities, its groves, its cultivated fields, its decorated lawns, and its gardens of wealth and beauty.

This meteorological change has been attributed to the concussion of air produced by the jar of the iron rail. While electricity is thus disengaged, and is also an active agent in producing storms, there is yet another cause, acting conjointly with it, to effect this result, viz., from breaking up the soil of large surfaces of land, along the settlements, gases arise, which are united by electricity to produce the water, or vapor, which constitutes the nimbus, or rain-cloud (see remarks on mountain storms). An increasing amount of vapor is also due to the smoke arising from the fires of the advancing settlements, fuel being largely composed of water, which is converted into vapor and thus arises in clouds. The great number of trees that have been planted near the eastern boundary of the plains are another source of rain. "In Upper Egypt, where there were only four or five days of rain in a year from time immemorial, the planting of twenty millions of trees by Mehemet Ali has increased the number of days to forty-five or forty-six in the same period."

In every instance the advance of the rain belt is due

to the influence of the advance of settlements, along the frontier. Thus nature takes up the work, and strews the pathway of the onward advancing tide of emigration with fresh bloom, fills the dinless air with fragrance, and enriches her tenantless soil with fresh promises of golden harvests.

Inspired with the love of natural beauty, and willing to accept the sacrifices that pioneer life imperatively commands for the reward it offers, the intelligent husbandman, closely followed by the skilful artisan, pushes forward, with a characteristic enterprise worthy the object to be accomplished, leading, with brawny sunburnt hand, callous with toil, the thousands who swell the tide of emigration that follows in his wake, on to the unpeopled paradises of earth. These are they who stand as sentinels all along our Western borders, ringing back the memorable phrase, "Land ahead," to the waiting army, ready to respond to marching orders.

Here and there, along our way across the plains, we saw dugouts, which, we were told, were occupied chiefly by herdsmen. From near the centre of these domiciles (by the observation of which we obtained our first knowledge of the burrowing habits of the genus homo, basements of houses excepted), wooden chimneys rise to the height of about two feet above the mud-covered roof. Otherwise they closely resemble an outside cellar in external appearance.

With all our natural aversion to premature burials, or rather to being buried alive, we could but welcome

the evidence that these sepulchral habitations presented of the care thus provided for the preservation of what there remains of man after his demise from the outside world. Anything that gave evidence of being a home of man brought back to us the associations of home life, from which we seemed to be estranging ourselves, in view of the lonely uninhabited districts through which we passed. The settlements along the road upon the plains, most of which had been established by the railroad company as stations, presented in many instances a thrift which we were unprepared to see, and in years to come, we doubt not, they will be looked upon with pride, as the living monuments by which the enterprise of those who now control the interests of that incorporation is represented.

At stations along the road the trains stopped for meals at regularly appointed hours. Passengers were provided with about the same bill of fare they would have had in Kansas City or Denver. Notwithstanding these available opportunities, we provided ourselves with edibles, and set our private table, preferring the advantages of selecting our own bill of fare, and of being able to command our leisure in which to dispose of it. In so doing, whatever might chance to cause a delay of the train, our meals were on time. The expense of shipping provisions to these points naturally increases the price of fare, but the unusual demands of the appetite make due compensation to the traveller. As we study the extensive

land surface of the plains; we can but entertain the conviction that, in the earlier history of the present era, there existed, instead, a vast sea or ocean. That its bed has been filled principally with the wash of débris, and disintegrated rock from the mountains, is evident, from its similarity of soil to that of the parks, and also from its gradual elevation from east to west.

The supposition that this body of water was salt is sustained by the presence of chloride of sodium in the soil, and the presence of salt marshes and beds of salt; also salt springs, which must have their origin in salt mines, or underground streams or bodies of salt water. The presence of this saline deposit renders vegetation more savory, furnishes herds with salt, and acts as a powerful atmospheric disinfectant.

The atmosphere of the plains is usually full of haze, often producing mirage; and showing the air to be highly charged with electricity. The amount and effects of the latter may be approximated by the density of the former. The nature of the mineral composition of the soil accounts, in a great measure, for this local phenomenon; though it is influenced by the transit of winds from the mountains to the valleys, these currents sometimes being highly charged. There also occurs the sirocco, a feature common to Eastern deserts, periodic in its returns, and the natural precursor of storms. These, we were informed, occur, on an average, about once in ten days. When these winds come from the south, the intensity of heat is

greatly increased along the northern portions of the plains. It is said that the tendency of the winds is from that direction during the warmer months of the year, and is from a northerly course during the colder months, taking a change of temperature to the opposite extreme. The changes of these periodic winds, occurring simultaneously with the change of seasons, and partaking of the corresponding temperature of the same, would indicate that both phenomena were dependent upon the same cause.

In passing over the gradual ascent, as one moves westward, upon the plains, the first thing one notices that gives evidence of the change of air from the valleys is the unusual noise produced by the motion of the train. The next is the loudness of one's voice when the train is not in motion. In the higher altitudes we found the attenuated atmosphere very perceptibly marked, by both the distance and velocity with which sound travels.

Sitting upon the brow of the hill, a few rods distant from our tents, we could distinctly hear conversation from a point two hundred rods away and several feet below. The change is less perceptible to the sight, on account of the haze of the plains; but becomes greatly increased in nearing the mountains.

To a person having over-sensitive lungs, the effect of light air upon respiration gradually marks the increasing altitude. Consumptives, in the later stages of that disease, suffer a sense of suffocation, which is often extremely painful. Such persons are recommended to stop for a few days or weeks, before reaching Denver. The point at which most invalids make this delay is determined by the condition of the sufferer.

The effect of the attenuated air, in the still higher altitudes, to one of healthy lungs, is, that while one is conscious of the increased rapidity of respiration, the air taken into the lungs is almost imperceptible to sensation; or, in other words, one breathes without realizing the presence of air.

The necessity of increased respiration is evident, it being required to enable the lungs to receive the necessary amount of air in a given time. In this atmosphere, the tendency of the lungs is to expand, until they reach a capacity that enables one to breathe with the same ease which would characterize respiration in his native climate.

The difference between the atmosphere of the valleys and that of the mountains is not only due to the fact that a column of air is shorter, and consequently lighter, in the latter than in the former location, but also to the fact that there is always a greater amount of water surface in the valleys, and hence a greater amount of vapor in the air, which also contributes to render it heavier.

CHAPTER V.

Serving Dinner—Passengers intent upon Discovery—First view of the Mountains—Pike's Peak—A Veil of Mist—Other Peaks greet us—Nearing Denver, the Bride of the Plains—Its Appearance in the Distance—It is built upon the Plains—Wealth awaiting the coming Queen of a then unpeopled Kingdom—Rest and Recreation—Health and Pleasure—Denver the great Railway Centre west of the Plains—The Colossus whose Arms extend from Shore to Shore—It shakes Hands with the World—Schools of Denver—Churches—Holly Water—Irrigating Channels—Fountains—Gas—Street Cars—Boulevards—Natural Drives—Shade Trees—Hotels.

In fading distance, 'bove the clouds,
Of purple tinted light,
Come shapes in softened azure shroud,
And crowned in purest white.
We gaze, then ask, Are there, or not?

Soon after dinner, which was leisurely served from our lunch basket, upon a temporary table, which afterwards served us as a reading table, flower stand, and other incidentally convenient purposes, we saw several passengers intent upon discovery. They were anxiously gazing from the car windows, alternately turning to each other, with inquiries like the following: "Have you seen them?" "Are they in sight?" "How far are we now from them?" Presently there was a general commotion in the car, and the passengers all seemed grouping themselves

about the windows upon one side of it, at the same time taxing their capacity of vision to its fullest extent; when, presently, Pike's Peak was announced. This mountain was named in honor of Lieutenant Pike, U. S. A., who commanded an expedition there in 1806. Its first appearance, to us, was like that of a cloud, uplifted from the horizon, and so ethereal was it rendered by distance, as to make but a doubtful impression upon the sense of sight; after which it gradually became more distinct in outline. Soon an overhanging nimbus dropped a veil of mist between it and us, the gossamer tissue of which was beautifully lighted up by the afternoon sun. As we neared the falling rain, we distinctly recognized the features of this gigantic mountain, through the transparency of the storm, serenely reposing under a clear sky.

"Isn't it grand?" exclaimed a chorus of voices. "It's GRAND!" repeated the echo. "GRAND!" from all sides came the re-echo.

One after another, other peaks greeted our expectant gaze; until, all along the west, the highest summits of the longest and most sublime range of mountains upon the Western Continent were distinctly visible.

We were then nearing Denver, the beautiful bride of the plains. The softened outlines of distant mountains, which, a short time before, seemed more like a panoramic view of dream-land, or like the creations of an over-stimulated imagination, than like those of possible realities, were fast assuming more sturdy shapes.

A distant view of Denver constituted a prospective picture of repose; a picture of passive grace and youthful charms. We could not then feel the warm throbbings of its healthful pulse, nor trace the vigorous circulation of its threading veins and arteries; nor, with attentive ear, listen to its free and full hearts-beatings. But there it stood; resting upon the plains, yet nestling so near to the foot hills that they must almost sense its warmth; nearly surrounded by the untiring sentinels that have watched over its cradle from infancy, directing the hand that rocks it to rest or arouses it to action. Prophetically they stood, guarding the foundations upon which this beautiful city has been erected, during ages lost in oblivion, in expectant waiting, holding the treasures to be unlocked at the coming of her footsteps, the fresh bloom waiting to be twined into wreath to adorn her brow; the fields ready to supply her banqueting table; an army of industrious sons and daughters of toil, waiting to attend her, the coming queen of a then unpeopled kingdom.

We were almost upon it before we had satisfied ourselves with the joy of beholding it, in general outline. Not that its beauty is unsurpassed, nor that it, in any sense, offered the glitter of splendor, undeveloped as its resources still are; but that in going forward to meet it, we were going backward to the endearing associations we had left, hundreds of miles away.

At four o'clock r.m., the train came to a final halt, and we took a carriage in quest of some quiet hotel, where travellers might find the enjoyment of rest and comfort. We had been out forty-two hours, and travelled a distance of about one thousand miles. We had accomplished a journey that we had expected to find, in many ways, tedious; but which had proven really delightful and pleasant. From social considerations and pleasures of scenery, though the latter had been somewhat monotonous during a portion of the way, we could have wished to prolong the trip indefinitely.

We had reached the terminus of that part of our route which was to be taken by rail. We remained in Denver several days, occupying most of our time in acquainting ourselves with the city. There is the great railway centre west of the plains, the arms of which enfold distant mountains in their embrace; a centre of a system whose gigantic proportions lie outstretched, reaching across the continent, and whose feet rest upon both shores.

The city has its Holly water-works, and its irrigating channels. It presents the attraction of numerous fountains of the most unique design. Its streets are level, most of which are shaded and lighted with gas. They afford delightful drives, being both smooth and dry. Street cars run through various parts of the city and boulevards. To the pleasure-seeker the theatre throws open its doors and offers an attractive programme. The public schools comprise a twelve

years' course, and include the collegiate grade. These schools employ the best of talent, and are ranked above the average public school. The buildings are pleasantly located, are large, and are arranged on the latest and most appproved plans of modern architecture. Besides the public schools, Denver is the seat of a commercial college and a collegiate institute. Situated there are costly edifices and palatial mansions. The Central Presbyterian Church, recently completed, is built of native lava stone of superior quality. This rock is said to contain silver to the amount of two hundred dollars to the ton. Denver may be said to be a city of churches, having a large number, all well sustained and amicable in their relationships.

Judging that city by its beautiful and costly residences, one naturally concludes that Colorado (of which Denver is the oldest and most populous city) is well represented, either in the enterprise of raising stock, the liquor traffic, mineral bonanzas, or in the United States Senate. As we had good evidence of the first, and nothing conclusive beyond that, we inferred that the proprietors of these desirable homes were all grangers. We had not visited the mining districts, or probably we should have decided upon something even more suggestive.

The hotels cater to the tastes of the most fastidious epicurean; and the *parvenu*, the most difficult of all to please, acknowledges himself satisfied. The Wentworth House, a hotel made up of eight or more cot-

tages, with their adjacent lawns, is particularly desirable for invalids, who there have the advantages of grounds as well as rooms. This hotel is soon to be enlarged by a three-story brick building. The American and Grand Central gild the comfort and cheer-which they extend to their guests, with an éclat that, undeceivingly, attracts the best class of patronage, while the Alvord offers its fair competition.



CHAPTER VI.

Native Jewellery—Museums—Smelting Works—No Picture without its Shades—Character of Schools foretell the Character of future Statesmen—Cemeteries—Tourists and Invalids—Pioneer advance—Mission of the Pioneer—Fortune not always for the Brave—The first Dwelling erected in Colorado—On the Site where Denver now stands—It still serves as a Model for the Pioneer of the Mountains—Scenery—Mining assuming a firm Basis—Winds—Pilgrims' Rest.

There Art unfolds her graceful wings, And toil, its songs industrial sings; And schools throw open wide their door, As gates to broadest fields of lore.

Prominently among articles manufactured there is that of native jewellery, for which the local resources seem unlimited. Every jewellery store has its show-cases supplied with specimens of its own manufacture. Exquisite chains, made of native gold, can be had in an almost endless variety of styles; also brooches, ear-rings, finger-rings, bracelets, sleeve buttons, charms, studs, etc., the sets of which are of native precious stones. Much of the labor of cutting and polishing is done East, there being but one lapidary in the city. The stones are cut in sets and attached to eards, from which selections may be made, and settings ordered to suit the purchaser. Among these jewels we noticed moss agates, crystals, chalcedony (in great variety), and topaz in its different hues.

Any person living at a distance can design their own jewellery and forward their orders to manufacturers who can be relied upon to fill them satisfactorily. The prices will always correspond to the quality of material used and amount of labor expended. It is valued more highly in the home market than that of Eastern make for which the same quality is claimed; and Eastern people acknowledge its superiority by giving the manufacturers of Denver their patronage.

We noticed several small museums where native minerals, birds, quadrupeds, reptiles, skeletons of animals and plants could be obtained. Associated with the mint, another place of marked interest to travellers, as well as home enterprise, is also a valuable cabinet, including native ores, a fine collection

of coin, etc.

During the year 1878 a new town was founded suburban to Denver, and christened with the appropriately poetic name Argo. It is the present location of the Boston and Colorado Smelting Works. These works were removed from Black Hawk to this place under the supervision of Professor N. P. Hill, formerly professor of chemistry in Brown University, Providence, R. I., who organized the company controlling its interests in 1867, and who has since then had the direct general management of them.

Three railroad tracks directly communicate with them in different compartments of the building, each serving in its respective capacity. These buildings, which are of stone, cover six acres of ground, the whole, when completed, to be enclosed by a stone wall eight feet high. They are known as the most extensive works of their kind in the world.

They have a capacity of a hundred tons per day, and give employment to one hundred and fifty men. The silver is first extracted from the ore, and afterwards the gold, by a secret process, said to be known only to the metallurgist of this firm. The yield of this establishment during the eleven years of its existence has been over fourteen and one half millions dollars.

Denver is a commercial city, extending its branches of trade all along the inland frontier.

But some important features were lacking; and as a picture is worthless without its appropriate depth of shade, I shall not feel that Denver is worthily brought out in this pen sketch without a little shading. The lots were quite too small for a place favored with such ample opportunities for enlarging its borders. It still lacks its State Capitol, though some of its school-houses might readily be mistaken for one, and the inference was that the State chose to first make statesmen, educating them with the growth of that new commonwealth to its necessities, and moulding their talents to meet its requirements.

We visited one of its cemeteries. The cold white marble bore its inscriptions there, as in other cities of the dead; but upon its mounds the flowers refused to bloom. No willow tenderly unfolded its branches and dropped them with a soft lullaby lovingly over the lowly beds of the cherished ones who slept

No evergreen sang requiems for those there at rest, nor raised its spires to point out the home of The tuneful winds swept through the narthe soul. row streets, leaving their symphonies all unsung; for no harp hung in shady branches to catch its æolian strains. Only a shaft of marble, quarried from the bosom of earth, a slab, or a simple urn, told where this or that jewel lay imbedded. But every mound was sacred, watered by tears of griefs, where the only minstrelsy was the wail of broken hearts. Lonely? The city was densely populated, yet the desolation was painful. Was this deserted ground? No; footsteps pressed lightly and noiselessly through the streets, and occasionally a group of mourners went there to bid their last farewell to some endeared one. No; but lovingly endeared to and Neglected? cherished by many a crushed heart, made hallowed by its consecrated relics—baptized by the association of holy memories. The urns, strewn here and there, bearing testimonials of affection, were all sweet forget-me-nots, the fragrance of whose bloom was incense to the departed. All that gentle hands could do was done to embalm mortality with emblems of those things with which our faith crowns immortality. But God does not water his acre there with reviving showers and refreshing rains. Trailing robes rustle upon the sere crisp grass, as they sweep over it, while yet the midsummer sun scorches with its burning rays. The thirsting air sips the pure fresh water from vessels taken there to preserve memorial tokens, with

a relish akin to sacrilegious irreverence; and almost anything of life soon dies in that atmosphere without constant recourse to moisture.

The number of tourists and invalids resorting to that and neighboring towns is constantly increasing, while not a few are each year added to the list of citizens.

The discovery of gold in the bed of Cherry Creek, a small tributary of South Platte River, was the shadow that foretold the event of the coming city. To that Eldorado the gold-seeker hastened with a zeal worthy a better reward than fortune held in store for him. The slower and more certain roads to wealth were abandoned by those who were too impetuous to await the harvests of the husbandman; and the avaricious mechanic laid down the implements with which he wrought with skilful hand, and both fell into the ranks of the moving line that constituted the pioneer advance or vanguard of the great army that has since had the bold hardihood and courage to delve into the mountains, penetrate their artery of iron, strike at their veins of silver, break up their petrified skeletons, turn their carbon into flame, and their walls into crucibles, from which should flow liquid streams of gold.

That many of these brave boys fell in the struggle and perished in the battles they were fighting, is neither unnatural or strange. That many a young man sacrificed his all at the altar of the god of fortune, and turned homeward with heavy heart, forgetful of his devotion to this deceptive idol, is not marvellous.

But their work was not alone to dig for gold. was to engineer thoroughfares through the wilderness of mountains; to establish the locations of cities; and to open the avenues to new industries, and encourage new enterprises, which were to be the chief resources of a nation's wealth. They suffered for want of proper geological surveys. Their engineering was imperfect, and their decisions were based upon random conclusions. They worked with uncertain results, and their system of operations was crude and unfinished. But all this was necessary. The trails of adventure have since been followed by the explorer, the speculator, the pleasure-seeker, and the artisan. enterprise that wrought ruin to so many at first is being conducted now with comparative certainty and safety. Wild hallucinations, shimmering fancies, and deceptive chimeras have given place to the more reliable results of intelligent and scientific operations, which have brought us, instead, the trade dollar and the eagle.

While the system of mining has been developing, maturing, and extending, we find, on turning to the place where gold was first discovered, instead of a tented field, or a group of log cabins, covered with poles, in turn overlaid with earth, Denver, the city into whose coffers much of this wealth of treasure rolls. It greets us with its din of trade and its hum of industry. It was there the first habitation was

erected upon the soil of Colorado, which, in an architectural sense, still serves as a model for the pioneer of the mountains. The outlook from this site is one of picturesque beauty. The near foot hills, and the distant snow-capped ranges, interblent with green slopes and granite summits, all lying under an everchanging sky on one hand and the vast plains on the other, always engage the observing eye with some new attraction, and lend to pleasure the welcome charm of some new delight. The west winds come fresh and crisp from the mountains, and the southern breezes have scarcely shaken the tropical perfumes from their ethereal robes, ere they fan the brow of the denizen of the bridal city. The thirsting plains absorb the malarial clouds which the eastern winds bear westward from the valley (or neutralize their poisons by chemicals given off from the soil), and the northern gales there sing their boreal songs.

Any one who can find rest on the weary journey home would there find a befitting place to lay aside care, and drop awhile the toils and struggles that beset us on its pilgrimage.

There the sun seldom veils its face but for a few minutes or a few hours at a time. It is a remarkable record, made by the Signal Service Bureau, that, during three years commencing with 1873 and ending with 1875, only eleven days occurred in which the sun was not seen in Denver.

CHAPTER VII.

Climate of Colorado—Idealized—Dealing with Facts—Resort for Invalids—Who are benefited—Consumptives—Asthmatics—At what stage Consumptives should be taken there—When not to go—Consumptives may be cured, or Life lengthened—Altitude—Its Effects upon Invalids—Effects of Climate upon Asthmatics—Cause and its Cure—Longevity—Rejuvenating Influence of Climate—Its stimulating Effects—Effects upon chronic Diseases—Agents essential in producing climatic Changes—How far determined by Air—How far determined by Water—How far determined by Food—Hygienic Hints—The Number of Invalids resorting there increasing—The same is true of Tourists.

Bright beauty floods thy radiant sky,
Fair golden land.
Sweet bloom of health thy fields o'erlie,
Fair golden land,
For pleasant glades, or mountains high,
Or matchless clouds, in every dye,
With all the world thy scenes will vie,
Fair golden land.

The climate of Colorado, so far as pertains to health and longevity, seems at present to enlist the attention of nearly every one. It has come to be idolized by some as the land where time never wipes the roses from the cheeks of youth; the land where none grow old; and where those who have reached its salubrious realms at the ripened period of three-score years and ten are constantly rejuvenated and never suffer death; the land where the fell destroyer,

disease, has never stricken robust manhood, laid its blight upon effeminate womanhood, nor withered the hopes of frail childhood; but where the invalid in quest of health is reinvigorated and restored, and pain is otherwise unknown; the land where wealth comes through magic art, where throbbing, wrecking anxieties never give place to furrows of care, but pleasure rules each passing hour.

To those who have only terror associated with the chemical change of our nature called death, the first cherished error is doubtless a beautiful fancy or a happy illusion, while to those whose enjoyment is founded upon wealth and luxury, or to whom the chemistry of human happiness finds its fullest range in a life of ease and fruitless prosperity, the latter affords an agreeable anodyne.

In dealing with facts these hallucinations are made to disappear; and while we could but wish that the original paradise of earth might again be found, we discovered no such Eden there.

Of the large class of invalids who are continually migrating to that country in search of health, the great majority are those who are suffering from phthisis or asthma. Until quite recently it has been considered an established fact that not only were these diseases cured, in their first stages, under the invigorating influences of the healthful climate of Colorado, but that neither of these diseases were ever contracted or developed there. But within the past few years they have been known to occur where no taint of them

could be traced previous to their appearance in that climate. Though such instances have been very rare, yet these facts being established in these almost isolated cases, proves the same liable to occur again.

Outside the causes usually recognized as agents producing phthisis, we have accounted for its origin in the following manner: Under certain circumstances it is contagious. Persons associating with invalids suffering from the distressing effects of this malady, inhale the diseased particles of matter affoat in the atmosphere, that have been eliminated by expiration from the lungs of the sick. When the lungs of the former are too weak to eliminate this substance again, its presence produces an irritation of the mucous linings of the lungs, to which it adheres, until it finally is absorbed through it into the lung tissues, and literally becomes the seed of disease, sown upon soil that is destined to bring forth the fruits of death.

This process of conveying disease by the absorption of diseased particles, usually termed contagion, is on the same principle of vaccination, in a less tangible form of communication. To sustain this theory, I will here give on medical authority (taken from a report in a medical journal) the result of an experiment several times repeated in one of our State prisons. The strongest and most vigorous inmates on the list of "life members" were selected and vaccinated with pus from the ulcers of the diseased lungs of consumptives, the virus used being taken from the expectorations of those in the last stages of consump-

tion; and it is unnecessary to add that every person thus experimented upon afterwards died of that disease.

Experiment having proven our premises correct, we can readily account for the origin of phthisis in a climate antagonistic to such results.

Statistics show that persons who go to Colorado in the incipient stages of consumption are usually greatly benefited, and their lives seemingly prolonged, while in many cases cures evidently have been effected. They also show that those who have made the change of climate in the later stages of that disease seem to sink more rapidly under the light and stimulating influence of the atmosphere, and death is hastened in consequence.

Consumption may be attributable to the result of different causes; and is, therefore, susceptible of classification; consequently it will be considered under the following heads:

Tubercular Consumption.
Catarrhal Consumption.
Asthmatic Consumption.
Bronchial Consumption.
Hepatic Consumption.

Many cases of the first type have come directly under the observation of the writer. One case, now under almost daily observation, was sent to Denver when a decline, together with other general symptoms of consumption, first manifested itself.

The disease was of a hereditary nature, rendering recovery less hopeful. After a stay of about two years, the patient returned to the Mississippi Valley, where she has been residing over a year, and reports no returning sign of her former disease.

Another case I will here occupy space to mention.

A lady living upon the bank of the Mississippi River removed to the city of Denver about ten years ago. Several fits of illness, occurring with each succeeding autumn, followed; in each of which tubercles were raised from the lungs. But a few days since we learned that she felt that her recovery was a permanent one, and that she could judiciously submit to live in any climate.

The cases which these two represent are legion, while of those less fortunate, in most instances great relief has been obtained, and length of days evidently added to the sum of life.

But all instances I have known attended with permanently favorable results have been where patients sought a climate west of the plains when, or soon after, the first symptoms of the disease were manifested.

The second, third, and fourth classes of cases are the result of the development of the several diseases respectively which their qualifying nomenclature would suggest.

When either catarrh, asthma, or bronchial affection, with pulmonary tendencies, is contracted in other climates, their natural cure is, in a great

majority of cases, is found west of the plains, when a change of climate is seasonably effected, and a residence in that atmosphere of restorative balms made permanent.

Hepatic (I here make use of a term that I am not aware has before been applied) consumption embraces that class of cases in which the glandular system is prominently regarded as abnormal. These cases are not infrequent in the Mississippi Valley and other low malarial districts, and in large cities; also in vitiated houses and illy ventilated rooms. peculiar form of disease is endemic—that is, produced by bad air, bad water, or both. The spleen, or liver, or both, are enlarged, and the cough is, in first stages, often recognized as proceeding from the diseased conditions of the liver. Hence the name I have chosen to apply. Whether the diseases of both lungs and glands naturally originate from the same cause, and are contracted independent of each other, or, to the contrary, the lungs become involved through the influence of diseased glands, is still a question. The seeming truth would be that both sets of organs were impaired primarily by the same cause; and secondarily by their direct relationships to and their sympathy with (action upon) each other.

A seasonable change of climate then to a place where the producing causes are unknown by their dreaded consequences is nature's remedial agent; and only under such conditions may a permanent cure be hoped for.

A case of this class of consumptives was sent from the Mississippi Valley to Colorado in 1872. He remained in Denver a short time, and then went to Pueblo, where he has since resided. In 1876 he announced himself perfectly well, and said he had gained fifty pounds in flesh. His is a representative case of those who go there to remain; but of those who go there temporarily I cannot now cite a single instance where there is proof of certain cure, though there may be many. Where patients have partially recovered and considered themselves out of danger on returning to their former home, their former symptoms soon manifested themselves.

A residence in some other State might correct this result; and doubtless would in many cases of the second, third, and fourth, if not in the fifth classification.

Whatever may be the direct cause of this malady, we are still further indebted to statistics for the fact that during the period between eighteen and thirty years of age this destroyer of human life woos most of its victims. By passing this or the earlier period of one's life in a climate where no malarial poisons infect the air, producing irritation of the respiratory organs, and where the atmosphere is so light as to require an increased volume to be inhaled, directly causing the air cells to expand their growth, and resulting in a healthier development of lung tissues, it is easy to see that even hereditary conditions tending to favor an enemy so fatal to human life may be overcome,

weak lungs gain strength, and impaired constitutions be revitalized.

Sometimes even a temporary stay or prolonged visit to this Mecca of America produces marked and lasting benefits where actual disease has not commenced its ravages. But this result is more particularly limited to childhood, when all the changes of the system are active, than when it is applied to adults and persons of mature age.

Some four years ago a gentleman in Wisconsin sickened with consumption. The disease was an inheritance, bequeathed him by his mother, but developed by breathing infected air. He went to Colorado when too late to derive any permanent benefit from any source. But he had an infant daughter who seemed to inherit the disease which proved fatal to her father. The wife and child accompanied the husband and father on this hopeful tour to Denver, where they remained but a few months. About a year afterwards I saw the child. Its chest had expanded gradually until of more than average size for a child of its age; its cheeks were rosy; and every indication of health favorable. Similar instances have occurred, of which mention could be made from personal knowledge were it necessary to do so to confirm a fact which needs only to appeal to one's reason to be regarded.

What altitude is most desirable, is a practical question, though it cannot be answered in a general way.

Before starting consult a physician who knows

something of the climate, if possible. If not, leave the train whenever you sense increased inconvenience in breathing, and rest a few days or weeks, and journey on whenever you feel that you can bear it. It is always desirable to consult a physician upon reaching Denver or other towns west of the plains, who will advise you with reference to location while in Colorado.

In speaking of the climate of Colorado in a general way, injustice is done the subject treated, as altitude in that State is very variable, and its influence is probably more marked than any other condition affecting climate in that location, by its specific effects upon persons of weak or diseased respiratory organs. Few of this class of persons can bear the higher altitudes. Only the exceptions are benefited by an altitude higher than that of Denver, while many are unable to bear even that location.

Asthma may be produced by either animal, vegetable, or mineral inhalations of a character to cause irritation of the mucous linings of the bronchial tubes. Persons affected by this disease while living in a valley, often find relief in removing to an elevation. It is a disease that not unfrequently finds its origin in one climate and its cure in another. It is said to have attacked its victim when occupying a house upon one side of a street, and released its grasp upon a change of residence to the other side of the same street. This was probably due to being placed where rooms were either dark or damp, or where there was some

local infection, and breathing the spores which would naturally result from this cause in the first case; and changing to a place where these conditions did not exist in the latter case. As in change of houses so in change of climate; leaving the producing causes, one is released from their results.

Where this disease exists from other causes, other treatment is naturally required. We chanced to meet with a gentleman from one of the States east of the plains, who had for years been afflicted with asthma, and could get no permanent relief while there. Upon his removal to Denver, where he has since lived, he found the disease either cured or passive; the symptoms having abated only to return whenever he went back to his former home on temporary visits. The same result is said to be noted in almost every instance where asthma is uncomplicated with other diseases.

There is in that climate evidently either a remedy surpassing the wisdom and skill of the savans of the medical profession, or else in other climates a producing cause for this disease against which they are unable to contend.

Whichever this may be, the relief to the afflicted is as sure and as welcome in one case as in the other, and the end sought by change of climate as certain to be obtained.

Perhaps this result may be chiefly due to either the dryness or lightness of the air, or both. The fact that asthmatics often begin to find relief immediately

after leaving the low lands of the Missouri River Valley, might be held as an argument in either case. Whatever may be our belief, no chemical analysis has as yet determined the peculiar physical property, condition, or quality of air most effectual as a curative agent.

The altitude sought must be determined by the conditions of the patients. As a rule, it ranges below 6000 feet. There, as elsewhere, time is ever busy in dusting the pearls from the robes of youth.

Instances of longevity are comparatively few. This is doubtless due to the fact that a large majority of those who emigrate to that State are invalids, whose lives early terminate; and also to the rule that the great majority of those who go there in health are young people, or those of middle age. But the few whom we there saw whose locks were dusted with the pearls of time, or silvered with the talismanic threads of years, walked with fleet elastic step, spoke with vivacity, and carried the weighty honors of age as an unconscious task—one to be preferred rather than endured.

There is a shade of truth in the assertion that aged people rejuvenate there; or that they retrace the walks of time, journeying back over the wayside of years; or, having found a way station, they take rest before they journey farther. They there ofttimes lay down burdens of disease that have a long time been borne. Their sluggish circulation receives new impetus, and flows on with youthful vigor. Respiration

is more rapid and digestion more prompt. Hence dyspeptics are greatly benefited there. The functions of life are all more active and its endeavors more earnest. Force is acquired to contend against the blights of disease (particularly in its chronic forms), and the infirmities it brings; while in lower altitudes people often suffer from want of power to eliminate from the system the seeds which ripen into suffering and death. This is not true to all. Some find there, as elsewhere, no wayside inn for weary nature to pause in its onward course; but, stimulated and exhilarated by mountain air, they hasten on to the boundary lines of time with unremitted and accelerated speed.

In making a change of climate a superficial observer usually recognizes a change of air as perhaps the chief or only source productive of change to the animal economy. But when we consider that the influence of air is largely modified by the gases given off in emanations from the soil, and that water holds these gases in solution, whether in the form of vapor or in its more tangible forms, we must recognize three powerful elements—viz., earth, air, and water—as agents almost or quite inseparably at work to produce the results thereby experienced.

But it is not of changes directly attendant upon location alone that I would speak, but upon secondary results of location in association with primary ones. In locations where wells are affected by poisonous drainage, the land is necessarily comparatively low, and the soil destitute of chemicals to neutralize the

infecting poisons. Hence the district is malarial. In this case the water evaporated from both land and water surfaces is charged with malarial poison; clouds also absorb it from the air, when drifted there from more healthful points; and cistern water becomes impure while it is yet in a state of vapor. is also true that an otherwise healthful locality may become unhealthy when it is subject to prevailing winds from unhealthy places. If it is a custom to use cistern water in the latter case, careful observation in noting the direction from which clouds come, and attention to shutting off the contents of storms when there is indication of malarial conditions, will greatly influence local sanitary tendencies. But the changes wrought by a change of climate is not due alone to both air and water. The ingredients of the soil, which are soluble in water, are taken up in the growth of vegetation, and either become a property, per se, of the vegetables, fruits, and grains consumed, or by their presence give rise to new compounds, into which they enter, thus aiding in determining their quality, and their effects upon the health of the consumer. The same is true by analogy of the chemical action of air upon the animal economy. Hence the food we eat has a direct bearing upon the functions of life. Where both air and water are favorable to health, the food produced by native growth is usually so. *

*A bad quality of air in dwellings, whether caused by location or from want of ventilation, whether limited to a sick

The number of invalids resorting to Colorado is continually increasing, with a good record of favorable results.

room or to public rooms where a large number of persons are convened, may be corrected by the use of sea salt (nature's purifier) held in solution in water, and subjected to slow heat, thereby producing evaporation. People living inland may, in this way, enjoy sea air, without the expense and inconvenience of leaving home. For these hygienic hints I am indebted to my husband, Dr. W. A. Gordon, whose views, I trust, I, at least, will be excused for promulgating.]



CHAPTER VIII.

Leaving Denver—Preparations necessary—Our Jewellery and finer dress goods to be left—Conveyance—A difficult Question practically solved—Effects of attenuated Atmosphere upon Vision—The Eye is educated, yet it may be deceived—Our Way lay along the Foot Hills—Night finds us upon the Plains—We go into Camp for the first Time—Our camping Ground—Boulder City—The City is built upon the Plains—Its Population—Description in brief—State University—How it was secured—Surrounding Country—Watered by Irrigation—Crops Superior in Quality—Produce sold by Avoirdupois—No Dew—Coal—Leaving Boulder—Sugar Loaf Mountain—Longmont—Table Mountain—Long's Peak—Hog's Back—Farming Country—Heavy Crops—Expectant Farmers.

Ye steeds of ancient pedigree,
Ye mountain ship, with white sails spread!
Ye gods, who rule the turfy sea!
Was there, for us, nought else instead?

In quite too short a time the morning dawned, clear and bright, on which we were to take leave of Denver. As it was decided not to take our Saratoga trunks, the process of unpacking and repacking was commenced. Our finer dry goods and jewels were replaced to be left, as we could find little use for them in camp. A dry goods box (which afterwards served as a kitchen for our coal oil stove), and one trunk, containing the necessary wardrobe of four persons, our tent, shot-gun, bedding, and edibles were our only encumbrances. These were hastily packed, when,

about nine o'clock A.M., our conveyance, consisting of a substantial wagon, covered with white canvas, and drawn by a span of mules, was brought up before the door. A hasty survey of the vehicle was made, its dimensions carefully taken in, and we were left in doubt as to the results of our demands upon it. It had been engaged for a party of eight persons; and where so much baggage and so many persons were to be provided with room, was a question to be demonstrated. The packing soon commenced, and within one hour the question was practically solved; for our effects had been stored away, and we were comfortably seated, and on our way to the mountains.

The clear subtle atmosphere, through which everything around us was observed, made distant objects seemingly near, and brought within our range of vision beautiful views that we otherwise had not seen.

The fact that the eye is educated before it can properly estimate distances is not only true, but it is also true that the comparative density of the air so interferes with the most reliable judgment, that persons who are accustomed to making observations in a low, dense, or humid climate, are guilty of the most eccentric errors in passing judgment concerning distances either upon the plains or in the mountains.

As we gazed upon the long ranges, looming up before us, we could readily fancy them within easy reach of an average pedestrian, or that a short drive would bring us within their hidden enclosures. But our course lay along the foot hills, and night found

us still out upon the plains; when wearily we pitched our tents, and for the first time our little party went into camp. Our camping ground lay six miles southeast of Boulder City, a pretty town, claiming a population of 5000 inhabitants. For that point we started early the next morning, after breafasting and hastily arranging our travelling domicile. We reached there about nine o'clock A.M., where we made a stay of nearly two hours.

A most cordial and agreeable reception awaited us, which had a tendency to more pleasantly associate everything about the place to us, and to impress the memory more favorably than it otherwise would have been.

The city is neatly laid out, almost under the shadow of a mountain that arises in close proximity on one side to the height of 4000 feet. (This mountain, and other mountains of the same range, is composed of an uplift of metamorphosed sandstone.) Its residences are, as a rule, surrounded by large inclosures, so that the town is spread out over a comparatively large surface of ground.

The most prominent feature of the place is the State University, which stands apart from and in full relief of other buildings. It is built of brick, is stately, and well proportioned. The surrounding scenery is such as has the effect to inspire the student with sublime conceptions of thought. Citizens who had gone there as pioneers, dependent upon the available resources of an undeveloped country upon which

to found their fortunes, generously donated \$15,000 toward the erection and completion of this edifice, thereby securing its present location.

Business seemed active, and the place manifested thrift and enterprise. On all except the mountainous sides lay rich fields of cultivated land. No better wheat is raised in the United States than Colorado produces. In a climate not subject to summer rains there can be no rust upon the crops; and where water is supplied by irrigation there is no danger of drouth. The soil being equally fertile, crops bear a larger yield, and are not only more reliable but of a better quality than in the older States. We ate bread made of this wheat, which was sweet and delicious. We feasted upon potatoes grown there, which were of superior quality. Corn grows less luxuriantly owing to the nights being cool; though the more hardy varieties are successfully raised. Garden vegetables compare more favorably in size and quality with those raised in California than with those grown in the Eastern States. They are large, rich, and juicy, and offer almost irresistible temptation to a hungry palate. Λ gardener of unimpeachable veracity informed us that he had raised twelve hundred bushels (by weight) on one and three fourths acres of ground. He also told us of another man who had raised twenty tons of turnips on one acre of ground. This is but a fair sample of the productive capacity of the soil when fertilized by irrigation.

Produce is all sold by the pound, instead of by

measure, which is certainly a more accurate manner of dealing.

In that climate the dew never falls, and the evening air holds no clouds of fog; but, to the contrary, it is dry, cool, clear, and exhilarating.

Several veins of lignite coal have been discovered in that region, which have afforded a good yield so far as they have been worked. Resinous substances are found in these mines, as are also petrifactions of pine. These circumstances furnish evidence that the veins there found are formed of carbonized resinous trees, perhaps differing little from those that now constitute the mountain forests. It was nearing noon when we found ourselves prepared to pursue our journey. Leaving Boulder City in the distance, the principal object that engaged our attention was Sugar Loaf Mountain. We had observed it with special interest the day previous, as it stood out before us in full detail of outline and proportion, isolated from the general range, and seemingly a stranger to the surrounding heights—a mountain solitaire, situated within a vast meadow, and unlike other summits in its resemblance to some stupendous work of art. Its appearance was that of a vast cone skilfully built by the hand of man. It arose with almost uniform inclination from base to apex, reaching a height of over 1000 feet.

Table Mountain, so called from the beautiful plateaus upon its summit, and Longmont, an elongated elevation named from its peculiar shape,

were distinctly visible during the afternoon. Long's Peak, named in honor of Colonel S. II. Long, U. S. A., who commanded an expedition there in 1819, was prominently in sight from the first time we caught a glimpse of it from the plains until we there lost sight of it again. The Hog Back, broken, deformed, and crooked, with here and there a lost vertebra, consisting of a series of parallel ridges or foot hills, some of which reach an elevation of over 10,000 feet, and are from ten to twenty miles in width, and co-extensive with the whole general Rocky Mountain range, lay at out left, as we traced our way along the coast line of the plains. Sometimes they were lost, in almost level distances, and then reappeared in prominent heights. The rocks of which they are principally composed are sandstone, limestone, and, in less quantities, granite and gypsum.

A few miles further on our journey, and we would be exploring the mysterious highways lying between and hidden by those lofty ranges which lay piled up and drawn out before us. These few miles lay through St. Vrain's Valley, a very productive farming country, watered by irrigation.

We were informed that wheat there averaged fifty bushels to the acre. Furrows, but few feet apart, were run parallel through the whole length of each field, and filled with water, whenever the crop demanded moisture. Farmers were busy and happy in expectation of a bountiful harvest.

CHAPTER IX.

Nearing Night—St. Vrain's River—The Bridge three Miles below—Dangers in fording the Stream—Should we plunge in and take our Chances—A grave Question—But little Time to consider it—Should Accident happen, Death was imminent—Railroad ties floating down from the Timber Regions—Evidence of recent fordings—A Ranchman demonstrates the possibility of crossing—We risk our Lives in the Undertaking—The Team carefully driven into the mad Waters—Brave Mountaineers—Their heroic Conduct—Perilous Situation of our advance—Human Freight—Fear of one of the Children—Second crossing effected—Consequent suffering in store for our Rescuers—Entering the Gates to God's beautiful Temples—Grandeur of the Scenery—The Effort to suddenly comprehend such sublime Magnitudes—We rode on in Silence—The Great Treasure House of Nature.

The sun hung in the heaven's decline, And poured its beams, in wavy line, Through floating clouds of tinted mist, Which clothed the earth in amethyst; Blending soft rays of azure dye With crimson tints of western sky.

It was nearing night when we reached St. Vrain's Canyon. Close by the entrance ran the St. Vrain's River, wildly rushing on in its descent to the plains. In it were floating railroad ties, which the current was carrying from the timber regions above to their destinations below. We reached its shore, where there were evident signs of it having been forded; but the dangers it presented were threatening in the extreme,

and we shuddered at the thought of our team being driven into its waters, laden with human freight.

The bridge was three miles below, and it was becoming late for us to fulfil the accomplishment of our day's journey. Should we plunge in, and take our chances of reaching the opposite shore, or should we go back and take the bridge road? Which? This was the question to be discussed, and yet, grave as it was, there was but little time in which to consider it.

The current was strong and swift, and should accident happen, fatal disaster seemed almost certain. The fact that a well-defined road led into the stream upon one side, and from it on the opposite bank, together with the evidences it bore of having recently been travelled, went to prove that to ford it was practicable. But only a small minority of our party were willing to demonstrate it at the risk required. While children clung to their fathers, and with cries of deep distress begged them to desist from the undertaking, and wives protested in tears, a ranchman came up, on the opposite shore, riding a large black horse, and plunged into the sweeping torrent. Anxiously we watched each step of the fearless steed, until it had measured the depth of the foaming water, and borne its noble rider to us unharmed. The conclusion this adventure furnished us was that apparent as well as real dangers might be brayed with possible escape.

It was accordingly decided that the freight should first be taken across, and afterwards the party. In this

emergency, six noble, brave, stalwart mountaineers appeared upon the other sider of the river (each bearing a pike pole, about ten feet long, used in dislodging floating pieces of timber), and there waited to render us assistance, if necessary.

The team was carefully driven into the mad waters, attached to the wagon, in which were our tents, bedding, edibles, and clothing. When the main current was reached the mules were lifted from their feet by its force. Encumbered as they were, they were unable to swim, and no further advance was possible without aid.

Seeing the perilous situation of our advance, where a floating tie, with its acquired force, might at any moment come in collision with and demolish the vehicle, sweeping away its treasures of human life into the relentless jaws of death, these six generous benefactors simultaneously sprang into the leaping torrent, ready to risk their lives for those whom they had never seen before, lifted the bed of the wagon above the waves, bore it over the swift current (thus enabling the team to reach a place where they could gain a foothold), and refused to go ashore until all danger had been passed.

When the conveyance was returned for its load of human freight, we were not in doubt as to the chances we were taking. Such was the fear of one of the children that we were obliged to place her in a position to hide every evidence of threatening peril, to ward off the shock that was already telling, too plainly,

that her weak nerves (debilitated by sickness) could bear to be taxed no further.

Encouraged by the demonstrations of strength and fortitude of those to whom we might have been committing our lives, the remainder of the party were willing to accept the results of the undertaking. Committing our all into the hands of God and the instruments he there made use of to save us, we rode into what might have been the chasm of death, where the waves, yawning to receive us, were ready to bury us from sight, and a second crossing was effected in the same way the first had been.

These men refused mercenary reward for their philanthropic deed, and immediately hastened on up the stream to fulfil the duties of their laborious mission. Their clothing was drenched with the icy water that had but just come from its home among the snow-clad mountains, when they left us, and the chill of the night air was creeping down into the canyon, from which their only relief was a camp fire and a blanket.

The same readiness to extend favor to strangers we found to be generally characteristic of those with whom we met, during our sojourn among the mountains. Every one found a ready welcome to these rural retreats, to which many may never be permitted to return, but in the fond delights of pleasant memories.

As we entered the gates to those beautiful temples, upreared by the supreme might of Him whose hand upholds and sustains the universe, we became silent,

in contemplation of the awful grandeur with which we were surrounded. The inspiration was painful, so suddenly were we called upon to comprehend such sublime magnitudes and altitudes as were here constantly presented in the vast panorama of nature. The grandeur of the scenery so far surpassed that which we had been accustomed to comprehend, that time was required to give stretch to our capacities, and to adapt ourselves to the demands upon them. Too absorbed in what we saw, and too fascinated with the enchantment of what we could scarcely believe real, to have any desire to speak, we rode on in silence, following the meandering road around the base of heights that looked coldly down upon us, or up their acclivities and down their declivities, gradually gaining elevation, our vision everywhere greeted with some new surprise, or some marvellous wonder that had been given place in this great museum of nature.



CHAPTER X.

Going into Camp on the Evening of the second Day out from Denver—We pitch our Tents upon the Banks of the St. Vrain's River—Precipitous Bank opposite—Fairy Land—Nature's sweet Incantations—Unexpected Calamity—Our little Boy narrowly escapes Death—The Alarm—Consciousness restored—Eventful Night—Distress outside the Camp—Calls for professional Help—A Child supposed to by lying at the Point of Death—Unable to respond—The tedious Hours of Night slowly wear away—The Morning finds the Patient in Camp better—We make a hurried Start—Professional Aid rendered the sick Child at the Toll Gate—We dine at that Point—Elk Park—Ranches—Enterprises that engage the Mountaineer—Cottages—Built for the accommodation of Tourists—They can be secured with or without Board—Unique Groups—The Advantages they Afford—Portable Mills.

Beside the fretting stream;
Below the mountain height;
Where sunset's parting beam,
Had kissed the earth good-night;
We sought the boon of rest,
Where care might not invade,
Nor aught our dreams molest,
In quiet grateful shade.

Weary from the excitement of the day's journey probably, more than from the fatigue consequent upon the long walks we had taken over the most rugged portions of the way, we went into camp, the second night after leaving Denver, on the bank of the St. Vrain's River, several miles above the cross-

ing. Upon the opposite bank, a wall of red sandstone arose, almost perpendicular in line, to the height of two hundred feet, against which the waters dashed with malicious fury, fretting themselves into white foam as they whirled and turned, and the procession of waves impetuously rushed on to meet other barriers below.

Between this river and a beautiful mountain, at the foot of the latter, we pitched our tents, where we could gather the broken harmonies of both mountain and stream, and listen to the march of both wind and wave—the long line of moving waters and the tuneful strains of passing zephyrs, by whose wings we were fanned in their eager flights to the distant plains. It there seemed to us we had entered some bright fairy land, where the earth brought forth flowers by nature's sweet incantations, and where fays had spread their richest repast before mortals. The sun threw a golden halo around the tops of the towering peaks, as a good-night benediction, and the chill frost of night hung in the air, when we first welcomed the warmth and cheerful glow of our camp fire.

Just at that moment we were alarmed by the cries of one of the children, as she shrieked, "The mule!"

On going to the place from which the cry proceeded, our little boy was found, lying apparently lifeless, having been kicked by one of the mules, that had just before been turned loose from the wagon.

We had seen our son, only a moment previous to

the alarm, picking flowers for one of the smaller children; and when we first heard the cry of distress, uttered by the child with him, we supposed it to have been prompted by some sudden emotion of fear, without any real cause for danger. The mule had been concealed from observation by a thicket; and, when feeling least a sense of danger, it suddenly appeared and viciously kicked its unsuspecting victim, hitting him just below the diaphragm. Consciousness was soon restored; and notwithstanding our apprehensions were at first grave and painful, the injury proved less serious in its results than symptoms would seem to have indicated.

During that eventful night of unmitigated anxiety and distress, my husband was three times professionally called upon to visit the bedside of a patient, supposed to have been lying at the point of death, four miles beyond our camp. But at no time was it considered safe to leave the bedside of our own child long enough to respond to these calls. The long, tedious hours of that never-to-be-forgotten night at length wore away; and when at daylight we found that the sufferer in our own camp could be moved with safety, we hurriedly proceeded on our way, anxious for the life of the sick child to which we have alluded, and for the relief of its then hopeless parents.

We reached that afflicted home as soon as was practicable for a journey of four miles to be accomplished, over the rough road we were compelled to travel. There (at the toll gate), our whole party being de-

tained, we built our camp fire, and remained until after dinner.

At three o'clock P.M., the symptoms of the patient being considered better, we prepared to take leave. After resuming our seats in our vehicle (that had been christened the "Mountain Schooner"), we made our way into Elk Park, which lay just beyond.

This park is several miles in length; and upon its diversified surface we found pastures, or meadow land, of native grass, upon which the elk come every winter to graze. Hence the name of the park. Antlers lay scattered about in great numbers (as they are shed each year by the elk, during the colder months), laying where they had fallen when cast. We also found groves of pine growing there in great luxuriance.

We passed several ranches, which bore an appearance of tidiness and thrift, although their rugged surroundings were still without cultivation, save beside the newly finished cabin, and its adjacent lawn, there was sometimes seen a small vegetable garden, and, occasionally, a small "patch of potatoes." But we missed the cultivated fields of grain, without which a country seems comparatively barren. Stock raising, dairying, hunting, trapping, fishing, and guiding tourists through the wilderness of mountains, constitute the chief employment of the mountaineer, outside of the lumbering and mining enterprises.

Some of the ranchmen, of late, have been experimenting in building cheap cottages, with a view to

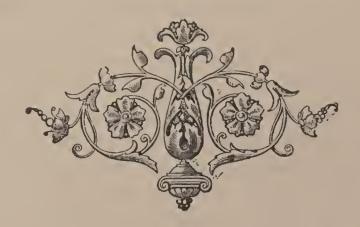
renting them to tourists, either with or without board, during the summer season. From these they have realized fair profits. These cottages are built of pine logs, hewn so as to present four sides, and put together after the usual style of building log houses. The crevices are then filled up with pieces of timber, and plastered over with clay or mortar, after which they are covered with a roof, consisting of poles closely laid across the top, which in turn are covered with clay, or, in some instances, with boards or shingles, according to the convenience or financial ability of the proprietor. A floor is usually laid, a window put in, a door hung, a place fixed in the roof for a stove pipe, or a straight chimney built, when it is considered ready to rent.

Some of the residences built on the same plan are at present being clapboarded, and lathed and plastered inside, and, in time, these cottages will doubtless receive the same finish. If these temporary houses pay, as they now promise to do, it will not be long before the proprietors will be able to afford a sufficient number of them to do away with the necessity of transients living in tents; and also to furnish them fitted up with the necessary conveniences.

These cottage homes are, in some respects, preferable to either boarding house or hotel, as a family can usually have their choice between housekeeping and boarding; and, in choosing the latter, can have their meals served in their rooms, or at the general table at the ranch. Availing themselves of the retirement

they afford, persons can also enjoy the quiet incidental to real home life. These unique little groups of pioneer architecture are very picturesque in appearance, and are suggestive of rest and comfort. To the weary traveller, who, perhaps, has not been inside a house for many weeks, these miniature homes are always hailed with intense delight, and are regarded as the oasis upon their journey in that sparsely settled country.

Portable mills are being introduced in many places, in the vicinity of which there is usually a better quality of buildings; and as settlers have a very wide range of choice, they usually locate in those places which the tourist finds most desirable to visit. Hence the tent of the traveller may everywhere be seen, during the warm season, interspersed with cottages, or just outside these diminutive towns that occasionally dot the parks.



CHAPTER XI.

Rattlesnakes—They are the Dread of Campers—Entering Muggins' Gulch—Native Plants—Many of them Common to the more Eastern States—They decrease in Number of Varieties as Altitude increases—Pine Belt—Timber below—Flowers in the Regions of perpetual Snow—People sit upon Snow Banks to gather them—Columns of gray Sandstone—Their Origin—Natural Masonry—A Legacy to Science—Continuous Changes through the Agency of Erasion—We Ride in Mountain Shades at Midday—Photograph Stones—Losing Sight of the Sandstones—Night comes on—We miss the Sunset View at the Entrance of the Park—And pitch our Tents for the Night—By a Mountain Stream fringed with Alders.

There are no voiceless haunts; No nooks unpeopled. Everywhere Some living thing a home hath found, Under God's care.

The great dread of all campers is the rattlesnake. These are said to be very numerous in Elk Park, and in Muggins' Gulch, adjacent to and just beyond it. In passing down the mountain side into the gulch on leaving the park, we counted four of these dreaded enemies, lying dead by the wayside, their mutilated heads showing the intensity of the conflict successfully waged against them. While passing through the gulch, which was very dark and deep, we crossed several small streams, that became dry later in the season, when the snow, which supplied them with water, had all melted away from the elevations above.

Along the banks of these streams, growing native, were many species of plants, shrubs, and trees also native to the Eastern and Middle States. Among these were the wild pea (Leguminaceæ), several species of the asterworts (Compositæ), morning glory (Convolvulaceæ), wild parsnip and wild carrot (Umbelifera), alder (Betulacea), willow (Salicacea), crowfoot geraniums (Ranunculacea), wild lily, among which was a species of wild lily called the mountain lily, peculiar to that location (Liliacea), cherry, raspberry, blackberry, wild rose (Rosaceæ), ferns (Filices). I have made mention of comparatively few orders; only such as memory serves me to recall. We saw several species of these orders also that were quite new to us. Besides these there were many plants and shrubs that we had elsewhere cultivated as exotics. The flora there, at altitudes ranging from 5000 to 6000 feet, latitude 40° to 42°, with few exceptions are the same species or closely allied to those of Eastern localities in the higher latitudes. We find in this comparison a good illustration of altitude compensating for latitude, other things being equal.

From the similarity of native plants, and their comparative luxuriance of growth, we readily infer that there is a comparative amount of moisture and also some predominating elements of soil common to both locations, as their growth seemed equally vigorous in the two sections of country. Plants, like animals, cannot live without subsistence, and where the soil holds no food that can be assimilated by any certain

plant, unless it be an aquatic or an air plant, it will die for want of proper nourishment. So when we find a species of vegetation growing in native luxuriance in one place, and find it existing in the same conditions elsewhere, we readily infer that there must be a simsilarity of causes to produce it; while to the dissimilarity of corresponding circumstances we owe the exceptions. All soil holds food for more than one tribe of plants; yet wherein it lacks food for any individual class of plants, that class which would remain unfed must necessarily die in consequence.

The number and variety of flowers become materially less as we reach the long belt of pines which stretches itself the full length of the mountain range. This belt is found to exist in the altitudes between 6000 and 9000 feet. Above this is the belt of spruce which reaches up to the height of 11,000 feet.

The varieties of pine trees there have been estimated to the number of fifty or upward. We are not informed as to the number that have been observed of the spruce, which are also a branch of the family *Pinus*. Below the pine belt are found cedar, hemlock, cherry, alder, and cotton-wood. The latter grows principally along the streams. Above the timber line in the regions of perpetual snow, some of the more hardy flowers find warmth to bloom.

A guide, returning from Long's Peak, brought with him a bouquet of which I became the fortunate possessor. In it was garden columbine (Aquilegia vulgaris) luxuriant in growth, spiderwort (Com-

melyna), wild everlasting (Graphalium), live-forever (Sedum telephium), together with a variety of beautiful grasses.

These were gathered in places from which the snow had been blown into drifts, which served as seats for the party at the time of gathering the flowers. I have given the names of but few of the flowers this rare bouquet contained; and as I had not the opportunity of inspecting the variety of bloom produced there during the different months of the season, it is impossible to arrive at any just conclusion as to the number and kind of species grown there. Those to which I have referred were obtained some time between the first and middle of August.

In our circuitous route we sometimes found ourselves surrounded on all sides with emerald slopes, whose bases were strewn with wild flowers, and whose summits were covered with native pine forests. these sequestered nooks the threading streamlet was often hushed to its softest strains, and the sweet melody of nature's voice rang down from the tuneful branches along the mountain heights, echoed on every side, where the harmonic strains of the human voice seldom joined in minstrelsy, and only occasionally broke upon the air; and then to lend but transient effect. In passing through the deep gulches, which are unavoidable in reaching the higher ranges of the mountains, and which we would not avoid if we could, we were often shut in by elevations that sometimes arose almost perpendicularly to the height of

many hundred feet; when suddenly, on emerging, we found ourselves upon a restful plateau, or at the entrance of a beautiful glade. At some points we could look back upon the plains which lay under a distant haze, far outreaching our capacity of sight, and which in turn again disappeared behind the intervening ranges.

One of the most interesting features of the scenery it was our pleasure to observe was the columns of gray sandstone that arose to from fifty to two hundred feet in height. Composing these columns were boulders weighing many tons, piled, one above another, in an almost perpendicular line, between which were crevices, showing where veins of other rocky formation had existed, uniting or seaming together the older rocks. Some of these large masses of sandstone, resting at or near the tops of the columns, overhung the general outline, and seemed ready to be precipitated by the slightest force. How could those immense rocks have been piled up? was a question raised by some of the younger members of the party. Exactly like masonry! ejaculated another. To the question the easiest and most natural solution is doubtless the correct one: They were piled up by the same force that uplifted the mountains, and laid in their places by the same hand that laid the foundations of the earth. They were a part of the natural masonry that had sustained mountains, that now lay in scattered débris around their base. They are the monuments that time has left as a legacy to science, telling of

mountains that have grown old and passed away. They are the monumental ruins which not only bear evidence of what has been, but tell the comparative age of what now is, and write the destiny of the surrounding heights. We were informed by a resident of the mountains, that, two years previous to our visit there, a rock weighing many tons had been dislodged from the top of a neighboring summit, and lodged at its base, during a violent storm. This event occurred in the vicinity of the toll gate, where the immense mass, that had been precipitated by the strength of the elements, was afterwards pointed out to us. These evidences of the changes constantly taking place through the erosion of the elements are everywhere to be found along the whole Rocky Mountain line, particularly the foothills or lower ranges.

As we travelled further into the mountains, following the labyrinthian course of a thoroughfare laid out with every inconvenience, and under the most formidable disadvantages, we found the gorges through which we passed becoming darker and deeper, and the slopes steeper and higher. Through the former we rode in the cool shades of the latter, while viewing their summits, crowned with the glowing light and warmth of summer sunshine.

Gradually we lost sight of the sandstone formations, which had become familiar to us. The only stone house that we saw north of Boulder was built of the old red sandstone close by the St. Vrain's River, where a laminated strata of this rock lay exposed to

view. We had in other places seen this rock yielding its warm glint of color at an elevation of 7000 feet, sometimes overlaying the granite, and again underlying the same.

A prominent feature of these rocks is the impressions of trees, shrubs, etc., that occur upon their laminæ. Slabs thus impressed are called photograph stones. These are said to be the most abundant in the Hog Back.

Beyond and above, everywhere around, lay cold formations of granite—cold in color, cold by nature, and cold by reason of their location. With new interest we greeted the peculiar features of each mountain as we slowly advanced toward the park, until the warm glow that kissed the mountain sides into bloom, and their breath into fragrance, faded from their highest tips, leaving but the cold gray peaks, which sent a shivering chill into the valleys, reminding us that the day was about to close; and that quite too soon for the realization of what the morning had promised. Our delay at the toll gate resulted in our disappointment of being able to witness the sunset at the entrance of Estes Park, as we had anticipated. Night came on, and we yielded to necessity rather than inclination, and pitched our tents by a quiet stream, fringed with alders, and there awaited the rising of the morning sun to call us to the duties and experiences of a new day.

CHAPTER XII.

Leaving the Gulch—Walking Sticks à la Mode—On Foot—Campers returning—Caricatures—Snowy Range—Mountain Jim's Cabin—Mountain Jim—His tragic Death—The Cabin serves as a Monument to his Memory—Entering the Park—Tableau Vivant—Nature's Repast—Lakes—Floating Fortunes—Speckled Trout—Earl of Dunraven—Hotel—How Long's Peak is reached—The Extent and Capacity of the Park—Theories as to the Origin of Parks—Light on the Subject.

From nature's chambers, dark and deep, We haste to climb the mountain steep.

LEAVING the gulch, we climbed over a succession of hills or small mountains. I here use the word climbed in its fullest sense, for I believe that seven out of eight, the whole number of our party, took each a cane \hat{a} la mode, and performed that part of the journey on foot. We had but few miles further to travel before reaching the end of a long journey. We were but a short distance from the entrance to the park, and to this we were gradually ascending. The morning sun shone warm, and the air was crisp and clear. Now and then we met a party of campers on their return trip to the country below. Upon reaching the gate to the park, the highest point over which our way led, range after range of peaks greeted us; some crowned with domes of solid granite; some bearing the appearance of vast and magnificent ruins; some resembling castles; some piercing the clouds with their uplifted

spires; some presenting fantastic shapes which seemed real caricatures of birds, beasts, and human beings.

Upon one summit sit the famous two owls, so distinct in outline that no observing traveller passes them without recognition. Upon another is an immense rotunda, and still upon another the ruins of an old monastery. The mention of a few of these will suffice to show the interest that would naturally attach itself to the study and observation of the mountains from a perspective standpoint.

The more distant heights were covered with perpetual snow, and veiled by soft tints of azure. From this point we counted five distinct ranges, which together exhibited sixty-five prominent summits, one of which was the famous Long's Peak, having an altitude of 14,216 feet.

Close by the gates to the park we discovered an open cabin. It was built of unhewn logs, and covered with earth. The door and window were gone, and the paths that once led to it were overgrown with bramble. We learned that this had once been the home of Mountain Jim, who, during his life, had been known as a trapper, hunter, fisherman, ranchman, and guide; as the man who once had a hand fight with a grizzly bear, and killed his ferocious enemy with a knife just in time to save his own life, with the providential care of friends, who found him bleeding to death from the wounds he had received. He was also known as the man who drank whiskey, and—finally fell in love. The latter was

the most unfortunate circumstance of an eventful life, as it resulted in tragedy.

The lady who had unconsciously won his affections rejected his suit. Her parents forbade him to visit their home. Enraged by the conflicting passions of love and of war, he taunted her friends, making use of vile epithets, until his conduct became unbearable. During an unguarded hour, when in a state of intoxication, he indulged in visiting the home of the lady of his choice. Unpleasant words occurred between him and the young lady's father, when, both becoming exasperated, the lover aimed his gun at the father, which he in turn thrust aside, at the same time taking fatal aim at the would-be murderer. The victim of the tragedy lived several months after receiving his death-wound, having ample time to repent his folly.

The desolate cabin still serves as a monument to his memory; and, as it is pointed out to strangers, the thrilling events of his strange life and tragic death are related; all of which have become historically associated with the park.

We saw the lady whose name circumstances had so unfortunately and unfavorably associated with his. She is young, pretty, gentle, and retiring. She will doubtless live to grace a sphere in life more congenial to her better qualities.

Two hours from the time we left our camp ground we had entered the beautiful fane of nature, whose walls were vast mountains and whose ceiling was a beautiful minaret of heaven, frescoed with systems of inhabited

worlds. As we looked far away into the background of this picturesque landscape we saw cold fleecy clouds drifting up from behind the snow-capped summits, and felt their wintry chill, as they were driven nearer until they hung over us, dappling the foreground with their ever-changing shadows.

Through this beautiful picture of nature flowed the clear, cool waters of the Big Thompson River, mirroring both earth and sky. The undulating meadow land was flecked with tents, and the smoke arose from the camp fires on all sides. Cattle were leisurely grazing or lazily reposing, in every direction. Teams were picketed on camp grounds, and whitecovered land schooners almost invariably lay anchored near by. In many instances the latter served every purpose of a tent. Campers were to be seen fishing along the stream, strolling at leisure, on duty about their tents, or sitting by their camp fires. These were the principal life figures in the scene, though the unpretentious home of the mountaineer was not left unobserved. Our eyes banqueted upon the beautiful prospect that greeted them. Could nature have spread a more inviting repast? In this park are several small lakes of crystal clearness; the principal ones are the St. Mary's and Lily Lakes. There are also crystal rivers whose sparkling waters are fraught with floating fortunes of speckled trout. Two gentlemen residing there (sons of our landlord) went out on a piscatorial expedition, during our stay in camp, and brought in specimens of these fish, said to weigh two

and a half pounds each, and to measure eighteen inches. Some were caught by members of our party and brought into camp, measuring fifteen inches. They are said to be taken from the streams very easily in winter. The gentlemen to whom we have referred remarked that, in their experience, they together had taken from the water, by opening the ice, over a thousand pounds in a single day. These they took to Denver, and sold them at twenty-five cents a pound. The trip could be performed by private conveyance inside of four days, the proceeds of which would amount to over two hundred and fifty dollars.

This isolated case, I think, will serve to sustain me in asserting that the waters of these parks are filled with shoals of floating treasure.

The principal part of this park is the purchase of the Earl of Dunraven. By him it is being enclosed where nature has not already fenced it in by almost insurmountable walls. The earl has there erected a commodious hotel, with the available capacity of fifty rooms. This building is richly furnished, and is conducted in a manner to please its most fastidious patrons. It is managed by an efficient landlord, who looks well to the comfort of his guests. The site upon which it stands was selected with reference to the view of and distance from Long's Peak. Tourists "making the summit" can avail themselves of the use of a vehicle the first few miles, from the hotel, if desirable; after which they must consent to abandon it; for the only choice to within two miles of the

peak is between going on horseback or on foot. The last two miles can only be accomplished on foot. The park is about ten miles in length and five miles in width. The grass is the same as that upon the plains, and is said to be sufficient in quantity to supply four thousand head of cattle with a proper allowance of food during the year.

This, like other parks, is irregular in outline. Its margin is closely studded with mountains, save where canyons here and there open out between.

Having often been asked to define the word park, in its practical application to the landscapes of the mountains, and deeming it of some importance to the reader in aiding him to obtain a definite idea of what the word here is intended to convey, I would say that the term, in its original meaning, signifies pasture, and is here applied to the rich meadow land, enclosed on nearly all side by mountains, where wild animals once found pasturage (as they now do, in many places), and where settlers at present graze their vast herds of stock. These parks vary in size from the area of a few acres to those of many miles. Among the larger parks of Colorado now considered comparatively easy of access from the eastern slope of the "Rockies," are North, Middle, and South Parks.

North Park is comparatively little visited, save by adventurers or a minority of tourists. It is much colder than either of the other two, and contains but few settlers; hence few inducements to invalids and to pleasure-seekers have as yet been presented.

Middle Park is accessible by stage from Georgetown, which is reached by rail. Berthoud Pass, over which this line passes, is 11,000 feet above sea level. The park is, at present, distinguished principally for its hot sulphur springs on the Grande River, which maintain a temperature of 121° Fahr., and are regarded as having special curative properties for rheumatism and cutaneous diseases. It is lower and warmer than South Park. The soil is said to be favorable to the growth of cereal productions, and also to most garden vegetables. It is claimed that silver mines have been discovered there; but, if so, none have yet been opened. It is little less than five years since the first settlers claimed a residence there; and doubtless but for the Indian panic, the land would ere this all have been taken up. Wild game is still abundant among the surrounding mountains. The amount of mineral wealth already discovered in neighboring vicinities assures us in the prediction that the mountains around this park will develop their share of rich veins, and that the park may afford gold and silver from the wash of other sources.

South Park has its salt works and its sulphur springs. Several railroads have been surveyed into it, all of which will doubtless be completed soon. Quite a number of settlements dot its borders. The Trinity City (of the future), Colorado Springs, Colorado City, and Manitou are situated near one of its gateways, as a citadel to the mountain's stronghold. These places, so popular as resorts for both tourists and invalids, are

already so well known as to require no mention. The South Platte takes its rise among the summits of its western boundary, and, winding through these fertile meadow lands, marks its course eastward on its journey to the far-off Gulf of Mexico.

South Park is evidently destined to be recognized as one of the most attractive places among the whole Rocky Mountain range.

These parks are subject to every feature of land-scapes elsewhere found. It is supposed that they were once covered with water that has long since disappeared, or by timber that has been destroyed by fires accidentally set. The argument would seem to be entirely in favor of the first supposition, as there are many acres that bear no trace of a forest having existed there at any time since the carboniferous period; while, on the other hand, the boulders give evidence of being water-worn, and in some places the land is still marsh. One of these marshes occurs in Estes Park, where the Big Thompson River divides its waters, and throws them around its surface, uniting them again below



CHAPTER XIII.

Making the Summit—We accompany the Reader there, on an imaginary Tour—Distance—Every Season of the Year represented —An unnatural Effort to breathe—Hunger—Attenuated Air— Its Effects upon Persons affected with nervous or pulmonary Diseases—Electrical Storms—Shocks—Nervous Fever—Natural Electrometers—First Glimpse of Day—A New Elysium—That Life is measured by heart beatings, a demonstrated Fact—Momentary Delights—Five States and Territories contribute to the View-Poetry of Art-Scenography, Meteorological-Land Scenery—Lakelets bespangle the View—Threads of Silver— Above the Clouds—Ruins of Mountains—Mountain Slopes in Mosaic—The Morning in purple Robes—Unfinished Picture— Disappointments, Incidental—Storms—Seen from a picturesque Standpoint—Sunset reverses the Shadows—The Storm King— Above all that makes Earth Home-The Object of One's Pilgrimage to the Summit-Adornings for the Palace of Memory —Time to leave—The Reign of Silence—Self lost in Sight.

> 'Bove the plains, where leads life's pathway, Lay the golden heights, sublime; Resting, where the hidden glory Waits, to crown the end of time.

To those who enjoy "sight-seeing," the opportunity of "making the summit," and "taking in the view," is one to be coveted, although attended with discomfort and inconvenience. To stand upon a pinnacle fourteen thousand feet above the sea, in a mid-ocean of air, while one's feet press one of the rarest gems of the continental diadem, and where distance is limited only by the capacity of vision, is a moment to

enrich a lifetime. Looking down over a terrace of mountain ranges from Alpine heights far out upon the burning plain, observation reaches from frigid regions to tropical climes, and through the uplifted zones one sees every season of the year represented, each in its peculiar features and characteristic beauty.

The peak is ascended from the south-west by way of Lily Lake. The distance is fifteen miles. Tourists usually arrange their visits so as to enjoy a sunrise or a sunset, though seldom both. Those who witness the sunrise perform part of the journey during the afternoon, rest at a ranch on the way at night, and arise in the morning in time to complete the tour before daybreak.

The first effort one usually makes on reaching the summit is an unnatural and an uneasy exertion to breathe. Succeeding in this, the next endeavor is to obtain something to satisfy the demands of the stomach; as the fatigue of the ascent, and the crisp morning air, combine to furnish one with a voracious appetite.

Few are able to bear the attenuated atmosphere at such an elevation with impunity but a very short time. This usually forbids visitors to remain long enough to enjoy the waking light of the morning and the lingering farewell of the evening of the same day.

The effect of the elevation upon one afflicted with pulmonary or nervous weaknesses is highly detrimental, and forebodes serious and sometimes fatal consequences. Not only are persons affected by the rarefied conditions of the air, but by the electrical conditions also, which produce results of painful excitability.

Those of highly susceptible nerves experience shocks which subject them to twitching, and all the painful symptoms that would be endured by being subjected to a heavy charge from a battery. I have witnessed these symptoms in nervous people at much lower altitudes, where a prolonged strain of the nervous system often resulted in nervous fever (a disease so common in the mountains, and one so naturally produced by local causes), which, in many cases, proves fatal. These symptoms occur in their severest forms and most disastrous tendencies during the electrical storms that prevail there. The presence of these storms is denoted by an electrometer. They are often unaccompanied by descent of rain, hail, or snow, though the currents are sometimes so strong as to shiver the rocks in pieces, and produce other equally marked demonstrations. A good natural electrometer is the human hair, or that of the lower animals. The former, when curly, becomes straight and bushy, and the latter becomes erect.

The impressions made upon the emotions by a view so vast and so comprehensive, and from a height so stupendous and grand, is one never to be forgotten. When the soft azure veil of the sky is laid so lightly over all the landscape as to be almost imperceptible, and the first rays of the morning sun flash their flood of

light through the clear transparent air, lighting up the chambers of earth with the glories of a new day, and one stands within the radiance of the halo of the morning, in the warmth of its glow and the beauty of its splendor, a new elysian is suddenly created, more enjoyable than the unpictured delights of ideal lands. The pulse leaps with a more joyous bound, and the life currents quicken their turbid flow; while thought summons all its powers of action under the influence of the stimulus of this momentary revitalization. The perceptions are quickened by the sudden thrill of the reinvigorated life forces; and, under the influence of nature's superior charms, life is not measured by the days, the hours, the weeks, or the years, for their pleasures and capacities are concentrated in the enjoyments of a single moment. The sentimental idea that "life is measured by heart beatings," is there physically and practically demonstrated.

Even these delights are momentary, for there is no rest in the perpetual march of worlds. While one lingers upon the margin of day, the chariot of light moves on. The sun rises higher, while its beams silently descend and touch the mountain tops with their wand of enchantment, and transform them into figures of life. The trailing robes of darkness are gradually lifted from lakelet and stream, from valley and plain, from gulch and gorge, from canyon and park, from forest and foot hill, from city and plain, revealing a landscape sublime in its diversified extent and in its native grandeur. The view extends over

the sunburnt plains of Utah, over the Spanish Peaks lying in the azure folds of their ether robes, into New Mexico on the south; beyond the boundary lines of State into Nebraska and Wyoming on the north; over the Rocky Mountain ranges on the west; and over and adown the eastern slopes of their vast chains, out on to the great plains which no eye but that of Omnipotence hath bounded.

To picture to one unacquainted with the surrounding scenery what may be seen from Long's Peak when circumstances favor the observer, would be practically impossible. Only in the poetry of art can skies be painted with ethereal loveliness, and the realms of cloudland be represented in their transcendent beauty; while to place the landscape in array before the imagination of the reader would be to picture the lakes that bespangle the view on all the uplifted plains below, and to trace the threads of silvery sheen which seam together vista and view, mountain and valley, earth and reflected skies; to delineate, with native grace, the cold porphyritic heights that rear their summits above the regions of stratified cloud, and tip them with sunlight; to represent forests laid low by the herculean force of the hurricane's might, and the débris of mountains that have been rent asunder with the terrific anger of the earthquake, or the interminable action of the elements, and scattered at the base of every range; to lay the mountain slopes with a mosaic of emerald and gray; to restrain the winds upon one height and clothe an-

other with tempest and storm; to spread the fields with a tapestry of varied hue, and endow them with the animation of life; to group the chaos of ruin with nature's magnificence of art; to bring hamlets and cities, lakes and streams, parks and plains, within the radius of human vision; to lift up the waters and chain them to the skies; to loop up the clouds in festoons of color, and tie them with the gorgeous hangings of the rainbow; to clothe the morning in purple, and place the signet of a star upon its brow; to drape the car of light with golden splendor; and to bring this wonderful work of art within the perspective of the reader's perceptions. Language would be inadequate to the requisitions of the parchment; and no ideal range of finite conception could furnish a pallette for such a picture. The attempt to faintly shadow a true life-scene would be all that my rashest egotism would excuse.

But it is not the good fortune of all who "make the summit" to enjoy the luxuriant repast that nature has spread out on all sides as a perpetual banquet. Sometimes clouds obscure the rising sun, and lay their deep and heavy shadows over the landscape below. Sometimes the descending storms, hundreds, even thousands of feet beneath, shroud both canyon and gorge with the darkness of night, and only the higher elevations rise above the mists to greet the light. Sometimes, even during the hottest days upon the plains, the clouds redeck the peaks with frostings and transparencies, while the unfettered winds pipe in

subdued strains the harsh, shrill, piercing airs of winter. To this carnival of the elements, to this revelry of the storm, the tourist is often a victimized guest; from which he returns to regret his harvest of disappointment.

Again the tourist stands under the softened light of transparent skies, while the lightnings send their flash through the turbulent billows that roll and surge at his feet, and the voice of the thunder alone is heard above the din of the storm. Here and there the sun lights up a freighted cloud-ship of the ether sea, whose white masts glimmer for a moment and then disappear; while the floating bark drifts onward, shattered and torn, or finds rest in open harbor. Beyond and below the outline of the storm-clouds the landscape is toned to its most serene aspect, and distance clothes itself with the habiliments of nature's irresistible charms.

Sunset holds the lights and shades in reverse order, while it uplifts the celestial robe of day—its garment of sunbeams, whose rays of light, heat, and color are held intact through the magnetic agent of the electric ray—which night replaces with its neutral tinted vesture.

Upon this mountain-top one sees the silvery lining of the Storm King's robes, and the crystal adornings of his imperial throne. Over his kingdom the starry crown sends its evening light. Beyond it lie the unseen lands, whose inhabitants occasionally come and go, as in Jacob's dream at Bethel.

Above the din of social life; above the sound of its busy pursuits; above the soughs of the forests and their wild moanings; above the music of the water's solemn chant; above all that makes earth home—how deep must be the solitude of a tranquil hour; and, left alone, how doubly lonely must be the person whose heart has not been taught to commune with self, with nature, and with God.

But the object of one's pilgrimage there is to get above the world and to look down upon it; to explore the regions of air, and fathom the atmosphere to a depth of over fourteen thousands of feet below; and to take a more comprehensive view of the phenomena of the heavens. Unconsciously, one there becomes expanded, enlarged to receive all this length and breadth and depth of space. The eye strains itself to a capacity perhaps never before reached when the polemoscope of vision forces all this sublime picture upon the retina; and the palace of memory was, perhaps, never adorned with so much grandeur as when this impression is transferred to its walls.

But the sun moves on over the dial plate of the skies, tracing the rapidly receding hours. Its rays fall aslant. It is time to leave; and the traveller, having accomplished the object of his pursuit, pauses not to listen to the far reaching sound of his own voice, nor to comprehend the awful silence that would reign in the absence of human footfalls, where only the roar of the storm is occasionally heard, or the wild fantasias of the hoarse winds are piped in the open halls of space.

During the time one spends there, self is so wholly lost in sight, that of all whom I have seen who have accomplished the tour, not one seemed to have been impressed with a sense of loneliness; but, quite to the contrary, those who were not overtaken by sickness or storm were so absorbed in the pleasures of the hour, that no undue shadows were left to blemish the record of the adventure.



CHAPTER XIV.

Transformation of a Planet—Twilight of an Era—The Destiny of Worlds known only to their Creator—God's great Day's Work done—Another Link in the Chain of the eternal Progression of Matter has been forged—The Evening Fires lighted—The Telescope of the Sun directed to its Planet Child—Heavenly Bodies marching to their Posts of Duty—Electrical Currents disturbed—The Axis of the Universe changing—Throes which give Birth to a new Era—Electric Wires stretched between and uniting all Worlds—Has Thought its more subtle Agent, by which it is transmitted?—Dawn of the new Day—All is changed—Races have accomplished their Mission—They have been swept away—New Edens, and new Pairs—Creation wears its Crown Jewel—The Footsteps of Man seen by the new Morning Light—The new Day—The hour of Revolution past—The Stars sing a new Song—Nothing lost in Change—Nothing gained but Change.

Oh, Change! Time's tireless agent! Busy, since ere the years began—Work on. Fulfil creation's plan—Thou art a destiny to man.

In musing upon the great changes that have been wrought upon and within the earth to bring the planet up to its present conditions, we imagine ourselves sitting in the twilight of an epoch's decline.

No human thought has ever visited the newly created star, whose destiny is known only to its Creator. The omnipotent eye looks down upon it, and beholds the completion of the fifth of God's great days' works. The seas are flooded with the finny

tribes of life. The leviathan, the monarch of the waters, sports in the expansive crystal chambers of the great deep, and the subjects of his domain do him homage. The dry land is replete with its reproductive fruits.

Everything is finished in accordance with divine purposes and divine wisdom; perfected as only God perfects his work. Nothing is lacking to fill each niche in the creative plan. Every crystal is polished, and every leaf and tree is afresh with life. Animals roam at will upon all the untented fields. Birds on swift wings pierce the air, while they make it resonant with songs of joy. Everything in the animal economy is true to its instinctive perceptions. The unspoken prophecies of the era have all been fulfilled. The finite work of the infinite hand lays mapped out on all sides. A link in the chain of the eternal progression of matter has been forged.

The evening fires have been kindled, but their light is yet hidden away, under the crust of the planet. The torch has been lighted that is to ignite a star, but its flames are yet suppressed. Far down in the heated furnaces of the earth a crucible is being prepared in which the oldest rocks are to be dissolved. But all is not yet ready.

The telescope of the sun is still directed to its planet child, whom it has so faithfully guided in its march onward and forward, lighting its trackless pathway through the mighty cycles.

The heavenly bodies, whose agency is to be called

into requisition during the eventful hour of the planet's transformation, are all marching to their posts of duty. The eye of heaven slowly closes, and darkness begins its reign. The atmosphere is suddenly disturbed, lashed into sweeping tornadoes and giddy whirlwinds. The electrical currents try in vain to keep their courses.

The great battery of the skies is agitated! The poles of the planets seems changing! The axis of the universe perchance is wandering from its accustomed place! The earth is convulsed! It is tossed by fire and tempest! A world is aflame! Its fires flash their light out upon eternal space.

Chasms yawn, and devour huge forests, whose charred remains are entombed in the entrails of the earth, until man shall come forth and demand of the planet its hidden treasure. Craters open wide their mouths, while streams and lakes forsake their beds and run down hissing throats into fiery maws. The crust of the earth collapses, and molten masses spring to the surface above.

Living creatures, munched by the jaws of death, go down into the bowels of the earth. Igneous rocks are belched forth from its feverish stomach. Here and there an island or a continent has been thrown up, and another has gone down, in the troubled waters.

The mountains are tumbling, falling. Their foundations are being riven and wrenched from under them, and they are being carried away in the general

wake of ruin. The great basins of the globe are being overturned, and their contents find measurement in newly constructed vessels. The heavens are black with the fumes of a burning world.

Are sister stars keeping careful record of the event? Are the intelligent races of other planets unconsciously sending their dispatches over the invisible electric wires that lay stretched between and uniting all worlds, impelling them onward and forward as they perform their busy rounds, holding in keeping the polarity of the universe?* Alas! for what man might be were this true, compared with what he now must be content to remain. No lighthouse along the vast shores of space will ever lend its gleam to such an era. The currents thus travelling through all the mighty distances, encircled and circumscribed only by the boundaries of matter, will never be caught up at their wayside stations, and made to subserve the purposes of the inhabitants of worlds, and the vehicle by which systems may be placed in communication with each other.

The atlas of the skies points out no sea where ships may lay in open harbor, and signal the sailing craft around them. No cablegram ever reaches us from the far-off worlds without whose existence our own

* Along the pathways of the skies, wherever a heavenly body sallies forth, upon its, to us, incomprehensible mission, there is marked a new electrical centre, whose radiating currents are connected or interwoven with those of every other heavenly body in space; so that the whole universe undergoes change, whenever any of its particles suffer from disturbing causes.

would perish. No electric messenger of thought, by us perceived, is dispatched on swift-winged flight from centre stars to worlds revolving around them, though all move on in harmony and concert of action. But mind may have its more subtle agents, all unknown to us, by which communication may be established, and thought be transmitted through the universe, while all is focalized in the great soul sphere, of which God is the centre.

The paroxysmal night of nature is at last wearing away. The morning star sheds its light in the east with undimmed lustre, and lifts the darkness from around the couch of earth. The storm of the elements has ceased its rage. The planet has controlled its ire. Exhausted nature has at last found rest. In the now silent chambers of the earth death has had its triumph. The glittering orbs tread lightly around the bier of an era, while they pass in solemn procession the transformed pavilion on the star-tented background of the skies. The clock of eternity rings out the hour of the departure of the creative period. No time has been lost upon its dial.

In the paling of the coming dawn we begin to trace the outlines of the features of the new physical day. The landscape has all changed. The waterscape and the cloudscape, too, have changed. The earth has been transformed. A portion of its fluids has been held in a crucible of flame until converted into gases or crystallized into solids. Its solids have been dissolved and their gases combined to produce new

fluids, and, in turn, new solids. Gases have entered into new relationship with other gases, and matter has been re-resolved and chemically united to form new compounds.

The atmosphere is changed. It contains less vapor in proportion as the land surface has been increased, and the water, or evaporating surface, diminished; and in proportion to increased crystallization, or solidification of the earth, so have the amount and depth of the gases around it, producing or permeating the atmosphere, been modified. The quality is changed by new emanations from new compounds, and new proportions from the old.

Races of both animals and plants have finished their period, and been swept away in the maelstrom of the struggling elements. The earth no longer produces food for them to subsist upon, and the air is devoid of the vitalizing elements essential to their existence. The world has no longer need of them, and it no longer offers them a congenial home. The conditions that gave and sustained life, to them, are destroyed.

But these new fields must not remain tenantless. It is not in the economy of nature that it should be so. To compensate for loss, there must be gain, and nature, left to herself, is honest, while God, to her, is just; so spirit, the great parent of life, on one side, and matter on the other side, become a prolific source of new races.

New Edens are created, and new pairs are created

to inhabit them. New mountains lift up their heads in rejoicing. New river systems thread the valleys and the mountain sides. New fauna impart animation to the fields, and new flora embellish them. Creation, beautified and adorned, dons its crown jewel, in the prototype of Deity. New footprints are seen here and there by the light of the new morning, while man's waking vision greets the kingdom of his reign. The hour of revolution is past. A new light gleams from out the mansion of the Creator, and its beams make radiant the new day. The earth is again vocal with praise, while the stars sing a new song. Nothing has been lost in all this great change. Nothing gained but change. The forces of the universe have all been sustained, and no world has lost any of its glory.



CHAPTER XV.

The Great Divide—Why so called—Its general Course—Its Extent—It constitutes the Crown of the Continent—Its mineral Wealth—A Comparison—Average Altitude—Aggregate Length, in Colorado—Saw Mills along the Timber Line—Utilizing the Forests—The Demands upon their Resources—Soil rich in mineral Composition—Grain raising not recommended—Hundreds of thousands of Cattle and Sheep find Pasturage—There is no Place more promising for dairying—Butter made there better than that from the best Eastern Dairies—Wild Oats and wild Grasses more than compensate for Timothy and the golden Pumpkin—Chief Obstacle in the Way of Dairying—The Mountains a source of Wealth to the low Lands.

Bold, craggy heights! that dare to stand, Both crown and throne, in freedom's land. Snow draperied, ice crystal gemmed, Evergreen fringed, by torrents hemmed, Thy crests bright glitter, 'bove the storm, Fashioned in strange and varied form. Thy voice of thunder greets the sky; While lightnings flash thine unseen eye. Thou'rt nature's monarch, holding sway, O'er continent. Reign, reign for aye.

It was during such a revolutionary struggle of our planet, when the earth rent its robes in the anguish of its despair, that mountains sprang from their burning depths in masses and broken chains, and the extensive mountain system, of which the Great Divide constitutes the highest and principal range, first had its existence. This chain is the line which divides the

waters and determines the course of the streams, eastward into the great valley of the continent (the Mississippi Valley), or westward adown the Pacific slopes through their long, tedious, and winding course into the Western sea.

The general course of this range is north-west and south-east. Its average width is estimated at twenty miles, and its length at five hundred miles, when it is lost, only to be recovered under a new name.

This range is productive of the richest treasures and the most sparkling gems that beautify and give value to the coronet of the Western continent. Among its distinguished summits are Pike's Peak, Long's Peak, Mount Lincoln, and the Spanish Peaks, which form the prominent settings in this beautiful adorning of nature.

Constituting the principle sources of its diversified mineral wealth are quartz, mica, iron, lead, zinc, copper, silver, gold, and precious stones, locked away in its secret vaults, or glittering upon its many tipped crests. The lower ranges afford limestone and gypsum, and along the foot hills, and extending out upon the plains, rich deposits of coal yield an exhaustless abundance of fuel. During the past year, over three hundred thousand tons have been mined from these veins, the principal part of which has been consumed in the capacities of the railways and smelting works.

The vein of the Star Coal Mine in Boulder County is seven feet thick. The coal is raised by a twenty-four horse-power double engine. The cost of the

elevating works is estimated at about \$15,000. The Marshall Coal Vein, near Boulder, is from ten to fourteen feet thick. These works are provided with convenient railway facilities for shipping. The Golden Coal Mines lay along the Colorado Central Railroad. Coal Creek Mines, near Canyon City, are classed among the wealthiest of the State. Many other mines are being less extensively worked. Most of the coal at present shipped from the State is consumed in Kansas.

The richest veins of gold yet discovered have been found between 7000 and 9000 feet above the sea, while the richest silver veins yet found have been discovered in considerably higher elevations. Prominent among those peaks constituting the Great Divide, which bears an acknowledged reputation for wealth in the latter, is Mount Lincoln.

A belt of tellurium, rich in gold, twenty miles in length, and five miles in width, exists in Boulder County, which is classed among the richest discoveries of the State. The amount of gold and silver products in bullion and in ores for the past year, by a recent estimate, has been placed at between \$9,000,000 and \$10,000,000.

Iron and copper, though found in abundance, have fewer developed mines (though those of the latter yielded 900,000,000 pounds during 1878), and consequently bring a comparatively small income. Lead mines here rank with the richest of their kind in the world.

Over sixty thousand mineral lodes are reported to have been discovered within the limits of the State (though comparatively few have yet been worked), and more promising discoveries are being made at present than in the past.

Leadville is now the centre of attraction for fortune-seekers. Excitement attending new discoveries of silver mines during the past six months has been intense, and some of the richest firms in the United States have recently made heavy investments in the mining enterprise of that location. Over two million pounds of base silver bullion are reported to have been shipped from these mines during a single month.

There nature wears a crown glittering with almost every jewel.

In design and general features,

the beautiful and real Outvie the far sublime ideal.

To gain some definite idea of this mammoth, rocky, inland structure, let us consider this range, the vertebra of the great mountain system, attached to which, on either side, are long and successive ranges and groups of mountains, approximating the vertebral chain in height, and reaching down to the foot hills, miles below, upon which this vast superstructure seems to rest, and we have gained some vague idea of proportion, though we still have little conception of its immensity, which the imagination, when given its broadest range of freedom, would lack boldness to delineate and capacity to comprehend.

The average altitude of the principal range or Divide has been estimated at 12,000 feet, the highest summits of which rise from 3000 to 5000 feet above the line of perpetual snow. The highest mountain (yet surveyed) is 14,296 feet above the level of the sea (Mount Lincoln).

The aggregate length of this range, and its principal spurs, in Colorado alone, is estimated at from ten to fifteen hundred miles. The intervening spaces constitute the parks, heretofore described, some of which present the most beautifully diversified land-scapes.

Along the timber line saw-mills have been erected which furnish most of the timber used in Colorado. The largest, located at Larkspur (we were informed), turns out over 3,000,000 feet of lumber per annum, besides a large number of railroad ties and telegraph poles, and a great amount of cord wood. The lumber business there seems almost exhaustless, and one could hardly imagine how so many acres of forest could be utilized but for the possible demands of the mining enterprise upon its resources.

These two branches of industry, together with that of cattle raising and dairying, are untold sources of wealth to a country otherwise comparatively barren and unproductive. But there can be no place in the world more promising for dairying than these parks of the mountains. I have eaten butter produced from the finest dairies of the East, which only approximated, in deliciousness of flavor that made in

the mountains. The wild grasses, with their sprinkling of wild oats, more than compensate for the indispensable golden pumpkin and the necessary timothy upon which cattle are fed in the Eastern States, in producing sweet juicy beef and creamy milk. once said to a friend, "I wish to say that I have seen cream a half inch thick taken from pans but little more than half full of milk; but I will wait until you have visited some of those mountain ranches, and then I will not have to say it, for you will have seen it;" when a bystander remarked, "Say it now; I will corroborate it, for I just came from one of them." The present obstacle to extensive dairying in many places in the mountains lies in the inconveniences for transportation. But the Divide is considered a natural dairying country. The aggregate production of cheese in Colorado alone, the past year, amounted to 230,000 pounds. Butter is made in larger quantities, though dairying, like other branches of business in this new State, is now in an embryonic stage.

The expense of dairying is greatly diminished by the use of water-power; and as laborers there are comparatively scarce, and prices paid for work proportionately high, the facilities afforded by this natural force being made available is not only a source of wealth to the dairyman, but also of convenience.

It is estimated that \$8,000,000 are invested in the cattle business, and \$5,500,000 would represent the capital in stock in sheep-raising in Colorado. These pursuits are rapidly extending farther and farther into the mountains, where water is more abundant, and where stock is less exposed to the inclemencies of the weather.

Although the soil is rich in mineral fertilizers, obtained from the wash of the mountain sides, and also in vegetable mould, obtained from the decay of its own native productions for many decades, yet the high altitudes would not warrant an attempt to raise many of the staple articles of food.

The fertility of the soil can scarcely be impaired by any demands likely to be made upon it, as the mountains will continue to be a source of wealth to the low lands until they are rocked to rest on the plains below, or riven from their foundations by the same agency that uplifted them from the vaults of the earth.



CHAPTER XVI.

Cascade Park—Its Location—Surface Features of its Surroundings—Roaring River—Cascades—Echo Grove—Water Nymphs in crystal Palaces—Fall River—Nature's Minstrelsy—Restoring Cordials—Twin Lakelets—Mountain Jim's Rock—Deserted Habitation—Recent Claims—The Park still without a human Tenant—New Claims and new Surveys—Hunter's Ambuscades—Practical Chasseurs—We dine in this delightful Solitude—We there spend a Day—We visit the Cascade—We pluck wild Flowers in Echo Grove—We drink Water transformed from Rainbows—Sunshine to a grateful Memory—We make our Way campward—Night comes on—The Moon arises in solemn Grandeur—Scenery by Moonlight—Fall River Canyon.

There the high towering walls, by the eternal might upreared, Surpass, by far, the studied art of skilful hands; And every nook, and shade and growing spire, Wake deathless thought, through inspiration From their source infinite.

Adjacent to and on the north-east side of Estes, lays Cascade Park. This miniature park or parquette is situated near the snowy range, and consists of grove and meadow, lakelets and streams. It is surrounded by some of the most delightful mountain scenery that it was our good fortune to observe. Roaring River comes from its snowy source above; its rapid current dashing over a rocky channel in its precipitous descent to the park. Leaping from the mountain side, just above, the waters come tumbling down, lashed into rainbows and foam, forming a beautiful cascade, from

which the park takes its name. Pursuing its course, it is, at times, almost lost to sight and sound, so deep are the abysses into which its waters are plunged, when it appears again below, unimpeded in its haste to join other streams. Large boulders conceal from view the caverned retreats of the mountain streams, and so deep are the chasms into which their waters sometimes rush, that a listener above hears only a subdued gurgle or a faint roaring for considerable dis-The laughing music of the sportive waters of this river may be heard in their wildest glee, echoing through the grove that lines its margin upon either side, while it is yet mellowed by distance; listening to which, one is irresistibly drawn to the spot where this tuneful hymn of nature is sung. Under the charm of its influence, it is easy to imagine the existence of water nymphs in coral chambers, crystal palaces, or hidden grottoes beneath, pouring forth liquid notes, timed to the graceful flow of the waters. A short distance below the cascade, Roaring River unites with Fall River, forming one of those large, clear, cool, limpid streams peculiar to the mountains.

There is, perhaps, no place within the park where the ear is not continually greeted by the delightful harmonies of some sweet minstrel of nature. Surrounded by mountains as it is, one may at all times drink in æolian strains, borne hither from every conceivable angle, line, and direction of sound (within the limits of the park), producing a concert of the sweetest enchantment of song. The far-off mournful music of the grand old pines, that have withstood the storms of ages, some with shattered limb, singing with broken harp and trembling voice, others responding to the graceful stroke that touches lightly their unawakened chords with unseen fingers, blending their more animated strains, in repeated reverberations, with the rhythmic rehearsal of the sweetly solemn anthem of the waters, greets the ear of the explorer, wherever his delighted footsteps roam. The perfumed breath of the mountains is freighted with medicating balms, and one there inhales the restorative cordials that reinvigorate the degenerate functions of life.

Two twin lakelets (covering perhaps an acre of ground) repose side by side upon the bosom of earth, clad in robes of ethereal azure, or of crystal white, hushed by gentlest lullabies, or fretted into unrest by the wild overtures of the aroused elements.

In this park is a boulder projecting on one side so that man or beast may find shelter and safety underneath. Mountain Jim, of whom we have previously spoken, chose this as his place of refuge, while hunting or fishing in its vicinity. The open side of this granite-roofed dwelling had been enclosed by the interwoven branches of trees, whose withered foliage still clung to their paternal source. The smoke of fires that had been kindled by this rock yet blackens and discolors its surface, and the temporary wall once built there now hangs from the ceiling in broken ruins.

A deserted habitation, with its surroundings of ruin and decay, serves to remind the older inhabitants of, probably, the first resident of the park; while the foundations of two other cabins showed that claims had since been made, though at the time of our visit there the place was without a human tenant.

Other claims have since been made, the land surveyed, and it is now, doubtless, the possession of some fortunate capitalist.

Here and there were hunters' ambuscades, built of logs in open field. These structures were about four feet high, four feet wide, and six feet long. In them hunters conceal themselves while watching for mountain sheep, as they come down from their homes above to graze upon the more acceptable pasturage of these uncultivated meadows.

When discovered, they become an almost sure mark for the practised sportsman's aim, which is taken from the crevices between the logs, where the hand that levels the gun, under a well-directed eye, remains concealed.

In this delightful solitude our party spent one day. We cooked our coffee and spread our edibles by "Mountain Jim's rock," and dined in its umbrage. We visited the cascade, and drank of the waters transformed from its rainbows. We plucked wild flowers in the native grove of this shaded retreat, and traced the embankments of the streams and lakelets, while we breathed the sweet incense of nature's offering upon God's holy altars.

When the day began to fade we took a reluctant leave of that garden of the mountains, the associations of which afford a bright gleam of sunshine to a grateful memory, making our way back to camp. Night came on and darkness clothed all the valleys, while twilight lingered for a time before retiring from the mountains. The moon arose above the solemn grandeur of the landscape and drew deep, dark, weird shadow pictures of summits resting against the slopes of other summits, or hanging over the intervening valleys, constituting a panorama unequalled by the hand of art.

Viewing the mountains by moonlight affords a most fascinating pleasure; and no tourists should allow themselves to miss an excursion when

Fair Luna sheds its softest beams O'er mountain height, and vale and streams.

Fall River Canyon, laying between Cascade and Estes Parks, affords one of the most delightful places in the mountains for a drive during the silent evening hours. Its scenery, always delightful, is then doubly compensating.



CHAPTER XVII.

Our Camp Ground—Song Current of the Big Thompson—Its Strains blend with the Soughs of the Mountain Pines—Lawn Decorations—Its grassy Carpet enameled with Flowers—Hemmed in by Mountains—Cottages in the Foreground—Camps and Campers—Camp Furniture—Much of it a Provision of Nature—Man's Necessities, when compared with his Desires—How we spent our Time, while in Camp—Piscatorial Amusements—Buffalo Gnats—They follow in the Wake of our retreating Footsteps—Not all Places infested by them—Sports of the Chase—A serious Warning to expectant Nimrods—Scenes from real Life—Conveyance tendered us—Mails—Reading Matter.

Oh, swift winged time, our burdens bear afar; And, with our pleasures, let thy flight be stayed.

On a beautiful eminence of ground in Willow Park, an arm of Estes Park, on the west side, at an altitude of about eight thousand feet, our party pitched their tents, where we remained just one month. At the foot of the hill the Big Thompson swept by, its song current blending its strains with the soughs of the pines, as they came echoing down from the heights around us. Our uncultivated lawn was picturesquely decorated with shade trees, of native growth, huge boulders, and elk horns. Cacti, wild everlasting, mountain 'lily, mountain daisy, and sage brush, embellished the rich carpet of buffalo grass spread out upon our grounds. On all sides,

save that by which the park is entered, were mountains, alternating with ravines, constituting a most romantic prospect. At the foot of the hill on the east was a group of cottages, ever suggestive of the pleasures of home life; and, promiscuously scattered, were the tents and canvas-covered wagons, dotting the camp grounds of transients. The former were often pitched at night and taken down in the morning, while their tenants moved on to visit other points of interest.

The place selected for our kitchen was furnished with boulders, promiscuously arranged, without seeming reference to the uses to which they were, in the events of time, to be appropriated. There was one about four feet high, against which our fire was built whenever there was cooking to be done. The particular side of the rock upon which the fire was kindled depended upon the direction of the wind at the time it was built.

Near this boulder was a tree, into which nails were driven, where our cooking utensils were hung. Close by was another boulder which answered the purpose of a kitchen table. Availing ourselves of these natural conveniences, together with the use of a trunk containing our canned goods, we prepared the food for our little camp.

Our dining room consisted of a small arbor of pine trees, on one side of which was stretched a tent fly. Our table was constructed after the fashion of a

kitchen table, supported by a frame-work of cross pieces. On either side was a bench measuring the entire length of the table, which not only served to furnish us with seats during our meals, but also at our camp fires.

The cabinet work was done by the gentlemen of our party, whose professional labors would, doubtless, have prohibited so fair a development of their mechanical skill but for the urgent demand of this, or a similar occasion, to exercise it.

Our side-board, washstand, ottomans, têtes, etc., were of solid mountain granite, hewn out by nature's artistic hand; though, from an occasional want of adaptability, we sometimes feared we had perverted their uses.

Our indoor life was limited to two tents, each occupied by four tenants. Living in this limited capacity but for a short time only, taught us how few were man's real necessities when compared with his desires.

"How was your time spent while in camp?" is a question often asked; so I will anticipate and answer it. We had our hours of restful leisure, our hours for recreation, our hours for reading, and our hours for social enjoyment. We had also our days for excursions.

The principal pleasure of a purely recreative character in which all could participate was that of trout fishing. We had ample opportunity to indulge in

this sport, though one circumstance made it objectionable.

No sooner was our descent made to the stream than we were attacked by an innumerable and irresistible army of buffalo gnats, that were *en bivouac* upon a bog which lay between the two arms that united below, forming the main body of the river.

These gnats are about twice as large as a mosquito. They have shorter limbs and more murderous bills, the latter of which they dip deep into the flesh of their prey. They draw blood without pain to their victim, and never give warning of their approach. The wound they produce is of a dark purple color, deeply underlying the skin, and is of a very poisonous nature, bleeding profusely at first, and afterwards swelling, and itching with painful intensity. I have seen the gentlemen of our party return to camp from one of their piscatorial excursions, their visages so covered with patches of blood as to elicit the sympathy of any (unhardened) observer. A few hours later their faces would become so swollen as to almost close their eyes.

(I might with propriety add, that it was only a lack of perseverance on our part that saved us from the same dilemma.) These wounds are several days in healing; and when one is badly bitten the poison absorbed from them into the blood results in sickness of a somewhat serious character. These insects sometimes visited our camp in swarms, and were a source

of great annoyance. Not all locations were infested with these obnoxious pests; only such as were within the vicinity of damp or wet places. For the benefit of those who may hereafter follow in our footsteps and be similarly victimized, I here give a receipt, hoping thereby to save them the painful annoyances we experienced.

Take of glycerine, four fluid ounces; to which add the same amount of lavender or rosemary water; also twenty drops each of carbolic acid and tincture or camphor. This must be obtained before going into the mountains, as it cannot be gotten there. Rubbing the flesh with bacon rinds, or with coal oil, is sometimes resorted to as a means of defence against these insects. Which is worst, the bite or the preventive, I leave the victim to judge.

The sports of the chase, pour passer le temps, was another favorite amusement with the gentlemen, though unavoidable circumstances robbed this pleasure of much of its charm. There was comparatively little satisfaction to a chasseur in taking aim at an object where distance was so deceiving as to almost insure failure. A circumstance illustrating the experience of two gentlemen known to our party, and supposed to be taken from Scenes in Real Life, might be here appropriately and impressively rendered. I have made note of it as a serious warning to expectant Nimrods who may be tempted to exercise their skill under like circumstances.

ACT I.

SCENE I.

Willow Park. Two gentlemen start out (with a revolver concealed) for pleasure.

D. D. The sun has risen high, and pelts me with its hissing ray. Let's to the woods away; and umbrage find;

In forest cool; and rest, and peace of mind:

Happiness—where never dare,

To follow us, the shades of care.

M. D. In this we are agreed.

My thoughts you've spoken well. What need

Have we that unto pleasure tends?

Our way, by purling stream, that wends

Through channel deep and wide, shall lay.

My pouch for game! We'll not delay.

- D. D. I wonder what of game we here may chance to find! Perhaps a buzzard, grouse, a bear, a roe, or hind.
 - M. D. By thy sure hand (the weapon mine) an Acteon shall fall!

Pierced, in its fleetness, by a spent misshapen ball.

(Placing his hand upon his side pocket.) Exit to the forest.

ACT II.

SCENE I.

Enter two gentlemen. They espy a grouse sitting upon the limb of a pine tree.

M. D. Here, take this pistol; for, in valiant chase,

Thy fame and skill, by far, excellest mine.

D. D. If so 'tis best the trial I should make,

I will accept. (Our dinner may be here at stake.)

M. D. Take fatal aim. (Aside.)

From hence our larder shall be stored,

With viands fresh. No more, for sharpened appetites, shall we our bacon hoard.

D. D. (Takes aim; and, missing his mark, returns the weapon.) Take back. The weapon, or my eye, deceives.

Whichever it may be, I wish thee luck;

But, if it fail thee, I will try again.

M. D. (Taking the pistol.)

My skill I scarce need try

When thine dost fail.

Howe'er, my chance I'll take.

I once was skilled, and well could vie

With any Nimrod. (Draws.)

By this hand—(Taking aim, he fires, when he, too, misses the mark. He repeats the shot, but misses again.)

(Soliloquizing.) Not all who're tempted fall.

(Hands back the pistol.)

D. D. (Intent upon bringing down the bird, that still sits where it was first discovered.)

Hero of many scars, whose marks of glory others bear;

Thirsting, from habit, for fresh wound, where blood doth flow, I'd rather, far, the honor should be thine.

(Fires; but missing the first shot, fires again. Grouse looks askance.)

Take back thine instrument of death,

I charge thee; for I would not rob thee of the fame

We could not share.

(The pistol is again returned.)

M. D. Two times two rounds we each will fire;

If so, e'er that, the bird doth not expire.

(Fires two more shots. Grouse blinks one eye.)

D. D. (Shoots twice more. Grouse has a twinkle in each eye.)

M. D. (Fires, taking double aim, and then repeats the same again.

Grouse scratches his beak. Gentlemen retire for council.)

SCENE II.

Enter Gentlemen.

M. D. Rememberest thou a fable often told, At fireside and at school—printed in books of old?

How, once a boy had climbed an apple tree, And would not down, when bidden; "no, not he!" Kind words defied, and laughed at gentle mean; When *stones* were tried—why, you the moral glean.

D. D. Here are the missiles.

Let us have a round of three;

And know, in this case, what their virtue yet may be.

(They throw three rocks each at their prey. Grouse cackles once, which, being interpreted, reads: Harp on that strain again; and then a vociferous bird laugh rang out, echoed by all the neighboring mountains, which the attenuated atmosphere rendered distinctly audible to the sportsmen.)

M. D. In judging distance, though we err, would it be strange?

That bird may yet be many miles beyond our range.

(Vanquished sportsmen take leave; while the bird, accustomed to measuring distances in its native flights, still remained, satisfied with the security of its situation.)

To better facilitate our opportunities for viewing the prospects of the mountains, we were tendered the free use of a saddle horse, and a span of carriage horses, carriage, and every appurtenance to constitute a luxurious outfit for a drive. We were also kindly tendered conveyance to some of the most desirable parts of the park by private parties.

For reading matter we could depend upon whatever the mails might bring us three times a week; aside from which we availed ourselves of whatever books we had taken with us. But our leisure was devoted more to observation than to reading, as we were never without objects of interest to contemplate.

CHAPTER XVIII.

Social Customs—External Appearances often deceiving—Brother shakes Hands with Brother—Residents—Manner of travelling—A Party from the "Heart of the Mountains"—"Hale and hearty"—The Tourist may observe much in little Time—Persons in search of Rest—The Adventurer—The Explorer—The Poet—The Minstrel—The Artist—The Chemist—The Geologist—The Divine—The Statesman—History in Nature—Worth a Voyage around the World—What might have been—Hieroglyphs: or Language of the Creator.

We borrow from an ancient day Customs that else had passed away; Leaving the homes of studied art, To rest on nature's throbbing heart.

Social customs in camp life are purely oriental. The stranger pauses before your tent, and you go out to greet him. A friend is announced, and welcomed at the open door of your pavillion. The latter is always invited to eat bread with you; and, if near your meal time, the stranger too has claims upon your hospitality.

It is a place where one cannot judge of whom he meets by external appearances. In this respect camp life admits of unconventional freedom. I heard a celebrated divine say that he was compelled to go from camp in a suit of clothes that had been patched with a portion of his gum blanket; and, coming nearer home, I am compelled to acknowledge the ac-

quaintance of a lady who went from camp into Denver wearing shoes that had been mended with shoe tongues, the work having been done with her own hands.

The unostentatiousness of society, in dress as well as manners, as it comes together from almost every city and hamlet, made up principally of the best talent and most refined intellects, is one of its greatest triumphs. Its pharisaical robes are laid aside, while for a time brother clasps hands with brother with untrammelled freedom.

Residents are usually very socially inclined. They lose no time in making the acquaintance of those who camp near by, and seem ready to do all in their power to make the temporary stay of the stranger pleasant. They avail themselves of the talent of some speaker who may chance to be near by, and in turn open their homes for sacred worship and invite all within their reach to join with them in their devotions.

In their travels some tourists provide themselves with teams, or ponies, and travel (usually in parties) accompanied by a guide, resting only by night, until the intended trip is accomplished. Sometimes they visit places where the journey is only practicable on mule-back, when pack mules are used by the party to carry tents and provisions. A large party of gentlemen of fortune and leisure from Philadelphia, Pa., once passed our camp on their return from such a trip, after having been six weeks "in the heart of the mountains." They all looked well, seemed cheerful,

and claimed to be "hale and hearty." Their blackened and sunburned faces told plainly that as pioneer soldiers they had seen service, while their robust appearance was convincing evidence that they had braved dangers well. Travelling in this hurried way the tourist observes much in little time, none of which need be lost to memory if notes are carefully taken and preserved. Persons who go to the mountains for rest, usually seek some attractive seclusion, where they quietly remain until the active duties of life call them forth.

Among those with whom we met, as transients, were persons emaciated with care and close indoor confinement, in quest of health and recreation. The adventurer was also there, satiating himself with new incident, and in quest of new fields of enjoyment. The explorer was there, urging his way into the mountains beyond, in quest of some unvisited nook or some pinnacle which the footsteps of man had not pressed.

In these beautiful retreats the poet finds sentiment for verse and the minstrel finds joy for song. The artist finds the broadest range of the most sublime subjects for his canvas; and the student finds volumes for scientific research that are nowhere reproduced. The chemist there finds the crucible in which every mineral constituent has been dissolved. The geologist finds nature's cabinet filled with gems of unknown value and untold variety and number. The divine

finds inspiration in mountains and sermons in stones. The statesman finds the statutes of universal law written by the great Law-giver.

The world's history lies piled up mountains high, in which its formations and transformations are faithfully illustrated; where they can almost be analyzed and re-resolved.

In whatever direction one turns, or upon whatever one fixes his attention, his observation is repaid by the enjoyments of new interests and their consequent pleasures.

If it was worth a voyage across the Atlantic Ocean (before steamships were called into use) to see the Blue Ridge Mountains, it is worth a journey around the world to see the Rocky Mountains. Nature's pages are nowhere more picturesquely illustrated or more divinely beautiful. Had the footsteps of man first have been imprinted upon the Western continent, Mount Lincoln (the highest peak of the Rocky Mountain chain) might have been the Ararat for the ark to have rested upon after the Flood; and Pike's or Long's Peak might have been the Sinai around which the literal associations of divine history would have been interwoven in the chain of sacred events; while upon some other inspired height Christ's sermon would have been preached.

But God instead has here proclaimed himself by writing his name in the hieroglyphs of vast wildernesses, vast lakes, vast plains, vast valleys, and stu-

pendous mountains. Through these man looks from nature up to nature's God, when he is irresistibly drawn from the love of the world to the love of the Creator, through these expressions of divine power, divine beneficence, divine wisdom, and divine glory.



CHAPTER XIX.

Evening—Camp Fire—Convenient Abundance of Fuel—Light and Warmth—Social Pastimes the Order of the Hour—Beautiful Starlight—Blistering Sun Rays at Midday, and Frosts at Night—Provisions necessary to meet the two Extremes—Camp Supplies—They may be obtained West of the Plains—It is cheaper than to transport them there—California Fruits—Fresh Vegetables from native Gardens—Camper's Outfit—Luxuries of Camp Life—Rents—Fresh Fruits not subject to rapid Change—Meats dry without perceptible Decomposition in Midsummer—Pastry soon becomes dry and unfit for use—Costumes—Hints given from personal Experience—Romance of Camp Life—Its Inconveniences and its Compensations.

When night came on, and down the mountain sides The cold air crept, full seven feet high we built, Of pine, our crackling fires.

About four o'clock in the afternoon, the sun dropped out of sight behind the western mountains, and was lost to us for the night. The chill and frosty air, sweeping down from the snowy ranges, then reminded us that it was time to don our water-proofs and build our evening camp fires. We availed ourselves of the convenient abundance of dry pine logs and boughs that lay scattered near by, with which to supply our camp with fuel. A huge pile of this débris was stacked up and lighted each evening; and as the day dropped over us the star-gemmed curtain of night, our little group assembled around this our

camp fire (which afforded us both light and warmth) for the usual social pastimes of that hour.

In clear evenings the starry world sent forth their rays through the light, thin, dry column of air, with almost unobstructed splendor. The altitudes usually sought by tourists are visited nightly by frosts; and the sudden change of temperature, from the burning rays of the sun, as they shone down through the thin dry atmosphere of a midsummer day, to the chill of evening, renders it necessary that campers provide themselves with changes of winter clothing and an amount of bedding sufficient for winter nights. A mattress and pillows may be made by filling ticks with wild grass; or what is better for a bed is a good buffalo robe. An oil blanket or a piece of carpet may be spread upon the ground underneath, as a protection to bedding, and a carpet may also be used to embellish the tent. Camp supplies of all kinds may be obtained in Denver for about the same prices as east of the plains. Fruits of the dairy may be gotten from ranches in the mountains. Canned goods and vegetables of excellent quality may be purchased from markets west of the plains, where the stock of fruits is principally of those grown in California, and where vegetables are fresh from native gardens.

A small wood stove, or a bake kettle, is almost an indispensable convenience to the camp. For table use an oilcloth and tinware are usually called into requisition, while a nest of camp kettles is necessary for general use. Λ list of supplies, sufficient for a

party of four persons, for one month, in the line of edibles, is here appended, by special request, for the benefit of those who contemplate visiting the mountains. The variety can be changed to suit the relish of the consumer, selecting such food as would be most desirable for the parties during the winter months: 2 dozen cans (2 lb.) corn; 1 dozen cans beef; 1 dozen cans Boston baked beans; half dozen cans tomatoes; 1 dozen cans cove oysters; 2 cans baking powder; 1 dozen boxes sardines; 1 lb. tea; 6 lbs. (ground) coffee; 20 lbs. sugar; 1 lb. soda; 50 lbs. flour; 1 ham; 1 side breakfast bacon; 10 lbs. corn meal; 10 lbs. crackers; 1 box mixed cookies; 1 gallon coal oil; 1 quart of vinegar; 1 lantern lamp.

We obtained the best of butter at the ranch where we stopped, for thirty cents a pound; milk at twenty cents per gallon; ice cream (genuine) at fifty cents per quart; and buttermilk without money or price.

Cottages rent at from four to eight dollars per month, according to their size and quality; also the length of time occupied. When rented for a season, they are obtained for a less price than when a tenant remains but a few days or weeks. Tents are often rated as high as cottages, in addition to which is the expense of transportation. But the latter cannot always be made available, unless the parties desiring them arrange for them in advance.

The luxuries of camp life are a pony and saddle, a tent carpet, camp stools or chairs, and such articles of tent decorations as may be readily packed in a trunk. The luxuries derived from the available resources of the country are game, fish, and, in some places, berries. The latter grow upon slopes that have been burned over, and are obtained with great fatigue and inconvenience. Most of the streams are supplied with fish, which, when obtained in excess of the demand, may be put up in vinegar, or seasoned to the taste, and strung and hung in the sun to dry for future use. The latter experiment we tried successfully. Notwithstanding the heat of the sun, they were preserved without perceptible decomposition.

In that dry atmosphere canned fruits would remain open several days without apparent change, while it was necessary to bake fresh bread every day. A few minutes' exposure of light bread to the open air would render it so dry as to be unfit for use.

The costumes of ladies who intend to indulge in pedestrian exercises should be made to fall just above the instep, and should be accompanied with heavy gloves, heavy shoes, and a broad brim hat.

The foregoing hints to campers have not been given without knowing their value from personal experience. That the camp offers a practical illustration of romance in real life is true; but much of its enchantment is borrowed from the distance in which it is viewed. It is certainly novel to one unaccustomed to it; and, like the written romance of modern literature, it has its lights and its shadows, its pleasures and its inconveniences, its demands and its sacrifices, for which it offers its compensations.

CHAPTER XX.

The Mountain Tramp—A prominent Feature of our Camp Ground
—Ground Squirrels—A Colony—Subterranean Town—Communication with the World above—Investigating the Town—The Result—Pastimes of these Rodents—They are easily domesticated—They served us as Scavengers—We were obliged to defend ourselves against their ravages—They burglarize our Tents—Our Juveniles trap them—Other nocturnal Guests—Canines investigate our Larder—Our Supplies begin to disappear—The Gentlemen assume the rôle of Detectives—They make a Discovery—Stolen Articles identified—Offenders put under surveil-lance—They prove their own Guilt—Culprits go unpunished—Their Instinct (?) admired—It is so near akin to human Reason—Our loss—Weighed in a Balance with our Necessities—Wild Animals—The success of the chase still a financial consideration.

The mountain tramps travel on fours; And take without "Sir, with your leave?" They come by stealth, where no barred doors Forbid them enter.

One of the prominent features of our camp ground was its great number of subterannean tenants. A colony of ground squirrels had previously taken possession of the premises, and carefully laid out and built their town within its precincts. The ground was literally perforated by them, where they had opened communication with the inhabitants of the world above. We examined their retreats as best we could with no implements for removing the earth that

covered them, and found that several entrances from above ground communicated with each street. We also ascertained that their streets were not always level, but seemed to partake of the general features of the land above, along their line. This we ascertained by pouring water into some of the open gateways that led to their thoroughfares; and observed that, when this innovation was made upon the higher portions of ground, the water took its course down hill with about the same precipitation that it would have done from the surface; while water thus introduced where the surface was level marked little or no inclination. The benefit of these frequent apertures is, perhaps, to insure safety when pursued, or it may be either to afford light or serve as a convenience.

These amusing little pests could be seen at all hours of the day engaged in their own peculiar pastimes, as they unhesitatingly asserted their right to recreate themselves upon our (?) territory ad libitum. By watching them carefully we could readily imagine them in turn playing "hide and go seek," and "chase each other round the corner." They seemed to understand each other intelligibly in all their little games of mirth; which, to us, was a study containing many little problems that doubtless would puzzle the wisest heads to solve.

They soon became so tame as to climb upon the benches by the dining table, while the edibles were being cleared away after meals; when they would straighten themselves up to examine the contents of

what remained, as though in quest of their morsel of food from our board. They served us as scavengers; keeping our kitchen and dining arbor free from crumbs, and the grounds from the refuse, which they either ate or carried to their homes under ground. We were obliged to place the contents of our larder where it would be inaccessible to them, to prevent them from consuming our supplies.

They crept under our tents at night, paying their nocturnal visits while we slept, when they tore up papers and feasted upon any accessible luxury. They plundered our wardrobe, carrying off the smaller articles of apparel. I have watched the antics of these betwitching little pests by the hour, scarcely less amused than were the children, whose diversions while in camp depended much upon the novelty of the strange companionship of these frisky little rodents.

Our juveniles trapped them, divesting them of their furs, which they brought home as trophies of their skill as trappers, and also as an addition to their cabinet of natural curiosities.

Having referred to one class of nocturnal guests, I will introduce another class, belonging to the canines. There were two large dogs belonging to the proprietor of the ranch upon which we had stored all of our immediate worldly possessions. These dogs, true to their instinct, scented bacon, and evidently watched their opportunity to burglarize our tents, during the dark hours of the night, when we all slept, as the sequel will show.

One morning we went, as usual, to procure our breakfast bacon for the morning meal, when we ascertained that it had all very mysteriously disappeared. Our suspicions could rest upon no one of the *genus homo*, as campers were accustomed to leaving their valuables in unlocked trunks in open tents whenever they went out, and no instance of theft had been known to occur.

Suspicion was therefore fixed upon the two dogs, as they had, at different times, been seen prowling about the tent at night. The gentlemen at once assumed the role of detectives, and went to work to unravel the mystery. They followed the culprits' trail, and made the discovery of one side of bacon, which they identified by recognition of the brand. The offenders were then put under surveillance; and, two or three days later, they were seen to exhume another side of the same material, bearing the same brand, which had been carefully hidden away to provide against coming necessities. The thieves, though detected, remained unpunished; and as we have since been heard to relate the incident, we have, in turn, almost invariably met with the response, "We can almost credit them with human reason," while we could witness an unsuppressed expression of admiration.

Our loss may seem trifling to many; but when weighed in the balance with our necessities, to us it was onerous. Let those who are strangers to our experience imagine themselves many miles from any

market, without conveyance, with their supplies cut off, and they will appreciate our situation.

We are often asked if we had no fear of wild animals. Having been told that they seldom entered the parks that were settled, we had no reason to fear them. On one occasion, however, the gentlemen encountered a deer that had strayed from some neighboring forest, which was permitted to escape unharmed. I think it was the only wild animal seen in close proximity to our camp. Still, their retreats are not so far away that hunting does not yet constitute a pursuit of financial consideration to the inhabitants of these parks.



CHAPTER XXI.

Cloudscapes of the Mountains—The Divining Prophet—Chromatie Rays-Cloudland and real Land among the Clouds-How the Height of Clouds may be approximated—Instantaneous formation of a Cloud—How produced—Three Conditions necessary—A Theory woven to meet the Emergency—How these Conditions may be produced—The Rocky Mountain Range a natural complicated Battery—It contains natural galvanic Piles -Different eauses at work to produce Electricity-Note-Chemical Agents-Oxygen and Hydrogen Gases constantly elaborated—The great Forces of Nature at work to produce this Result—The Sea beneath which we live—Nature places its Agents where it has use for them—One of the principal uses of this great natural Battery-Poetry of the Skies-The Universe a Poem of creative Work—Man in harmony with Nature—Physical Conditions with which one is surrounded influence Character.

On all we look, whate'er of joy,
Some power within lurks to destroy;
Some voice that's hushed, were it to speak,
Would say, destruction here I seek.
Thunder is hushed in drop of dew,
The lightning's flash there hid from view;
The strongest forces atoms hold
Latent remain, their strength untold.

The cloudscapes of the mountains are picturesquely beautiful; and, whether dyed in the purple tints of the morning, or dipped in the sea of carmine and gold with which the sunset floods the west at evening, they hold captive the admiration of the observer, and render one oblivious to other charms around. The study

of this attractive page in the illustrated volume of nature constituted a pleasure which, above all others, tempted us to neglect the active pursuits of daily life, and to bear unwarrantable exposures in all types of weather.

But why should the cloudscapes there differ so much from those elsewhere? Local causes. The broken surface of the country interferes with the uniform temperature and pressure of the atmosphere; and this result becomes a cause, in turn, for influencing the capacity of the air for retaining moisture; and this capacity, together with the amount of vapor to be absorbed, are the divining prophets which foretell the drouth or the storm.

The chromatic rays of the sun are rendered more or less perfect according to the quality or perfection of the medium which decomposes light, together with the conditions of atmosphere to absorb certain rays of color and to transmit others. Hence the peculiar coloring and degree of brightness of the cloudscapes is measurably due to location.

The mingling and commingling of the cloudscapes afford other peculiar features which enhance vistas, while they delight the eye; the principal one of which is the happy effect of intermingled lands and skies. Lying along the base or sides, and many feet below the summits of mountain ranges, definitely outlined and beautifully illuminated, the strata may often be seen; where its height may be approximated from its height above the base of the moun-

tains against which it rests; or looking out through a deep canyon or gorge, upon the farewell scene of day, it may be traced, holding its torch aflame along the pathway of night. The highest cumulus sometimes climb above the mountain ranges, and at other times form a gorgeous hanging between the intervening distances.

It was during a clear, bright afternoon, while sitting under the shade of a boulder near by our tent, I witnessed the singular phenomenon of the instantaneous formation of a cloud. To account for this strange, and, to us, new revelation of nature, afforded a new theme of study for our leisure hours; the result of which is here given:

To produce a cloud instantaneously, three conditions are necessary, viz., the previous existence of oxygen gas, of hydrogen gas, and the circumstances to produce or excite an electric current to unite them. The next question that forcibly impressed me was, From what local resources are these essential causes derived, and upon what are they dependent?

The mountains in themselves are one of nature's exhaustless and most complicated batteries. They contain natural galvanic piles, and afford unquestionable proof of their continuous workings. The disintegration of rocks, by chemical action, is there one of the most prolific sources of electricity. Another, perhaps equally productive, is the unequal distribution of heat among the metals, or the difference of temperature of the metallic rocks there im-

bedded. Electricity may be generated without the contact of dissimilar metals [Faraday]. In the latter case it may be accounted for doubtless by supposing that the disturbing element acts upon dissimilar particles in the same body, placing them in such relationships as to produce this result.

Natural galvanic batteries, the currents of which are so active in producing chemical changes, may be discovered whenever zinc, one of the baser metals, is found in the same lode with silver or copper, associated with the earth or with some of the native rocks.*

*I have formed test batteries by using a silver coin with plates of zinc, and intermediate layers of damp sand; completing the circuit by connecting the poles with my thumb and index finger. I have also formed them, in the same manner, substituting a copper coin for the silver one. I sensed a difference in the quality of these currents, the one producing an aching pain, and the other an acute pain in the sensation of the hand. Thinking that in this I might be deceived by some freak of the imagination, I caused two unlettered persons to form the connection of the poles of these batteries in the same way, without their knowledge of what they were, or of the effects they were intended to produce, both of whom corroborated the foregoing results.

These experiments led to the belief—1st. That chemical change is the natural result of chemical action. 2d. That electricity is a fluid always generated by the chemical action of component particles of matter common to all bodies. 3d. That the electricity thus generated may at the same time be set free through the agency of proper conductors. 4th. That any excitation that tends to stimulate or increase this action increases also the amount of the fluid generated, thereby intensifying its effects by conductility; or, otherwise, leaving it to be held latent by the body in which it is generated. 5th. That this quality measurably de-

The galvanic battery is also an instrument of power in producing chemical decomposition; and, as the two gases which unite to form water are by it distributed almost or quite throughout the economy of nature, they may by this process be disengaged from almost every tangible substance, both organic and inorganic. Besides, other forces are there at work to produce these results. An example illustrating the quiet way in which these chemical agents are performing their mission may be cited by referring to the vast acreage there covered with crystals of soda, which, through the agency of water, give off hydrogen gas, and in turn give off oxygen gas through the action of sun heat.

The local advantages for producing the results, which an attempt has here been made to prove, over those of other locations, lie chiefly in the resources of the vast laboratories which lie piled up mountains high, where every agent is active and every chemical is called into use. The conclusion of the foregoing remarks proves that local causes there exist to produce the above-named results. A careful study of the nature and formation of clouds unravels the mysteries of the phenomena they exhibit, and offers an explanation for the otherwise wonderful and seemingly in-

pends upon the nature and quality of the substance by which it is produced, and the quantity upon the capacity of the same; it being subject to the same general laws which control the grosser forms of matter.

comprehensible problems presented by them to the eye and the reason of man. It explains their instantaneous formation upon a spotless sky through the action of electricity, or their slower formation by the process of evaporation. It separates their changeable woof of color into rays, and resolves their vapor into prisms, by which light is made subservient to their adornings, and heat the vehicle to draw them upward to their homes in the sky. That the atmosphere is a sea of air, is no poetic illusion; for water, in its subtle form, denizened with microscopic tenants, pervades it everywhere, having its uses as well as its charms.

Situated far inland, away from any extensive water surface, where the vast plains have drunk up the waters which the wind chariots have borne from the Gulf of Mexico on the south, and from the Atlantic Ocean and the great lake chain on the east, one of the principal uses of the extensive natural battery of the mountains is, doubtless, to manufacture moisture for the support of both animal and vegetable life; to make fertile the low lands of that otherwise sterile mineral region, and give salubrity to its climate.

We may, at least, confidently suppose that nature places her agents where she has use for them, and judges their mission by their works.

In studying the poetry of the skies, where every line of cloud is a part of the great universal hymnal of nature, the intellect arises on emotional wing, to greet the revelations of the realms where human footsteps never fall, and to grasp the higher conceptions of poesy. It was under the inspiring influence of the surrounding companionship of inanimate nature, when the deep soul senses thrilled as though swept by an unseen hand, that Professor Tice wrote his memorable "Farewell to the Rocky Mountains;" and others whose souls have been sweetly attuned to song have sung their rapt measures, perhaps in silence, to the world, in boulder shades, beneath mountain skies.

While yet the mountains have their reign, and the thunders proclaim the lightning's flash around their lofty pinnacles, and while the leaping torrents spring from the clouds that encircle them, or the silvery threads of nature are let down from heaven to bind them to the valleys, or the riven earth almost opens up to the gaze of man the Plutonian regions where these homogeneous and heterogeneous masses of igneous rocks were molten and wrenched from the jaws of earth, so long will these grand old ranges, with their broken and rugged slopes, their precipitous sides, and their arches and hangings of color, enlarge and ennoble the heart of him whose aspirations reach high enough to gather the inspiration they offer.

It was during an hour spent in nature's solitude that the humble author of this little work embarked in the enterprise of inditing the following apostrophe, which, though not intended for a book, is given the reader by special request.

APOSTROPHE TO THE ROCKY MOUNTAINS.

I.

Grand pinnacles, that kiss the skies! Grand mountains, that o'er mountains rise! Deep garners, rich with fruits of gold! Bold granite forms, of every mould! Vast high expanse, that found not space, In nature's deep abiding place! Green valleys, deep, dark mountain gorge, Where Jupiter his bolts doth forge! Bright flowering parks, whose fertile mead, Await the fructifying seed! Swift winds that bear from cooling mount, To thirsting plains, the winged fount! Broad streams, that belt the mountain sides! Sheen lakes, so far above the tides! Brave torrents, that, with matchless spell, From glazier heights, leap to the dell! Dark cataracts, that rage, and foam, In caverns deep, then make your moan; Wild storms, let fall by weary wind, 'Neath where the mountain feet hath climbed! Thine unseen power, th' emotions sway, With artless art, the heart strings play; Awaken chords, before unstrung; Awaken strains, before unsung.

II.

There seems a voice, I cannot hear,
Though far away; yet, to me, near!
So vague, in space—so undefined—
Yet, clearly inwrought, to the mind—
Of one, that knows all science, deep,
And nature's secrets cannot keep.

Its legions date, e'er song first rang, When morning stars together sang. Creation's art it long hath known; Of universe, measured each zone. We hearken to its tales of old-Of alchemists, in cavern fold; Almost above the sea of air, They've reared elysiums wondrous fair. They e'en have wrought since time began, And reared the thrones of Jove and Pan. It tells us of races of men, Whom hist'ry hath forgot to pen. It tells of ehivalry and war; Back, in Time's hist'ry, page afar; Of heroes, and of gods, unknown, And eonquerors perished with their throne; Of peace, when virtue sat in state, And ruled the world: fearless of hate. (Then was the Eden of our race; We here give neither time nor place.)

III.

We shudder, for an era's fall!
O, God! Where are these races, all?
No tongue was left to tell the tale;
No soul was left there, to bewail;
When continent, from strand to strand,
Was shaken by Almighty hand.
When earth was rent, from pole to pole,
And change was writ, on heaven's scroll.

IV.

We turn a leaf in Time's fair book, And find new seenes, where'er we look. New lands we tread; new life appears; New prophecies, and new born seers.

From centres new, new races start; And cities rise, with peopled mart; Where nation once had rise, and fall; A race, lies 'neath its funeral pall. We see the works of ancient art, Where human hands, performed their part; Who, since the present era's dawn, Have run their course; the race is gone. But crumbling ruins now remain, Of heroes gone, and conquerors slain; The only index to a race; That, like us, here, have had a place. Time's footsteps tell not whence they came; And record hath not given name. 'Tis only left the present age, To snatch this from oblivion's page.

V.

From all, that ages past, have wrought,
Oblivion's register is fraught;
And, in its realms, shall yet be found,
Lost arts, lost myths, lost truths abound;
The past, the future may explore,
Find the lost key, to hidden lore;
And science, with gigantic pen,
Unfold its mysteries to men;
Unlock the vaults, her treasures store,
And, our race lost, give back once more.

VI.

Since the last era's fatal day,
Mountains have 'ris'n and passed away
E'en sceneried curtains, on earth's stage,
Have rise and fall, with era's age.
Along the range of Rocky slopes,
Destruction, masked, in silence, gropes;

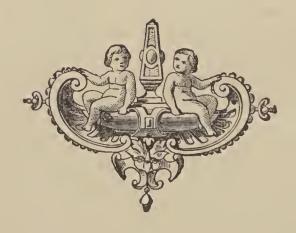
Touches with blight the tow'ring wall,
And granite avalanches fall.
Before her stand the mountains gray;
Some have grown old, and passed away,
And monumental columns stand,
Where mountains were the hourglass sand.

VII.

Pictured on page, in art sublime, The ripple marks the water's line; Where erosion, with skilful might, Hath given shape to every height; Worn gulches deep, and canyons wide, And shown where once swept ocean tide, And where the sea had fixed its bound. And continent might then be found; Hath taught us of the wind and storm, Whose etchings trace our evening's morn; Told where clouds fell to make the rill, That impress left, on mount and hill: Where streamlet, from its winding course, Was gathered into river's force; Or, leaping free of fett'ring strand, It bore away some mark of land: And left, inscribed, upon the shore, A line, addressed to future lore— Written on lithographic page And left on records of the age.

VIII.

Here streams have wearied of their bed; Here waters from their course have fled; Here trees and shrubs, in beauty grow, Where song hath ceased, of water's flow; Here flowers now bloom upon the grave, Of all that lived, beneath their wave; And change upon the shore is made
Where ocean bounds could not be stayed.
Here forests lie, in graveyard, deep
Buried, beneath the mountain steep.
Here winds have changed their current course,
Been shorn of strength, or, gathered force;
Have continent changed, and built new lands,
And driven seas to new made strands.
Creation's works, of other days,
Are hymned, in God's eternal lays.



CHAPTER XXII.

Mountain Storms—Troops of Clouds—They begin Hostilities—
Threatening Danger—A Sea of Cloud—It is charged with Electric Fire—Jupiter enthroned—Fountains of the Sky—Continuous Coruscation—Battle of the Elements—Conquering Battalions—Their victorious March—Banner of the Battle-field—Emotions of that Hour—Campers suffer Loss—Hintson selecting a Camp Ground—Rainy Season—Indian Summer—April in August—Clothing quickly dries—Winds in the Parks changeable—Every variety of Weather sometimes observant at once—Storm and Calm—Freaks of the Climate—Orography of the Mountains.

Ye winds that roam o'er land and main, And lash to waves the sea of air, Upon whose tides the foam cloud rides, Hailing the open harbors fair, We greet the kingdom of thy reign.

It was my ambition to experience one of those wild mountain storms which so many have attempted, and all failed to describe. About four o'clock one afternoon we saw troops of cloud, furious in their impetuous march, approaching. They soon began hostilities with the peaceful elements around us. We hastened to our tents, which were near by, but so suddenly had the storm king descended from his throne, commanding the invincible force, that was felling with continuous stroke the forests around us, that we had scarcely time to avail ourselves of their shelter

when they began swaying to and fro, while the fierce wind threatened to uplift or demolish them.

We seemed suddenly plunged in a sea of cloud, charged with electric fire. We could easily imagine Jupiter in his reign sitting enthroned upon some lofty summit near by, hurling his thunderbolts with such fury as to awe mortals and render them almost powerless under his supremacy. The rain fell as though the fountains of the sky had been suddenly opened, and their contents were about to deluge the earth. The forests moaned as though stricken with the grief of sudden calamity. The dark clouds that hung over us on all sides were illuminated by a continuous coruscation of fire, while the lightnings played every-Reverberations of thunder were where around us. lost only in renewed peals, and our canvas perceptibly quaked under the influence of the waves of sound, as it struggled against the vehemence of the storm.

The tempestuous elements strove together with unabated fury for the space of one hour, when suddenly the conflict ceased, and the conquering battalions of the skies, with their unspent forces of war, retreated in broken lines of victorious march, bearing away the last battery from the embrasured battlements of the heavens. Scarcely were the repeating echoes of their marshal notes lost in distance, ere the bright and radiant bow of promise was hung in the glory of its richest splendor, as a banner over the field of battle. The emotions of that hour I may never again experience—emotions that I shall ever fail to find language

to describe. The deeper strung chords of my nature sent forth their first notes of song; while over the whole scale of my being the hand of minstrelsy swept, and the inwrought melody was one that may never be reproduced.

We suffered no loss, and comparatively little inconvenience, from the incursion of the storm, as our location afforded good surface drainage, in addition to which drains had been cut around and from our tents, having ample capacity for the emergency. While our tents remained dry, those of some of our neighboring campers were deluged. One lady, in referring to the event, said: "Large hail stones fell upon and around our tents; and as the storm increased the water suddenly rushed in upon us, from under the canvas, and we had scarcely time to gather up anything before it had spread over the tent floor, and was pouring through in a rapid current, drenching beds and clothing, and damaging provisions."

We learned in this our first experience in a mountain storm, that tents should not be pitched too near a mountain side, or too close by a stream where the embankments are low and flat; but that the location should always be selected in consideration of both winds and storms, and ample drainage provided.

The rainy season in that locality usually commences about the middle of August, and is considered a warning to campers to leave. It continues several weeks, after which comes the welcome long Indian summer. During the earlier part of August we found the

weather exceedingly fickle, not unlike April weather in the valleys, being subject to sudden and frequent showers. But one thing favored those who happened to be out in them; and that was, their clothing dried so rapidly that it was seldom changed on account of being wet. The winds in the parks are necessarily changeable, being intercepted in their general course, and reflected by their opposing barriers. There are times when every variety of weather presents itself to the eye of the spectator at the same moment. I have seen on one hand mountains lying under a cloud of falling snow; others, with their mantles of crystal glittering in the clear sunlight; a rainstorm dimming the peaks and sides of other heights, a shadow of cloud, bearing the footsteps of storm elsewhere, resting over summit and gorge; in another direction, the descending storms were laved in sunbeams, while the winds lifted one vehicle of cloud here and rifted another there; on one mountain the wind was spending its fury among the broken pines, while upon another there was seeming calm. I have watched the strife of the elements, when the message-bearer of the clouds flashed its dispatches from one portion of the heavens to another, and all save its terrific voice was awed to silence. I have seen the armies of the skies go forth to battle, and heard the angry peals of their artillery in the far-off din of war, when no danger threatened the undisturbed quiet of our own seclusion. Such are some of the freaks of the climate of the mountains, which present a strange contrast with the

comparatively unchangeable bearing of nature, in her stern character, as otherwise manifested there, in all its phases.

To those who love to sit down and view her face to face, and to watch her in all her changing expressions—her smile in the sunshine, her frown in the cloud, and her passion or rage in the storm—the mountains afford rare opportuinities.

The orography of the Rocky Mountains is a study for the most scientific research. In detail it would fill large volumes, while their history and legends would constitute other extensive works, neither of which is here intended to receive but a passing consideration in its respective association with the incidents of a temporary visit to some of their resorts. Since writing the above, a new work has come before the public, "The Great Divide," and notwithstanding it has not been my good fortune yet to have seen it, judging from the interest the subject presents, and what I have been able to learn of the rare ability of the author, I predict the work to be one of unusual merit.



CHAPTER XXIII.

Adieu—Nearly the last to leave—Rural Music—Psalms of the Mountains—Birthright, as handed down by our first Parents—Our personal Effects—Disappointment—The Team non est—Services volunteered to search for the Equines—Difficulties attending the Search—Discovery of the lost Animals—Taking Leave—On our Way—En Bivouac—Fires in the Mountains—Their terrible March of Destruction—Danger and Death—Clouds from the Vapor of the Fires—Sunset—How these fires originate—The law prescribes punishment.

ADIEU TO THE MOUNTAINS.

I.

Adieu,

Each glittering peak, each purling brook, Each leafy tree, each quiet nook; Each mellow light, each softened shade, That impress on my heart hath made. I've learned to count each treasure dear, Of all the wealth thou holdest here.

II.

Companions of the trees I've made,
Of boulders, sitting 'neath their shade;
Traced the dark storm-cloud, tipped with light,
That rests, where eagle takes its flight;
And watched their shadows, pass away,
Which told that we, too, have our day.

III.

I've traced the giants, brave and bold, Upon the mountains, their stronghold; And animals, which none can tame, There domiciled, in quiet hame; All sitting mute, silent and cold, Whose granite forms, all may behold.

IV.

I've seen, far up the mountain height, Almost beyond the ken of sight, The open doors to caverns wide, Where human footsteps eannot bide, Beyond whose thresholds naught was known, Perehanee, of beasts of prey the home.

v.

Caves, too, I've seen, where climbed the vine, And o'er their eeilings, high did twine; And thence, adown their walls depend, With grace, that charms to beauty lend; Around whose entrance, bramble grew, And half concealed the caverned view:

VI.

And grottoes, of which poets dream;
Where gods woo'd goddesses, I ween;
And where, from tow'ring eliff, was thrown
The rocks that are at once a throne
Where, in recesses, dark, and deep,
Immortal records, gods did keep.

VII

Of such, the ancients once did write, And painted them in glamour light— Great men as gods, and gods great men, Created by idyllic pen; And crowned, with strange ideal thought, Which Graces into image wrought.

VIII.

I've seen where rocky clefts were made So dark and deep, there slept the shade; And never, from the home of light, Came messenger, to wake the night. Weird figures, from the spectral scene, Broke only an ideal dream.

* * * * * *

IX.

These golden gates will time unbar; These courts be peopled from afar; In these vast temples, anthems ring, Till tuneful voice shall cease to sing; And every note, to measured lays, Blend in one universal praise.

X.

These wastes, that bloom 'neath heaven's smile, Shall wealth, in golden harvests, pile; These forests, where the wild beasts play, And lion in his lair doth lay, Are, to the future, promised land; Near which the waiting Abrahams stand.

XI.

Stay us not here, O fond delights!
To witness autumn's coming blights;
We could not bear the swift decay,
Destined to take our loves away.
Cold winds, and frosts, thy blight and death
Forbear. Touch not with thy chill breath,
The verdure ripe, or blushing bloom,
Nor pluck the foliage, for their tomb.

XII.

Adieu,

To all I see. The brightest scenes
Will fade, as distance intervenes.
E'en time with its effacing hand,
Will wipe out views in this fair land;
While image fair, on mem'ry's page,
Now wrought, will cheer our coming age.

XIII.

Adieu,

Each welcome voice, with accents sweet;
To all I have been won't to meet;
To lips, by kindest words endeared;
And loving hearts, that mine have cheered;
All, me have brought sure recompense,
And blessings, I bear with me hence.

It was nearing our time to leave the mountains. We had witnessed the departure of many tourists whose presence had contributed to the pleasure of our stay; and though nearly the last to leave, our sojourn among the "Alps of America" was about to terminate. The strains of the mountain blue jay and the magpie that greeted us, as these daily visitors paused and perched in some inviting tree upon our camp ground, to rest in their weary flight, would soon be sung where no delighted ear would listen; and the early discordant concert of mountain grouse would then cease to call us from our morning slumbers. The lowing herd that nightly made their way to the ranch would then cease to remind us of the pastoral scenes of our far-off childhood, country home. The

grand cathedral chant of the unwritten psalms with which the mountains broke forth into rejoicing would soon cease to greet us with its melody. The peaceful solitudes we had enjoyed in nature's tranquil hours would miss our coming footsteps. The freedom of camp life would soon be exchanged for the conventionalities of social intercourse. We were about to give up the birthright bequeathed to us by our first parents—viz., the undisputed right to select our home in all the open fields around us, or to fix our claims at discretion. But we freely yielded these rights to those who might come after us, assured that some heir to their vast estate would follow in our wake; for

Since Adam found his paradise In field, and open air, Posterity, in every clime, Have sought their Eden there.

On the 24th of August, just one month from the day our tents were pitched, they were taken down and folded, and our personal effects packed. At an early hour we were prepared to retrace our journey. But, in accordance with the uncertainty of all human events, we were destined to disappointment. The team that had been engaged to convey us to Denver had not been picketed the night previous to our start; and having been left to roam at large, they were not to be found in the morning. The hills and the large number of mammoth boulders that lay scattered everywhere around, together with groves of timber, and

the near mountains and canyons, rendered the search extremely difficult.

The whole available force of the ranch and the neighboring camps entered into volunteer service in search of the equines. The squad started off, describing as many points of compass as it contained members. The search continued until eleven o'clock A.M., when a loud whoop from one of the party signalled the discovery of the lost animals.

Twelve o'clock M. found us bidding adieu to the friends who had come together to take leave of us. Our landlady had previously served us with a sumptuous lunch, and her two sons had presented our party with botanical and mineral specimens collected in that vicinity, which we now hold in grateful memory of these and many other kindnesses, while the lord manor of the ranch prepared to accompany us.

At one o'clock r.m. we were on our way, slowly descending through park and gorge to the plains, over the same route we had previously taken and have already described. We reached the toll gate that night, where we went into camp. The younger members of our party, who had indulged in long walks during the afternoon, found themselves greatly exhausted (as indeed we all were), but rallied under the tonic effects of a hearty supper, for which we had an unusual relish.

The principal objects of interest to us during the afternoon had been the fires in the mountains. At different distances, and in different directions, we saw

five of these terrible conflagrations, sweeping onward in their unchecked march of destruction. Without the aid of a drenching storm, it is impossible to stay their course or contend successfully against them. This terrible enemy to both property and life was scaling the highest mountains, undaunted and unobstructed, its rage entirely uncontrolled. The flames, fed upon the tall pines, arose to great heights far above the loftiest summits, and leaped forward in large sheets with malicious fury, or rested upon a dark cloud of smoke against a background of sky. Sometimes these fires encircle the base of a mountain before arising to a great height; and persons above the tide of seething flame are suddenly aroused to a sense of danger, when it is found too late to escape the threatening calamity. Not many years ago an instance of this kind occurred, when the lives of several miners were sacrificed to the flames; and another, when pioneer homes, together with the families occupying them, were burned to ashes.

The air above and around us was dim with the haze of smoke, the vapor of which gradually arose to the height of several hundred feet, and encircled the horizon with a beautiful strata of cloud; which, a few hours later, distributed itself over the whole visible heavens.

As the sun went down to the seeming repose of night, each ray of light seemed shivered into prismatic color and spent upon the cloudscape thus formed, imparting to it a touch of indescribable beauty.

How do these fires originate? Sometimes from fires carelessly left burning by campers; sometimes by the stump of a cigar being thoughtlessly thrown upon the crisp grass; sometimes from a stroke of lightning; and sometimes they are set for the purpose of clearing the ground to facilitate prospecting.

In the devastating wake of ruin thus wrought often the forest of an entire mountain side is left charred and standing, which the winds sweep down, and time by its chemical processes consumes.

We were told that the laws of the State fixed heavy fines upon those persons found guilty of starting one of these conflagrations. The damage thus done is reparable only by time. While there is already quite a heavy drain upon the timber for both mining and commercial pursuits, the demand is steadily increasing; and it becomes those who execute the law to be strict in its enforcement, where this native source of wealth demands protection.



CHAPTER XXIV.

Morning—We visit the aforementioned sick Child—Convalescent—Moving forward—Reaching Boulder—Pleasantly Entertained—Back to Home Life—We again pursue our Journey—Boulder River—Coal Mines—Onslaught upon Colorado Grass-hoppers—We capture a few Specimens—Lizards—Our last Dinner in the capacity of the Camp—Bill of Fare—A Stranger calls—We meet twenty-four Hours later, without being recognized—Another Tourist—Indifference with which People travel—Dryness of the Plains—A Dilemma—Reaching Denver—Supper—Rest—Most places of popular Resort now accessible by Rail—Other Facilities for travelling.

The east lay draperied in cloud, Where night, with stars, had pinned her shrowd; But when the eye of day looked down, The morning sky soon ceased to frown.

The brilliant light, proceeding from another camp, and the amount of cheer, rest, and comfort its scenes and surroundings foretold, attracted us to the place where, side by side with it, our fires were soon lighted for the night.

We obtained a good supply of fresh milk and buttermilk from the ranch, made our meal, and sought sleep, the elixir of rest.

Early and hurriedly we prepared for the journey of the second day on the following morning, which would terminate our way through the mountains. But before leaving camp we made a short call upon the child we had left so sick on our way into the park. We found her nearly recovered, and left her, with the prospects of a long and useful life before her.

The sun was about an hour high, when we found ourselves duly seated in our mountain vehicle, and again moving forward, thoughtfully taking leave of each mountain, canyon, park, gulch, and stream, which now hold so prominent a place in our memory.

About four o'clock P.M. we arrived at Boulder City, where our entire party gratefully accepted an invitation to spend the remainder of the day and the night at the residence of Mr. Charles Campbell. Our entertainment was one of rest, comfort, and pleasure. There, for the first time in nearly six weeks, we slept in a house, and enjoyed the privileges of home life. It was, to us, a leap forward from the primeval life of our ancestors into the nineteenth century; or from the days of Abraham and the patriarchs, and their tented encampments, to the architectural homes of the present day. We welcomed this change with a delight known only to those who, for a time, have exchanged the comforts and conveniences of pleasant homes for the romance of adventurous travel.

The following morning, after some delay, we started on our way over the plains to Denver. Crossing the Boulder River we stopped for a short time, and made a hasty visit to the coal mines. Resuming our route we found the rays of the sun, which

had then risen high, intensely, and almost intolerably, warm. Umbrellas were brought into use, but were found inconvenient, and soon abandoned, while to ride under the canvas of our wagon was extremely oppressive. Soon tiring of our crowded positions, several of our number alighted, accepting the only alternative, which was to walk.

We found the plains thickly tenanted with a moving legion of grasshoppers. Of these there were many species, most of which were of such enormous size as to render them very destructive. We availed ourselves of the opportunity to make a collection of these dreaded insects, by the invasion of whose armies settlers had been driven from their homes, and portions of our country devastated. To this collection was also added two or three species of lizards, most of which succeeded in making their escape from us soon afterwards.

About noon we reached a farm-house where an inn was kept. There we found a good well of water, and it was decided that we should take our dinner before going further. Our team was driven along close beside the fence. Between the fence and the wagon a canvas tent-fly was stretched, by which means a temporary pavillion was improvised. Under this we spread our cloth and edibles; and, grouping together in its grateful shade, we dined for the last time in the capacity of the camp. The occasion being a notable one, from the fact that it was the last, though the bill of fare was ordinary, it is here given:

Drinks.

Tea (steeped in a bottle in the sun).

Lemonade.

Buttermilk.

Soup.

Oyster.

Fish.

Speckled Trout.

Sardines.

Meats.

Breakfast Bacon.

Pickled Pork.

Vegetables.

Baked Beans.

Tomatoes.

Corn.

Relishes.

Alpine sauce.

Pickles.

Pastry.

Corn Bread.

Light Bread.

Biscuits.

Fruit.

Peaches.

Before we had finished the course presented for our repast, a gentleman of prepossessing appearance, both in dress and address, drove up, alighted near by, and after a short conversation with the gentleman accompanying us, in the guise of a driver, he advanced and introduced himself. Covered with dust, as all of us were, and dressed in clothing that had done service before (though appropriate for the occasion), we naturally observed the contrast with some embarrassment.

Feeling that an apology was due our guest, as well as ourselves, it was promptly made and accepted. After a brief interview our visitor took leave, not, however, until he had relieved us of further embarrassment by remarking that it was nearing time for him to start, as he had an engagement to meet; and before leaving he must complete the dress of the pedal extremities by way of introducing them to a pair of socks.

We met him again the next day at church, but the transformation we had undergone by the use of soap, water, brushes, and changes of clothing, rendered us unrecognizable. When services were over, one of the party, which he had met the day previous, advanced and addressed him. With evident surprise he remarked: "You, sir, have the advantage of me, as I do not remember ever to have seen you before." Four other members of our party were afterwards introduced to him, none of whom were recognized. Another tourist, an artist, who had accompanied us a few miles on our way over the plains, took leave of us just before entering the city, stating that he had left a suit of clothes there, which he must don, or his friends would not know him upon his arrival home. These incidents are mentioned to show with what freedom people travel through that sparsely settled country. The reason of this manifest indifference to personal appearance is the utter impossibility of preserving a condition of neatness. During the summer months the plains, where the rain seldom falls, and

little or no dew ever appears, are so dry as to render it impossible to travel in any capacity without being continually surrounded by a cloud of dust, and the most dainty travelling suit soon becomes distasteful. For this reason those who travel in private conveyances usually take trunks, containing ample changes of clothing, and leave them outside the city, where they can be accommodated to both bath and dressingroom on their return.

The evening sun hung in the western sky when we entered Denver. The élite of the city were out for their afternoon drives. We were again in a dilemma. The contrast between their equipage and ours was becoming painfully striking to us, and pleasurably emotional to them.

Our trunks had been left at our hotel, and the wardrobe we had taken with us was unavailable. Our wounded pride began to suffer. Still there was but one way to do, and that was to submit to circumstances.

We recalled an original maxim, by which we have previously endeavored to govern our immediate family circle, which reads: Dare be, or do, whatever God or circumstances require. Some of the party protested against riding through the city until the canvas cover of our vehicle had been drawn down, and the passengers concealed from the gaze of strangers; but the experiment proved a failure, the air thus confined being so warm as to be unbearable.

Upon our arrival, the joke we had unconsciously per-

petrated upon ourselves was enjoyed immensely, though our welcome was made a hearty one. Our genial landlord forgot none of the attentions due his guests, even under these trying circumstances.

We were not only dusty, but sunburned, hungry, and tired. After a thorough lotion, a due amount of dusting and brushing, accompanied by changes in our toilette, which was not accomplished without a great deal of unpacking, we repaired to the dining-room, where we did ample justice to a sumptuous supper.

Fruits were never more delicious, nor viands sweeter to the taste, than to us that night; nor did weary waiters ever find a company of travellers better prepared to appreciate attention than was ours upon that occasion.

Having portrayed the romance of a trip from Denver into the mountains, over the common thorough-fare or wagon road, by private conveyance, and also hinted at some of the inconveniences attending such a trip, it may not be amiss to state, for the benefit of those who are not fond of adventure, that trains now run within a few miles of the park (with a prospect of a railroad through it at no distant day), and most places now made available for resorts of pleasure are already accessible by rail. Where the roads fail in reaching those places, stages connect with trains in their regular trips. Private carriages may also be readily obtained at any of these points along the route, so that passengers need never necessarily be detained in their travels to any part of the Rocky Mountains.

CHAPTER XXV.

En route—Eagerness to discover a herd of Bison—Our Ambition partially rewarded—Difference between a wild and a tame Buffalo—Frequent discovery of Antelope—Cow Punchers—Cow Punchers' Saddles—Instrument used in driving Stock—Lonely Life of the Herdsmen—Shepherds—Shut out from the World of Men—Shepherds of Old—God selects one from their Number—His Eye still keepeth watch over them—Utes—Tragedy in Frontier Life—Government defends the Settlers—Utes considered friendly—Snow Sheds—Plains on Fire—Kansas—Its Wealth of Harvest in Store—Missouri—Her Storehouses filled—Hum of Industry and ring of Prosperity—The Lever by which the poor are raised to Power—Evening Benediction—Night—Rest with but little Sleep—Home again.

After a sojourn of a few days happily spent in Denver, the city of classic associations, and its vicinity, we prepared to take leave on our homeward journey. On a bright beautiful morning we boarded an eastern bound train, and soon found ourselves en route over the plains.

There was very little to engage our attention that we had not seen before. Our former eagerness to discover a herd of buffaloes was here in part rewarded by the sight of an immense bison at one of the railway stations. We were welcoming this partial and almost unexpected remuneration for the diligent search in which our eyes had tirelessly swept over the plains, when we were told that it had been obtained, when a calf, by its present owner.

Now the difference between a wild buffalo and a tame one may be slight, but we have to admit that, trivial as it may be, it had the power to dispel much of the pleasure that our discovery afforded.

Antelopes were numerous along the route, and the discovery of them became so frequent in its occurrence that the circumstance scarcely claimed a passing notice.

The herdsmen were still pursuing their monotonous vocation, their dark, tawny, sun-browned faces scarcely leaving a satisfactory trace to show the race to which they belonged. They sit in their saddles most of the time, always fearing to leave them when they sleep, lest they be trampled by their herd. These men bear the distinguishing title of "cow punchers," which was given them in consideration of the weapon which they make use of in separating and driving stock. It consists of a long pole, having a sharp metallic point in one end. I remember once to have seen several specimens of these instruments, which were being preserved in a museum, and pointed out as relics of the barbarism of the past, the owner of which seems to have been entirely ignorant of the fact that only a few hundred miles away they were still an article of commerce, and also that the ferociousness of these undomesticated herds sometimes requires more than gentle means to control.

The saddles used by these men differ from other saddles, and are arranged with special adaptation to the use for which they are intended. In crossing a

bridge over Platte River, in Denver, we saw no less than three advertisements erected upon that superstructure, instructing the travelling, and doubtless interested, public where cow punchers' saddles could be obtained cheap.

We could but pity the condition of the lone herdsmen, exposed as they are to both extremes of temperature and every variety of weather, and cut off from every social avenue of life. The uninhabited fields around them are comparatively unproductive of change, and there is scarcely aught but the coming and going of the seasons to fix the milestones along the pathway of life.

The shepherds, too, were lazily reposing by their charge amid the surrounding desolation. Not even the companionship of a boulder or a tree was to be obtained for many long, weary miles. The sacrifice demanded of this class of men can hardly be compensated for. Left with so little to engage the attention, it is not for us to wonder that the shepherds of old devoted themselves to the study of music and the heavenly bodies. Alone, and comparatively unknown to the world, was one whom God took from their ranks and made king over his chosen people, Israel, buffeting the storms and contending with the snows of adversity, doubtless gave him courage to baffle against his enemies, or moral strength to forbear with their unjust practices against him. Added to this, perhaps, the pastimes of his leisure hours had given him skill and dexterity in the use of the simple

weapons so successfully wielded against Goliath. Again, the Psalms could scarcely have contained so much real poetry had he not accustomed himself to the study of the world around him in the school of the open fields, and educated himself in the beautiful comparisons of spiritual with external things, which he therein gave to the world. His occupation in early life was evidently as much a Providence as was any portion of his history; and as the same eye that then watched over the plains of the East slumbereth not in the vigilance it is keeping over those of our own land, some humble child of God's tender care is, perhaps, there being fitted for his special purposes, and to add to the brightness of his glory.

The next objects we met that claimed our particular attention were a band of Utes. This tribe of Indians is characterized by being very dark, short, and thick-set. They are filthy and repulsive in appearance. Long as they have lingered upon the boundaries of civilization, they still cling to their habits of roving. Not content with their reservations, their home, if they may be said to have a home, is yet in the mountains; but they make frequent journeys to the plains, where they subsist upon such game as is there to be found.

Inseparably associated with this tribe are many tragedies of frontier life, which are still recited to strangers, as incidentally interwoven with the history of the mountains. Indeed, a generation has not passed since this band of outlaws was the terror of

every defenceless settler, emigrant, or traveller within their reach. They indiscriminately robbed and murdered every white man, woman, and child, until forbearance with them ceased to be a virtue, and restraint became a necessity, when the men in the white settlements, aided by troops of war, successfully conquered them.

They are now considered friendly and peaceably disposed; but it is their want of power to contend successfully against the white man, whom they, perhaps justly, regard as their natural enemy, that assures the settler of his safety; for such is the nature of the red man that no argument with him is persuasive save that dictated by war. Their undeveloped moral nature can not respond to moral suasion, and their untutored intellect can comprehend no power higher than that of brute force. The history of the two races is, in their relative attitudes to each other, continually repeating itself, and to recapitulate it is unnecessary. The tribe is now estimated to number about 6000 men, women, and children.

In many places along the road the track is protected from snow during storms and high winds in winter by snow sheds. These are simply board fences, some of which incline in an angle of about forty-five degrees, and are sustained or strengthened by scantling.

The plains were on fire in many places. As these fires, so far as we could observe, all seemed to have had their origin near the road, it was evident that

they had either been lighted by sparks from the locomotive or eigar stumps thrown from passing trains.

In due time we again found ourselves passing over the fertile meadows and productive fields of Kansas. The ripened harvest had been garnered, but the thick golden stubble unmistakably told the vast amount of wealth that State then held in store.

Having passed the boundary line of Kansas, the second day's journey from Denver found us, at five o'clock P.M., within the pale of the great commonwealth of Missouri. Here, too, the fields had been unburdened of their abundant yield, and every storehouse was filled to overflowing. Everywhere around, in the hum of industry was the ring of prosperity. In all the cities or villages through which we passed there was evidence of thrift and promise. The din of labor, the lever by which the poor are lifted to wealth, prosperity, and power, greeted us on all sides until the hours of toil gave place to those of rest. Slowly the day declined, and the sun went down, throwing a shimmer of golden glory over the land-Night caught the benediction, and through the lingering twilight, one after another, came troops of worlds, until the literal heavens were ablaze with their splendor, all marching to the order of the Great Commander.

The lamps were lighted through the train, and soon the curtains began to fall on either side of the car, behind which the weary passengers disappeared. Our turn came, and we gratefully accepted the rest it brought.

We were awakened at four o'clock A.M., having just time to prepare to leave the train as it paused before the depot from which we started on leaving home.

Fatigued with the over-excitement and excess of pleasure our journey had brought us, we all found welcome for the relief afforded us in reaching the end of our journey.





THE SATCHEL SERIES.

BRIGHT, ELEGANT, CHARMING!

STORY, ROMANCE, TRAVEL, ADVENTURE, HUMOR, HEALTH, PLEASURE.

From the Boston Home Journal.

The "Satchel Series" comprises the brightest and best brief works of fiction by American authors who are, for the most part, well known to the reading public. They are not trashy reprints nor "dime novels," but are clean and polished in matter, printed in large type, neatly bound in paper covers, convenient alike for railway, seashore or home reading.

Short, sententious and marrowy, pleasing in style and handy in form—with bold type and open, cheerful pages—they are designed to fill fragments of leisure, in all seasons and places, with the genuine comforts of reading.

VOLUMES READY.

Nobody's Business. By author "Dead Men's Shoes." "Heavy Yokes," etc. 30c.
Story of the Strike. Scenes in City Life. Ill'ted. By Elizabeth Murray. 30c.
Lily's Lover. By author of "Climbing the Mountains," etc 35c.
Traveller's Grab-Bag. Stories, Thought, Fancies. By an Old Traveller. 25c.
Prisons Without Walls. Novelette. By Kelsic Etheridge, 35c.
Rosamond Howard. Fact and fancy. By Kate R. Lovelace 25c.
Bonny Eagle. A Summer jauut to the forests of Maine 25c.
How to be Beautiful. A Toilet Manual for Ladies. By Louise Capsadell 25c.
Earnest Appeal to Moody. A Satire 10c.
Voice of a Shell. Stories of the Sea, and Sea Songs. By O. C. Auringer. 40c.
Our Winter Eden. Pen Pictures of the Tropics. By Mrs. Cazneau30c.
Our Peggotties. By Kesiah Shelton 25c.
Only a Tramp. A fascinating, picturesque novel. By Owanda. Just out. 50c.
Who Did It? A vivid, thrilling story. By Mark Frazier. Just out30c.
Poor Theophilus, and the City of Fin. By a Contributor to Puck 25c.
Bera, or the C. & M. C. R. R. By Stuart De Leon. A Novel 40c.
How it Ended. By Miss Marie Flaacke A sweet and pretty love story 25c.
Glenmere. A story of Love versus Wealth

IMPORTANT ANNOUNCEMENTS.

NEARLY READY.

A	Complet	e Scientifi	c Gram	mar of th	e Eng	glish L	anguage	—in-
	cluding	Phonetics.	By W.	Colegrove,	Pres	W. Va.	College.	For
	Schools	and Student	g		• • • • • • •			
Th	e Queer :	Little Woo	den Caj	ptain. By	Sydne	y Dayre.	Being vo	lume
	T of the	" Knelmite	d Librar	" for You	ng Foll	ks		

NEW BOOKS AND NEW EDITIONS

JUST ISSUED BY

THE AUTHORS' PUBLISHING COMPANY,

27 Bond Street, New York.

MISCELLANEOUS.

Analytical Processes; or, the Primary
Principle of Philosophy. By Rev WM.
Analytical Processes; or, the Primary Principle of Philosophy. By Rev Wm. I. Gill, A. M. \$2.00 Beauty of the King. A brief Life of Christ.
By Rev. A. H. HOLLOWAY, A.M., \$1.00;
full gilt,\$1.25
Christian Conception and Experience. By Rev. WM. I. GILL, A.M. \$1.00
Ecclesiology: Fundamental Idea and Constitution of the New-Testament Church.
By E. J. Fish, D.D\$2.00
Evolution and Progress. An Exposition
Evolution and Progress. An Exposition and Defence. By Rev. WM. I. GILL, A.M. \$1.50
\$1.50 Life Among the Clergy. By Rev. ROBERT FISHER. \$1.25 Life for a Look. By Rev. A. H. Hollo-
Life for a Look. By Rev. A. H. Hollo-
Resurrection of the Body. Does the Bible
Teach it i By E. NISBET, D.D. Intro-
duction by G. W. SAMSON, D.D\$1.00
Universe of Language. Uniform Notation and Classification of Vowels, adapted
and Classification of Vowels, adapted
to all Languages. By the late GEORGE
to all Languages. By the late GEORGE WATSON, Esq., of Boston. Edited by his daughter, E. H. WATSON
Ts our Republic a Failure? A Dis.
cussion of Rights and Wrongs of North
Is our Republic a Failure? A Discussion of Rights and Wrongs of North and South. By E. H. WATSON\$1.50
Camping in Colorado. With Sugges-
tions to Gold-Seekers, Tourists and Invalids. By S. A. GORDON\$1.00
valids. By S. A. Gordon\$1.00
Manuscript Paper. Per ream, \$1.00 or
\$1.25. By mail, 50c. per ream extra.
Manuscript Manual. How to Prepare
Manuscripts for the Press10 cents.
Mercantile Prices and Profits. By M. R.
Pilon. (In press.)
Race for Wealth. Considered in a Series
Brother and Sister Edited by Tayes
of Letters written to each other by a Brother and Sister. Edited by JAMES CORLEY
What is Demonetization of Gold and Sil-
ver? By M. R. PILON

FICTION AND ÆSTHETICS.

ł	
B	uccaneers, The. Historical Novel. Ry
	RANDOLPH JONES. Paper. \$1; cloth \$1.73
1 70	Deacon Cranky, the Old Sinner. By Geo.
ىد ا	Quinous \$1.50
İ	Guirey
C	Guirey\$150 othurnus and Lyre. By E. J. Hira-
1	DING\$1.00 Ier Waiting Heart. By Louise Cap-
H	ler Waiting Heart. By Louise CAP-
1	GATETT
-	n Dead Earnest. By Julia Brickin-
10	n Dead Earnest. Dy octia Directive
	RIDGE\$1.25
I	rene. By Mrs. B. F. BAER\$1.00
L	inda; or, Uber das Meer. By Mrs. H.
	L. CRAWFORD. For Young Folks \$1.25
-	F. A. Tr. A Doctio Fortuno Tollor Tro
1V	Tystic Key. A Poetic Fortune Teller 75c
0	ur Wedding Gifts. By AMANDA M.
1	Douglas. Paper, 50 cents; cloth. \$1.00
S	Douglas. Paper, 50 cents; cloth. \$1.00 hadowed Perils. By M. A. Avery \$1.00
S	umners' Poems. By S. B. and C. A Sum-
	NER Illustrated. 12mo. \$2 50; 8vo. \$4.00
47	Till Tiles De C W Henry At 00
V	Vild Flowers. By C. W. Hubner. \$1.00
	THE SATCHEL SERIES.
H	low to be Beautiful. Cl. 75c.; paper 25c.
A	ppeal to Moody16c.
	he Traveler's Grah-Bag25c.
P	risons Without Walls
D	onny Eagle
,D	Character Charac
A	Story of the Strike 30c.
ىل	ily's Lover
R	osamond Howard25c.
V	oice of a Shell40c.
N	lobody's Business30c.
0	ur Winter Eden 30c.
o.	ur Peggotties
0	m reggories ····································
0	nly a Tramp
V	Vho Did It?
P	oor Theophilus25c.
H	low it Ended25c.
B	era; or, C. & M. C. Railroad40c.
C	lenmere
u	25c.
1	

. Books mailed, postpaid, to any part of the United States and Canada, upon receipt of price by the publishers.

New Plan of Publishing and Descriptive Catalogue mailed free.











