Bow



## Our New West.

## RECORDS OF TRAVEL

BETWEEN

# The Mississippi River and the Pacific Ocean. <br> OVER THE PLAINS-OVER THE MOUNTAINS—THROUGH THE GREAT INTERIOR BASIN-OVER THE SIEREA NEVADAS-TO AND UP AND DOWN THE PACIEIC COAST. 

WITH
Details of the Wonderful Natural Scenery, Agriculture, Mines, Business, Social Life, Progress, and Prospects OF

COLORADO, WYOMING, UTAH, IDAHO, MONTANA, NEVADA, CALIFORNIA, OREGON, WASHINGTON, AND BRITISH COLUMBLA;

INCLUDING

# A Full Description of the Pacific Railroad; 

 andOf the Life of the Mormons, Indians, and Chinese.

WITH MAP, PORTRAITS, AND TWELVE FULL PAGE ILLUSTRATIONS,

> By SAMUEL BOWLES.

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[^0]то
SCHUYLER COLFAX,
 TRUSTED AND LELOVED ABOVE ALL OTHER PUBLIC MEN BY THE american people;
whose past and present are both the pledge and PROMISE OF HIS FUTURE;
With whom these journeys through " our new west," whose
experiences and results are here recorded, were made;

This Volume is Dedicated, by his grateful friend and fellow-traveler, SAJIUEL BOWLES.

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## PREFACE.

The Pacific Railroad unlocks the mysteries of Our New West. It opens a new world of wealth, and a new world of natural beauty, to the working and the wonder of the old. The eastern half of America offers no suggestion of its western half. The two sides of the Continent are sharp in contrasts of climate, of soil, of mountains, of resources, of productions, of everything. Nature, weary of repetitions, has, in the New West, created originally, freshly, uniquely, majestically. In her gifts, in her withholdings, she has been equally supreme, equally complete. Nowhere are broader and higher mountains; nowhere richer valleys; nowhere climates more propitious; nowhere broods an atmosphere so pure and exhilarating; nowhere more bountiful deposits of gold and silver, quicksilver and copper, lead and iron; nowhere denser forests, larger trees; nowhere so wide plains; nowhere such majestic rivers; yet nowhere so barren deserts, so arid steppes; nowhere else that nature has planted its growths so thickly and so variously, and feeds so many appetites so richly; yet nowhere that she withholds so completely, and pains the heart and parches the tongue of man so deeply by her poverty.

To give in detail some clear impressions of this vast and various region, its wonderful features of natural scenery, its illimitable capacities of growth and wealth, its present crude and conflicting civilizations,--its mining populations, its Mormons, its Chinese, and its Indians,-and still its sure promise of the finest race, and the broadest, freest, most active and most aggressive society, commerce and industry, that the world has yct developed,-this is the excuse and the promise of this book. The author has spent two summers in intimate travel over the regions comprehended in the volume. The first (186.5) was before the Railroad was begun, when he traveled by stage from the Missouri River to the Pacific Ocean, and thence north to Oregon, Washington Territory, and Puget's Sound; stopping for leisure study of Colorado, of Utah and its Mormons, of Nevada and its mines; and visiting all the distinctive points of interest, either for scenery, for business improvement, or for social characteristics. Again in 1868 , he passed over the then already completed Railroad to the crest of the great continental mountain ranges, and, thence descending among the great folds of Mountains and elevated Parks that distinguish Colorado, and make it the geographical center and phenomenon of the Continent, spent some weeks in camp life in that future Switzerland of America. The company of so distinguished and popular public men as Mr. Colfax, the Speaker and the Vice-President, and Lieutenant Governor Bross of Illinois, during both summers, smoothed all our ways, and unlocked for our study all the mysteries of social and business life. We were welcomed to generous hospitality of head and heart, and gained at once completest knowledge of the states and territories visited. Study, then and since, of all local records and authorities, has
completed and kept alive my acquaintance with the growth, character, and capacity of this new kingdom of our Continent.

The author must therefore be at fault if, in this compilation of the original records of his two summers' journeys, corrected and reviewed by the help of all other sources of information, he shall fail to convey some true idea of the present and promise of this Western Half of the American Continent. He invites particular attention to his chapters on the Central Parks and Mountains of Colorado; on the Mormons and their polygamy and political pretensions; on the Sierra Nevadas and their scenery in California, including that wonderful valley of the Yo Semite, the one unrivalled sublimity of nature in all the known world, and its neighboring groves of Mammoth Trees; on the Chinese, and their place in the industry, domestic life, and business of the Pacific States; on the Willamette Valley of Oregon; on the Scenery of the Columbia, the only continental river that breaks through the continental ranges of mountains; on the forests of Washington Territory, and the beauties and capacities of Puget's Sound; on the conditions and principles of Mining in Colorado, Nevada, and California; on the Agriculture of Colorado, California, and Oregon; and on the grand commercial and industrial future of this interior and Pacific Coast Empire of ours. He will fail, if the reader does not come to share the impression, that here is a nature to pique the curiosity and challenge the admiration of the world; an atmosphere to charm by its beauty and to heal by its purity and its dryness; a wealth of minerals and a wealth of agriculture that fairly awe by their boundlessness; an aggregation of elements and forces that, with development, with increase and mixture of populations, with facility and cheapness of
intercourse, -with steamships on the Pacific Ocean, and railroads across the Continent to the Atlantic,-are destined to develop a society and a civilization, a commerce and an industry, a wealth and a power, that will rival the most enthusiastic predictions for our Atlantic States Empire, and together, if we stand together in the future, will present on the North American Continent such a triumph of Man in race, in government, in social development, in intellectual advancement, and in commercial supremacy, as the world never saw, -as the world never yet fairly dreamed of.

[^1]
## INTRODUCTORY LETTERS

## FROM VICE-PRESIDENT COLFAT AND GOVERNOR BROSS.

## Washington, February 10, 1869.

## My Dear Mr. Bowles :-

The notice of jour publishers that you intend to incorporate the sketches of the two long journeys we had together, amplified, revised, and illustrated, in a new and more permanent work, brings again vividly before my mind, like a panorama, the stirring incidents of these expeditions, the magnificent scenery, the constantly ehanging and novel experienees, the explorations down into the bowels of the earth and up to the summits of lofty mountains, the dashing rides down the Sierras and at the Geysers, the Oceans of Water, and of Land, and the open door of Opportunity which everywhere invited us to enter, and to add so largely to our stock of information as to "Our New West." I have not forgotten the Indian hostilities, which threatened us on both journeys; but I remember far more delightfully the boundless Plains; the snow-capped Mountains ; the majestic Columbia; our Mediterranean of the North-west, Puget's Sound ; that magic City, San Franciseo; the wonderful Geysers; the Mammoth Trees; and the peerless Yo Semite.

If our people, who go to Europe for pleasure, travel and observation, knew a tithe of the enjoyment we experienced in our travel under our own flag, far more of them would turn their faces toward the setting sun ; and after exploring that Switzerland of America, the Rocky Mountains, with their remarkable Parks and Passes, go onward to that
realm which fronts upon the Pacific, whose history is so romantic, and whose destiny is so sure; and which that great highway of Nations, the Pacific Railroad, will, this Spring, bring so near to all of us on the Atlantic slope.

These cannot now realize our long-drawn two thousand miles of staging West, and one thousand Northward from the Golden Gate; for palatial ears and lightning trains will render travel a pleasure, instead of a fatigue; but your graphic sketehes of what is to be seen will, wherever they are read, increase the numbers of those who will not only add to their enjoyment and knowledge, but also strengthen the patriotic ties whieh bind together such distant regions, as the Atlantic and Paeifie States, into one harmonious Republic, by following so far as possible in our path across the Continent.

Very traly yours,
Schtiler Colfax.

To the Hartford Publishing Company:-
I learn, with much pleasure, that you propose to publish a revised and illustrated edition of Mr. Bowles's alrearly famous book, "Across the Continent," to include also his sketches of travel and camp life in the Rocky Mountains the past summer. The journey of Vice-President Colfas and his party to California, in the summer of 1865 , seems to have marked the commencement of a most important era in the prog. ress of the country. When we left the Missouri River in May, work had seareely begun on the Union Pacific Railway; but we found the energetic President of the Central Pacific, Governor Stanford, and his contractors, vigorously engaged in pushing their line up the western slope of the Sierra Nerada mountains, and forty-two miles of the road were completed. When we returned, in the latter part of September, the forces of the Union Pacific were fully organized, since which time
they have performed the most astonishing feats in railway building ever achieved. The managers of the Central Pacific have been working, perhaps, with equal energy, as the engineering difficulties to be overcome by them were immensely more formidable, and I have every reason to believe that the lines will conncet at or near the head of Salt Lake within the next two months. Thus the great Continental Railway, regarded only four years ago by perhaps a majority of our people as a chimerical project, will become an accomplished fact,-a magnificent reality.

The completion of the road and the rush of tens of thousands of our people to the Central Territories and to the Pacific Coast will render the new cdition of Mr. Bowles's book none the less acceptable and valuable to the public. His descriptions of the country, through which the road runs, and through most of which we passed, are so comprehensive and accurate ; his obscrvations are so discriminating, graphic and just; his estimates, based on figures and personal inspection of the vast mineral resources and the commercial advantages of the country, are so new, suggestive and exciting, that his work should be carefully read by every tourist before he sets out upon his journey; and it will be consulted by him with great advantage at every stage of his progress. The information it has imparted to the Nation has, in my judgment, been immensely more varied and valuable than they have derived from all previous sources put together. Certainly no former work has ever circulated so widely among the people, and they have proited largely by the new, varied and most valuable facts it contains.

Wishing you all possible success,

$$
\begin{aligned}
& \text { I am very truly, } \\
& \text { Your obedient servant, } \\
& \qquad \text { Wilias Bross. }^{\text {Bian }}
\end{aligned}
$$

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MAP 'IO


## OUR NEW WEST.

## I.

## INTRODUCTORY CHAPTER.

Ocr New Wesr-Its Extent and Importance, and Four Great Divis-ions-The Cordilleras of South America and their Progress 'Through North America-The First Great Division, the Plains--The Second, the Rocky Mountains-The Third, the Great Interior Basin-The Fourth, the Sierra Nevadas and the Pacific Coast-The Characteristics of Each-The Promise of the Book.

Our Nef West,-cut through its center by the east and west line of the Pacific Railroad, and only now and thus opened freely to the knowledge and the occupation of the American people,-is the larger half of the territory of the United States. From the Missouri River to the Pacific Ocean is fifteen hundred to eighteen hundred miles; from British America on the north to Mexico on the south is from one thousand to twelve hundred miles. The great mountain chain of the Continent with its subdivisions separate this region into four marked sections.

The Cordilleras of South America, marching in unbroken and firm column from its south to its north,
and making the most magnificent mountain range in the world by its length, its hight, and its unity, humbles itself almost to the sea in crossing the Isthmus, but rears its columns anew in Central America and Mexico, with occasional individual peaks that are as famous for hight and majesty as any in all its hemispherical sweep, and yet nowhere renews that unyielding unity that is its distinguishing southern characteristic. Approaching the broader sections of Western North America, as if feeling the appeal for a wider parentage, it breaks into several lines, two especially so majestic and firm and distinctive, that each might almost fairly claim to be the parent range. The main line, unmistakably, however, passes easterly with but little disorder, and becomes what we call the Rocky Mountains of North America, on from Central Mexico through New Mexico into Colorado, where it centers and readjusts its powers, and, again and more widely spreading, stretches northward through British America to the Arctic Ocean. The rival line of the Sierra Nevada has its birth or separation in Lower California, and, forming the bold and magnificent eastern boundary of California, goes north through Oregon and Washington Territory, and spreads itself over the coast lines of British Columbia, furnishing, both in California and Oregon, some of the highest and finest individual peaks to be found in the whole territory of the United States. As it enters California on the south, it sends a minor line of mountains west near the coast, which is carried with considerable uniformity into Northern California, there rejoins the Sierra Nevada, but again opens to form
that garden of Oregon, the Willamette valley. Between these mountain ranges in California, and among the folds of each, lie the great wealth, the great beauty, the great variety of soil, climate and production, of that wonderful and representative state of the Pacific coast.

Beginning on the east with the Missouri River, and going west, there is an open, treeless, nearly level stretch of plains, five hundred miles wide, to the Rocky Mountains. For the most part, it is high tableland, gradually but imperceptibly rising from the river to the mountain line; stretching from the British borders on the north to the like table-lands of Mexico on the south; with three or four great rivers flowing through its whole width, and many lesser streams freely watering its eastern and southern borders; yet for the great part too dry for general agricultural purposes, and only now inviting use as the great pasture-ground of the Nation. It seems to be covered with the wash of the mountains; and this grand ocean of land makes up the first section of the journey across the Continent, and is called The Plains.

Next comes the Rocky Mountains section, and this, too, from where the Plains end over into the basin of Salt Lake, is five hundred miles,-a broad line of mountains and rolling table-lands, ranging from seven thousand to fourteen thousand feet high; full of the most unique forms of nature ; rich in inspiration to the poetic traveler; and rich in mineral wealth to the patient, persevering miner.

The third section, another five hundred miles still,
begins with the end of the Rocky Mountain ranges in the Salt Lake valley, and stretches on west to the Sierra Nevadas. The central parts of this section, comprising the bulk of Utal and Nevada, form the great interior basin of the Continent. It is five hundred miles from east to west, and an average of half that distance from north to south. The seanty waters of this interior region find no outlet to either ocean. The great Salt Lake of Utah is its principal body of water, and this has no visible outgo, though richly fed from various quarters. Lines of mountains or ligh hills pass north and south every twelve or twenty miles through it. The streams, that flow out of them, lose themselves in the sands of the valleys. There are few trees and but little verdure on hill or plain. Great patches of salt and alkali deposits intensify the general barrenness of the scene, and load the dry air with painful exhalations. The whole region is high ; rising gradually from four thousand feet above the sea level at Salt Lake to seven thousand and eight thousand feet at the center, it as gradually falls away to the original four thousand feet under the Sierra Nevadas. The valleys adjoining the Rocky Mountains in Utah, and those near the Sierras in Nevada, with one or two intermediate ones, are suffieiently watered to return good crops, and irrigation widens this area and enriches the yield; but for the most part the whole basin is a desert, not so much from poverty of soil as from lack of moisture.

But for the patient industry of the Mormons in Utal and the temptations of the rich silver mines in Nevada, this country would have still remained un-
peopled and unknown, and the Pacific Railroad still a mere problem of our progress. To the north of this independent basin, the Columbia and its branches enter; and to the south, the Colorado, and yet they do not essentially change the character of the region they water; and Idaho and Eastern Oregon on the one hand, and Southern Utah and Nevada and Arizona on the other, save in narrow valleys that the streams cannot get through without enriching, present little that is lovely in nature or inviting to the farmer. The richness of mineral deposits tempts the greedy explorer, and where he is fortunate, agriculture will follow under whatever restrictions; and occasional rare phenomena in rock or river, like the Grand Canyon of the Colorado and the rival of Niagara in the Shoshone Falls in Idaho, seduce the traveler from the through route.

Fourth, and finally, are the Sierra Nevadas and the country between them and the Pacific Ocean,-a width of about two hundred miles, which, both in California and Oregon, compensates for the dreary wastes behind in a wealth and majesty of forest, such as the world can offer nowhere else, and in a variety and richness of agricultural production, that unites the offerings of temperate and tropical zones, forms the sure basis of a permanent and unmeasured wealth, and laughs poverty and famine to scorn.

Into and through these regions,-with more of familiarity than form, with more of grand result of knowledge than of detail of facts, with the authority of two summer journeys among them, and with conscientious study of their nature and resource and so-
ciety,-this book invites the reader. It opens to him the present state and the future promise of the larger part of the American Republic,-new yet to the world in every sense, but destined surely to a mighty influence upon all the after growth of Republic and world, and to be counted prominently in the advance of all our civilization.

## II.

## OVER THE PLAINS BY STAGE.

The Rival Depots for the Traffic of the Plains-An Indian Scare to Begin With-The Richness of the Country for Two Hundred MilesScenes on the Plains-The Prairie Schooners by Day and Night-A Hail and Thunder-Storm-The Week's Ride and the Plains Summed Up-The Civilization of the Country-The Meals at the StationsLife and Death in Contrast-Personal Sketches: Vice-President Colfax and Governor Bross-The Advent of the Mountains.

From the Missouri River to the Mountains, now a railroad ride of twenty-four hours,-was in the summer of 1865 a stage ride of six days and nights. Atchison, in northern Kansas, was then the point of departure ; Omaha, above, was but a feeble rival for the outfitting of emigration and freight trains to Colorado and Utah; Leavenworth and Kansas City, below, were struggling vainly to maintain a supremacy they had but lately enjoyed. Long trains of heavily loaded wagons, drawn by mules and oxen, were moving out daily; but warehouses and yards were crowded with heavy machinery for saw-mills and gold-mills, with food to eat and clothes to wear, with agricultural implements for new farms beyond, waiting their turn in the great summer's commerce

Everything was carried by the pound; six to ten cents from the river to the mountains; twelve to eighteen through to Utah; so that eastern prices were doubled and trebled to the settlers in and around the Rocky Mountains.

Our fine Concord coach and its team of six gay horses waited for the delayed incoming stage, and when it came, a bunch of Indian arrows lodged in its sides, and the broken nerves of its passengers, including a mother and children, confirmed their story of an Indian attack some one hundred and fifty miles out. But we were all well armed, and the brave General Connor, then commanding on the Plains, was our companion and escort. We represented the great American nation,-it would not do to be afraid or to hesitate,-and so we drove on and out,-our hopes our fears belying, our fears our hopes.
For the first two hundred miles west from the river, through northern Kansas and southern Nebraska, the country presents the characteristics of the finest prairie scenery of the West,-illimitable stretches of exquisite green surface, rolling like long waves of the sea, and broken at distances of miles by an intervale with a small stream, along whose banks are scattered trees of elm and cotton-wood. Here and there was a "ranch" or farm with cultivated land, but these grew raver and rarer ; the uniform view was one wide rolling prairie, freshly green, spreading out as far as the eye could reach, with the distant fringe of thin forest by the water-course, and sending forth and receiving the sun at morning and evening, as the ocean seems to discharge and accept it when we travel its track-
less space. No land could be richer; no sight could more deeply impress one with the measureless extent of our country, and its unimproved capacities, than that of these first two days' ride west from the Missouri River.

Then the waves of land ceased ; the soil grew thin and dry; a dead level spread before the unresting eye; and we entered upon the region of the Platte River and the Plains proper. The streams were few and scant, and the water muddy; but wells gave good drinking water all along the route, though oftentimes they had to be sunk as deep as fifty or seventy-five feet. It was too early then (May) for many of the prairie flowers; but the rich, fresh green of the grass satisfied the eye. Scattered through it we caught frequent glimpses of the prairie hen, multiplying for the hunter's harvest in November ; from its bare, last year's stalks floated out the liquid music of the larks; the plover, paired as in Paradise, and never divorced even in this western country of easy virtue and cheap legislation, bobbed up and down their long necks, or fluttered their wide wings in flight at every rod; little blackbirds accompanied us in great flocks; a lean, hun-gry-looking wolf stole along at a distance, with one eye on us and the other on the carcass of a horse or ox, dropped in sickness or fatigue from some passing train; away off near the horizon scampered, most daintily and provokingly, a half-dozen antelopes,-too near for restful palates, too far for waiting rifles; and over all and illuminating all floated an atmosphere so pure, so rare, so ethereal, as pictured every object with a preRaphaelite distinctness, made distant things appear
near, and sent the horizon far away in an unbounded stretch of slightly rounding green earth. Added to these a constant breeze, tempering the sun to a most grateful softness, and bearing an inspiring tonic to lungs and heart; sunsets and sunrises that rival Italy or the Comecticut valley; a twilight prolonged as in England ; and a dryness and purity to the atmosphere that is certainly not known in New England, and guards the most exposed against colds,-and the reader may form some idea of the life of our senses and sensibilities in our stage ride over the Plains.

One great feature in the constant landseape was the long trains of wagons and carts, with their teams of mules and oxen, passing to and fro on the road, going in empty, coming out laden with corn for man and beast, with machinery for the mining regions, with elothing, food and luxuries for the accumulating populations of Colorado, Utah and Montana, and all intermediate settlements. The wagons were covered with white cloth ; each drawn by four to six pairs of mules or oxen; and the trains of them stretched frequently from one-quarter to one-third of a mile each. As they moved along in the distance, they reminded me of the caravans described in the Bible and other ancient Eastern books. Turned out of the road on the green prairie, for afternoon rest or a night's repose, the wagons drawn around in a circle, as a barricade against Indians or protection against storm, and the animals turned loose to feed, and wandering over the rounding prairie for a mile,-"cattle upon a thousand hills;" at night their camp fires burning;-in any position or under any aspect, they presented a
picture most unique and impressive, indeed, summoning up many a memory of oriental reading. The mule trains made from fifteen to twenty miles a day; and the oxen about twelve to fifteen. They depended entirely upon the grass of the Plains for food as they went along; and indeed the animals grew stronger and fatter as they moved on in their summer campaign of work, coming out of their winter rest poor and scrawny, and going back into it in the fall, fat and hearty. It was thus that, before the Railroad, all emigration and all merchandise moved into our great New West.

Another of our marked early experiences was a terrible storm of thunder and lightning, hail and rain, upon the open Plains. First came huge, rolling, ponderous masses of cloud in the West, massing up and separating into sections in a more majestic and threatening style than our party had ever before seen in the heavens. Then followed a tornado of wind. Horses, coach and escort turned their backs to the breeze, and, bending, awaited its passing. It stripped us of every loose bit of baggage; and we sent our scouts for their recovery. Next fell the hail, pouring as swift rain, and as large and heavy as bullets. The horses quailed before its terrible pain. Our splendid quartette of blacks careered and started over the prairie; we tumbled out of the coach to save ourselves one peril, and so met the other,-the fire of the heavenly hail; it bit like wasps, it stumned like blows. But horses and coach were to be saved; and after a long struggle, in which the coach came near overturning, and the horses to running away, in dismay and fright, and our driver
and military friends proved themselves real heroes, and everybody got wet, the hail subsided into a pouring rain, the horses were quieted and restored to their places, and we got into a drowned coach, ourselves like drowned rats, and hastened to cover, over a prairie flooded with water, in the barracks of old Fort Kearney.

From Monday to Saturday, day and night, stopping every ten or twelve miles to change horses, and every forty or fifty to eat a meal, were we upon this stage ride over the Plains. The days were warm and monotonous; the nights cold and tedious; sleep in a jolting stage-coach was hard and fitful; and we fast grew careless in toilettes and barbaric in manners. We were alert for an Indian attack, but none appeared; and not even buffalo or antelope gave us opportunity to test our vaunted prowess with firearms. We had a wide and smooth road; an occasional gully or dry ditch offered the only break in its uniform levelness, and a rare stretch of sand interrupted its hardness; it seemed easy, with light coach and frequent change of horses, to keep up a speed of eight to ten miles; but the average rate of the coaches, with heary mails and full loads of passengers, was but four to six. The road lay for the most part along the Platte River,-a broad, shallow, swift and muddy stream; useful then and now only for drinking purposes, but destined to flow out in side ditches and make almost a second Nile Valley in agricultural richness. The soil of the Plains is a cold, dry, sandy loam, the wash of the great range of mountains beyond them; yielding a rich though
coarse grass, that, green or dry, is the best food for cattle that the Continent can offer. From the river to the mountains, there is a steady though imperceptible rise in the land, averaging ten feet to the mile ; half way across, dew ceases to fall, and at Denver and Cheyemne, where the mountains begin, the Plains bear an elevation of near six thousand feet above the sea level.

This whole intermediate region was and still is substantially uninhabited; every ten or fifteen miles was a stable of the stage proprietor, and every other ten or fifteen miles, an eating-house; perhaps as often a petty ranch or farm-house, whose owner lived by selling hay to the trains of emigrants or freighters; every fifty or one hundred miles we found a small grocery and blacksmith shop; and about as frequently a military station with a company or two of United States troops for protection against the Indians. This made up all the civilization of the Plains. The barns and houses were of logs or prairie turf, piled up layer on layer, and smeared over or between with clayey mud. The turf and mud made the best houses, and the same material was used for military forts and for fences around the cattle and horse yards. The roofs were often a foot thickness of turfs, sand, clay and logs or twigs, with an occasional inside lining of skins or thick cloth. Floors were oftenest such as nature offers only; and, as at some of the Washington hotels, the spoons at the table did not always go around. Mexican terms prevailed: an inclosure for animals was called a "corral ;" a house of turf and mud is of "adobe;" and a farm-house or
farm a " ranch." Our meals at the stage stations continued very good throughout the ride; the staples were bacon, eggs, hot biscuit, green tea and coffee; dried peaches and apples, and pies were as uniform; beef and antelope were occasional, and canned fruits and vegetables were furnished at least half of the time.

As we went on, and the Plains grew more barren, the prickly pear and the sage bush became plenty in their tough unfruitfulness; the road was marked more frequently with the carcasses of oxen and horses,scarcely ever were we out of sight of their bleaching bones; and occasionally the pathos of a human grave gave a deeper touch to our thoughts of death upon the Plains, deepened, too, by the knowledge that the wolf would soon violate its sanctity, and scatter the sacred bones of father, mother or child over the waste prairie. The wiser instinct of the Indian showed itself, once in a while, in the sepulture of his kindred above ground; for, rolling his dead in a blanket, he places the body in mid-air between two forked poles, six or eight feet high, and so, if not poised for an upward flight, it is at least safe from vulgar profanation. Anon we grew gay over the lively little prairie dogs, looking half rat and half squirrel, as they scampered through the grass, or dove, with a low, chirruping bark, back into their holes. These animals are smaller and more contemptible than I had expected; their holes, marked by a hillock of sand, are congregated in villages, sometimes extending a quarter or half a mile along the roadside. Only a pair occupy each hole, but we hear the same story, which earlier
travelers record for us, that a snake and an owl share their homes with them. The snakes we did not see; but the owl, a species no larger than a robin, solemn, stiff and straight, stood guard at many of the holes. The water at last showed its bitter alkali taint; and we passed through a patch where the soda deposits whitened the soil, and so poisoned the springs, that for man or beast to drink, after fresh solutions by a rain, was dread danger of death. Fremont Spring, an oasis in this desert, gains its name from the discovery and use of it by the gallant captain, who almost first introduced this country to public acquaintance; and we found it pure and sweet, with an original sulphurous smack.
In the long reaches of this slow coach ride, and thus early in the experiences and observations that we are all to share together, there are at least two of our traveling party that I am justified in introducing personally to my readers. These are Mr. Colfax and Governor Bross, for they are of public renown, and their presence has made these journeys very much affairs of politics and government. The one distinction of the former, perhaps, is that he has more personal friends,-people who, whether they have ever seen him or not, feel a personal attachment to and interest in him,-than any other public man in the country. He is more than the Henry Clay of this generation; for the love and respect borne towards him are not confined to his political party, as that of Mr. Clay practically was. A member of Congress now for fourteen years; the Speaker of its House for six; and elevated from that, the third, to the second
political station in our government,-the Vice-Presi-dency,-he stands before the country one of its freshest yet one of its ripest, one of its most useful, and certainly one of its most popular and promising public men. But this is not all, nor the best of the man. He is not one of those to whom distance lends enchantment; he grows near to you, as you get near to him; and it is, indeed, by his personal qualities of character, by his simplicity, frankness, genuine good nature, and entire devotedness to what he considers right, that he has principally gained and holds so large a place in the personal esteem of the nation and upon its public arena. Mr. Colfax is short, say five feet six, weighs one hundred and forty-five, is in the prime of life, forty-five years, has brownish hair and light blue eyes, is lately married, after a long widowerhood, drinks no intoxicating liquors, smokes almost as much as General Grant, is tough as a knot, was bred a printer and editor, but gave up the business for public life, and was the idol of South Bend and all adjacencies before he became that of the country at large. There are no rough points about him; kindliness is the law of his nature;-while he is never backward in differing from others, nor in sustaining his views by arguments and by votes, he never is personally harsh in utterance, nor unkind in feeling, and he can have no enemies but those of politics, and most of these find it impossible to cherish any personal animosity to him. In tact, he is unbounded, and with him it is a gift of nature, not a studied art; and this is perhaps one of the chief secrets of his success in life. His industry is equally exhaustless;--he is al-
ways at work, reading, writing, talking, seeing, study-ing,-I can not conceive of a single unprogressive, unimproved hour in all his life. He is not of brilliant or showy intellectual qualities, not a genius, as we ordinarily apply that slippery word; but the absence of this is more than compensated by these other qualities I have mentioned,-his great good sense, his quick, intuitive perception of truth, and his inflexible adherence to it, his high personal integrity, and his long and valuable training in the service of the people and the government; and in any position or capacity, even the highest, he is sure to serve the country faithfully and well. He is one of the men to be tenaciously kept in public life; and I have no doubt he will be. Some people talk of him for President; but his own ambition is wisely tempered by the purpose to perform present duties well. He certainly makes friends more rapidly and holds them more closely than any public man I ever knew; wherever he goes, the women love him, and the men cordially respect him; and he is pretty sure to be always a personal favorite, as now, with the people at large.

The other official of the party, Lieutenant-Governor Bross of Illinois, is indeed our paterfamilias, our "governor." Hale and hearty in body and mind; ripe with fifty-six years and a wide experience and culture in school, college and journalism ; cheery in temperament, enjoying rough, out-door life like a true unspoiled child of Nature ; sturdy in high principles; unaffected and simple in manners and feeling as a child; a ready and most popular stump speaker; enthusiastic for all novel experience, we all give him
our heartiest sympathy and respect, and constitute. him the leader of the party. Our best foot, we always put him foremost, whether danger, or dignity, or fun is the order of the occasion. Governor Bross was born in New Jersey, -and so says he never can be president, as the Constitution requires that officer to be a native of the nation; lumbered on the Susquehannah; went through Williams College, Massachusetts; taught school in Franklin and Berkshire counties of the same State; continued a teacher and married in New York ; and, following the star of empire, went to Chicago, and entering on the editorial profession, has gone on from small to great things, until he is now the senior editor and proprietor of the leading journal of the North-west, and has been for four years the second officer in the State government of Illinois.

There were beauties of character that the world little recks among the other members of our traveling party; but their place of honor is the private station ; and I may not rob it of their secrets even as example for a needy generation. Besides,-now, the morning sun lights up the mountains, and the long embattlement of snow and rock rises abruptly in the distance to end the Plains, and marshal in new scenery and new experiences. No vision could be more grand and imposing,-none was more welcome to eyes, weary with the monotony of plains and tired with a week's sleepless travel. From Long's Peak in the north to Pike's Peak in the south,-a full handred miles of mountains, continental in position, continental in hight and breadth and majesty,-spread before our
eyes and lifted us up from selves to a new conception of the Infinite. The roll and richness of prairie began again as we neared the mountains, and their waters flowed out freer and purer in different directions. And soon we exchanged greetings with Denver, under the shadows of the hills, the commercial and political capital of Colorado.

## III.

## THE PACIFIC RAILROAD.

The Story of the Pacific Railroad-The Pullman Cars-Omaha and Council Bluff-Over the Plains by Rail-Cheyenne-The Mountain Pass and its various Revelations of Plain, Desert and MountainThe Architecture of Wind, Rain and Sand-Echo and Weber Can-yons-Around Salt Lake and Across the Great Interior BasinScenes along the Route-Up and over the Sierra Nevadas-Donner Lake-The Greatest Triumph in Railroad Building in the WorldThrough California-The Continental Railroad Reviewed and Summed up-Its Beginning, its Execution and its Results.

So completely is the Pacific Railroad henceforth the key to all our New West; so thoroughly must all knowledge of the characteristics of the latter radiate out from the former as a central line, that its story should be told almost at the outset, even to the anticipation of earlier experiences. Marked, indeed, was the contrast between the stage ride of 1865 and the Railroad ride of 1868 across the Plains. The then longdrawn, tedious endurance of six days and nights, running the gauntlet of hostile Indians, was now accomplished in a single twenty-four hours, safe in a swiftly-moving train, and in a car that was an elegant drawing-room by day and a luxurious bedroom at night.

The long lines of travel in our wide and fresh West have given birth to more luxurious accommodations for passengers than exist in Europe or the Atlantic States. With the organization of travel over the Pacific Railroad come cars that will carry their occupants through from New York to San Francisco, without stop or change, and with excellent bed and board within them. Only America could have demanded, conceived and organized for popular use such accommodations as the Pullman Palace and Sleeping Cars of the West. To some, as to ours, are added the special luxury of a house organ; and the passengers while away the tedious hours of long rides over unvarying prairies with music and song.

Omaha, in 1865, a feeble rival of Atchison, Leavenworth and Nebraska City in outfitting emigrant and merchandise wagons for Colorado and Utah, and without a single mile of railroad within one hundred miles, has already become the greatest railroad center of the Missouri and Mississippi Valleys. It is the startingpoint of the Pacific Railroad, which stretches a completed line of cighteen hundred miles west to the Pacific Ocean; to the east are two or three completed lines of five hundred miles across Iowa and Illinois to Chicago, and others are in progress; to the south are open roads to St. Louis across Missouri ; and to the north is a finished road to Sioux City, and fast stretching on to St. Paul. The three great States of the Mississippi Valley, Illinois, Iowa and Missouri, the garden and granary of the nation, and seat of its middle empire, are slashed in all directions by railroad lines, completed or rapidly constructing, meet-


ing as a western focus at Omaha and Council Bluffs, sister towns on either bank of the Missouri, and converging on the east into either Chicago or St. Louis, Their consequent development, in population and wealth, is perhaps the most wonderful illustration of modern American growth. It is within this area that New England is pouring the best of her emigration, and reproducing herself, in energy and industry and intelligence, on a broader, more generous and more national basis.

Council Bluffs, on the Iowa bank of the Missouri River, opened the year 1869 with eight thousand inhabitants, having erected thirteen hundred new buildings in 1868, while Omaha, opposite, counted nearly double that number. In both cases the railroads center upon the bottom lands, but the beautiful bluffs back and above invite the living areas of the towns. Council Bluffs is almost hidden amid the folding circles of its hills, and has the fascination of mysteries in the distance; but Omaha stands out with bolder and more even front upon a grand amphitheater over the river. Besides the railroads, these towns have a river navigation two thousand miles north into Montana and to the British line, and two thousand miles south to New Orleans and the Gulf.

Out now upon the continental Railroad. For five hundred miles, a straight, level line, across the broad Plains, along the valley of the Platte. It was but play to build a railroad here. Yet there is a steady ascent of ten feet to the mile; and for the first two hundred miles the country has the exquisite roll and the active fertility of the Iowa and Illinois prairies.

Through this region the growth of Nebraska shares that of those two States; and she has the advantage of them, generally, in climate, in water, and in wood. But beyond this limit,-out upon the real Plains,the first results of the Railroad are to kill what settlement and cultivation they had reached under the patronage of slow-moving emigration, stage-travel, and prairie-schooner freightage. The ranches which these supported are now deserted; the rails carry everybody and everything; the old roads are substantially abandoned; the old settlers, losing all their improvements and opportunities, gather in at the railway stations, or move backwards or forwards to greater local developments. They are the victims, in turn, of a higher civilization; they drove out the Indian, the wolf, and the buffilo; the locomotive whistles their occupation away; and invites back for the time the original occupants.

The day's ride grows monotonous. The road is as straight as an arrow. Every dozen or fifteen miles is a station,-two or three sheds, and a water-spout and wood-pile; every one hundred miles or so a home or division depot, with shops, eating-house, "saloons" uncounted, a store or two, a few cultivated acres, and the invariable half-a-dozen seedy, staring loafers, that are a sort of fungi indigenous to American railways. We yawn over the unchanging landscape and the unvarying model of the stations, and lounge and read by day, and go to bed early at night. But the clear, dry air charms; the half dozen soldiers hurriedly marshalled into line at each station, as the train comes up, suggest that the Indian question is not disposed
of yet; we catch a glimpse of antelopes in the distance; and we wateh the holes of the prairie dogs for their piquant little owners and their traditional companions of owls and snakes,-but never see the snakes.

The Plains proper and the first day's ride end at Cheyenne, five hundred and sisteen miles from Omaha. Here a branch road goes off south a hundred miles to Denver, where it connects with the St. Louis or Eastern Division of the Pacific road. Cheyemne is also a great railroad work and supply shop, as becomes its location adjoining the mountain and winterexposed section of the road. It was the first of the towns created by the advance of the road to assume permanency and importance; and though Denver watches its growth with some jealousy, there is no real rivalry between them. Well located on the open Plains, watered by fresh streams from the near mountains, it has the secure elements of agricultural wealth around it, and in a brief first year took on the organization and completion of a first-class Western town, with several thousand inhabitants, daily papers, stores, taverns, and all the luxuries and many of the comforts of civilization. A hight of six thousand feet gives it a share of mountain air, and a climate but a degree rougher than that of Denver, which is more like that of St. Louis and Philadelphia, with greater dryness, than like the top of Mount Washington in New Hampshire, with whose altitude both Denver and Cheyenne correspond. The new Territory of Wyoming depends on Cheyenne at present for its chief importance; but the town lies so near to Colorado that the latter half claims it.

The second or Rocky Mountain section of five hundred miles of the Railroad track,-from Cheyenne to Ogden in the Salt Lake Valley,-_divides itself again into three peculiar portions. The first of one hundred and fifty miles mounts up a rapidly ascending plain,-for nature has smoothed down the mountains for an easy path,-to the crest of the Black Hills, the outcrmost line of the continental mountains. In thirty-two miles, the track ascends over two thousand feet, but so uniformly that the grade is nowhere over eighty feet to the mile, and at Sherman or Erans's Pass it is eight thousand two hundred and sixty-two feet above the sea level, which is the highest point the road has to run in all its line. But this is not the continental divide, and all this section is through an open, half-plain country. The ruins of the old mountain tops stand around in grotesque, individual forms; away in the far distance rise the unmoved ranges; but along our path, winding to escape an occasional hill, is a compact red granite gravel, that upturned to plow and scraper, and has made a model bed for the sleepers and the rails.

Descending by easy grade a thousand feet or so, the road enters broader areas, and we recognize the Laramie Plains; a repetition of the elevated Parks of Colorado. These are fifty miles by one hundred in extent, being seven thousand to eight thousand feet high, with trout-brooks in adjoining and embraced hills, and, in the summer, most strongly inviting the weary traveler, the sportsman or the invalid to linger for days and weeks. They were famous huntinggrounds for the Indians; agreeable resting-places for
the emigrant caravans of old; and long the chief outpost of the army in the mountain region. The Railroad makes a division station here, and a town of some importance seems likely to grow up.

The country grows more broken and less interesting as this section of one hundred and fifty miles comes to an end at the crossing of the North Platte. But up to this point the ride from Cheyenne possesses the greatest novelty and charm for the fresh traveler. The senses all dilate with what is spread before and around him; rich black mountains bound the horizon north and south; a dash of snow on peak or side occasionally enlivens the view and deepens the coloring; along our pathway are fine valleys or broader plains, rich in grass and flowers; nature has fashioned it for a railroad; scattered around in valley or plain, as the track approaches the summit, are monuments of rock, grotesquely or symmetrically arranged; here a wall as if for a bulwark, there the ruin of cathedral or fort, again a half-finished building, anon the fashion of a huge, dismasted screw steamer, with paddle astern and pilot-boat ahead; over all an atmosphere so pure that the eye seems to take in all space, and so dry and exhilarating that life titillates at every avenue, and we mount as if on angel's wings. Here would seem to be the fountain of health; and among these upper hills and plains adjoining the Railroad is surely to be many a summer resort for the invalid and the pleasure-seeker in the by no means distant future.
The middle of the mountain sections,-a second one hundred and fifty miles,-begins with the North

Platte and stretches to Green River. It is a sad contrast to its predecessor. No living streams are found in it; few living springs have been discovered; and in building the Railroad through it, water had to be brought up from behind, not only for the workmen and animals to drink, but for the locomotives to make steam with. The water found on or near the surface is unfit for either purpose; but deep wells will probably in the future relieve this difficulty. A high, rolling, desert country is this, with scarcely any vegetation but the rank, coarse sage bush, and the soil a finc, alkali-laden dust. To all slow-traveling emigrant trains and stage passengers, this region is a memorable pain. The eye has no joy, the lips no comfort through it; the sun burns by day, the cold chills at night; the fine, impalpable, poisonous dust chokes and chafes and chaps you everywhere. The sage bush is a vulgar exaggeration of our garden sage; growing rugged and rough from one to three feet high; dry and strong and repulsive; yet through such wastes as this, mules and cattle sometimes eat it, because they must or die, and it does make quick, hot fire for the emigrants' and wagon-drivers' kettles. But think of savoring your food with soap and sage tea; think of putting a soap factory and an apothecary shop into one room, and that your kitchen!

Within this desert of the mountains, the divide of the Continent occurs both on the old stage road and the new Railroad line; and here, in the summer of 1868, we witnessed the building of the track over the parting of the waters. The last rail on the Atlantic slope and the first on the Pacific were laid in our presence;
and Governor Bross pinned them down with stalwart blows upon their spikes. As yet, still, no mountains appear in the path of the track, and it winds easily along through these rolling sand-hills, occasionally helped over a deep dry gulch, and spanning a feeble or possible river. But the whole section is mountainously high, from seven thousand to eight thousand feet above the sea level.
We witnessed here the fabulous speed with which the Railroad was built. Through the two or three hundred miles beyond were scattered ten to fifteen thousand men in great gangs preparing the road bed; plows, scrapers, shovels, picks and carts; and, among the rocks, drills and powder were doing the grading as rapidly as men could stand and move with their tools. Long trains brought up to the end of the completed track loads of ties and rails; the former were transferred to teams, sent one or two miles ahead, and put in place upon the grade. Then rails and spikes were reloaded on platform cars, these pushed up to the last previously laid rail, and with an automatic movement and a celerity that were wonderful, practiced hands dropped the fresh rails one after another on the ties exactly in line, huge sledges sent the spikes home, the car rolled on, and the operation was repeated; while every few minutes the long heavy train behind sent out a puff from its locomotive, and caught up with its load of material the advancing work. The only limit, inside of eight miles in twenty-four hours, to the rapidity with which the track could thus be laid, was the power of the road behind to bring forward the materials.

As the Railroad marched thus rapidly across the broad Continent of plain and mountain, there was improvised a rough and temporary town at its every public stopping-place. As this was changed every thirty or forty days, these settlements were of the most perishable materials, - canvas tents, plain board shanties, and turf-hovels,-pulled down and sent forward for a new career, or deserted as worthless, at every grand movement of the Railroad company. Only a small proportion of their populations had aught to do with the road, or any legitimate occupation. Most were the hangers-on around the disbursements of such a gigantic work, eatching the drippings from the feast in any and every form that it was possible to reach them. Restaurant and saloon keepers, gamblers, desperadoes of every grade, the vilest of men and of women made up this "Hell on Wheels," as it was most aptly termed.
When we were on the line, this congregation of scum and wickedness was within the Desert section, and was called Benton. One to two thousand men, and a dozen or two women were encamped on the alkali plain in tents and board shanties; not a tree, not a shrub, not a blade of grass was visible ; the dust ankle deep as we walked through it, and so fine and volatile that the slightest breeze loaded the air with it, irritating every sense and poisoning half of them; a village of a few variety stores and shops, and many restaurants and grog-shops; by day disgusting, by night dangerous; almost everybody dirty, many filthy, and with the marks of lowest vice ; averaging a murder a day ; gambling and drinking, hurdy-gurdy danc-
ing and the vilest of sexual commerce, the chief business and pastime of the hours,-this was Benton. Like its predecessors, it fairly festered in corruption, disorder and death, and would have rotted, even in this dry air, had it outlasted a brief sixty-day life. But in a few weeks its tents were struck, its shanties razed, and with their dwellers moved on fifty or a hundred miles farther to repeat their life for another brief day. Where these people came from originally; where they went to when the road was finished, and their occupation was over, were both puzzles too intricate for me. Hell would appear to have been raked to furnish them; and to it they must have naturally returned after graduating here, fitted for its highest seats and most diabolical service.

The country changes for the better as the road crosses Green River, and enters upon the third section of the Mountain Pass, which ends with the Salt Lake Valley at Ogden. Nothing on the whole line, unless it be the passage over the Sierra Nevadas in California, rivals this section in grand and picturesque seenery. It has also, with the same exception, been the hardest part of the road to build; for here are real mountain ranges to be crossed, to be scaled and to be descended, in order to reach the Salt Lake Basin. Deep cuts, heavy embankments, numerous tunnels are found in the pathway of the track. But at first, we pass through long troughs, like beds of departed rivers, with mountain walls on either bank, often bearing most unique forms, models for the architect, puzzles for the brain of artist. High winds, heavy rains, and columns of swiftly moving and revolving
sand appear to have been at work among these hills to waste and to reconstruct. Tall, isolated rocks, surmounting a hill, sometimes round, but always even and smooth as if work of finest chisel; immense columns and fantastic figures upon the walls of rock that line a valley for miles; solitary mountains upon the plain, fashioned like a fortress, or rising like Gothic cathedral, and called buttes (a French word signifying isolated hill or mountain), separated from their family in some great convulsion of nature; long lines of rock embankment, one above another, formed sometimes into squares like a vast fort, and again running along for miles, a hundred feet above the valley, looking like the most perfect of railroad embankments, with an open breach occasionally for a water-course, -these are some of the labors of these architects of nature, and with details indescribable and ever picturesque, they will be a constant excitement and inspiration to the traveler.

One of the most curious and famous of these grand fantastic shapes on the route is the "Church Butte." It lies directly by the old stage road, and not far from the Railroad track. At a distance, it looms up on the level plain, a huge, ill-shapen lill; near by, it appears the most marrelous counterfeit of a halfruined, gigantic, old-world Gothic cathedral, that can be imagined. We stopped before it just as the sun had gone down in the west, and as the full moon came up the eastern horizon, and the soft, contrasting lights, deepening slowly into shadowy dimness, gave exquisite development to the manifold shapes and the beautiful and picturesque outlines, that rock and clay
had assumed. The Milan or the Cologne cathedral, worn with centuries, ill-shapen with irregular decay, could not have looked more the things they are or would be, than this did. Everything belonging to the idea was there in some degree of preservation. Porch, nave, transept, steeple, broken columms, bent roof, caryatides, monster animals, saints and apostles, with departed nose or foot, worn and crumbling features, were all in their places, or a little out, but recognizable and nameable. We walked around this vast natural cathedral of sandstone and clay,-a full half mile,-and greater grew our wonder, our enthusiasm. Flowing out from the Butte on all sides was a thick, solid stream of fine stone and clay, that told how the work was done, how it was going on still, refining, pointing, carving, chiseling, but gradually and surely leveling, as all mountains, the world over, are being leveled, and the whole surface of the globe making into one vast plain.

The share which the high winds and the sand they take up and blow with powerful force in right lines, and in curves, and in whirls, have in this great work, both of construction and destruction, is such as can hardly be realized by those who have not experienced or witnessed them. Sand showers or sand whirlpools are of almost daily occurrence in these high central regions of the Continent. They load the atmosphere with sand; they carry it everywhere; among rocks, into houses, through walls, into the bodies of everything animate and inamimate, and there keep it at its work of revolution. There is a window among the mountains of Colorado that a single storm of this sort,
has changed from common glass into the most perfect of ground glass; and the fantastic architecture of its creation among the rocks of the country, from the North Platte to Fort Bridger, can only be understood and appreciated by being seen.

Soon, passing over crests of mountains, amid patches of snow and fields of yellow flowers,-such contrasts were offered us in June,-the road seeks its way into the Salt Lake Valley by Echo and Weber Canyons. These, their approaches and their connections, are varionsly wonderful regions. Narrow gorges themselves, with towering walls of rock on each side, narrower gorges open out from them, and lead up among timber and to mountain tops. Streams, pure and lively, course through them, seeking home in the mystery of Salt Lake. Wherever the valley is bold enough to widen, fertile meadows gladden the eye, and Mormon thrift and Mormon polygamy begin to show their results. Nore women and children than men are a new and strange sight in this far-away country.

Out from the rugged Weber Canyon, the road comes plumply into the Salt Lake Valley, and at Ogden, a branch comnects the main line with the capital city of the saints, thirty-nine miles distant. But here we are among the most prosperous farming settlements of Utah; and following the central road up the valley to reach the northern point of Salt Lake, we see Mormon civilization in villages and farms, for forty or fifty miles or more. Crossing Bear River near its mouth in Salt Lake, whence the stages for Montana will in future start from the Railroad, the line passes out of the Salt Lake or Wahsatch
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Valley, and in skirting the lake, has to attack and mount the Promontory Mountains that come sharply down into the lake from the north. Here at Promontory Point, the two companies, the Central Pacific and the Union Pacific, one building from the west and the other from the east, joined their tracks, and completed the grand Continental Railroad.

Continuing west, the road completes the northern circuit of the lake through a desert region, and goes out towards Nevada with uninviting surroundings. Pilot Peak, in the Ombre Mountains, is the first noticeable feature in the landscape; lying twelve to fifteen miles south of the Railroad, it commands a grand view of all the Salt Lake country and the desert north and west of the water. The general line of the road from Salt Lake to the Sierra Nevadas is along a high trough of rolling desert country, with occasional narrow fertile meadows; to the north high volcanic table-lands that intervene between it and the waters of the Columbia; to the south the mountain ranges of Nevada, and their almost equally barren valleys, that come to their northern ends here. The Humboldt River begins one hundred and forty miles west of Salt Lake, in Humboldt Wells, where the East Humboldt Mountains, the chief of the Nevada ranges, taper down into the trough. Here are several hundred acres of good meadow land, rich with springs, and capable of large crops of grass. The East Humboldt range is the backbone, as it were, of the Great Interior Basin, and some of its peaks are eleven thousand and twelve thousand feet high, and carry their snow caps through the year.

From the source of the Humboldt, the road follows the river for near three hundred miles to its sink. The stream is for the most part sluggish and muddy, with but a narrow fringe of arable land. A few ranches, raising hay and barley, flourish in favored spots; but there can be no very extensive farming through the valley without irrigation. An occasional kindred stream comes into the Humboldt from out the hiils, north and south. One from the north is known as Maggie Creek, so named for a sweet little Scotch girl, who was a pet of one of the emigrant parties that crossed the country by this route many years ago. Up its valley lies the nearest a vailable route to Idaino from the Caiifornia end of the main road, and Carlin, the village at the junction, has hopes of a future. Near by, the South Fork of the Humboldt, its main tributary, comes down out of the East Humboldt range, and up this lies the stage route to the new mining regions of South-eastern Nevada at White Pine and Pahranagat, the former one hundred and forty miles distant, and possibly the route for a cross or branch railroad to Southern Utah and Nevada and Northern Arizona, there comecting with the future southern continental road. Near the Railroad in this region, too, is a favorable specimen of the hot springs that abound all through the Interior Basin country. It seems to lie in the basin of an old crater, on top of a knoll fifty feet high from the river, and fills a mammoth pool, one hundred and fifty feet long by seventy-five wide, with water as hot as the hand can bear it, and affording a most delicious bath. Farther on west, the road passes the foot of Reese River Valley, ninety miles up which
lies Austin, in Central Nevada, the second most famous mining settlement of the State, and near its center.

Approaching its end, the Humboldt River passes between the West Humboldt Mountains on the south and the Trinity on the north, both which have for several years been the more hopeful than successful theaters of considerable mining operations. Those of the Trinity have proven the more fruitful of the two; and Orcana is their central settlement. At the end of the West Humboldt range is another broad Park, known as Lassens' meadows, and similar to those of Humboldt Wells at the beginning. Leaving the Humboldt River to run south and waste itself in the sands of the valley, the Railroad soon turns more westerly into and across another purely arid plain, covered with sage bush, varied by white alkali flats, holding but little water and that bad; with hot springs here and there; lizards and jackass rabbits the principal inhabitants; no timber save the sparsely scattered nut-pine in the higher parts of some of the mountain ranges; mountains in view on either hand, picturesque in outline, but bare, brown and dry. Thirty miles of this desert of deserts brings the road to Wadsworth on the Truckee River, and we taste the fresh waters and begin to feel the inspiration of the strong life of the Sierra Nevadas.

The track of the road from Salt Lake to the Truckee is on a very uniform elevation of four thousand to five thousand feet; the grades are all light, and the work of construction was easy. From Wadsworth, it ascends the Truckee Valley into the mountains, stopping at Reno to send off a branch of seventeen miles
to Virginia City and Gold Hill, the oldest and largest mining towns in Nevada, built up over and by the famous Comstock Lode, and beyond to Carson, the capital of the state. Near by are the Steamboat Springs, where sulphurous waters seethe with threatening roar just beneath the surface, and find vent through little cracks in the earth, pouring forth huge volumes of steam and rivulets of boiling water. From these,-last illustration of the heat and aridity of the desert,-it is a grateful sensation for the traveler to get among the grand woods and the bright pure waters of the mountains; and the track mounts two thousand feet to the tops of the Sierras (seven thousand feet high) in thirty-three miles. Near the summit, beautiful lakes adjoin the road, most especially Domer Lake, which strongly invite delay for the leisurely enjoyment of the grand scenery of the upper Sierras. In the days of early emigration, Domner Lake was the theater of a sad tragedy. An 1llinois party were overtaken here by winter and snow, lost their way, grew short of provisions, and many died from cold and starvation, and the survivors only existed on the flesh of their companions. It is difficult, amid the summer beauty and sweetness of this scene, to call up this thrilling, horrible experience, that gave the lake its name, and will forever cling to its history. For twenty or thirty miles along the summit section, the Railroad track is covered with a stout roof to protect it from the heavy winter snows, and this shuts out what the traveler is most eager to see. Going down on the California side, the mountains run off very rapidly; the rivers lie in deep
gorges, and cannot well be reached or followed by the track; and so the rails are laid along and around the more evenly descending ridges out into the valleys, and by winding back and forth on the hill-sides, occasionally crossing a deep gorge by majestic span of bridge, they manage to get down seven thousand feet in one hundred miles, with grades of from sev-enty-five to one hundred and sixteen feet. These two hundred miles of road, ascending and descending the great California range of mountains, are without parallel, for so long a distance, in expense and difficulty of construction, and in variety and magnificence of scenery, among the entire railroad system of the world. A million dollars in gold was spent for blasting powder alone in the construction of this section; the average cost of grading was one hundred thousand dollars a mile; and some single miles cost as high as three hundred thousand dollars each. About a dozen tumnels carry the track through projecting angles or bold hills of rock, and for miles it is fairly cut into the solid, perpendicular mountain sides. Considering that this mountain range, with all its doubts and difficulties and cost of railroad construction, reared itself at the very beginning of the whole enterprise on the Pacific side,-that it had to be attacked first, the courage and the faith of the California pioneers and executors of this grand continental roadway, rise to the front rank of all the high qualities required and put into its perfection; and in the distribution of historical honors growing out of it, to them should be given the lion's share.

There is a genuine exhilaration in the scenery of

California, after the long ride through the Great Interior Desert Basin; along wooded gorges, through broad groves, under hili-sides, already green and purple with the grape, over rolling meadows, golden with grain or brown with the ripened, decaying season's grass, into villages dead with the decay of mining, or alive with the birth of agriculture and manu-factures,-for it is thus the Railroad passes into and across California. At Sacramento, its capital, lowlying by the river, the center of the great interior valleys of the State, rival lines invite the traveler for the remnant of his journcy to the Coast at San Francisco. Steamboats down the river; a short, direct railroad to the upper end of San Francisco Bay, leaving a ferriage of twenty-two miles to the city; or a half-circle sweep of road through Stockton to Oakland, across the narrow part of the bay from San Francisco; or, adding another circle, by the southern shore of the bay, the train passes into the very center of the great city of our Pacific Empire.

There will speedily be other railroads across our Continent. The rivalries of sections, the temptations of commerce, the necessities of our political system, will add at least two more through lines within a generation's time. But this, the first, will forever remain the one of history; the one of romance. Its construction in so short a time was the greatest triumph of modern civilization, of all civilization, indeed. The work was seriously begun on the California side in 1864; on the eastern end in 1866; and the early part of the year 1869 witnessed its entire completion. Considering that its length is over eighteen hundred
miles; that much of it lay through an almost unknown and unexplored country; that it crosses two great continental ranges of mountains, and almost innumerable sub-ranges; that even the feeble centers of population along the line were five hundred miles apart; that for distances of from two hundred to five hundred miles there was no timber for ties; and for distances of fifty to two hundred miles there was no water for even drinking uses, and no grass to feed animals; that all the iron for one-half of the road had to be shipped around Cape Horn or across the Isthmus of Panama, and for the other to be freighted across the country from Pennsylvania,-thinking of all these elements of delay, difficulty and cost, surely neither argument nor rhetorie is necessary to place this work in its true proportions and its true relations before the world and in the pages of history.

The generous government grants were of course the moving power in this wonderfully rapid work. They proved more royal than it was supposed they were when made; but they lay practically unimproved for some three or four years. But when their wealth of gift was realized, and the war renewed the faith of the eapital and liberated the labor of the country, the two companies, chartered to execute the work, the one begimning in California and moving east, and the other on the Missouri River and moving west, entered into a race for the completion and possession by each of as much of the line and as much of the generous government bounty as could be secured. 'Whough the California Company began first, the heavy labor of grading over their mountains forbade them
to move so rapidly as the Eastern Company, whose first five hundred miles were over the open, level plain, and whose next three hundred miles had little of heavy or expensive work upon it. The result is, counting the line from San Francisco to Omaha, that the California or Central Pacific Company built about seven hundred miles, and the Eastern or Union Pacific about eleven hundred miles, and the point of conjunction is Salt Lake. The government money bounty averaged thirty thousand dollars to the mile, or over fifty millions of dollars in all ; while, by its acceptance of a second mortgage as security for this, the companies were enabled to issue and sell an equal amount of first mortgage bonds of their own. Thus their cash funds to do the work amounted to sixty thousand dollars a mile, or over one hundred million dollars in all. Despite the expense of construction through so new and in some places barren and mountainous a country, and the waste consequent upon such rapidity, the cost has undoubtedly been considerably below this. For their boldness and their energy, the men, who have performed this great work, have won immense fortunes. The direct profits cannot well be less than twenty million dollars; and behind this there remain the capital stock of the two companies, whatever it may prove to be worth, and the royal land grant of half the real estate for twenty miles each side the road, or twenty-five millions of acres in all. Besides all this, the California Company had direct local aid and grants worth four million dollars. Never was an enterprise so richly endowed; never in America so grand a speculation as the construction and ownership
of this road. The profits are on a scale with the work; and both are wortly of each other. But even the excess of bounty was a good investment for the Nation; the time gained, in the completion of the road, by such appeal to cupidity, was worth all that such excess has taken from the government. And the business already seeking the road proves clearly enough that, with honor on the part of its managers, the loans of the Nation will be returned with interest in direct repayment.

The manner of the construction of this great work has been much discussed. With such haste, there must have been not only waste, but imperfection and incompleteness, in the details. To avoid rocks or hills, as well as to increase the distance for which the government would issue its bonds, circles have also been substituted in some places for straight lines. But the builders have, after getting ahead with the line, gone back to improve and perfect it; and though they may not bring it up to the highest standard of even American railroads, the more intelligent judgment is that they have made and are making fair return for their opportunity. The road is so sure to be valuable to own and operate, that self-interest invites them to a solid and safe construction throughout; and the government will not be likely to let go its hold upon its various grants until this is secured.
To the East, to the world at large, the opening of this Railroad is but opportunity for new wealth, a revolution to the courses of commerce, by putting America into intimate relations with Asia, and sending the traffic of the Indies across our Continent, a fresh im5
pulse to civilization, and the founding of a new empire on the Pacific Coast. But to the pioneers in the mountains and on the plains of the interior, and along the States of the Pacific shore, it is something more, and deeper. It is moral and social refreshment and rehabilitation. It was touching, even to tears, when we first visited these regions in 1865 , to hear the appeals of the people for this that they now have so much more quickly than they then dreamed of. The first question, from man or woman, was of the Pacific Railroad. "When will it be built?" "Do use your influence to hasten it on." "We starve in soul and in heart and in pocket for that." It was the hunger, the prayer, the hope of all these peoples. For then, and without this chord of quick sympathy and communication, they did not feel at ease or at home in the far West. None of them ever spoke of Califormia or Nevada as their home. "Home" was in the East. They were ever talking of going "Home." "When I was home last;" "I mean to go home next year," or, "just as soon as the Railroad is done;" "I have never been home since I came out;" "I fear I shall never see home again,"-these and kindred phrases, unconsciously uttered almost, told where the heart was, -told of the yearning hunger of these pioneer spirits, not simply for "the cots where they were born," not merely for the circles of their kindred, nor the hills and the valleys amid which they were reared,-all these and something more,-but for the close contact and quick sympathy with the completer social, moral and intellectual life of the East, the absence of which every earnest spirit, orphaned in far away regions,
feels above all other lackings. The Railroad is the chord along whose quick lines moves this food for the early settlers of our New West. It brings them home; more, it carries home to them. Though they may never see its rails, or ride in its trains, they will feel its influence, and be more content and richer in their lives. It puts the great sections of the Nation into sympathy and unity; it marries the Atlantic and the Pacific; it destroys disunion in the quarter where it was ever most threatening; it brings into harmony the heretofore jarring discords of a Continent of separated peoples; it determines the future of America, as the first nation of the world, in commerce, in government, in intellectual and moral supremacy. Who shall say that any price was too great to pay for these results?

The story of this great enterprise would not be complete without the names of a few at least of the many leaders of men and of capital, under whose auspices the work was initiated and constructed. Of the California Company, Leland Stanford was president, C. P. Huntington vice-president, Charles Crocker superintendent of construction, and S. S. Montague and George S. Gray engineers; of the Eastern or Union Pacific Company, Oliver Ames was president, Thomas C. Durant vice-president and superintendent of construction, G. M. Dodge and Silas Seymour engineers. Further down the list, among the contractors, deputy-superintendents and engineers, were men who perhaps contributed more to the rapid completion and real labor of the enterprise than even some of these; it was a work that called for the highest
executive talent and the most indomitable energy to be found among the American people; and it not only gathered these to itself, but by the inspiration of its own magnitude, it called these qualities out freshly, and put them into their most vigorous exercise. No other people than ours,-daring in conception, rapid in acquirement, bold in execution, beyond any other nation,-could have both educated the men for such a work, and done it, too, all within five years of time. The Pacific Railroad is another such an illustration, such a triumph of the American people, as the war and its peace. Both were original, and not only without precedent, but even without comprehension by another people.

## IV.

## COLORADO: ITS MOUNTALNS AND PARKS.

Back to the Rocky Mountains-Their Finest Scenery Away From the Railroad Line-Colorado, the Center and Backbone of the Conti-nent-Its Three Grand Divisions-Its Majestic Mountains-Its Great Natural Parks-North, Middle and South Parks-Summer Scenes Among the Mountains and Parks-The Western Division of Colorado-The Stage Ride from Cheyenne-Night in a Stage-Coach-Experiences on the Road-Denver, its Growth and Promise, and its Panoramic Mountain View-Salt Lake City and Denver Compared.

But, after all, this Railroad, like railroads generally, fails to exhibit the most striking and attractive features of the country. The iron track seeks level lines and smooth ways, and runs through the back yards of towns, across the desert plains of the interior, and over the mountains in their humbler moods, away from commanding hights and picturesque attitudes. So, in bringing my reader back to show him the Rocky Mountains and to picture to him the attractions of Colorado, I must take him away from the main line of the continental railway. Nature graded a grand pathway for the locomotive across our Continent; the mountains fall back to the right of us and to the left of us,-so far away that we catch only the
dim outline of their greatness, leaving but here and there a quaint ruin of or majestic monument to her mighty labor,-that civilization may go by steam from ocean to ocean. The great mountain center of the Continent lies below the present railroad line; it looms up in the distance at Cheyeme; it marches along the southern horizon as you sweep up and across the magnificent Laramie Plains; it cheers you through the rolling alkali dust of the Bitter Creek country; and it shoots its spurs in beauty and in power before you, as you seek, more slowly, a descending path into the Salt Lake Basin. But would you behold it in all its majestic grandeur, its multiplied folds of hight, with ficlds of ice and snow and rock, its beauty of infinite form and color, its wealth of flora, and its wealth of gold and silver,-all the grand landscape and the hidden promise of the finest mountain region that the world holds,-then you must switch off from the main road, and come into the heart of Colorado, which is the very heart of our western Continent.

As Pennsylvania is the key-stone in the Atlantic belt or arch of States, so is Colorado the key-stone in the grand continental formation. She holds the backbone, the stiffening of the Republic. Lying a huge square block in the very center of the vast region bounded by the Mississippi Valley on the east, the Pacific Ocean on the west, and British America and Mexico north and south, the continental mountain chain here dwells in finest proportions, exaggerates, puffs itself up and spreads itself around with a perfect wantonness and luxuriance of power,-great
fountains of gold and silver, and lead and copper, and zinc and iron,-great fountains of water that pours itself in all directions through the interior of the Continent, feeding a wealth of agriculture that is little developed and never yet dreamed of even,great fountains of health in pure, dry and stimulating air,-great fountains of natural beauty; she may proudly bid the Nation come to her for strength, for wealth, for vigor,-for rest and restoration,-and may well call her mountains the Sierre Madre, the Mother Mountains of the Continent.

Her geographical prominence and parentage are but type and promise of her future relations to the developed and developing life of the Nation. Stretching two hundred and sixty miles north and south, and three hundred and seventy-five miles east and west, her territory has three natural subdivisions. Tlre eastern third is of the Plains, and forms their western section,-a high rolling plateau from four thousand to five thousand feet above the sea level, richly watered by streams from the mountains, the strips along the rivers ripe for abundant harvests of grains and fruits and vegetables, the whole already the finest pasture land of the Continent, and with irrigation, for which the streams afford ready facility, eapable of most successful cultivation,-beautiful in its wide, treeless sea of green and gray, with waves of land to break the monotony and lift the eye on to the great panorama of mountains, snow-slashed and snow-capped, that hangs over its western line through all its length of two hundred and sixty miles, and marks the second or middle division of the State. This is of about equal
width,-mountains one hundred, one hundred and fifty, two hundred miles deep,-on, on to the West, till even this pure air tires of carrying the eye over peak on peak, range on range. You think you must look over Brigham Young's fertile valleys, and trace the Colorado River out of its grand mystery, even if the outer and faintest rim of the horizon does not shadow forth the Sierra Nevada of California.

Starting from an elevation at the end of the Plains of five thousand to five thousand five hundred feet, these mountains rapidly carry you up to eight thousand, ten thousand, thirteen thousand, near to fifteen thousand feet above the sea level. Nine, ten, and twelve thousand feet peaks are scattered everywhere, -they are the mountains,-while those that mount to thirteen or fourteen thousand are plenty enough to be familiar, and are indeed rarely out of sight. They do not form a simple line, ascending from one and descending to another plain or valley, but are a dozen lines folded on, and mingling among each other, in admirable confusion; opening to let their superfluous waters flow out; closing to hold their treasures and defy the approach of man; gathering up all their strength, as it were, to make a peak or two of extra massive proportions, cold with snow and dreary with rock; and shading down into comparatively tender hills that woo the forests and the flowers to their very summits. The line of peaks that divide the waters that flow to the Atlantic from those coursing into the Pacific, -"the divide," par excellence,twists and turns through the State, very much in the style of a long and double-backed bow, making an
almost entire circle sometimes, and then coming back to its mission as a north and south line. Within its huge folds are other "divides," separating the feeders to rival rivers of the same continental side, or rival feeders of the same river, and other ranges with peaks as high as the parent range; and within and among them all, the hills, as if tired of hight and perpendicularity, give way to wide plains or prairies, with all the beauties and characteristics of plains and prairies outside the mountain region, and the added charm of holding little baby mountains of their own to diversify the landscape and feed forest and stream, while up and around them grow, through woods and grassy openings, the grand parent ranges that guard and enfold what are well called Natcral Paris.

These Parks are a distinctive and remarkable feature of this mountain center or belt of Colorado. They open upon the traveler at frequent intervals in charming unexpectedness; rich with grass and water, with trees and flowers, with soft beauty of outline and warm beauty of color, in most admirable contrast to the rough rocks and white snow of the high ranges around. Most of these Parks are, of coiurse, petite,little wide valleys around the heads of single streams, or the conjunctions of several, or the homes of sweet lakes; but there are four great ones that mark the phenomenon and give the name. These are North Park, Middle Park, South Park and San Luis Park, varying in size from twenty by fifty miles to one hundred by two huncred, or say from Rhode Island to Massachusetts,-lithe episodes and interjections among these mountains,by whose size, as thus stated,
you may take in some sense of the extent and majesty of the region, of which they are a sub-feature, as a whole.

The North Park extends up to the northern line of the State and within thirty or forty miles of the Pacific Railroad; through and out of it flow the head waters of the North Platte; its streams are thicker with trout, and its sage bush and buffalo grass and wooded hill-sides offer more deer and wolves and antelopes and bears than are found in the lower and more frequented Parks, but its soil is colder, as its elevation is higher, and its charms of color and vegetation more stinted. Niddle Park lies next below, and separated by a single but high sub-range of the main mountains. This is fifty miles wide by seventy miles long, and as the continental divide sweeps around on its eastern side, all its waters flow into the Colorado of the West and so into the Pacific. But it embraces within itself several high ranges of hills and two or three different valleys. The great peaks of the Territory lie marshaled around it,-Long's Peak, Gray's Peaks, and Mount Iincoln, north-east, south-east and south-west, each from fourteen thousand to fourteen thousand five hurdred feet high; and snow-capped mountains circle its whole area. Milder and more beautiful in landscape than the North, it yet falls behind its neighbor on the other side, the South Park, which is thirty niles wide and sixty long, and, fellowshipping with the North Park, comes into the inner tail of the bow carries the continental divide on its west, and furnshes the waters of the Arkansas and the South Plate.

This (the South) is the most beautiful of the Parks and the better known. Mining discoveries within and around it have opened roads through it, and bordered it with settlements. It offers a remarkable combination of the beauties of the Plains and those of the Mountains. They mingle and mix in charming association. Wide areas of rich prairic open out before the level eye; upraise it or turn one side, and grand snowy mountains carry the sight up among the clouds; and between these types of natural beauty are plentiful shadings in gently rolling hills, long level banks, thick and diversified forests, bright and bountiful streams,_-all the grand panorama of natural beauty that hill and valley, mountain and plain, winter and summer, snow and verdure, trees and rocks, water and waste can produce in combination and comparison, is here spread before the spectator, not from a single spot or in a single hour of his travel, but from mile to mile, from day's journey to day's journey, ever the same various scene, yet ever shifting in its kaleidoscopic alliances and changes.

The San Luis Park lies along and around the Arkansas and its tributaries in Southern Colorado and Northern New Mexico, is the largest and perhaps the most varied of the series of great Parks, centers about a grand lake, and is rich alike in agricultural and mineral promise. The Indians robbed us of our promised peep into its lines, and we know it only by its kinship to those we have visited, and the enthusiastic descriptions of those to whom it is familiar. But the South Park as yet takes the palm among the Coloradians, perhaps only, however, because it is the
more accessible, and its beauties have been more thoroughly explored. Certainly it lies more closely in the lap of the great mountains; and Mount Lincoln and Pike's Peak, perhaps the most noted and remarkable of all the high peaks of the State, sentinel it north and south, feed it from their snows, protect it from the rough winds, shadow it from the sharp suns.

In spite of these great elevations, the traveler carries summer skies as he keeps summer scenes with him at this season, in most of his excursions among the mountains and their parks in Colorado. We borrow our ideas of mountain travel and mountain hights from Switzerland and the White Mountains of New IIampshire. Among them both, vegetation ceases at about five thousand feet above the sea level, and perpetual snow reigns among the Alps at seven thousand to eight thousand feet, and would in the White Mountains if they went as high. But here in these vaster mountain regions than either of Western America, the hills themselves only begin to rise from the Plains at an elevation of five thousand five hundred feet. And at that hight, though the nights are always deliciously cool, the summer days are as warm as, if not warmer than they ever are in the valleys of the New England States, and snow enough for sleighing or to force the cattle to shelter or other food than the prairie grass is only a rare chance,-a memory of the oldest, or a dream of the youngest inhabitant. At six thousand or seven thousand feet, in the valleys of the mountains, the small grains and the tenderer vegetables are successfully cultivated, and at seven thousand five hundred and eight thousand five hun-
dred feet, potatoes, turnips and cabbages thrive. The Middle Park ranges from seven thousand seven hundred to mine thousand feet high in its level sections, and the South from six thousand five hundred to seven thousand five hundred, while the higher plains and embraced hills of both run up to ten thousand and even eleven thousand feet. Yet grass grows richly and abundantly through both; hay is a great natural crop, and is cured already for all the wants that can be reached; and in the lower parts of the South Park, cattle winter out of doors, and the smaller grains and hardier vegetables are grown with great success and profit. Flowers are beautiful and abundant up to ten thousand or eleven thousand feet,so beautiful and abundant that I must reserve them for special description,--the largest and best timber grows at nine thousand to eleven thousand feet, and trees do not cease till you pass above eleven thousand five hundred feet, while the real, absolute and perpetual snow line,-such snow and ice as are found universally in Switzerland at eight thousand feet,-is not reached at all in these mountains. At twelve thousand feet it begins to lie in great patches on the shaded sides of the hills, or in deep ravines, and goes on to multiply in such form as the mountains rise to their greatest hight at fourteen thousand to fourteen thousand five hundred feet. But it absolutely covers no mountain peak; the tops of Gray's Peaks and Mount Lincoln, the highest points in the whole region, are dry and bare, at least at midday, through August, though in reaching them you may go over snow-fields twenty or thirty feet deep and miles long,
though nearly every morning's sun may glance brilliantly off the freshly whitened peaks of all the high mountains in sight, and though it makes everywhere and at all times a significant feature in all the landscape visions of the country.

The full mountains of show and the vast rivers of ice that belong to Switzerland are not here, and are certainly missed by the experienced mountain traveler; but for their absence we have many compensa-tions,-a more varied and richer verdure, a wider range of mountains, with greater variety of form and color, these elevated Parks, that have no parallel anywhere for curious combination of landscape feature and beauty and practical use, a climate in summer that fosters comfort and makes high mountain travel both much more possible and agreeable, and an atmosphere that, in purity and dryness, in inspiring influence upon body and mind, can find no match in any part of Europe, nor elsewhere in America.

The third or western great division of Colorado is comparatively unknown. Explorers have crossed it here and there; adventurous miners have penetrated into this and that of its valleys; but it holds no real population, and its character is known only in a general way. The great mountain ranges shade down irregularly through it into the vast interior basin of the West, instead of breaking off almost abruptly, as they do on their eastern side, into the level plains; the Grand, the White, the Green and the Gumison, the great feeders of the Colorado of the West, slash freely through it, often by narrow and unapproachable gorges, often too through wide and rich valleys;
many a high park, with rough sage bush and tall grass, spreads itself ont, cold and dreary in the north, warmer and more fertile in the south. Many a fable of rich mines, of beautiful valleys, of broken and ruined mountains,- the debris of great contlicts of nature,-many a deep faith in untold wealth and unnumbered beauties do I hear of and about this section of the State; but the fact remains that it has few settlers and no especial history, -and I gather the conclusion that it is in every way less interesting to traveler, less enticing to speculator or settler, than the middle and eastern divisions. New and thorough explorations are in progress through its lines; another year will add something to our knowledge of its valleys and mountains; but for the present it is perhaps as much unknown land as any section of equal size in the United States.

To reach the heart alike of the civilization and the scenery of Colorado, the traveler now leaves the main Pacific Railroad at Cheyenne. A branch track will soon, if it does not already, carry him quickly through the hundred miles south to Denver. The more direct line of the St. Louis or Eastern Division Railroad is within two hundred miles of Denver on the east, and is under engagement with the government to continue its track to that point. The completion of this line will give Colorado two railroad connections with the East to the good fortune of both sections. But our second entrance into Denver, in the summer of 1868, was by a stage ride of twenty-two hours from Cheyenne. The road lay across the last fifty miles of the Plains,-through high rolling green prairies, cut every
fifteen or twenty miles by a vigorous river, with border of rich and cultivated intervale, and line of trees marking its progress from mountain debouch to the slow-sinking, wide-reaching horizon,-to the right the grim mountains with towering tops of rock and snow, -to the left the unending prairie ocean, with only an occasional cabin and scattered herd of cattle to break its majestic solitude and indicate human settlement; there was such magnificent out-doorness in the continuous scene as no narrower or differently combined. landscape can offer, and so long as the day lasted it was a thing of beauty and of joy.

But the night cometh, when the landscape is shut out, and dreary weariness comes over the coachcrowding passengers. It is the first step that costs in all experience; and of nothing is this more true than of the first night in a long stage-coach ride. It is more intolerable than the combination of the succeeding half-lozen, were the journey prolonged for a week; the breaking-in is fearful,-the prolongation is bearable. The air gets cold, the road grows dusty and chokes, or rough and alarms you; the legs become stiff and numb, the temper edges; everybody is overcome with sleep, but can't stay asleep,--the struggle of contending nature racks every nerve, fires every feeling; everybody flounders and knocks about against everybody else in helpless despair; perhaps the biggest man in the stage will really get asleep, which doing he involuntarily and with irresistible momentum spreads himself, legs, boots, arms and head, over the whole inside of the coach; the girls screech, the profane swear; some lady wants a smelling-bottle
out of her bag, and her bag is somewhere on the floor,-nobody knows where,-but found it must be; everybody's back hair comes down, and what is nature and what is art in costume and character is revealed, -and then, hardest trial of all, morning breaks upon the scene and the feelings,-everybody dirty, grimy, faint, "all to pieces," cross,-such a disenchanting exhibition! The girl that is lovely then, the man who is gallant and serene,-let them be catalogued for posterity, and translated at once,-heaven cannot spare such ornaments; and they are too aggravating for earth.

But the horses are gayer and go faster than three years before; and the meals at the "home stations" are greatly improved; no more single-roomed turf cabins, bare dirt floors, milkless coffee, rancid bacon, stale beans, and green bread, and "if you don't like these help yourself to mustard;" but comfortable little taverns of dressed timber and planed boards, with carpeted parlors and separate dining-rooms, fresh meat and milk and butter, trout and eggs, everything "square" in fact, and a hearty welcome. The road crosses half-a-dozen hearty streams, pouring away from the mountains, and finally aggregating in the Platte, but furnishing along their lines rich intervale land, now being rapidly taken up and successfully cultivated for farms. Several villages of growing importance we found at the principal river crossings. Only once, in the ride, did we fail of cheery greeting; but it was a trifle rough to wake up the landlady at one o'clock in the morning for an early breakfast. She could get it, she said; but she
didn't quite like to. But who could resist the gallant Vice-President, whether pleading for ballot or breakfast; or the offers of help from the ladies; or the final suggestion of the driver? - She wavered at the first; the second operated as a challenge to her capacity; and the third was irresistible. There is no king on his route like a stage driver, - he has a "dreadful winning way" with him, both for horses and women. The philosophy of it I do not understand, but the fact is universal and stubborn; he is the successful diplomat of the road; no authority goes back of his; no meal can be begun till he is in place; and there are no vacant seats for the men passengers on the box when there are ladies in the party. So, at two o'clock in the morning, we sat down to beef and ham and potatoes, tea and coffee, bread and butter, pies, cakes, and canned fruits,-not even the edges of the "squareness" of the meal rubbed off, and good humor everywhere.

Denver looked even more charming than three years ago, as we tumbled out of the stage, long after "sun up," feeble and flabby, hungry and humble, with a dreadful "morning after" feeling and appearance and movement about us. The town has, indeed, passed its hot, fickle and uncertain days, when gamblers reigned, and "to be or not to be" was the everlasting question that fretted everybody who owned real estate, and with which they, in a sort of your-money-or-your-life manner, assaulted every stranger the moment he got out of the stage. Now, though trade was dull while waiting for the Railroad to come, and we saw but a single street fight while in the
town, the Denverites all wear a fixed fact sort of air, and most of them are able to tell you, in a low and confidential chuckle, calling for envy rather than sympathy, that they own a quarter section just out there on the bluff, to which the town is rapidly spreading, and where the capitol buildings and the fine residences will all be located, or a few corner lots down near the river, where the mills and the factories are destined to rise in the near future. Long lines of brick stores already give permanent and prosperous air to the town; its dry and its wet rivers are both newly bridged; irrigating ditches scatter water freely through streets, lawns and gardens, and now flowers and fruits, trees and vegetables lend their civilizing influences and their permanent attractions to the place; national banks emit their greenbacks and will "do" your little note most graciously at from one to two per cent a month and "a grab mortgage" behind it; Episcopal Bishop Randall from Boston has established an excellent school for girls; the Catholics have a larger educational establishment; the Methodists have the handsomest chureh and wear the best clothes; the Baptists and Congregationalists are lively and aggressive; the stores are closed Sundays; the nights are quiet and the police have a sinecure; free schools are organized; and three daily papers and two independent weeklies are published in the town. Kitchen girls are scarce and a dear luxury, with pay at fifty dollars to seventy-five dollars a month; but the consequence is that the cooking is excellent, and people live "first rate." The dwelling-houses are mostly small, a single story or a story and a half, but
within are comforts and luxuries in abundance, and one house boasts a true Van Dyke. The emigrant and the traveler must "move on" by Denver if he would get beyond the organization of the best American social and intellectual life.

I see I have spoken of Denver's "dry river," which calls for a parenthetical paragraph in explanation. The South Platte sweeps around the lower part of the town, broad and turbulent, of certain volume but uncertain track, useless for navigation but excellent for irrigation; but more sharply through the center of the business section lies Cherry Creek, now a broad bottom of dry sand, and only occasionally enlivened, with any water. For years after the founding of the town, none appeared in its bed, and supposing it to have been deserted altogether, the people builded and lived in the bottom. Stores, shops and dwellings, streets and blocks appeared there; it was the heart of the town; the printing office was there, also the city records; but of a sudden, after a heavy rain, there came a flood pouring down the old river bed, not gradually and in rivulets, to warn, but a full-blown stream marched abreast with torrent force and almost lightning speed, reclaimed its own, and swept everything that had usurped its place into destruction. Since then, the people have paid respect to Cherry Creek; at some seasons of the year there is still a. little water in its sands, but for the most part it is dry through the town; but nobody builds in the bed, and bridges over its path pay tribute to what it has been and may be again. Farther up its line, there is water in it now; but the sands consume and an irrigating
ditch seduces it all away before it reaches the limits of the city.
Her central location, under the Mountains, in the Plains section of the State, gives Denver a fine climate the year through ; is favorable for trade to all parts of the State; secures to her the outgo and the income of the mining districts; makes her also the chief market for all the productions of the farming counties, and the focal point for all travel to and from the Mountains, as well as north to the Railroad, and south to New Mexico; and endows her with a scene of mountain panoramic beauty, one hundred miles long, now touched with clouds, now radiant with sunshine, then dark with rocks and trees, again white with snow, now cold, now warm, but always inspiring in grandeur, and ever unmatched by the possession of any other city of Europe or America. The finest views of these Mountains are obtained farther out on the Plains, where the more distant peaks come into sight, and the depth and variety, as well as the hight and beauty of the range, are realized; and wider and older travelers than I,-who have seen the Cordilleras of South America from the sea, as well as the Alps from Berne,-join in the judgment that no grand mountain view exists that surpasses this, as seen from the high roll of the prairie just out of Denver, and over which the town is fast spreading, and so on for twenty to forty miles farther east.
With these charms of climate and landscape, with a settled and intelligent and prosperous population already of four thousand to five thousand, with busi-
ness connections and facilities, social order and attractions, religious and educational institutions, all well organized, and fed by their own interior force,-growing from within out, and not simply by fresh importations of eastern material,-and holding the conceded position of the social, political and commercial capital of the State, Denver has a gratifying future of growth before it. Another year will bring through it the Pacific Railroad on the St. Louis route, connecting here with the branch of the main or central road that drops down from Cheyenne; a railroad is already commenced, also, towards the mining centers of the mountains by the Clear Creek Valley; and it cannot be long before a southern road will be demanded, down from Denver, along the base of the mountains to Southern Colorado and Santa Fe. Not unlikely, indeed, it will prove wiser to carry the first Southern Pacific Railroad around this way, rather than to strike diagonally across to Santa Fe from the present terminus of the St. Louis Road, as is proposed, for this route is through a rich and already partly developed agricultural country, while that goes by half or wholly barren table-lands, not likely to be at all occupied for many years, and never capable like this of holding a large population.

Coal and iron and clay are found in the neighborhood; the hills give timber; the valleys every grain and vegetable and many fruits; and Denver cannot well escape a steady and healthy growth, and the destiny of becoming one of the most permanently prosperous, as it will be certainly one of the most beautiful of our great western interior cities. I
rank it along with Salt Lake City. Both are off the main line of the continental Railroad; but both have locations, amid developed natural wealth and conceded natural beauty, that must command their future, and make it one of power and prosperity for each. Six hundred miles apart, with the continental range of mountains separating them, there can be no rivalry between them, save in social graces and pleasure attractions, and here the Mormon supremacy in Salt Lake will give Denver great advantages.

## V.

## LIFE AMONG THE MOUNTAINS.

The Roads from Denver into the Mountains-What they Reveal to the Traveler-How Pleasure Parties Travel and Camp-The North Clear Creek and Central City-The South Clear Creek Valley, and its Attractions-Idaho and its Springs-Outfit for a Camping Ex-perience-The Mule-Over the Mountains by Berthoud Pass to Middle Park-The Flowers and the Forests of the Upper Moun-tains-The Camp at Night.

All the mining in Colorado is up among the mountains, and this has provided roads in all directions. To the north-west from Denver, one leads up Boulder Creek, first through farming villages, and then among mining camps, till it carries us to the very tops of the range. More directly west are the roads to Golden City, Black Hawk, Central City, Nevada, Idaho, Fall River, Mill City, Georgetown and Empire, in the valleys of Clear Creek; while south-west are roads into and across the South Park to Hamilton and Fairplay and Breckinridge, and on over into the mining regions of the upper Arkansas Valley. Daily stages go up into the Clear Creek Valleys, where at least ten thousand people are supported or are hoping to be supported by the gold and silver mines.

All these roads introduce one delightfully to close companionship with the mountain scenery,-first through the long, wide prairie; then into narrow valleys; occasionally a bold gorge or canyon and a broken mountain; up and among and over high hills, commanding majestic views of higher summits beyond; through little wooded parks or open fields, where grain grows and flocks feed, and somebody keeps "a ranch;" by lively streams with tangles of willows and hops and clematis, and fruity shrubs up the drier and higher banks; among flowers everywhere, growing finer and plentier the higher you climb; out and in forests of various species of cottonwood and evergreen, often brown and dead through wasting fires that have swept the hill-sides, or half cleared for the consuming rage of the gold and silver furnaces, but still a rich possession of beauty and wealth for the country; under a sun always searching with heat, but through an atmosphere growing rarer and rarer and drier and drier, and ever fresh and cool,-the day's ride is thus a perpetual pleasure and surprise to the new-comer.
How the mind runs back to our youthful, vague, mythical knowledge of the Rocky Mountains in their actual presence! How difficult to realize that, whereas, twenty years ago, they and their location and character, and the region about them were almost unknown, now, only a week from the Atlantic shores, we are sporting familiarly under their shadows, following tediously up their sides, galloping in the saddle around their summits, drinking from their streams, playing snow-ball in midsummer with their imperish-
able snow-banks, descending into their very bowels, and finding companionship and society as various and as cultured and as organized as in New England; cities of thousands of inhabitants, not only at their base, but away up in their narrow valleys, eight and nine thousand feet above the sea level! All this seems dream-like, yet abundant experience with every sense testifies to the reality.

Our party went at first in various ways and by various roads up into the mountains; some on the stage; others on horseback; others still in wagons with camp equipage, stopping wherever hunger or night overtook us, and establishing board and lodging out in the open air, by free-rumning stream, and under inviting trees. This independent camping habit is almost the rule for all pleasure parties into the mountains. It grew up with the necessities of the early settlements, and out of the roving, straggling habits of the miners. The taverns are not now frequent or good; the climate favors the outdoor life in the summer season; and with provision in abundance, as blankets, a coffee-pot, a frying-pan, and a sack of flour and a side of bacon, either in a wagon, or packed on an extra horse, if you are journeying in the saddle, even pleasure-travelers find it much the more comfortable and decidedly the more independent mode, while to the old settler, and especially to a miner, it is altogether a matter of course. One of these hangs his blanket and his coffee-pot and frying-pan, with a joint of meat and a bit of bread, around his saddle, and, without extra animal or companion, is good for a week's journey among the mountains. What he
lacks for food he finds in the streams or woods, or buys at the occasional ranch, and at night a deserted cabin, which is nearly always at hand, where miners have been and are not, or a roadside tree and an open camp fire furnish him shelter and warmth. He sleeps the sleep of the tired, and if it rains and he gets wet, the renewed fire dries him, and the climate never encourages colds. So with the multiple of our single traveler; with companions, conveniences and comforts increase, but the fashion is the same; and whole families,-mothers and babies included,-will, with covered wagon and a saddle-horse or two, make a pleasure visit to the mountains, after this fashion, and live literally on the country for days and weeks, in delightful and refreshing companionship with Nature. It was this sort of life that we were all entering upon, with all its strange novelty and stimulating influences.

The road by Golden City offers more striking mountain and rock scenery; that by Mount Vernon is generally the more inviting. The North Clear Creek Valley is hardly more than a ravine, through which for five miles are huddled the chief gold-mining operations of the State. Black-Hawk, Central City and Nevada run into and over each other, and form really but a single town. The clang of mills, the debris of mines, the waste of floods leave nothing that is inviting, except money-making; and unless the traveler is interested in studying this form of it, he will be content with a passing glance, and seek the more pleasing neighboring valley of the South Branch. Here, below Idaho, gulch mining, which is
pretty lively and successful still, despoils the prospect so far as man can; but the dozen or fifteen miles from Idaho, up by Fall River, Mill City and Empire, to Georgetown, is quite the nicest bit of the inhabited portion of the mountains. The valley is not wide, indeed you can heave a stone across it in the narrower, and fire a rifle from hill to hill at its wider parts; but it breaks out frequently into little nooks of plateaus or bars; it opens up into seductive side valleys or canyons, and it winds and turns about, and sends up its high mountain walls in form and manner, to present a constantly varying but ever beautiful scene. At the upper end, winter confronts you in snow-covered peaks; below, nature looks warm and summer-like; and though the valley is from seven thousand five hundred to eight thousand five hundred feet high, the days are like June and October, and the winter is not long or severe. Till you reach Georgetown, where the hills shut in the valley sharply, and the rich silver section has its center, there is not much mining, and the villages are but neighborhoods of six to a dozen houses each. Idaho and Fall River have good hotels, and are favorite summer resorts. The former has a wonderful hot soda spring that furnishes most refreshing and healthgiving baths. Over it rise a family group of three peaks, distinguishable in all mountain views, and known as the Chief, Squaw and Papoose, and up from the valley here you rise to Chicago Lake and Chicago Mountain, familiar as the foreground scene in Bierstadt's "Storm in the Rocky Mountains."

All these mountains go sharply up from two to
four thousand feet above the valley, often past the timber-line, and end in snow or bare, grim rocks. They offer unending fascination to the lover of mountain-climbing and mountain views; while to lie on the grassy banks just above the river,-that, in practical parenthesis, it should be noted, runs swift and strong down the rapid descent of the valley, and is full of "water power,"-in the warm sun, and look through the snowy fleece of grasshoppers, that with outstretched wings fill the air, up and among the hills,-masses of forest and rock and patches of snow,-to the line of brightened blue sky they border,-this is just comfort and rest, and is worth the coming to experience.

Up here, we stripped for a pure saddle and camp trip over into Middle Park. The ladies and superfluous baggage were returned to town, and we came down to "bed-rock," as the miners say, i. e. an extra flannel shirt and a pocket-comb. My individual outfit may serve both to show our manner of travel and life, and as a model for the reader who shall follow our experiences. First, woolen stockings and winter under-clothing; and of these, an extra set, with two extra handkerchiefs and two towels, soap, comb and tooth-brush and slippers, only moderately filled a pair of light saddle-bags on my own animal. Over the undershirt was worn a dark and thick cassimere shirt, with turnover collar of same and pocket in breast, which, coming nowhere in contact with the body, may be worn for weeks without disrespect to your washerwoman. A pair of very thick, high-top riding boots, of extra size, my last winter's thick pantaloons
and heavy sack coat, and an old soft hat, flexible as a rag, and answering as well for a nightcap, completed my clothing. No vest or waistcoat, no suspenders; a strap around the waist held things together, and carried a revolver and a tin cup. Over the saddle-bags behind were strapped a thin woolen overcoat,-it would have been better thick,-and a loose rubber cloth coat; both which were frequently in use, and were always valuable at night; and as often in mid-day they had the company around the saddle of the sack-coat, and I rode under the warm sun in pantaloons and shirts. It was a neat, complete and compact personal outfit; everything that was needed for a trip of two or three weeks, and the only modification I would make, in going again, would be to substitute a pair of old shoes for the slippers, and to have the rubber overcoat so modified that it would closely cover the legs in the saddle down to the boot-tops. All this was carried on and around my own saddle; my bedding alone went on the pack animals, and this consisted of two pairs of heavy blankets, a buffalo robe, a rubber blanket and a pillow,-all strapped into a tight roll or bundle, -no more than one restless sleeper needs in the cold nights of these outdoor mountains, but equally abundant for two square and fair sleepers who will turn over at one and the same time and don't kick the clothes off.

My mule,-did you ever ride a mule? There is no other experience that exactly fits one for this. As far as a mule's brains go, he is pretty sensible,and so obstinate! But it takes a long while to beat a new idea into his head, and when it dawns on him, the effect is so overpowering that he just stops in
amazed bewilderment, and won't move on again until he is relieved of the foreign consciousness, and gets back to his own origiual possessions. The whole process is startlingly human; it inspires you with faith in the idea of the transmigration of souls. I know so many people who must have been mules once, or will be,-else there is no virtue in the fitness of things! But my mule belonged to the best of the race; he was prudent,-he never went in any doubtful places until somebody else had gone before and proved the way; he was very patient,-he would always stop for me to get off, or to get on; he was very tough,-my spurs never seemed to annoy him one atom, and my riding him didn't wear any skin off of his backsides, not a bit. But after we grew acquainted, and he came to appreciate the more delicate shades of my character, we got on charmingly together for the first half of the day; in the afternoon, when he grew lazy and tired, and I nervous, we often had serious discussions,-sometimes with sticks,-but he generally got the best of the argument.

If a well-broken Indian pony or a "broncho" (a California half-breed horse) can be got, either is probably better than a mule; more springy in tread and quicker in movement, and equally careful in moun-tain-climbing and fording streams and ditches; but otherwise, the mule is the better animal for your work on these expeditions. A "States" horse cannot stand the hard riding and tough climbing, and besides must have grain to keep him up, while the mule and the Indian and "broncho" ponies will live on the rich grasses of the country. The latter are apt to be
wilful and wicked, and should only be taken, in preference to the mules, upon good references as to character and a trial to boot.

But our select party of a dozen gentlemen, led now by the local Governor Hunt, are already far ahead. We have passed the beautifully located village of Empire City, and are up where the Clear Creek is but a lively brook. The valley has become a defile, a gorge, wooded and flowered, rock-strewed and briskly watered,-a wild Alpine scene. The mountains rise sharp and sheer, one thousand and two thousand feet above the road, and wide walls of red granite hang over it. The stream turns and twists, and foams, and we follow a half-made road along, over, in its rugged path. There was an attempt made a few years ago to build a stage road through the mountains and over into Utah by this route; many thousand dollars were spent upon it; but it was found too big a job, and it is passable now for only a few miles farther on. It takes the traveler into and among rich mountain beauties; even to come up here and go back, without an objective point beyond, is abundant recompense.

We turn sharply from the road up the steep mountain side, a narrow trail guiding us along precipitous lines. The mis-step of the mule would send animal and rider rolling over and over among the sparse trees down the declivity; but mules don't mis-step, and even the top-heavy pack jacks,-mountains on mole-hills, indeed,-carried their burden and themselves unharmed to the top. The thin and thinning air offered severer trial, however, and the
beasts struggled like huge bellows for wind, and trembled beneath us in the effort to take in enough to keep agoing; to get off and walk was to undergo the same trial ourselves, and, walking or riding, we had every few rods to stop and adjust the lungs of man and beast to the rare and growing rarer air. There was temptation to stop, too, in the widening views of the upper mountains; their snowy fields and gray or red or brown walls and peaks lifted into sight, on all sides, close and familiar, distant and stranger, but making us feel, for the first time, their real companionship,-that nearness to great and sublime nature that awes and uplifts like the presence of God himself.

Passing the sharp mountain side, we came, at a hight of ten thousand feet, to pleasant little park openings, ascending by easy grade, half-wooded, and whose bright grass and abundant flowers and deep evergreens tell of fertile soil and protecting hights around. Such spots are frequent in all these high mountain ranges, and are exceeding fair to look upon. They were in their glory at this August season of the year; it is but a little while back to last year's snows, and a few weeks forward to another wintry embrace ; and they make the most of their stinted time. So in July and August they compress the growth and the blossom of the whole year; and we see at once flowers that are passed and flowers that are yet to come in the Plains below; dandelions and buttercups, violets and roses, larkspurs and harebells, painter's brush and blue gentian,-these and their various companions of spring, summer and au-
tumn, here they all are, starring the grass, drooping over the brook, improving every bit of sunshine among the trees, jealous of every lost hour in their brief lives.

I wish I could repeat the roll of this army of beauties for the benefit of my flower-learned readers; I know most of them very well by sight, as the lad said of his unlearned alphabet, but cannot call them by name. Blue and yellow are the dominant colors; of the former several varieties of little bell and trum-pet-shaped blossoms, pendant along stalwart stalks; again, a similar shaped flower, but more delicate,-a little tube in pink and white, seems original here; and of the golden hues, there are babies and grand-babies of the sum-flower family in every shade and shape. One of these, about the size of a small tea-saucer, holds a center stem or spike of richest maroon red, with deepest yellow leaves flaring away from it,each color the very concentration and ripeness of itself, as if dyed at the very fountain head. The harebell is at home everywhere; drooping modestly and alone on the barren and exposed mountain sides at eleven thousand or twelve thousand feet, as well as in the protected parks among all its rivals; but the fringed gentian is more fastidious, and grows only where nature is richer, but then in such masses, with such deep blueness and such undeviating uprightness of stem, as to prove its birthright here. The painter's brush, as familiarly called here, is a new flower to me; something like the soldier's pompon in form, it stands stiff and distinct on a single stalk, about six inches tall, with three inches' length and one inch in
thickness or diameter of flower, in every shade of red from deepest crimson to pale pink, and again in straw colors from almost white to deep lemon. We picked on a single morning's ride seven of different shades of red. A bunch of the brightest of this flower, with sprinkling of those of milder hues and a few grasses, such as could be gathered in five minutes in many a patch of Alpine meadow we passed through, was enough to set a flower-lover crazy with delight. It was a beacon, a flame of color, and would make a room glow like brilliant picture or wood fire on the hearth. But perhaps the most bewitching of the flowers we discovered was a columbine, generous but delicate, of pale but firm purple and pure white,-it was very exquisite in form and shading. Higher up, where only mosses could grow for rock and snow, these were in great variety and richness, with white, with blue and with pink blossoms.

All this wonderful wealth and variety of flomer is marked with strength but not coarseness ; the colors are more deep and delicate than are found in garden flowers; and though frost and snow may stiffen their blossoms every morning,-for at ten thousand feet high and above, the temperature must go down to freezing every night,-the dryness of the air preserves them through their season, and they keep on growing and flowering until their September and October winter fairly freezes them out.

There is no such variety and beauty in the forests of the Rocky Mountains as those of the East and the extreme West alike offer. The oak, the maple,
the elm, the birch, all hard woods are unknown. Pines, firs and spruces of various species, and the cotton-wood, a soft maple or poplar, with delicate white wood and a pale green and smooth leaf, are all that this region can offer for trees. Nor are these generally of large size. The forests seem young and the individual trees small, even by the side of those of New England; there is no hint among them of the giants of the Pacific Coast. The probability is that they are young, that the Indians kept them well burned off, and that, with settlement and civilization, in spite of the wanton waste now in progress, and against which there should be some speedy protection, the forest wealth will increase. Perhaps not in these first years, but by and by, when coal takes the chief place for fuel, and self-interest and legislation work out their care of the trees, and prevent devastating fires. But many a fine grove of thick and tall pines, that would warm the heart of any ship-builder, have we passed through; and their deep colors and firm forms, contrasting with the light and free-moving cotton-wood, give a pleasing and animated life to the forest landscape.

But the silver spruce is the one gem of the trees; a sort of first cousin of the evergreen we call the balsam fir in our New England yards, but more richly endowed with beauty of shape and color. It is scattered plentifully through these mountain valleys, and looks as if a delicate silver powder had been strewn over its deep green needles, or rather as if a light white frost had fallen all upon and enshrouded it; and you cannot help wondering why the breeze does not
shake the powder off, or the sun dissipate the frost, so ever present is the one illusion or the other. But it holds its birthright persistently,-a soft white-bluegreen combination of positive power that comes into the rather hardish gray neutral coloring of the general landscape with most agreeable, even inspiriting effects. This and another spruce often throw themselves into a very charming form of growth; gathering around an old pine, they will shoot up numerous spires, thin and tall, thicker and shorter, and so shade down to a close, spreading mass in a wide semicircle around,-a bit of natural cathedral-like posturing in tree and shrub life, so often repeated as to suggest art, so effective as to call out the delight and envy of every landscape artist who sees it. Everywhere among these high mountains, in barren rather than in fertile spots, we unexpectedly find the "Mahonia Holly," a favorite but winter dying shrub of our eastern lawns; they call it here the Oregon grape, for it bears a little berry, and it is evidently killed to the root every winter, for it gets only a few inches of growth, and I do not find it massed at all. But in its freely scattered little specimens, its deep, smooth and hard green leaves kept company with us until we had passed the timber line, and come out among the snow-fields.

After three or four hours' hard riding, from the upper Clear Creek, we suddenly came out of the tree. into an open space of scanty green, bordered by snow, a gap or sag in the mountains,-and behold we are at the top of Berthoud Pass. The waters of the Atlantic and Pacific start from our very feet; the winds from the two oceans suck through here into
each other's embrace; above us the mountain peaks go up sharp with snow and rock, and shut in our view; but below and beyond through wide and thick forests lies Middle Park, a varied picture of plain and hill, with snowy peaks beyond and around. To this point, at least, I would advise all pleasure travelers in Colorado to come; it is a feasible excursion for any one who can sit in the saddle; it can be readily made with return in a day from Empire, Georgetown or even Idaho; and it offers as much of varied and sublime beanty in mountain scenery, as any so comparatively easy a trip within our experience possibly can.

But until improved paths are made,-which must soon be, however,-a heroic spirit and a tough body are needed for the descent into the Park. Through a tangle of trees and rock and morass, down a very steep mountain side, sliding, stumbling, scrambling, it was a long and hard afternoon's work to master it all. It was near dark, after traveling from twenty to twenty-five miles in all, when we stopped for the night in the woods, just without the open section of the Park. A bit of meadow with tall grass was at hand for the animals, and, relieved of saddles and packs, away they went, without let or hindrance to enjoy it. The only precaution taken is to leave the lariat, a rope of twenty to thirty feet long, dragging at their necks, by which to catch them the more easily in the morning. Only a portion of the herd are thus provided, however. They rarely stray away far from camp; and if they should, these people make little of an hour or two's hunt to find them, which they are quite sure of doing wherever the best grass
grows. The animals are picketed only when there is danger from the Indians, or a prompt start is necessary.
A big fire was soon blazing; a part prepare the supper,-tea and coffee, bacon, trout, potatoes, good bread and butter, and, to-night, a grouse soup, the best use Governor Hunt can make of an old bird he shot on the road to-day, and very good use it proved, too, by the help of tin pail, potatoes and butter; others feed the fire, bring the water, and prepare the camp for sleeping. An old canvas cloth serves for table; we squat on our blankets around it, and with tin cups, tin plates, knife and fork and spoon, take what is put before us, and are more than content. Eating rises to a spiritual enjoyment after such a day ; and the Trois Freres or Delmonico does not offer a "squarer meal" than Governor Hunt. The "world's people" make their beds against a huge tree, and cut and plant boughs around the heads to keep out the cold wind; but the old campers drop their blankets anywhere around the fire; and after going back over the day and forward to the morrow in pleasant chat, sitting around the glowing mass of flame and coal, we crawl in under our blankets, in a grand circle about the now smouldering logs, say our prayers to the twinkling stars up through the trees, and,-think of those new spring beds just invented in New England!

## VI.

## THE MDDLE PARK AND THE UTE INDIANS.

> A Day's Ride Across the Middle Park-An Indian Encampment, and our Reception Thereat-The Mountain Raspberries - The Hot Sulphur Springs-The Ute Indians; How they Live, Move and have Being-A Lingering Farewell to Middle Park-Over the Boulder Pass-A Winter's Morning and a Summer's Noon on the Mountains -Night in a Barn.

It was mine o'clock the next morning before we could move off into the Park. It is not an easy matter to make an earlier start when we have to carry our homes with us; cook and eat breakfast; wash the dishes; catch the animals; pack up beds and provisions; clean up camp, and reconstruct not only for a day's journey, but for a family moving. A short ride brought us into miles of clear prairie, with grass one to two feet high, and hearty streams struggling to be first into the Pacific Ocean. This was the Middle Park, and we had a long twenty-five miles ride northerly through it that day. It was not monotonous by any means. Frequent ranges of hills break the prairie; the latter changes from rich bottom lands with heavy grass, to light, cold gravelly uplands, thin with bunch grass and sage bush; slug.

"LO, THE POOR INDIAN."-A Company of U're Braves.

gish streams and quick streams alternate; belts of hardy pines and tender looking aspens (cotton-wood) lie along the crests or sides of hills; farther away are higher hills fully wooded, and still beyond, "the range" that bounds the Park and circles it with eternal snows. The sum shines warm; there are wide reddish walls of granite or sandstone along many of the hills; some of the intervales are rich with green grass ; and the sky is deep blue; and yet the prevailing tone and impression of the Park is a coldish gray. You find it on the earth; you see it in the subdued, tempered, or faded greens of leaf and shrub and grass; it hangs over the distant mountains; it prevails in the rocks; you feel it in the air,-a certain sort of stintedness or withholding impresses you, amid the magnificence of distance, of hight and breadth and length, with which you are surrounded, and which is the first and greatest and most constant thought of the presence.

We scattered along wildly enough; some stopping to catch trout; others humoring lazy mules and horses; others to enjoy at leisure the novel suroundings,meeting, with fellow-feeling, for lunch and the noon rest, but dividing again for the afternoon ricle. All had gone before,-leaders, guides, packs, and were out of sight, - when my comrade and myself rose over the last hill of the day's ride, and looked down into the valley that was our destination. It was a broad, fine vision. Right and left, several miles apart, ran miniature mountain ranges,-before, six miles away, rose an abrupt gray mountain wall; just beneath it, through green meadow, ran the Grand River; up to us a smooth, clean, gradual ascent; along the
river bank, a hundred white tents, like dots in the distance, showed the encampment of six to eight hundred Ute Indians, awaiting our party with "heap hungry" stomachs; in the upper farther corner, under the hill-side, a faint mist or steam in the air located the famous Hot Springs of the Middle Park,- the whole as complete a picture of broad, open plain, set in mountain frame, as one would dream of. It spurred our lagging spirits, and we galloped down the long plane, whose six miles seemed to the eye not a third so long in this dry, pure air.
Reaching the river, through the Indian encampment, whose mongrel curs alone gave fighting greeting, it looked deep and was boisterous; our animals hesitated; and we thought sympathetically of Bayard Taylor's sad fortune in making this hard journey into the Middle Park to see and try the Hot Springs, and then being obliged by the flood to content himself with a distant view from this bank of the river. But our comrades had gone over; and the only question was where. Looking for their track, directly there came galloping to our relief a gayly costumed Indian princess,-we were sure she was,-bare-backed for her haste to succor, and full of sweet sympathy for our anxiety, and tender smiles for our-attractiveness in misfortune. Plunging boldly into what seemed to us the deepest and swiftest part of the stream,-as doubtless it was,--she beckoned us to follow, with every enticing expression of eye and lips and hand; and follow we, of course, did,-had it been more dangerous we should,-and by folding ourselves up on the highest parts of our animals, we got through
without serious wetting. But it proved that we crossed in the wrong place, and that our beautiful Indian princess, with beads and feathers and bright eyes and seductive ways, was only a plain young "buck,"-not even a maiden, not so much as a squaw, not, to come down to the worst at once, so near to glory and gallantry as a first cousin to the Chief. Nothing less than the welcome we had from one of the best women of Colorado,-whom we parted from last in Fifth Avenue, and now found spending the summer with her family in a $\log$ cabin of one room, with eight hundred Indians for her only neighbors,and the arrival of her husband from his afternoon's fishing with two bushels of fine trout packed over his horse's back,-here only was adequate soothing and consolation for our chagrin. And we didn't go into camp that night till after supper,--after supper of fresh biscuits, fried trout, and mountain raspberries!

Let me celebrate these high mountain raspberries before the taste goes from my mouth. They grow freely on the hill-sides, from seven thousand to ten thousand feet up, on bushes from six to eighteen inches high, are small and red, and the only wild fruit of the region worth eating. They are delicate and high-flavored to extreme; their mountain home refines and elevates them into the very concentration and essence of all fruitiness; they not only tickle but intoxicate the palate,-so wild and aromatic, indeed, are they that they need some sugar to tone the flavor down to the despiritualized sense of a cultivated taste. Yet they are not so sour as to require sweetening,-only too high-toned for the
stranger stomach; after sharing their native air a few days, we found them best picked and eaten from the vines. It is one of the motives of family excursion parties into the mountains at this season to lay in a supply of raspberry jam for the year; while the men catch trout, the women pick raspberries, cook and sugar them in the camp-kettle, and go home laden with this rare fruity sweetmeat. Here in the Middle Park, we were kept in full supply of the fresh fruit by the Ute squaws, who, going off into the hills in the morning, often two together astride the same pony, and a little papoose strapped on its buard over the back of one, would come back at night with cups and pails of the berries to exchange with the whites for their own two great weaknesses, sugar and biscuit. But the bears get the most of the raspberries so far. They are at home with them during all the season, and ean pick and eat at leisure.

The Hot Sulphur Springs of the Middle Park are both a curiosity and a virtue, and its chicf distinction. They are a considerable resort already by Coloradians, and when convenient roads are made over into the Park, there will be a great flow of visitors to them. We found twenty or thirty other visitors (in the ripe summer, ) there, scattered about in the neighborhood, while parties were coming and going every day. The springs for bathing, and the rivers for fishing, are the two great attractions. On the hill-side, fifty feet above the Grand River, and a dozen rods away, these hot sulphurous waters bubble up at three or four different places within a few feet, and, coming together into one stream, flow over an abrupt bank, say a dozen
feet high, into a little circular pool or basin below. Thence the waters scatter off into the river. But the pool and the fall unite to make a charming natural bathing-house. You are provided with a hot sitz bath and douche together. The stream that pours over the precipice into the pool is about as large as would flow out of a full water pail turned over, making a stream three to five inches in diameter. The water is so hot that you cannot at first bear your hand in it, being $110^{\circ}$ Fahrenheit in temperature, and the blow of the falling water and its almost scalding heat send the bather shrieking out on his first trial of them ; but with light experiments, first an arm, then a leg, and next a shoulder, he gradually gets accustomed to both heat and fall, and can stand directly under the stream without flinching, and then he has such a bath as he can find nowhere else in the world. The invigorating effects are wonderful ; there is no lassitude, no chill from it, as is usually experienced after an ordinary hot bath elsewhere; though the water be $110^{\circ}$ warm, and the air $30^{\circ}$ to $40^{\circ}$ cold, the shock of the fall is such a tonic, and the atmosphere itself is so dry and inspiring, that no reaction, no unfavorable effects are felt, even by feeble persons, in coming from one into the other. The first thing in the morning, the last at night did we renew our trial of this hot douche bath during our brief stay in the neighborhood, and the old grew young and the young joyous and rampant from the experience. Wonderful cures are related as having been effected by these springs ; the Indians resort to them a good deal, put their sick horses into them, and are loth to yield con-
trol of them to the whites; and in view of their probable future value, there has been a struggle among the latter for their ownership. They are now in the hands of Mr. Byers of the Rocky Mountain News at Denver, under a title that will probably defy all disputants; and he proposes to improve the access to them and the accommodations for visitors. The waters look and taste precisely like those of the Sharon Sulphur Springs in New York. The difference is that these are hot, those cold. They have deposited sulphur, iron and soda in quantity all about their path, and these are their probable chief ingredients.

Over a little hill from the springs, by the side of the Grand River,-the hill, the stream, and a half mile between us and the Indian encampment,-we settled down in camp for two days and a half, studying Indian life, catching and eating trout, taking hot douche baths in the springs, and making excursions over the neighboring hills into side valleys. The river before us offered good fishing, but better was to be found in Williams Fork, a smaller stream a few miles below, where a half day's sport brought back from forty to sixty pounds of as fine speckled trout as ever came from the brooks or lakes of New England. They ranged from a quarter of a pound up to two pounds weight each, and we had them at every meal.

The Indians were very neighborly; hill, stream and distance were no impediment to their attentions; their ponies would gallop with them over all in five minutes; and from two to a dozen, men and boys, never the squaws, were hanging about our camp fires from early morning till late evening. Curiosity, beg-
ging and good-fellowship were their only apparent motives; they did no mischief; they stole nothing, though food and clothing, pistols and knives, things they coveted and needed above all else, were loosely scattered about within reach; they only became a nuisance by being everlastingly in the way and spoiling the enjoyment of one's food by their wistful observation. Mrs. Browning says, you remember, that observation, which is not sympathy, is simply torture. And not a bit of sympathy did they show in our eating except as they shared. We were as liberal as our limited stores would allow; but the capacity of a single Indian's stomach is boundless; what could we do for the hundreds?

These Utes are a good deal higher grade of Indian than I had supposed. They are above the average of our Indian tribes in comeliness and intelligence; and none perhaps are better behaved or more amenable to direction from the whites. There are seven different bands or tribes of them, who occupy the Mountains and Parks of Colorado and adjoining sections of New Mexico and Utah. The bands number from five hundred to one thousand each. This one consisted of about seventy-five "lodges" or families, each represented by a tent of cloth stretched over a bunch of poles gathered at the top, and spreading around in a small circle. The poles leave a hole in the top for the smoke of a fire in the center beneath, and around which the family squat on their blankets and pile their stores of food and skins and clothing. Probably there were six hundred in the camp near us, men, women and children. They look frailer and
feebler than you would expect; I did not see a single Indian who was six feet high or would weigh over one hundred and sixty-five pounds; they are all, indeed, under size, and no match in nervous or physical force for the average white man. Some of both sexcs are of very comely appearance, with fine hands and delicate feet, and shapely limbs, with a bright mulatto complexion, and clear, piercing eyes; but their square heads, coarse hair, hideous daubs of yellow and red paint on the check and forehead, and motley raiment,-here a white man's cast-off hat, coat or pantaloons, if squaw a shabby old gown of calico or shirt of white cloth, alternate with Indian leggins and moccasins, bare legs and feet, a dirty white or flaming red blanket, beaded jacket of leather, feathers, and brass or tin trinkets hanging on the head, from the ears, down the back or breast,-all these disorderly and unaccustomed combinations give them at first a repulsive and finally a very absurd appearance. The squaws seem to be kept in the background, and, except when brides or the wives of a chief, dress much more plainly and shabbily than the bucks. They are all more modest and deferential in appearance and manners than would be expected; and I saw no evidence of a taste for strong drink among this tribe,-none of them ever asked for it, while their desire for food, especially for sugar and biscuit, was always manifest. The sugar they gobble up without qualification, and such unnatural food as this and fine flour breed diseases and weaknesses that are already destroying the race. Coughs are frequent, and dyspepsia; sickness and deaths are quite common
among the children; and this incongruous mixture of white man's food and raiment and life with their own, which their contact with civilization has led them into, is sapping their vitality at its fountains. To make matters the worse, they have got hold of our quack medicines, and are great customers for Brandreth and other pills, with the vain hope of curing their maladies. In short, they are simple, savage children, and in that definition we find suggested the only proper way for the government to treat them.

Their wealth consists in their horses, which they breed or steal from their enemies of other tribes, and of which this tribe in the Middle Park must have a couple of hundred. They live on the game they can find in the Parks and among the Mountains, moving from one spot to another, as seasons and years change, the proceeds of the skins of the deer and other animals they kill, roots, nuts and berries, and the gifts of the government and the settlers. It is altogether even a precarious and hard reliance ; the game is fast disappearing,-save of trout we have not seen enough in all our travels among the mountains to feed our small party upon, if it had all been caught; and the government agents are not always to be depended upon in making up deficiencies. Our neighbors had lately come over from the North Park, where they had hunted antelope to some purpose and with rare fortune, killing four thousand in all in two or three weeks, half of them in a single grand hunt. They cut the meat into thin slices and dry it, so that it looks like strips of old leather; and as we went about their camp we saw the little, weakly children pulling
away at bits of it, apparently with not very satisfactory results. Our tribe was in trouble about a chief; the old one was dead, and there were two or three contestants for the succession; but the wrangle was not half so fierce as would arise over a contested election for mayor of a white man's city.

Affairs always seemed very quiet in the Indian camp in the day-time; the braves played cards, or did a little hunting; the squaws gathered wood, tanned skins, braided lariats, or made fantastic leather garments ; the boys chased the ponies ; but at night they as invariably appeared to be having a grand pow-wow,-rude music and loud shouting rolled up to our camp a volume of coarse sound that at first seemed frightful, as if the preparatory war-whoop for a grand scalping of their white neighbors, but which we learned to regard as the most innocent of barbaric amusements. Though these Utes are quite peaceable and even long-suffering towards the whites, they bear eternal enmity to the Indian tribes of the Plains, and are always ready to have a fight with them. Each party is strongest on its own territory,-the Arapahoes, Camanches and Cheyennes on the prairies, and the Utes among the hills; and each, while eager to receive the party of the other part at home, rarely go a-visiting. The Plains Indians are better mounted and better armed; chiefly because, keeping up nearly constant warfare with the whites, they have exacted prompter presents and larger pay from the government. The Utes complain, and with reason, that their friendliness causes them to be neglected and cheated; while their and our enemies thrive on government bounty.

There is now a plan for all the Ute tribes to go together into the south-western corner of Colorado, away from the mines and the whites, and there, upon abundant pastures and fruitful mountains, engage in a pastoral and half agricultural life; to set up stockraising on a large scale, and such tillage as they can bring themselves to, under the protection and aid of the government. The scheme is a good one ; the Indians agree to it ; and the bargain has been made by the government agents here, -all that is needed is for the authorities at Washington to furnish the means for carrying it into execution. So far as our observation extends, the greatest trouble with our Indian matters lies at Washington; the chief of the cheating and stupidity gathers there; while the Indian agents here upon the ground are, if not immaculate, certainly more intelligent, sensible, and practical, and truer to the good of the settler and the Indian, than their superiors at the seat of government.

We were loth to lave the Hot Springs and the Middle Park; but our time was up. We looked longingly through the hills up the valley of the Grand; beyond I knew there lay a wilder country than we had seen, and under the shadow of Long's Peak, Grand Lake itself, a large and fine sheet of water, alive with trout, and rich in commanding beauty. Long's Peak, too, just ascended for the first time, offered glorious temptation in a hard mountain climb, and recompensing views of continental sweep and grandeur. No fewer than thirty-nine lakes on the sides of that and the neighboring mountains, and all as high up as ten thousand feet, can be seen at
once from this peak. We galloped over the bare hills the other way, and looked off down the valley. Bits of rare stone, agates and jaspers and crystals and petrifictions, lay everywhere about; and over the river, a dozen miles off, was the famous " moss agate patch," where these peculiar crystallizations covered the ground; Williams Fork came rollicking down the opposite hill-sides through a line of trees, with inmumerable breakfasts of uncaught trout, and a wide green meadow at the mouth for camping ground; while far on in the landscape, the Grand found magnificent pathway for twenty-five miles through a broad field of heary grass,-the gem, the kernel of the Middle Park; then turning abruptly west, it shot through the mountains by a canyon, lapped up the Blue on the other side, and, thus strengthened, poured out southward for the Colorado and the Pacific Ocean. It was this way we would have gone out,-down the Grand and up the Blue, all within the capacious boundaries of the Middle Park,-had not time and the provision bag forbade.

So, turning reluctantly back on our entering path, we compromised with our hunger for new scenery by taking the Boulder Pass out. This lies opposite the Berthoud at the lower end of the Park. Our party was reduced by the earlier return of Governor Hunt and the Indian agent, who, having some negotiations with the Indians, had taken out a dozen or twenty of the leading braves with them, to seek arguments where freights were not so expensive. The Indian sees the point of an idea always through a full stomach and a warm back, and it required a whole beef and
several barrels of flour and sugar and a dozen blankets to prove to them that a petty technical amendment by the Senate to their last treaty was just right. Going up the Boulder ascent, we found thicker and greener grass and richer forests and flowers than in the open Park, and camped by a beaver settlement at the hight of ten to eleven thousand feet. In the morning, the water was freezing, and the grass and shrubs were stiff with frost, so stiff and yet so dry from lack of moisture in the air, that neither then, nor after the sun had softened them, was there any water to be rubbed off from them. It was a perfectly dry freeze, and this is why these summer frosts do no more harm to vegetation, and delicate flowers thaw out and go on in their sweet short life in these high mountains.

The clouds gathered, and the rain-drops fell, as we finished breakfast and packed and saddled for the cold hard ride over the mountains. In an hour we were out of the timber, and a dreary waste of rock, relieved only by a thin grass at first, then by mosses, and always by flowers, lay before and all around us. The storm grew thick and fast, hail and snow ; the trail wasted itself in the open area; the ground was being rapidly covered with the white snow; straggling was forbidden, and "close up" and "push on" were the orders from the front. The promised view of park and plains, of range on range, was lost; only thick, dark clouds, hanging over impenetrable abysses, were around and below us; the storm beat and bit like an outraged conscience; beards gathered snow and ice; the mules and horses winced under the blast,-it was a forlorn looking company for a pleasure party.

But there was exhilaration in the unseasonable struggle; there was something jolly in the idea of thus confounding the almanacs, and finding February in August. At the summit of the Pass,-thirteen thousand feet high,-the storm abated its intensity to let us dismount and pick out of the snow the little yellow flowers that crept up among the rocks everywhere. Then it rolled over again, and now with thunder and lightning, pealing and flashing close around us. Here our laggard pack mules with their drivers came hurrying up and forward; the leader saying as he spurred them by that perhaps we might like it, but for him "hell was pleasanter and safer than a thunder-storm on the range."

But as we descended the elements calmed; the clouds opened visions of the new valleys, and flashes of sunlight unveiled the great mysteries of the upper mountains. Summer was again around us; and though it was hardly noon, the spot we had reached was so rarely charming, and the sun so refreshing, that we halted, loosed our animals, made our coffee, lunched, and basked on the rocks in the sunshine for a long, delightful hour. We were on a narrow ridge of the mountain, shooting out into the valley, and not over twenty feet wide. On either side there was a sharp almost perpendicular descent for at least one thousand feet in one case, and seven hundred and fifty in the other. At the foot on our right were two lovely lakes, one almost an absolute circle, rock and grass bound, fed by great snow-banks between us and them, and feeding in turn the South Boulder Creek. On our left, a grassy slope, so steep that it was im-
possible to walk down except in long zigzags, and far away at the bottom among the trees ran the North Boulder from out the mountains. Everywhere about us, where the snow and the rocks left space, were the greenest of grass, the bluest of harebells, the reddest of painter's brush, the yellowest of sunflowers and buttercups. All, with brightest of sun and bluest of sky, made up such a contrast to our morning ride that we were all in raptures with the various beauties of the scene, and feel still that no spot in all our travel is more sacred to beauty than this of our noon camp on Boulder. But, as if to frame and fasten the picture still more strongly, we were hardly in the saddle again, before the storm set in anew, and we rode all the afternoon under snow or rain.

There is what is called a road over into Middle Park by this Pass, and strong wagons with oxen or mules make the passage ; but the difficulties they encounter are frightful,-mud and rocks, rivers and ravines,it is hard to imagine how any wheels can surmount them and remain whole,-and few do. Our trail followed the road only in part; it made short cuts over hills, through woods, and across valleys, and was full of variety, annoyance, sometimes of difficulty; but we found all less vexatious than the descent of Berthoud Pass, and, following the South Boulder Creek, came at last, wet and weary, into the nearly deserted mining village of South Boulder. Here we found welcome around the fire of the post-office ; a deserted cabin was thrown open to us for our baggage and our meals; and a big barn's loft with fresh hay furnished a magnificent bedroom. We dried, we ate, having
fresh meat, cream and vegetables added to our bill of fare, and we slept, all in luxury. Half the village was preoccupied by a large party of men and women, some twenty to thirty, from the villages farther down the valley, on their way into the Park by the road we had come out. They had ox teams for their baggage, saddle animals to carry themselves, and a cow to furnish fresh milk; and thus generously equipped were jollily entering upon camp life among the mountains for ten days or a fortnight, after the mamer of the residents of the State.

A rapid morning gallop over intervening hills, waste with the axman's greedy work, or the miner's greedier wash, brought our party into the civilization of the Clear Creek Valley,-to taverns, telegraphs, and stage lines.

## VII.

## MOUNTAIN CLIMBING AND CAMP LIFE.

Up Gray's Peak from Georgetown-The View from it-A Saturday Night Camp on the Snake River-Sunday with a "Prospector"A Butter and Milk Ranch in the Mountains-The Valley of the Blue and its Mining Operations-Over the Breckinridge Pass in a Thunder-Storm-Hamilton and South Park-Reunion with the Grand Party-Ascent of Mount Lincoln-A Snow-Storm on the Summit-Montgomery-The Everlasting Plattes - The Side Valleys of the South Park.

Witn appetites only whetted for mountain experiences, with curiosity only stimulated to observe the phenomena of the grand elevated Parks of Colorado, by our week's trip into Middle Park, we were soon in the saddle again for a climb up the two most conspicuous peaks of the central range, Gray and Lincoln, and a journey through the South Park. There were but three of us to make the ascent of Gray's Peak; and such a load as we put on our single pack mule: a great overtopping cube of blankets and sacks of meat and bread, and four little feet sticking out beneath, were all that could be seen as it went shaking along on a mysterious trot. Sending the outfit and our guide by an easier path over to where we intended to camp for the night, our little party started
early of a clear August morning from Georgetown,distance fifteen miles to Gray's Peaks, and, by virtue of mines among the mountains, a good wagon road two-thirds the way.
It was an object to get to the summit as soon as possible, before afternoon haze or cloud should dim the view, and we galloped rapidly through aspen groves, then among larger pines, by the side of rapidly descending streams, around and around, up and up, and finally out above the trees, where grass and flowers had all life to themselves, and again above these and only thin mosses lived among the stones, and yet still higher, where the mountains became great walls of rock, or immense mounds of broken stone, as if they had been run through a crusher for the benefit of Mr. Macadam. Such was the character of Gray's Peaks. Great patches of snow divided place with the rocks, and fed the clear, cold rivulets that started out from every sheltered nook or side of the mountains; but they only added to the cold dreariness of the scene. The only life was grasshop-pers,--here they were still by thousands, by millions, sporting in the air and frisking over the snow, but the latter's chill seemed soon to overcome their life, for they lay dead in countless numbers upon its white surface. In some places the dead grasshoppers could have been shoveled up by the bushels, and down at the edges of the snow cold grasshopper soup was to be had ad libitum. There was a feast here for the bears, but we could see none enjoying it.

Gray's Peaks,-great mounds or monuments of loose, broken stone,-shoot up sharply from a single
base, in the midst of very high mountains all about. Their sharpness exaggerates their superior hight. Below, the two seem but a rifle shot apart; above, they are manifestly several miles away from each other; but their common paternity, their similarity in form, effect and views, entitle them to bear the common name, which was given to them by Dr. C. C. Parry of St. Louis, who has been, so far, the most thorough scientific explorer of the higher mountain regions of Colorado, and in honor of the distinguished Cambridge botanist, Professor Gray. There are now trails for horses to the top of each,- that to the higher was nearly finished while we were there; and though the path to the lower is the more easy and familiar, our ambition was not content with anything less than the highest, and spite of fatigue and cold we struck out for it. Going through a snow-drift at least fifteen feet high, and coming out above all snow deposits, we fastened our animals with stones at the end of the path, and slowly toiled the remaining quarter of a mile over the loose rocks, - the thin air obliging us to stop every three minutes to gain our breath,-and at high noon sat upon the highest peak of the highest known mountain of the great Rocky Mountain range. Dr. Parry made the lower peak fourteen thousand two hundred and fifty-one feet high; the higher must be at least fourteen thousand five hundred.

The scene before us was ample recompense for double the toil. It was the great sight in all our Colorado travel. In impressiveness,-in overcomingness, it takes rank with the three or four great natural wonders of the world,-with Niagara Falls from
the Tower, with the Yo Semite Valley from Inspiration Point. No Swiss mountain view carries such majestic sweep of distance, such sublime combination of hight and breadth and depth; such uplifting into the presence of God; such dwarfing of the mortal sense, such welcome to the immortal thought. It was not beauty, it was sublimity; it was not power, nor order, nor color, it was majesty; it was not a part, it was the whole ; it was not man but God, that was about, before, in us. Mountains and mountains everywhere,-even the great Parks, even the unending Plains seemed but patches among the white ranges of hills stretching above and beyoud one another. We looked into Middle Park below us on the north; over a single line of mountains into South Park, below us on the south,--but beyond both were the unending peaks, the everlasting hills. To the west, the broadest, noblest ranges of mountains,there seemed no breaks among them except such as served to mark the end of one and the begimning of another, and no possible limit to their extension. The snow whitened all, covered many, and brought out their lines in conspicuous majesty. Over one of the largest and finest, the snow-fields lay in the form of an immense cross, and by this it is known in all the mountain views of the State. It is as if God has set His sign, His seal, His promise there,-a beacon upon the very center and hight of the Continent to all its people and all its generations. Beyond this uplifted what seemed to be the only mountain in all the range of view higher than the peak upon which we stood. It is named Sopris Peak upon some of the
maps, but has never been explored, and is more completely covered with snow than any other.

Turning to the east we find relief in the softer and yet majestic and unending vision of the Plains,-on, on they stretch in everlasting green and gray until lost in the dim haze that is just begiming to rise along the horizon. Directly below us, great rough seams in the mountain sides, as if fire and water had been at work for ages to waste and overturn ; dreary areas of red and brown and gray rocks; masses of timber; bits of green in the far-down valley; flashes of darkness where little lakes nestled amid the rocks, fed by snow, and feeding the streams,-Nature everywhere in her original forms, and her abounding waste of wealth, as if here was the great supply store and workshop of Creation, the fountain of Earth. Looking from side to side, above, below, and around,-impressed, oppressed everywhere with the presence of the Beginning; it was almost unconsciously and instinctively that we turned again and at last, as Mrs. Browning makes Romney Leigh,"toward the east:"-
"——where faint and fair,
Along the tingling desert of the sky,
Beyond the circle of the conscious hills,
Were laid in jasper-stone as clear as glass
The first foundations of that new, near Day,
Which should be builded out of heaven, to God."

It was difficult to leave this citadel of earth, this outpost of heaven ; but our time and our strength were both exhausted. The long gallop, the hard climb, more, the excitement of the vision of earth and sky at this elevation of over fourteen thousand
feet above the ocean level had used up our nervepower; the cool breezes, too, chilled us; and after lunching, we regained our horses, and pushed down the other side of the mountain from that we came up.

There was only a dim trail to follow, ruming hither and thither around and among the hills, and then across and along the valleys of the streams that came in from cvery mountain crevice and snow-bank. We crossed Colfax Park, a little gem of grass and flowers, with Colfax Lake at its head, a great rock bowl of clear water, high in the hill-side, and pouring its surplus over a sharp natural wall of stone,-so named by an enthusiastic and appreciative miner in the lower valley, who would hardly be reconciled with us that we had not brought the Vice-President to witness how happily and fitly he had been honored here. We passed also through many a beaver village; but the inhabitants gave us no visible welcome; they modestly let their works speak for them. The woods grew thick and mellow; the aspen tender, the spruce silver-hung and silver-tongued; and we came at last, -a long ten miles from the summit of Gray's Peak,to our proposed camping spot, the junction of two forks of the Snake River and of the two trails from Georgetown.

Here, the grass was abundant, the stream ran pure and strong, unpolluted by miner's mud, fuel was plenty, even the mosquitoes sang a welcome, but no guide, no pack-mule was to be seen, no blankets, no food, no nothing, that belonged to us, but weariness and hunger. We sounded the war-whoop of the country,-a shrill, far-reaching cry; and back the
voices came, not only from our lagging outfit, but from miners here and there among the hills, just finishing their day's work, and wondering who had come into their wilderness now. The mules took up the refrain, and bellowed from "depths that overflow" their welcome to each other. Soon we were at home, the coffee brewing, the ham stewing, and a hole through the peach can; under the frosts of night and the smoke of the camp fire, the merry mosquitoes flew away; our tent was raised, our blankets spread; and the peace of Saturday night and a day richly spent reigned over us four and no more.

But camp life is not all comfort. That very blessed Saturday night on the Snake River, the wind took turns in coming out of the three or four valleys that converged upon our camping-ground, and blew the virulent smoke in upon us. Shift the fire, change the blanket, still the smoke followed us, as if charmed, and was discomfort and sleeplessness to all, poison to at least one. There was a yearning for something delicate for the Sunday morning breakfast,-a bit of cream toast, or a soft egg, and some milk-ameliorated coffee; but the knurly little "Jack," that carried our "bed and board," had no provision for sensitive stomachs, and we had to take our victual and drink "straight,"-plain ham and bread and butter and black coffee,-or go without. But that best and cheapest of doctors and nurses, the sun came to our relief; and later in the day a pitcher of buttermilk completed and capped his healing triumphs. One of my companions of three years ago, records my then sarcastic contempt for buttermilk, but I take it all
back now,-no cup of it shall ever pass from my lips again other than empty. It comes to a faint and forlorn stomach like woman's sympathy to a bruised heart.

We sauntered ten or a dozen miles that day, down the close bound Snake Valley, chiefly through woods, occasionally across an open park, fishing a little, and chatting a good deal with Commodore Decatur, a quaint old miner of the valley, who, "prospecting" for society that day, had struck a "lead" in us. If I could tell you his story, it would rival one of Charles Reade's most romantic and mysterious novels, and show you how thickly studded an American life can be with tragedies. He is an old Greek philosopher,with an American variation; as wise as Socrates, as entliusiastic as a child, as mysterious in life and purpose as William H. Seward or an Egyptian sphynx, as religious as a Methodist class-leader. Our morning ride brought us out into a grand opening in the valley. The timber disappeared; the hills sharpened into a dead wall on one side, and swept away in soft rolling outlines on the other; a wide stretch of intervale lay between, while pretty groves of trees tempered the distant knolls and broke the abruptness of forests beyond. We were again, indeed, in Middle Park, though a high range of mountains and a long, hard ride separated us from that part of it which we visited the week before.

Under a bluff in this fine area, we came upon the "Georgia Ranch." Here in a cabin of two rooms, with a log milk-house outside, the only dwellers in this rich pasture park, were a man, his wife and daughter; their home and farm were in Southern

Colorado, but they had come up here in the spring with forty or fifty cows, and were making one hundred and forty-five pounds of butter a week, and selling it to the miners in the cabins and camps among the hills ten to fifteen miles around, for seventy-five cents a pound. When the snows begin to fall in October, they will drive the herd back to their southern pastures; the increase of the cows will pay all expenses, and the one hundred dollars or more a week cash for butter and milk is clear profit. The dairy cabin was a "sight to behold," such piles of fresh golden butter, such shelves of full pans of milk, -there wasn't room for another pound or pan; and yet the demand far exceeds the supply,-it was a favor to be allowed to purchase the treasures of "Georgia Ranch." It was our Commodore's Sunday diversion to ride down these dozen miles, fill his weekly butter-pail and his milk-can, and gallop back in season for a Sunday night supper with his cabin comrade of "mush and milk."

These mining hermits in the mountains manage to live well,-they become adepts in cooking; with flour and meal and fresh meat, potatoes and onions, dried and canned fruits, the bill of fare is appetizing ; and the cost of the "best tables" is from seventy-five cents to one dollar a day. Nor are they always thus exiles from society; their season in the hills, hunting new lodes or developing old ones, is confined to the summer; when cold and snow come, they flee to the villages or to Denver,--to live as leisurely and luxuriously as what they have made the past season or hope to make the next will permit.

We "packed" a bottle of cream, filled our water canteen with milk, took Decatur's Methodistic ben-ediction,-"May the Lord take a liking to you,"with a hearty "amen," and rode down the valley, by numerous soda and other mineral springs, three or four miles farther, to our camp for the night. This was at a still more picturesque spot,-a trinity of rivers, a triangle of momntains. The Blue and the Snake Rivers and Ten Mile Creek all meet and mingle here within a few rods; each a strong, hearty stream from its own independent circle of mountains; and while the waters unresisting swam together, the hills stood apart and away, frowning in dark forest and black rock, and cold with great snowfields, overlooking the scene, which green meadows, and blue sky, and warm sun mellowed and brightened. A neck of land, holding abundant grass and fucl, between the three rivers at the point of junction, offered a magnificent camping-ground. It is a spot to settle down upon and keep house at for a week. Ten Mile Creek overflows with trout; one of our party took ten pounds out of a single hole in a less number of minutes,-a single fish weighing about three pounds; and deer and game birds must be readily findable in the neighborhood. The Blue isn't blue,-its waters have been troubled by the miners, and it gives its name and mud color to the combined stream, which flows off through an open, inviting valley to join the Grand, and thence to make up the grand Colorado of the West.

We had a lesson in precaution, after unloading, and proceeding to make camp here, by finding that no-
body had any matches; we could not shoot flame out of our metallic-cartridge pistols; nor had we the Indian accomplishment of rubbing fire out of two sticks; so the best mule was put over the road to the "Ranch" and back at a very un-mule-like-gait, to bring us the means of kindling our camp fire. But we had a sumptuous supper of cream toast and trout, with milk for our coffee, and a sweet night in camp, though lulled to sleep by the roll of thumder and the patter of a brisk shower, with high wind and sharp lightning; and we turned reluctantly up the valley of the Blue, the next morning, with the resolution to come to stay at this point another season.

The day's ride was along the Blue to its source in the mountains, over these and down into the South Park. The first eight miles was through a fine open grazing country, and we found a magnificent herd of fat cattle, strongly marked with Durham blood, enjoying its rich grasses. They had been sent up here to fatten for the summer from some of the ranches of the lower valleys, and, perhaps, to furnish fresh beef to the mining camps, which are quite numerous among the side valleys of the neighborhood. All the morning we were in sight of the ditches that had been built to carry water to the rich beds of sand that were in course of being washed over for gold deposits at various localities in the valleys. One of these ditches is twelve miles long; tapping the Blue away up in the mountains, it takes a vigorous stream along and around the mountain sides, up and down, from gulch to gulch, parting with portions at different points on the route to little companies of miners at
so much per foot; and, deployed into sand-banks, swept through long boxes, tarried in screens and by petty dams, it does its work of separating the tiny particles of gold from the earth, and finds its way back to the parent stream, miles from where it left it, but bringing the pollutions of the world and of labor with it. Many thousands of dollars are invested in these ditches; sometimes they are made and owned by individuals, who also work the mines or deposits of gold to which they lead, but oftener now they belong to companies that have no other interest than to sell water from them to those who mine alone. Generally they have passed out of the hands of their builders, who rarely realized anything but expectations, vast and vain, from them.

Breckinridge, a village of twenty cabins, ten thousand feet high among the mountains, is the center of these upper mining interests. Pleasant enough in summer, life here in winter, when the miners gather in from their surrounding camps, must be little better than hibernation. There are good wagon roads from the village, into all the neighboring valleys and over the Breckinridge Pass in the continental range, to South Park. We rode up through open woods, flowerendowed meadows, a broken, various and interesting mountain country, often giving majestic views of the higher and snow-crowned peaks, with glimpses of valleys and parks below and beyond. The Pass is just above the timber line, about twelve thousand feet high, and as we mounted it, a cold storm gathered upon the snow-fields above us, wheeled from peak to peak in densely black clouds, and soon broke
in gusts of wind, in vivid lightning, in startlingly close and loud claps of thunder, in driving snow, in pelting hail, in drizzling rain. We were below the storm's fountain, but near enough to see all its grand movements, to feel its awful presence, to be shaken with fear, to gather inspiration. The rapidity of its passage from side to side, from peak to peak, was wonderful; the crashing loudness of its thunderous discharges awful; one moment we felt like "fleeing before the Lord," the next charmed and awed into rest in His presence.

But it was dreary enough, when the thundering and the flashing ceased, and the clouds stopped their majestic movement, and hung in deep mists over all the mountains and the valleys, and the rain poured ceaselessly down. The poetry wás gone, and gathering overcoats and rubbers closely about us, we bent our heads to the undeviating shower, and pushed gloomily and ghastfully on. It seemed a long ride down mountain side and through valley to Hamilton, -woods that made us feel even more pitiful ; open valleys that made the rain more pitiless; streams twisted out of place and shape by ruthless miners; desolated cabins, doorless, windowless,--even the storm was more inviting ; Tarryall, where thousands dug and washed sands for gold three and four years ago, and now only two or three cabins, mud-patched and turf-warmed, sent forth the smoke of home; a solitary dirt-washer, trudging along from his day's mountain work, with dinner-pail and pickax;-out at last, where, through the opening mists, we could see the long, level reaches of South Park, and into Ham-
ilton,-fifty or more vacant and decaying cabins and two log hotels,-where one thousand men mined in ' 60 to ' 64 , and gayety and vice reigned, and now a dozen or twenty men and three or four women were the entire population; a grimy, dirty-looking village of the past, for all the world in the storm like an old Swiss mountain village, with manure heaps in front of the houses, and a few sorry looking horses and mules scattered about the pastures.

It was a comfortless promise after so comfortless a ride. We passed on by the village to a plateau above the river, and tried to make camp; but everything was wet,-the water especially so, and very muddy; we couldn't start a fire ; our guide was obstinate for going to the hotel, and after long struggling against it, we capitulated and went. We gained shelter and warmth, and a good supper, and chapters of country experience around the fire with the tobacco, and a small bed for two ; but there are more real comfort and better air and greater cleanliness and real independence in camp than in these pent-up mountain inns. It was hard to accept such compromise with civilization after the luxuries we had enjoyed in our ground and tent homes.

But with the morning at Hamilton came sunshine and beautiful views of the South Park country, that lay spread out before us in unending stretches of green prairie; here lifted up by a perfect embankment to a new level, and going on again in another plain ; there rolling off into hills with patches of evergreen; now bringing down from the mountains, still through pastures green, tributaries to the main river;
offering on every hand glimpses of beckoning repetitions of itself through and over hills; while ail around in the distant horizon huge mountains stood sentinel, guarding this great upper garden-spot of the State, as if jealous lest its frontiers be invaded, its lands despoiled. No so fine a combination of the grand beauty of the plains, of the lovely beauty of the hills, of the majestic beauty of the mountains, ever spread itself before my eyes. Water-courses were abundant, groves and forests were placed with sufficient frequency to diversify the scene and relieve and kindle the eye, while mountains, near and remote, gave their impressive sanction and completeness to the picture. The coloring was brighter yet softer than in Middle Park; and we felt that Colorado had indeed reserved her choicest landscape treasures for us to the last.

Before noon, six miles away, we caught sight of our companions from Denver, coming over the hill,some on horseback, some in light carriages, and the rest in wagons with the baggage ; Vice-President, Governors, Indian Agents, mothers, sons, daughters, wives, babies,-two or three dozen of them in all. They looked like one of the patriarchal families of Old Testament times, sons and daughters, servants and asses, moving from one country to another, in obedience to high commandment; and as if representatives of another tribe, we rode out to greet and welcome them to our goodly land. We propitiated their stomachs with our treasured big trout; and after lunch upon the open prairie, the grand caravan moved on, in somewhat disorderly array.

We made a dozen miles, along the northern line of the Park, over a rich, rolling country, starred by occasional lakes, darkened by frequent forests, shadowed by the everlasting snow-fields of the mountains. The inevitable afternoon storm came upon us midway, and we rode into Fairplay, the most considerable town of the South Park country, variously wet and considerably disgusted. The ladies stopped by the hospitable fires of the village, while the men went on, and made camp on a hill overlooking the valley, shaded by a few old and stunted pines, and circled by a miner's ditch full of furiously running water. Here half a dozen fires were kindled, as many tents stretched, and the storm passing away, everybody came into camp, and sleep followed supper to the satisfaction of all.

It was a happy thought to call the parent mountain of this region, of the whole Rocky mountain range proper, for the President who guided the Nation so proudly through civil war and slavery to peace and freedom. Peer among presidents and mother among mountains is Lixcolar. The higher Gray's Peak is as high, possibly a hundred or two feet higher; but Mount Lincoln is broader, more majestic, more mountainous. Out from its wide-spreading folds stretch three or four lines of snow-covered mountains; within its recesses spring the waters of three great rivers, the Platte, the Arkansas and the Colorado, that fertilize the plains of half the Continent, and bury themselves, at last, two in the Atlantic and the third in the Pacific Ocean. This is the initial point in our geography, and a fountain-head of national wealth and strength. This geographical parentage, the repre-
sentative association of its name and office, and the enthusiasm kindled by our accounts of the view from Gray's Peak, spread a zest among the larger party for climbing Mount Lincoln; and though the morning was strewn with showers, and huge black clouds hung over the mountain tops in alternation with great rifts of sunshine, these revealing fresh-fallen fields of snow, we determined to take our chances, and galloped off, a dozen strong, women and men, up the valley to Montgomery, a dozen or fifteen miles from Fairplay.

The rain poured relentlessly for the first two hours' ride ; but then the sunshine came out, and joined by half a dozen more at Montgomery, we turned directly up the mountain side. For two or three miles there is a rough wagon road; beyond that not even a trail that is fixed. Catching sight of the distant goal, we scattered irregularly over the intervening slopes and ravines; first through richest grasses and most abundant and high-colored flowers; then across huge snowfields, so soft under the summer sun, that our animals could not bear us without floundering in dangerous depths, and we had to dismount and walk and lead; next over wide but steep fields of thin mosses, delicate in leaf and blossom to the last degree, pink and white and blue,-the very final condensed expression of nature ; all beauty, all tenderness, all sweetness in essence ; and at last, beyond all growth, beyond all snow, out upon miles of broken stones, immeasurably deep, as steep as they could lie.

To ascend over these was tough work; the wind blew biting cold; clouds charged with hail and snow every few minutes swept over, through us; the air
was so rare that the animals labored for breath at every step; the sides so steep and the stones so loose as to render the footing fickle, even dangerous; we could only make upward progress in slow degree by long, zigzag courses back and forth; and every few minutes the panting, trembling horses and mules would come to a stubborn stop in very fear of their footing. Then we had to dismount and reassure them by leading the way, or find firmer paths. But at last we got as far as horses could go; and a climb of five hundred feet remained for ourselves of even steeper and still loose-lying rocks to the summit. Then we found our hearts and lungs, if never before; work as fast as they could, shaking our very frames in the haste to keep up with their duty, we still had to stop and rest every thirty or forty feet, and let them get even with the air.

Finally on the very crest of the mammoth mountain, the one spot higher than all others, than all around so far as could be seen. Our hopes our fears belied, our fears our hopes in turn; the sweep of the horizon was broken by thick clouds; and we could not compare the view with its rival, from Gray's Peak; but the contending elements lent a new majesty, almost a terror to the scene. Sunshine and storm were continually at war; clouds and clearness constantly changing places; now it was all light to the east, and Gray's Peak and all the intervening mountains to the Plains, the Plains themselves, Denver itself glowed in golden sunshine, while in the west everything was shrouded in blackness and despair; then the clouds came upon and over us, pelting
us with snow, and passing by opened great lines of brightness to the west, and we could see on to indefinable distances of snow-covered mountains,-Sopris Peak, the mountain with the snow-cross, a continent of rocks and snow, dreary yet beautiful in color, majestic yet fascinating in form. So we caught long narrow glimpses of the South Park, and the Arkansas Valley, south of us; and Pike's Peak in one direction and Long's Peak in another were not denied us,sentinels of nature in the far off corners of the State, rising above clouds, over intervening storms; while deep chasms, yawning recesses opened in ghastliness through the clouds below us on every side.

The whole vision, fickle, forbidding in many features, always surprising, never satisfying, piquing us by what was withheld, astonishing us by what was given, though disappointing our hopes, yet was vastly finer than our fears. It was the wildest of mountain views and mountain experiences, such as may be welcomed as a variety, though not chosen as the reward for a single excursion. Similar experiences in the high Alps are tamer every way; there is less variety in the landscape; less color in the mountains and the atmosphere; above all, less sweep of distance, less piling of mountain on mountain, through the long openings in the clouds.

We waited as long as the freezing air and the driving snow would let us for wider views of earth and sky; but clouds and storm growing denser, and having finished our lunch of sandwiches and sardines, pickles and peaches, and, coffee being out of the question, a necessary flask of whisky, we retraced
the tedious, hard-going way to the valley. Far up, where only rocks reigned, beautiful white and blue birds, like large doves, but called mountain partridges, trotted or flew tamely about us; and a revolver sadly repaid the faith of some of them. Back among the flowers, we gathered large bouquets of bright painter's brush, harebells, fringed gentians, lupins and quaint grasses, and rode into Montgomery aglow with color and excitement, and wet alike from perspiration, snow and rain.

The whole excursion up from and back to Montgomery occupied five hours. The distance cannot be more than six miles to the top; and the hight of the mountain, though never exactly measured, must exceed fourteen thousand feet above the sea level. The wildest estimates are made by the local population of these higher peaks of Colorado; but unless it be Sopris Peak in the far West, it is not probable that any one of them rises as high as Mount Whitney in the Sierra Nevada of California, which is known to be above fifteen thousand feet. Gray, Lincoln, Pike's and Long's Peaks are the four great mountains of explored Colorado; they are all above fourteen thousand feet high, but probably no one goes higher than fourteen thousand five hundred.

Montgomery, which lies close at the foot of Mount Lincoln, on the inside, and is about ten thousand feet high, is another of the deserted mining towns of Colorado. There are a hundred or two houses standing, but only one now occupied. Several years ago, the mines in the hill-sides were rich and remunerative, and a population of two or three thousand were
gathered there. There was an opera house, and saloons and stores by the dozens; but the more readily worked ore gave out, there were no means to reduce profitably what followed in the mines, and fresher discoveries elsewhere invited the people "to move on." "Buckskin Joe" is another similar town, five miles off, under another spur of Mount Lincoln. There are good and rich mines at both places, an $l$ new ones are even still being discovered; but, like most of the ores of Colorado, they await cheaper lahor and simpler and more searching processes of treatment for their profitable use.

The Platte River divides, subdivioues and redivides almost indefinitely; and when we get up here among its head waters, the brain fairly grows confused with the number of its forks or branches. The same name extends to the remotest subdivision; and we have the north branch of the south fork of the South Platte; and the middle fork of the north branch of the south fork of the South Platte, and so on ad infinitum. I wish the Coloradians would abolish the sinuosities and multiplications, and put the Plattes into numerals, as Platte $1,2,3,4,5$, and so on. I verily believe they would run up to the hundreds; but that would be better than the "Peter Piper picked a peck of pickled peppers" nomenclature. Perhaps, though, they mean to make their geography take the place of classics as a discipline for the youthful mind; if so, they have hit upon a very ingenious substitute, not to say improvement. As between learning the Plattes and conjugating a Greek verb, where's the choice for hardness? All the time we were in the South Park,
we were among Plattes, and getting to the heads of Plattes, and each was big enough and independent enough to go alone, and to deserve a name to itself. Fairplay lies on the Platte, and so did every one of our camping grounds for a week.

I believe I have exhausted my adjectives and every known variety of picture frame in trying to set the South Park landscapes in the mind's eye of the reader. But their soft coloring, their rich variety of outline, their long sweep of distance, their grayish-green grasses, their deep-green evergreens, their silverygreen aspens, their summer pictures in their winter frames,-here August, there rising around always January,-only seeing can be feeling and believing. Especially beautiful and exhilarating to sense and spirit are the approaches to the mountains out from the central basin or prairie. First, over slight and soft-rolling liils, through wide valleys, around spurs of the mountains into new valleys, each succeeding one narrower, finally into canyons or chasms, and then up the abrupt hill-side; flowers that had deserted the plains now begimning, then trees ceasing, and snow-banks appearing; and finally catching the cold western wind as it sweeps over the crest of pass or hill. Occasionally, in the open prairie country, a ranch where some successor of David tends his flocks; in the narrow valleys, or on the hill-sides, the deserted cabins of gold-hunters, who had passed on; every six or eight miles a new Platte to cross; and at each ascended mountain top the begimning of a new Platte running through tender grass out of a little round lake, or oozing from under a huge snow-bank.

## VIII.

## AN INDIAN "SCARE" AND THE INDIANS.

Our Experiences with Indian Wars-A Terrible "Scare" in the Moun-tains-A Night in Camp with Indian Expectations-The Indian Question Generally, Past, Present and Future-The Arkansas Valley - The Twin Lakes and their Beauties of Scenery and LifeDown the Valley and Across South Park again-A Grand Camp Scene-Who we Were and How we Lived-An Evening with Friendly Indians--The Last of our Camp Experiences-Out of the Park, Through the "Garden of the Gods," and Back to Denver-A Motley Procession Through the Town.

We ran into the edge of an Indian war on both our journeys into the far West. The experience of an Indian scare,--that finish to all border life,-was granted to our party each year. Though we rode across the Plains in 1865, under apprehensions, we escaped interruption or delay; but in continuing our stage journey over the Mountains to Salt Lake, at that time, the hostile redskins broke in on our track, stole the horses, killed their tenders, and obliged us to lie by, in dreary cabins, in the wilderness of the Bitter Creek desert country, till other horses and soldierly protection could be procured. Less real danger but greater alarm visited our excursion among the mountains of Colorado in 1868. Before,
we were all men, and well armed; now we had a large company of women and children, and were but poorly prepared for fighting. So we had a temporary share in the horrible excitement of the settlers, when the hostile Indians put on their war-paint, raise their war-whoop, and dash wildly upon the life and property of the whites.

The day after our grand mountain experience on Lincoln, we pushed on west out of the South Park, over another range of mountains, and into the valley of the upper Arkansas River. The South Park country is free from rocks or stones; the waste of the mountains is broken and pulverized before it reaches the ralleys; and even when we mount above grass and trees and earth, the "rock-ribbed hills" are simply great deposits of small stones, or, more correctly, broken rocks. This is one great element in the softness of its scencry. But as we go over the mountains into the Arkansas Valley, there is a change; the roads become rough with stones; boulders lie along the path or in the hill-sides, and the water-courses have thrust themselves through high walls of solid rock. There is more ruggedness and coarseness in nature ; and while the want of it was not felt, now we welcome the new materials in the landscape. Our heavy baggage teams were slow in working up the huge hills and down, and we went into camp at the first passable widening of the side valley.

But just as we were spreading blankets, and displaying tents,-weary with mountain travel, and our heaviest teams far behind,-there dashed in, on a gaunt white horse, a grim messenger from Denver,
with official advices to Governor Hunt that the Indians of the Plains,-the Cheyennes, Arapahoes and Sioux,-were on the "war path;" that from seeming friends they had suddenly turned again to open foes; and were raiding furiously all anong the settlements, east, north and south of Denver, stealing horses and shooting the people. We were besought to keep anong the mountains,-the home of the friendly Utes,-as the ouly place of safety, for our company of territorial and federal officials would be a tempting prize for the red men; but the messenger, who proved to be a villainous sensationist,-though of course we did not know this then,-added to his written reports the alarming story that he had met the hostile Indians in the mountains, only that very day, that they had pursued and shot at him,--he rascal even showing as proof the bullet-holes in his saddle,-that he barely escaped by rapid riding, and that they were probably but a few miles back, and on our path.

Here was serious business, indeed, for such a party; burdened with overloaded wagons, tired horses and defenceless women and children; and all on pleasure and not on war intent. Messengers were sent back to hasten to camp all stragglers, and to warn the Indian agent, with his load of goods and rilles in the Park, to be on his guard, and to come forward. The secret could be kept from no one; the confusion and the excitement quickly grew intense; and that peculiar recklessness or indifference as to ordinary matters, that follows the presence of a deep emotion, was singularly manifest. Tents were shabbily put
up; camp was disorderly made; supper was eaten in that mechanical, forced way, without regard to quantity, quality or clean plates, that happens when death is in the house; and elaborate toilets were dispensed with. But we huddled close in together; the animals were picketed near at hand; our fire-arms were put in good order; and up and down the road trusty sentinels were posted. On each side were high abrupt hills; it was a "lovely spot" for an ambuscade; but the nearest anybody came to being killed was when one of our sentinels, during the midnight blackness of storm, suddenly entered upon the ground of the other. Indian-shod in sandals, and moving with that noiseless, stealthy tread that hunters unconsciously adopt, the one was almost upon the other before the latter discovered a foreign presence. There was a sudden click of the rifle's cock, a peremptory demand for "personal explanation" without delay, and then, -a friendly instead of a deadly greeting.

But it was a night to remember, with a shiver,lying down in that far-off wilderness with the reasonable belief that before morning there was an even chance of an attack of hostile Indians upon our camp, more than half of whose numbers were women and children,-after an evening spent in discussing the tender ways Indians had with their captives, illustrated from the personal knowledge of many present; aroused after the first hour's feverish rest by a new messenger from another quarter, galloping into camp, and shouting, as if we were likely to forget, that "the Indians were loose, and hell was to pay;" followed by the coming of furious storm of rain and hail and thunder
and lightning, sucking under our tents, beating through them, to wet pillows and blankets,-at any other time a dire grievance, now hardly an added trial; every ear stretched for unaccustomed sound, every heart beating anxiously, but every lip silent; all eagerly awaiting the slow-coming morning to bring renewal of life and the opportunity to go farther on and to safer retreats.

The experience brought serious thought to us all of the whole Indian question, that puzzle to Congress and Eastern public opinion generally. And the failure, which this unexpected outbreak carried to the last and most promising experiment with the so-called but miscalled "peace policy," has already led to a more intelligent study and understanding of the whole subject by the country, and in the end will procure a resolute reformation of our past treatment of it. The truth here, as in many another dispute, lies between the two extremes of opinion and policy. The wild clamor of the border population for the indiscriminate extermination of the savages, as of wolves or other wild beasts and vermin, is as unintelligent and barbarous, as the long dominant thought of the East against the use of force, and its incident policy of treating the Indians as of equal responsibility and intelligence with the whites, are unphilosophical and impracticable. The conflict between these two theories, with the varying supremacy of each, has brought us nothing but disaster and disgrace; we have alternately treated these vagrant children of the wilderness as if we were worse barbarians than themselves or downright fools. It is time we re-
spected ourselves and commanded their respect. Now we do neither.

In the first place, the care of the Indians should be put into a single department at Washington. Its division between the War and Interior secretaries is the cause of half our woes. The war office, as representing force, which is the first element in any successful dealing with ignorance and dependence, should monopolize their care. Then we should stop making treaties with tribes, cease putting them on a par with ourselves. We know they are not our equals; we know that our right to the soil, as a race capable of its superior improvement is above theirs; and let us act openly and directly our fiith. "The earth is the Lord's; it is given by Him to the Saints for its improvement and development; and we are the Saints." This old Puritan premise and conclusion are the faith and practice of our people; let us hesitate no longer to avow it and act it to the Indian. Let us say to him, you are our ward, our child, the victim of our destiny, ours to displace, ours also to protect. We want your hunting-grounds to dig gold from, to raise grain on, and you must "move on." Here is a home for you, more limited than you have had; hither you must go, here you must stay; in place of your game, we will give you horses, cattle and sheep and grain; do what you can to multiply them and support yourselves; for the rest, it is our business to keep you from starving. You must not leave this home we have assigned you; the white man must not come hither; we will keep you in and him out; when the march of our empire demands this reservation of yours, we will
assign you another; but so long as we choose, this is your home, your prison, your playground.

Say and act all this as if we meant it, and mean it. If the tribes would go and submit peaceably, well and good; if they would not, use the force necessary to make them. Treat thein just as a father would treat an ignorant, undeveloped child. If necessary to punish, punish; subject any way; and then use the kindness and consideration that are consistent with the circumstances. Use the best of these white men of the border, these Indian agents, many of whom are most capable and intelligent and useful men, to carry out and maintan this policy, so far as is possible; use the army so far as is necessary to enforce it, but withhold the soldiers whenever it is not,-for their presence on an Indan reservation is demoralizing to both parties.-but let all authority proceed from a single head, and that head represent a single force.

Above all, stop the treaty-makugg humbug. It is the direct parent of all our Indian woes and theirs too. Neither party keeps the basgain. The Indian is cheated; the Senate changes the provisions; a quiddling Secretary of the Interior or Indian Commissioner refuses to carry it ont ; and from secretary down through contractors and agents, something is taken off the promise to the ear by each, till it is thoroughly broken to the hope of the poor savage. What the Indian wants is to be fed and clothed; the treaty and those who fulfill it on our part may or may not do this for him, oftenest not; he cannot tell what or how much he wants beforehand for these
ends, and if he did, and bargained for it, the chances are ten to one that he fails to get it; or getting it, squanders it at once, and now, hungry and naked, he goes forth to seek relief by the simplest law of nature; and hence his excuse and the excuse of his white sympathizers for war.

But establish Force for Bargain ; Responsibility for Equality; Parentage for Antagonism ; see that he is put apart and kept apart from the tide of settlement and civilization; that he has food and clothing, not in gross, but in detail; supplying him the means to help himself in the simplest forms pos-sible,-stock raising is practicable to all the tribes, and tilling the soil possible to most,-and furnishing the rest from day to day; add such education as he will take, such elevation as he will be awakened to, and then let him die,-as die he is doing and die he must,-under his changed life.

This is the best and all we can do. His game flies before the white man; we cannot restore it to him if we would; we would not if we could ; it is his destiny to die ; we cannot continue to him his original, pure barbaric life; he cannot mount to that of civilization; the mongrel marriage of the two, that he embraces and must submit to, is killing him,-and all we can do is to smooth and make decent the pathway to his grave. All this is possible; and it need not cost so much as the mixed state of war and bargaining that we have heretofore pursued. In the beginning there must be the display and the use of power to unlearn in the Indians the false ideas our alternately cowardly bargaining and cowardly bully-
ing policy towards them has engendered; but once inaugurated, it will be simple and successful,-it will give us both peace and protection, and the Indians an easier path to the grave than lies before them now. More briefly and soldierly, General Sherman, now alive at last to the true nature of the question, expresses the new and necessary policy: "Peace and protection to the lndians upon the reservations; war and extermination if found off from them."

But to return to our own experiences. The scare wore off under the tonic of a cool, clear morning, with splendid visions of fresh fields of snow glancing in the sunlight, the arrival of our load of rifles and Indian goods safe, a good breakfast of trout and Governor Hunt's best griddle-cakes, and the following summons to horse for the Twin Lakes. Never party moved out of camp more gladly; and a few miles farther on, the Arkansas Valley welcomed us into a new country, full of the light and the freshmess and the joy of a newly awakened nature. There was a California roll to the hills that led down to the river; the sage bush that covered them was greener and more stalwart than that of the Middle Park; and the river bottom held a deeper toned grass, and was alive with grazing cattle; while the Sahwatch range of mountains, that divides the Arkansas Valley from the Pacific waters, was continuously higher than any we had yet looked up to, and its bold majestic peaks bore and brought far down their middles that thin new snow, which is such a touching type of purity, and is never seen without a real enthusiasm. Governor Bross and Vice-President Colfax, who had been off spending the night among
the miners of an upper gulch, greeted us, too, with felicitations on our safety, and with a company of volunteer cavalry, that did not desert us until all apprehensions of danger had passed away.

Crossing the river, descending the valley, and then turning up among the western hills, over one, two lines of them, racing and roystering along with our new companions, and in our new joys, we suddenly came out over the Twin Lakes, and stopped. The scene was, indeed, enchanting. At our feet, a half a mile away, was the lower of two as fine sheets of water as mountain ever shadowed, or wind rippled, or sum illuminated. They took their places at once in the goodly company of the Cumberland Lakes of England, of Lucerne in Switzerland, of Como and Laggiore in north Italy, of Tahoe and Domer in California, and no second rank among them all. One is about three miles by a mile and a half; the other say two miles by one; and only a fifty-rod belt of grass and grove separates them. Above them on two sides sharply rise,-dark with trees and rocks until the snow caps with white,-the mountains of the range; sparsely-wooded hills of grass and sage bush mount gracefully in successive benches on a third,-it was over these that we came into their presence; while to the south a narrow, broken valley, pushed rapidly by the mountains towards the Arkansas, carries their outlet stream to its home in the main river. Clear, hard, sandy beaches alternate with walls of rock and low marshy meadows in making the immediate surroundings of both lakes. The waters are purity itself, and trout abound in them.

Here we camped for that and the next day, which was Sunday; restored our Indian-broken nerves; caught trout and picked raspberries; bathed in the lakes; role up and around them; looked into their waters, and on over them to the mountains,-first green, then blue, then black, finally white, and then higher to clouds, as changing in color under storm, under sun, under moon, under lightning. Every variety of scene, every change and combination of cloud and color were offered us in these two days; and we worshiped, as it were at the very fountains of beauty, where its every element in nature lay around, before and above us.

Also, not to live forever in poetry, we patched our clothes, greased our boots, washed our handkerchiefs and towels,-one would dry while another was being washed, in the dry, breezy air,-and ate boiled onions and raspberry short-eake to repletion. Bayard Taylor's letters are at least a guide to the opportunities for good dimners in Colorado ; and ostensibly with the purpose to explore the lakes, and see the falls in the river above, possibly with a thought to fall upon such hospitality as he experienced in the little neighboring village of Dalton,-another collection of vacant cabins, with a new court-house, and only two oceupied tene-ments,-a few of us stole quietly off for a Sunday excursion.

We circled the lakes, as beautiful in detail as in grand effect; pieked out many a eharming campingground for future visits; found along the shores one or two resident families, and a tent with a stove-pipe through it, where a Chicago invalid was spending the
summer, gaining vigorous strength and permanent health, and drying quantities of trout,-think of trout so plenty as to suggest drying them!-followed up the bed of the stream two miles or more above the lakes to a very pretty waterfall, and a deep pool, worn out of solid rock, thick with visible trout, whom we could poke with long sticks, but could not seduce with the fattest of grasshoppers; lunched off the mountain raspberry vines; tracked a grizzly bear; and looked up the far-stretehing gorge through rocks and bushes and vines that were very seducing,--but came back to Dalton in time to get our invitation to dimner. There was white table-cloth, and chairs, and fresh beefsteak, and mealy potatoes, and soft onions, and cream for coffee, and raspberry short-cake "to kill," and a lady and gentleman for hostess and host; everything and more and better even than Taylor had two years before. Going back by the lakes to camp just at sunset, they were in their best estate of color, of light and shade ; and water and mountain and sky met and mingled, and led on the eye from one glory to another, till the joy of the spirit overcame and subdued and elevated the satisfaction of the senses.

We had entered the Arkansas Valley so far up that its head was visible. It leads to the lowest pass in all the mountains over to the Pacific slope, not rising above the timber line. Like all the passes of the range, it is ambitious of a railroad, and certainly seems more reasonably so than many others. But for many jears to come our continental railroads will find lower and smoother paths both north and south of Colorado.

The plan of our journey had been to go from the Twin Lakes down the Arkansas, around the outside of South Park, so nearly as the rock-bound banks of the river would allow, through Canyon City and Colorado City, and up by the Plains, under the eastern line of the mountains, to Denver. Thus we should have circuited all the great central portions of the State, and except San Luis Park, which we should have left in the south, have seen all the principal centers of her population, all the distinguishing features of her geography and her matural beauty. But this would have taken us directly into the path of the now rampantly hostile Indians; so we drew in our lines, and made a narrower circle across the South Park, and up to Denver. We lost little or nothing that was distinctive, though some repetitions and modifications of beautiful scenery already or to be made familiar to us. But I urge all who come after us to follow our intended route, and even to extend their trip over into San Luis Park. Here, though the testimony is contradictory, will be found a country rich in beauty and resources, and with some features not characteristic of the other great Parks.

First we rode some twelve miles down the valley. With a mounted escort of about twenty gallant young gold miners, and the addition of two or three camping parties that sought our company home as a sedative to the nervousness of the Indian stories, we made up a grand "outfit." All together, there were from seventy-five to one hundred persons, and as many animals, as it moved back over the mountains into South Park again. The first eight miles were through
a broken, hilly country, the mountains coming down to the river on each side in great gashes or rolls, occasionally a broad inclined plain, frequently a dry ravine. The soil was light and cold, and sage bush and coarse grass and thin forests were its products, other than gold. Of the latter it holds in deposit a plentiful sprinkling almost everywhere; and we passed the prosperous mining villages of Granite and Cash Creek, their peoples tearing up the ground all about in eager search for the precious metal.

Little canyons and big canyons drove our road away from the river and over hills and bluffs for much of these eight miles; but at the end we came down into a wider and richer opening, and there spread before us a fine agricultural section, the garden of the upper Arkansas. For thirty-five miles now, the river, hugring the hills on the east, lays open a broarl, clean, rising plain of from one to ten miles in width, before the rocks and forests of the western mountains begin. Beyond these thirty-five miles, the river canyons again for a long course, and farming is at an end, and travel down the valley is turned off into South Park till the stream emerges again from its rock embraces. Tributaries of the main stream slash and fertilize this great meadow ; and it bears large crops of grain, grass and roots. Some twenty farmers have brought under profitable cultivation about seven hundred acres of this valley ; the mines in the valleys above and over in Soutl Park furnish the markets; a Frenchman, one of the first of these ranchmen, and whose bread and milk we devoured as we went by, returned an income of from
twelve to fifteen thousand dollars in 1866, as the results of a single season's farming, crops being good and prices high; and, spite of grasshoppers and drouth, the business is uniformly more successful than mining

Crossing the river through the hospitable Frenchman's grounds, we turned up the hills, and began to leave this inviting country almost as soon as we had entered it. It beckoned us back by scenes of exquisite beauty, clothed in warm sunshine, and at every convenient spot in the ascending hills, we lingered for longing looks, up and down, and across its lines. All around on the lower hills, down to the river, guarding its passage, were magnificent ruins of mountains; huge boulders; fantastic shaped columns; lines of palisades; the kernels which water could not wash nor abrasion wear away; groves of rocks; fortresses upon the river shore,-the Rhine is not more thickly peopled with ruined castles; with pines and aspens and coarse bushes growing upon and among them all, including a new species, called pinyon, a stunted, sprawling, thick-growing pine, looking, as set in a grove a little way off, like an old apple orchard. Starting from the opposite bank, the open, rising meadow, a great inclined plane of gray and green, stretching miles away up the sides of the grand Sahwatch Mountains, whose tops formed a line of snow-fields that overlooked and cooled the whole warm scene of sunshine and life below. Up and down hills we toiled all the afternoon, refreshed only and yet tantalized by occasional glimpses of the beautiful valley behind, which seemed to spread out all
its beauty of form, of scene, of color, to harrow us for so early deserting it.

The only other sensation of the afternoon's ride was the sudden dashing into our line from behind of a dozen or twenty Ute chiefs and warriors. As we had not learned to know one kind of Indians from another, their galloping in among us stirred the blood a trifle; but we soon found they were friends, and, pairing off among our mounted men, they were grunting and gesticulating their story into all our ears. They proved to be the leaders of a band of Utes living down in the San Luis Park country, who had learned, in the mysterious and speedy mamer of savages and wildernesses, of the uprising of the hostile Indians of the Plains, and of the presence of Governor Hunt and our party in this region, and so, traveling day and night, they had hurried up to meet us, and see if they were wanted, either to protect us or take the field against their and our enemies. Not without selfish thought, too, perhaps, for blankets and beef. They camped with us that night, were well fed and well promised, and went back home the next day. The Governor had neither authority nor means to put them into the field against the Plain Indians; nor was it clear that there was any occasion for it.

We pushed up near to the tops of the mountains, riding far into the evening, before camping, and finally pitched our tents in a great meadow, heary with grass, and interspersed with little wooded knolls, within and around one of which we built our fires and laid our blankets for the night. We needed them all, for it was drearily cold before morning, and water
froze in our cups on the way from the brook, half a mile off. But the forenoon's sun and saddle brought summer warmth back; and we were not long in getting over the range and down into South Park again. We entered it about at the middle, and it seemed tamer and less green than in the upper sections. Alkali and salt deposits whitened the surface in great patches, and so rich are the springs with salt at one spot, that a large establishment for evaporating the water and making salt is in operation, and holds a profitable monopoly of the salt market of the State. We made a fine noon camp by one of the everlasting Plattes, and trout-catching was brisk for an hour.

Here, too, we had another Indian raid,-the outposts of our old Middle Park Utes, who had heard the story of the Plain Indians coming up into the South Park, and moved over in a body to dispossess them, came wildly and joyfully riding in upon us, a dozen of two, with some white friends from Fairplay. So our escort doubled, and we traveled across the Park with as large and as motley a retinue as ever Oriental prince moved among over the deserts of Asia. Only, with true American individuality, we scattered wildly about, and lingered or hurried at pleasure over the wide open plains, dotted with occasional hill and lake, the latter repeated by mirage in the distance, or by the deceptive resemblance of an alkali field, and circled by the far-distant, far-reaching mountains. Everything else failing or fatiguing, from sheer abundance, -mountain, field, grass, forest, color,-the atmosphere remained, a feeling of beauty that ministered to several senses without ever palling the appetite of either.

We made grand camp that night about a mile beyond Fairplay, on a gently sloping plateau, backed by a thick aspen grove, watered at its base by a fresh stream, fronted by the broad Park meadows, looking towards sundown, and taking the best light of the full moon through its nightly cirele of the horizon. The dozen or twenty Utes enlisted to go through with us to Denver, and made a camp for themselves a few rods away among the trees. The mounted men were usually the first in camp; they stripped their animals of saddles and bridles and blankets, and sent them galloping off for grass and water. As fast as the wagons came up, they took their places in the grand circle of the camp-cround, and were umloaded of tents, baggage and provisions, and their horses loosened to join the others. Smooth spots were chosen for the tents in a semicircle, and the tents put up by the most adroit in that business. There was one for Governor Itunt and his family ; another for Mr. Witter and his, consisting of himself, his wife (Mr. Colfax's sister), a babe eight weeks old,-think of that, you tender mothers in fom-walled and close-roofed houses in civilization!-and Mr Colfix's mother and father; a third for the young ladies; Covernor Bross and the Vice-President used one of the large covered wagons for lodgings; my friend and myself had a little tent by ourselves; and the rest, despising such paltry interventions of effeminacy, lay around in the softest, shadiest places, under the wagons, under trees, always near the fires. The little sheet-iron cooking-stoves, one for each of the two messes into which our original party was divided, were simultaneously planted and
fired up. The open fires were located, and the VicePresident, Governor Bross, Mr. Thomas of "The Rocky Mountain News," and any other idle and otherwise incompetent persons, were detailed to fetch wood for them. Soon a huge fire blazed in front of each tent. Then the wood-haulers became water-carriers. Next the fastidious made their toilets; and Governor Hunt called for assistant cooks.

This night we were to have an extra meal. To start with, and especially to provide quantity for the capacious Indian stomachs, a herd of cattle were driven up from the meadow, and Mr. Curtis, the Indian interpreter, passing them in review, rifle in hand, and, choosing a fat young cow, sent a ball unerringly into her forehead, and she fell dead instantly. It was the first time I had ever seen this speedy, humane manner of butchering; and Mr. Bergh, the anti-cruelty man, ought to demand its universal use. The animal was soon cut up, and a few choice pieces brought to our camp, but the Indians carried off the bulk to theirs, and, with forked sticks and open fire, and a little salt, were soon filling up their waste places. The village furnished us cream and fresh supplies of sugar. Soon we had beefsteak frying, mush and milk in proper progress, oysters and tomatoes stewing, hominy warming, a huge section of ribs of beef roasting on a forked stick before the fire, coffee and tea brewing, biscuits baking at one mess, and slapjacks browning at another. Governor Bross earned his supper by grinding coffee for half an hour, and afterwards, his hand having grown supple, you could have seen him, seated on
an empty whisky-keg, turning the griddle-cakes to perfection; and the writer won his glory and victual by making the "long-sweetening," $i$. e. white sugar meited into a permanent syrup. Then there were canned peaches and raspberries for dessert. All this, seated on our haunches on the ground, or on bended knees around the board and box that served for tables, each with a tin plate and cup, and knife and fork and spoon to match, and all with appetites worthy the food. We generally "boarded around," that is, ate at the mess which happened to have the most inviting meal, and as there is no knowledge so satisfactory as the experimental on such a subject, it commonly resulted in our eating at both. It is surprising how excellent food can be had in such a camping expedition with a little painstaking and tact in providing and cooking. Governor Hunt was master of all the arts of camp-life, and under his care we "fared sumptuously every day." The slapjacks and their "long-sweetening" were an incomparable dish, and took the place of bread at Governor Hunt's table.

Supper over, and the dishes washed, in which last operation "equal rights" were sometimes allowed the women, all gathered around the central camp-fires, with shawls, buffalo robes and blankets for protection from the ground; our friends traveling in company, who had made separate camps adjoining, came over to spend the evening ; to-night our escort party from the Arkansas Valley had supped with us, and were about to say farewell; and their Indian successors, having become happy and hilarious, were invited
and welcomed into the circle ; and thus re-enforced and diversified, we made a gala night of it. It was a very curious scene indeed. The blaze of the campfire contrasted sharply with the light of the moon, and brought out in fine relief all the hundred varying faces and strange costumes gathered around. Speeches were made and songs sung; Mr. Colfax addressed the Utes, and his words were interpreted to them by Mr. Curtis, and the reply of their chief to us; and then we called for songs from them. Stimulated by a pile of white sugar that Governor Hunt threw down at their feet, they got up and responded with spirit. Standing in a row, shoulders touching, and swaying to and fro in a long line by one motion, they chanted in a low, guttural way, all on one key, and only musical as it was correct monotone. Then there were more songs and sentiments from the whites; the Indians were dismissed; our kind friends from the Arkansas said good-by ; and soon the fires of camp were dull, and all its life still in sleep,-a sleep of trust and safety, there under the open sky, with a village of all sorts of people a mile away, and a band of savages within six rods. It was all so incongruous and anomalous to our home thought and life; and yet we felt as safe, and were as safe, as in double-bolted houses on police-patrolled streets. Only the contrasts forced themselves into the wakeful moments of night and morning, as we turned over and refastened the blankets, and piled more baggage over chilly feet, and peered out into the dead stillness of the camp, broken may-be by the dull snoring of a heavy sleeper, and the far-off browsing of a greedy
mule; sounds brought near and made loud by the hush of human life, and the reign of nature's peace.

Out of the Park and into the hills that separate it from the Plains the next day. The way was familiar, the road for the most part good. We scattered along, two or three together, through five or six miles; closing up for lunch, and again for night camp. Our Indian escort, familiar with every rod of the country, roamed at will, taking short cuts over the hills, and appearing first in the rear, then far in advance. We had a beautiful camp, after twenty-five miles ride, in a narrow but long little valley, that bowed the sun out at one end, as it welcomed the moon up at the other. The next day, too, all among the hills, riding another twenty-five miles; the roads improving; ranches thickening, -no lack now of buttermilk or cream; travelers grew numerous; daily newspapers coming in ; and the end dawning. It was a pleasant mountain country, open, free, lightly wooded, abundantly watered, and the valleys rich for grass and grain. The streams, too, hold trout, and the hills are thick with raspberries,-it is up here that the Denverites come for their briefer mountain excursions, and this is the common road for commerce and for pleasure into the South Park.

Our night camp now was the last of the excursion. It was near the junction of the roads leading to Denver by the Plains and to Idaho through the mountains. There was a rivalry among the cooking-stoves for the best farewell supper; but the slapjacks gave Governor Hunt the victory,--there was no equalling, no resisting them. Around the camp-fire, we "talked
it over;" hilarious with a vein of sadness; humorous with a touch of pathos; Mr. Colfax made his excellent speech, beginning, "this is the saddest moment of my life;" we sang auld-lang-syne, and prepared for an early start in the morning.

The breakfast dishes were packed dirty,_" after us the Deluge,"-and camp was broken by eight o'clock with the cry, "Ho, for Denver." The going out of the mountains was very fine. The several miles through Turkey Creek Canyon, the road winding along with the stream at the bottom of a high gorge of rocks, were fresh and exhilarating; we had gone around canyous before, painfully and laboriously; now to follow one by a narrow but firm road offered new and picturesque views. This was not unlike the Via Mala of Switzerland; and coming out, the road circled a high precipitous hill midway in its side, an expensive and excellent bit of road-making, such as is rarely seen anywhere in America.

Here we overlooked the grand ocean of the Plains, and came upon the struggles of nature to leave off mountain and begin plain. Along here, as at other points below, there seems to have been an especial and antagonistic fold thrown up almost abruptly from the level plain. Pike's Peak, which is distinct from the main range, is the chief endeavor or culmination of this throe of the formation. And around it, as here, are grouped monuments or romains of mountains, alike grotesque, commanding, impressive; taking all shapes, and giving the thought that a Power greater and higher than man's had made here familiar home. The collection of these ruins near

Pike's Peak and Colorado City, which we missed seeing because of the Indian war, is called "The Garden of the Gods," and the name not unfitly clothes the impression they make. They are not boulders or piles of rock, but what is left of mountains washed and worn away by waters and winds. The body is a fine reddish granite; and they stand sentinelled about upon the bare closing bluffs of the hills, with forms of such majesty and such personality, as arouse one's wonder and deepen curiosity into awe.

Down into the last ravine, and out upon the long rolls of the Plains. The Platte and its branches wind about in the far distance, with their gardens of grain and their groves of trees, making a pleasantly variegated map of green of the vast picture. Bear Creek especially offers a charming principality of its own. And far in the thin haze the steeples and blocks of Denver stand upon the sky. Herds of grazing cattle are scattered along on both sides of the road; and with a common hunger for home and civilization, beasts and drivers spur each other into rapid gait. Our day's ride of twenty-five miles is finished by two o'clock, and we stop before entering the town to "serry the ranks," and try the unaccustomed draughts of a suburban brewery.

A circus would have been a poor show compared to the procession that then passed into Denver. First were the faithful Utes, gay with bright blankets and yellow and red paint; a bride among them, beaded and bespangled from head to foot; then our own cavaliers and cavalieresses, their plumage not over gay after a fortnight's mountain use, their animals
worn and sorry from hard riding and no oats; next carriages, ambulances and baggage-wagons, out of which peered flapping sum-bonnets and browned faces, with every other wheel bound in huge sticks from the forest to keep them from dropping to pieces; and finally Governor Evans's carriage, altogether minus two wheels, and just lifted from the ground by two poles that dragged their slow length along behind. Despite the solemnity of the town over the Indian raids; despite the dignity of demeanor due to high officials,_-Ute chiefs, Colorado chiefs, Illinois chiefs, Washington fathers,- the street broke into a horse, nay a mule laugh, that rolled along from block to block, and turned the back doors out in affright lest Cherry Creek had come to town again. And then we were dismissed to assure our friends of our identity, and reconstruct ourselves.

## IX.

## THE MINES AND THE FARMS OF COLORADO.

The Beginning, Growth and Present Condition of the Mining Interests of Colorado- 1859 to 1869 -Central City and its OperationsGeorgetown and its Silver Mines-Gulch Mining and its RevivalThe Certain Future Growth of the Mining Wealth of the StateThe Greater Agriculture Wealth of Colorado-lts Rapid Develop-ment-Fertile Valleys and Astonishing Crops-Cost of Living Stock Raising-Coal and Iron and Manufactures-Professor Agassiz and the Glaciers-The Population of Colorado and its Character-istics-When to Visit its Mountains and Parks-The Resort of Pleasure Seekers and Health Hunters.

It remains for us, before going over into the Great Basin of the Continent, to consider the industrial interests, growth, prosperity and promise of Colorado. These have only been incidentally alluded to so far; but they deserve special exhibition. The discovery of gold among the sands of the mountain valleys in 1859 was the begimning of the present State. Thousands flocked across the Plains in that year in eager scramble for the fabled wealth. Fortune ebbed and flowed with them as in all mining ventures; the few won, many struggled and suffered for a bare subsistence, nearly as many more lost all they brought with them, even their hopes, and went

THE MARCII OF CIVILIZATION.


An Indian Encampuent and a Miner's Cabin.
back despondent, or went on over the mountains to California or Idaho, desperate. The war sent out a new class of emigrants, neutrals or cowards, willing to run any risks but those of fighting either for their section or their nation. The dirt-washers swept eagerly over the rich surface deposits, moving like grazing herds from spot to spot for fresher fields; and quartz mining came in to renew the fading hopes, and fix both capital and labor.

When we first visited the country, in 1865, the original era of speculation, of waste, of careless and unintelligent work, and as little of it as possible, of living by wit instead of labor, of reliance upon eastern capital instead of home industry, was, if not at its hight, still reigning, but with signs of decay and threatening despair. In the next two years, 1866 and 1867, affairs becane desperate; the population shrunk; mines were abandoned; mills stopped; eastern capital, tired of waiting for promised returns, dried up its fountains; and the secrets of the rich ores seemed unfathomable. Residents, who could not get away, were put to their trumps for a living; and economy and work were enforced upon all. Thus weeded out, thus stimulated, the population fell back on the certainties; such mining as was obviously remunerative was continued; the doubtful and losing abandoned ; the old and simple dirt washing for gold was resumed, and followed with more care; and farming rose in respectability and promise. The discovery and opening of specially rich silver mines near Georgetown kept hope and courage alive, and freshened speculation in a new quarter; but the main fact
of the new era was that the people went to work, became self-reliant, and, believing that they "had a good thing" out here, undertook to prove it to the world by intelligent and economic industry.

These were the kernel years of Colorado; they proved her; they have made her. Her gold product went down, probably, to say a million dollars, in each of 1866 and 1867 ; but it begran at once, under the new order of things, to rise; and agriculture also at once shot ip and ahead, and directly assumed, as it has in California, the place of the first interest, the great wealth. No more flour, no more corn, no more potatoes at six cents to twelve cents a pound freight, from the Miscouri River; in one year Colorado became self-supporting in food; in the second an exporter, the feeder of Montana, the contractor for the government posts and the Pacific Railroad; and now, in the third year, (1868,) with food cheaper than in "the States," she forces the Mississippi and Missouri Valleys to keep their produce at home or send it East. She feeds the whole line of the Pacific Railroad this side the continental divide, and has even been sending some of her vegetables to Omaha. Her gold and silver product ran up to at least two millions in 1868 , got out at a profit of from twenty-five to fifty per cent., and is certainly to be at least three millions in 1869. Her agricultural products were near twice as much, certainly three millions for 1868 , and perhaps four millions; though it is difficult to make as certain estimates in this particular, and the Indians worked great mischief with the ingathering of the crops the past fall.

Central City, in the midst of the mountains on the north branch of Clear Creek, continues to be the center of the gold quartz-mining; and business there was never more healthily prosperous than now, though the population is not so large (in 1868-9) as in 1864-5. But all its stamp mills were in operation in the fall of 1868, and more were being erected; for after wearily waiting through two or three years for more effective processes for reducing the ores, their owners have set these in operation again, simplified, perfected and economized their working, and, from about forty mills and seven hundred and fifty stamps, were then producing near fifty thousand dollars of gold a week, at a cost for both mining and milling of from two-thirds to three-quarters that sum. This season is expected to see say fifty mills and one thousand stamps at work in that valley. The most valuable ores of the neighboring mines are not put through this process, but are sold at about one hundred dollars a ton to Professor Hill's smelting or Swansea works, now established there, and working the richer and sulphuretted ores with an economy and completeness that the plain stamp mills cannot do. The ores worked in the latter form the principal product of the mines, and produce under the stamps about twenty-five dollars a ton, while the cost for mining and milling is about fifteen dollars. If steam is used the cost goes up to twenty dollars. The Swansea and the plain stamp mill are the only "processes" now in use in the valley. Professor Hill has proved the success and profit of the former, at least for all high-class ores. He was giving from eighty to one
hundred and twenty-five dollars a ton for such ore (in ISCS), and probably made from thirty to forty dollars a ton on it; and his purchases amounted to some twenty thousand dollars a month. He was already doubling his furnaces. But the problem is to apply his process profitably to lower class ores; to such as hold from twenty-five to fifty dollars a ton, of which there are almost literally mountains in Colorado. The free or simple gold ores of this grade cam be worked well enough by stamps and amalgamation, as in Central City and California, and the cost thereof can be ultimately reduced to probably one-half of present prices; but these constitute only a fraction of the rich ores of Colorado. Most of them hold both silver and gold, combined with sulphurets of iron, and a process which gets one leaves the other, except, of course, smelting, which at present is too expensive for any but highly-freighted ores. This is why thousands of mines are unworked to-day; why scores of mills with unperfected processes, or plain stanps, stand idle, rotting and rusting in all parts of the State; and why deserted cabins and vacant villages lie scattered in all the valleys about, -telling their tragic tales of loss and disappointment, monuments of the enthusiasm and the credulity of miner and capitalist, who labored and invested wildly and before their time.

The villages of the Central City region lie most uncomfortably squeezed into little narrow ravines, and stuck into the hill-sides, on streets the narrowest and most tortuous that I ever saw in America; some houses held up in dizzy hights on stilts, others bur-
rowed into the stones of the hill, with a gold "lode" in the back yard, and often a well issuing from a rock of precious metals. But here they have struggled into a hopeful permanency, with four to five thousand inhabitants, thriving, orderly, peaceable, busy, supporting two daily papers, with churches and schools, and all the best materials of government and society that the East can boast of. Down in the close valleys, and up the steep hill-sides to the very top, rise the mills for grinding out the gold, or the shanties that cover the shafts that lead down after the ore. Farther away, on the mountains, thick as ant-hills or prairie-dog-holes, and looking the same, are "lodes" or leads of mineral, discovered, dug into, pre-empted, but not worked,-hundreds, thousands of them, with fortunes or failures involved in their development, ready to be tried when the discoverer gets time or money, or turned over to a Wall street stock company of five millions capital.

Some silver mine discoveries have recently been made in the Central City region; indeed, there is silver in all the gold ores, and gold in all the silver ores of the State, and lead and copper in most besides; but the head-quarters of the silver business is at Georgetown, ten or a dozen miles over the mountains from Central City, at the head of the south branch of Clear Creek. Around and above this now thriving and most beautifully located of the principal mining villages of Colorado; at nine thousand, ten thousand, on even to twelve and thirteen thousand feet above the sea level, almost unapproachable save in summer, and then only by pack mules or on foot, are many
marvelously rich silver veins in the rocks. Hundreds of mines have been opened; but only a dozen or twenty are now being actually worked with profitable results. The rest await purchasers from their " prospectors," or capital to develop them. The ore from the leading mines ranges in value from one hundred to one thousand dollars a ton. Only two mills for reducing the ore were in operation in 1S6S; one treated the second class ore, such as will average say two hundred dollars a ton, reducing it by crushing or stamping, then washing with salt to oxidize it, and then amalgamating with quicksilver, at a cost of from fifty to one hundred dollars a ton; and the other smelting the higher priced ores, at a cost probably of one hundred to two hundred dollars a ton. The latter establishment buys outright most of the ore it reduces, and has paid all the way from five hundred to six hundred and seventy-five dollars a ton for it. Both processes get out from seventy-five to ninety per cent. of the assay value of the ore; but they are imperfect and expensive, and much of the best ore is now sent East for treatment. The Equator mine, owned by a party of railroad men from Chicago, is one of the two or three prizes there, and sends its first-class ore, worth from nine hundred to one thousand dollars a ton, all the way to Newark, N. J., to be reduced. Thirty tons, sent East in September, 1S6S, realized over twenty-two thousand dollars in silver. Georgetown now has a population of about three thousand, and the best hotel in the State. It is one of the places that every tourist should visit, partly for its silver mines, partly because the road to it up
the South Clear Creek is through one of the most interesting sections of the mountains, and partly that it is the starting-point for the ascension of Gray's Peaks. The traveler can go up to the top of that mountain and back to Georgetown between breakfast and supper; and if he will not take his tour by the Suake and Blue Rivers to the Middle or South Park, he should certainly make this day's excursion from Georgetown.

Scattered about, in Boulder District, on the Snake, over on the upper Arkansas, up among the gulches of the South Park hills, are a few more quartz mills, some in operation, more not; but the principal business of quartz mining is done in the sections I have named, in Giipin and Clear Creek Counties. Mill City, Empire, and Idaho are villages in this section, with their mines and mills, doing a little something, struggling to prove their capacity, but hardly in a single case making money, partly because of the poverty of the ore, but chiefly because it is refractory, and will not yiehl up its possessions to any known and reasonably cheap process. Time, patience, and cheaper labor will bring good results out of many of these investments; but others will have to go to swell the great number of failures that stand confessed all over this as all over every other mining country.

There are great tumneling schemes proposed or started in the Georgetown silver district, by which the various ore veins of a single mountain are to be cut deep down in their depths, and their wealth brought out of a single mouth in the valley, at a much cheaper rate than by digging down from the top on
the vein's course and hauling up. The "Burleigh drill" from Massachusetts, that has been in use in the Hoosac tunnel, has been introduced there for this purpose ; and successful mining on a grand scale will soon take this form, not only there, but in Nevada, and indeed in most of our mining States.

The other form of mining, known as gulch-mining or dirt-washing, is increasing again, and employed full three hundred men during the season of 1868. Fifty to seventy-five of these were at work in the Clear Creek and Boulder Valleys; but the great body of them were scattered through Park, Lake and Summit Counties, on the Snake and other tributaries of the Blue River ; on the upper Plattes in South Park; and on the upper Arkansas and its side valleys. They averaged twelve dollars a day to a man the last year; but the season for this kind of mining is less than half the year, in some places because of ice and snow ; in most for lack of water. The year's product from gulch-mining certainly footed up half a million dollars, probably a hundred thousand more. New gulches and fresh"hars," or deposits of sand, brought down from the hills by the streams, were opened last year in preparation for another season's work; and it is not unreasonable to look for a million of dollars from gulch-mining in 1869.

These figures seem small compared with the amounts reported to be got out in the years following the first gold discoveries in 1859,-in '60 to ' 64 ,-when one year's production ran up as high as six or eight millions, and for several years averaged probably four; when hundreds, if not thousands, of eager miners
were gathered in a single gulch, and ran over its sands with a reekless waste, taking off the cream of the deposits, and then moving on to new places, and, finally exhausting both their own first enthusiasm, and all the best or most obvious chances, turning away in disgust at a " played out" territory. But the business is now resumed in a more systematic, intelligent and economical way; labor is cheaper; miners are satisfied with more moderate returns; and there is really almost no limit to these valleys and banks, under the hills and along the rivers, whose sands and gravel hold speeks of gold in sufficient quantity to pay for washing over. An intelligent investigator of the subject tells me that the whole of South Park would pay three to four dollars a day for the labor of washing it over. But I pray it may not be done while I live to come to these Mountains and the Parks; for gold-washing leaves a terrible waste in its track.

In the valley of the Blue and its tributaries, more extensive works for gulch-mining exist than in any other district; there, not less than eighty-four miles of ditches to bring water to wash out the gold with have been constructed, and the amount of water they carry in the aggregate is eight thousand seven hundred and fifty inches. One of these ditches is eleven miles long; two others seven miles each; another five, and so on ; and they cost from one thousand to twelve hundred dollars a mile. Says Mr. Thomas of "The Rocky Mountain News," from whose careful and elaborate investigations last summer and fall, I draw many of the facts of this chapter:-"The facilities and opportunities for gulch-mining in this county
(Summit) are equal if not superior to any in Colorado. Many of the gulches now worked will last for years to come, while much ground remains yet untouched. The Blue River will pay for ten miles or more, at the rate of five to ten dollars per day to the man. Many places will pay from three to five dollars per day to the man, and will be worked when labor becomes lower and living cheaper."

In the Granite district of the upper Arkansas, quartz gold is found in simple combinations, or "free," as in California, which can be mined and reduced for eight to ten dollars a ton, while it yields from fifteen to one hundred dollars; but these are ores from near the surface, and it is yet a problem whether they will not change on getting down in the veins, as in other Colorado mines, and become "refractory," and impossible of working at a profit by any yet known process.

The Cinnamon mines, just over the southern border in New Mexico, have attracted much attention for the last two years. Several quartz mills are in operation there; but the main yield, so far, is from the gulches, and the total product this year is about a quarter of a million dollars. San Luis Park, too, is believed to be rich in mineral deposits; some promising discoveries have already been made there; and indeed in almost every quarter of the State are the beginnings of developments that inspire great faiths, each in its own particular circle of prospectors and prophets.

There is apparently no limit, in fact, to the growth of the mineral interests of Colorado. The product of 1868 was full two millions; this year it will be at
least a million more; and the increase will go on indefinitely. For the business is now taken hold of in the right way; pursued for the most part on strictly business principles; and every year must show improvements in the ways and means of mining and treating the ores. The mountains are just full of ores holding fifteen to fifty dollars' worth of the metals per ton; and the only question, as to the amount to be got out, is one of labor and cost as compared with the profits of other pursuits.

But inexhaustible as is Colorado's mineral wealth; progressive as henceforth its development; predominant and extensive as are its mountains; high even as are its valleys and plains,-in spite of all seeming impossibilities and rivalries, Agriculture is already and is destined always to be its dominant interest. Hence my faith in its prosperity and its influence among the central States of the Continent. For agriculture is the basis of wealth, of power, of morality ; it is the conservative element of all national and political and social growth; it steadies, preserves, purifies, elevates. Full one-third of the territorial extent of Colorado,-though this third average as high as Mount Washington,-is fit, more, rich for agricultural purposes. The grains, the vegetables and the fruits of the temperate zone grow and ripen in profusion ; and through the most of it, cattle and sheep can live and fatten the year around without housing or feeding. The immediate valleys or bottom lands of the Arkansas and Platte and Rio Grande and their numerous tributaries, after they debouch from the mountains, are of rich vegetable loams, and need
no irrigation. The uplands or plains are of a coarse, sandy loam, rich in the phosphates washed from the minerals of the mountains, and are not much in use yet except for pastures. When cultivated, more or less irrigation is introduced, and probably will always be indispensable for sure crops of roots and vegetables; but for the small, hard grains, I have no idea it will be generally found necessary. It is a comparatively dry climate, indeed; but showers are frequent, and extend over a considerable part of the spring and summer.

At a rough estimate, the agricultural wealth of Colorado in 1867 was a million bushels of corn, half a million of wheat, half a million of barley, oats and vegetables, 50,000 head of cattle, and 75,000 to 100,000 sheep. The increase in 1868 was at least 50 per cent.; in the northern counties at least 100 . Indeed, the agriculture of the northern counties, between the Pacific Railroad at Cheyenne and Denver, which has grown to be full half that of the whole State, is the development almost entirely of the last three years. South, in the Arkansas and Rio Grande Valleys, the farming and the population are older, going back to before the gold discoveries. This is the Spanish-Mexican section, and was formerly a part of New Mexico. Its agriculture is on a large but rough scale, and only the immense crops and the simple habits of the people,-chiefly ignorant, degraded Mexicans,-permit it to be profitable. The soil yields wonderfully, north and south. There was authentic evidence of 316 bushels of corn to the acre in the neighborhood of Denver last season ; 60 to 75
bushels of wheat to the acre are frequently reported; also 250 bushels of potatoes; and 60 to 70 of both oats and barley. These are exceptional yields, of course, and yet not of single acres, but of whole fields, and on several farms in different counties. Probably 30 bushels is the average product of wheat; of corn no more, for the hot nights that corn loves are never felt there ; of oats say 50 , and of barley 40 , for the whole State. Exhaustion of the virgin freshness of the soil will tend to decrease these averages in the future; but against that we may safely put improved cultivation and greater care in harvesting. The melons and vegetables are superls; quality, quantity, and size are unlike unsurpassed by any garden cultivators in the East. The irrigated gardens of the upper parts of Denver fairly riot in growth of fat vegetables; while the bottom lands of the neighboring valleys are at least equally productive without irrigation. Think of cabbages weighing from 50 to 60 pounds each! And potatoes from 5 to 6 pounds, onions 1 to 2 pounds, and beets 6 to 10 ! Yet here they grow, and as excellent as big. But hardly a beginning has been made in the occupation of the arable lands of the valleys and plains. The Cache-a-la-Poudre, the first branch of the Platte below Cheyenne, has 200,000 acres of tillable land, only 5,000 of which are as yet cultivated. Its oat crop in 1868 averaged $48 \frac{1}{2}$ bushels to the acre, and its cows paid for themselves in butter in that single season. The Big Thompson and Boulder and the Platte itself are the other principal farming valleys north of Denver; and oats, wheat, potatoes and butter are their chief productions.

The southern valleys, the South Platte, its tributary Bear Creek, and the Arkansas and its branches, grow more corn, having the warmer nights, which that crop loves. Even with the loose farming ways of the Arkansas region, where the old Spanish-Mexican habits more or less prevail, the grains average 30 to 50 bushels of corn, 20 to 40 of wheat, and 40 to 45 of oats per acre. Provisions are cheaper now in Denver than in New England; beef, indeed, is only half as much ; and with such bountiful results from the soil, and the ease and certainty of all farming operations, they must continue rapidly to recede. All other prices are indeed past assimilating to the Eastern standards; but the essential articles of food will always henceforth be even lower.

Stock-raising on the Plains is simple and profitable business. The animals can roam at will, and a single man can tend hundreds. The only enemies are the Indians and the diseases that the Texas cattle bring up from the South. But the former are the great evil; the confusion, danger and loss they created last season sum up a serious blow not only to stock-raising, but to all farming. Even if the evil is suppressed hereafter, last season's raids are a year's loss to the agricultural interests of Colorado. Many farmers have given up in despair from danger and disaster, and retired from the field; others hesitate and refuse to come, who otherwise would be there at once and in force of capital and energy, to enter upon the business.

These great interests of mining and farming shade naturally into others, and already there are the be-
ginnings of various manufacturing developments, as there are the materials and incentives for such undertakings without stint. Some fifteen or twenty flour-ing-mills are in operation throughout the State. The Colorado wheat makes a rich hearty flour, bearing a creamy golden tinge; and I have eaten nowhere else in America better bread than is made from it. The wheat will rank with the very best that America produces, but is more like the California grain than that of "the States." Coal mines are abundant, and several are being profitably worked along the lower range of the mountains; as, indeed, they have been found and opened at intervals along the line of the Pacific Railroad over the mountains, and are already supplying its engines with a most excellent fuel,-a hard, dry, brown coal, very pure and free-burning; in Boulder Valley and Golden City, iron is being manufactured from native ore; at Golden City, there is a successful manufactory of pottery ware and firebrick; also a paper-mill and a tamery, and three flouring-mills; the State already supplies its own salt; soda deposits are abundant everywhere, and will be a great source of wealth; woolen mills are projected and greatly needed, as wool-growing is the simplest of agricultural pursuits there; a valuable tin mine has been lately discovered and its value proved, up in the mountains; and this very year the Railroad will be one of Colorado's possessions, and bring harmony and unity and healthy development to all her growth, social, material, and political. Also, in another year, she will be formally admitted to the Union, and so reaponsible for her own government, be it good or bad.

As we came out of Colorado, Professor Agassiz was leading a new party in among its plains and mountains. He was already seething with enthusiasm; all Brazil was nothing, he said, to what he had seen of natural beauty and scientific revelation in crossing the Plains; but the half was not told him. When he came face to face with the mountains,- the mountains in perfection and the mountains in ruin,-and their phenomena of parks and wealth of verdure, then indeed he might feel he was among the "Gardens of the Gods." The Professor found abundant materials to sustain his wide-spread glacial theories; all these vast elevated plains, from Missouri River to Mountains, from Montana to Mexico,-the very heart of the Continent,-are but in his eye the deposit of great fields of ice, stretching down from these hills and washing down their hights. What must they have been once to have lost so much and remain so Titanesque!-to be still the Mother Mountains of the Continent?

The settled population of Colorado is now at least fifty thousand, perhaps sixty thousand. About onequarter is Mexican, all in the southern section, and ignorant and debased to a shameful degree. The rest are as good a population as any new State can boast of. They are drawn from all eastern sources; but the New England leaven, though possibly not the New England personality, is dominant in their ambition, their education, their morality, their progressive spirituality. The pioneer miners, the "prospectors," are a class of characters by themselves. Properly they never mine ; to dig out and reduce ore is not their
vocation ; but they discover and open mines, and sell them, if they can; at any rate move on to discover others. Men of intelligence, often cultivated, generally handsome, mostly moral, high-toned and gallant by nature, sustained by a faith that seems imperishable, putting their last dollar, their only horse, possibly their best blanket, into a hole that invites their hopes, working for wages only to get more means to live while they prospect anew and further, they suffer much, and yet enjoy a great deal. Faith is comfort, and that is theirs; they will "strike it rich" some day; and then, and not till then, will they go back to the old Ohio, Pemnsylvania or New England homes, and cheer the fading eyes of fathers and mothers, and claim the patient-waiting, sad-hearted girls, to whom they pledged their youthful loves. The vicious and the loafers, the gamblers and the murderers, have mostly "moved on;" what is left is chiefly golden material; and the men and the mines and farms of Colorado, all alike and together, are in a healthy and promising condition, and insure for her a large growth and a generous future. The two things she lacketh chiefly now are appreciation at the East and women; what she has of both are excellent, but in short supply; but the Railroad will speedily fill the vacumms.

August is the best month in which to visit Colorado, for that is nearest summer in the high mountains; the streams are lower, purer and more readily forded; the weather most uniformly clear. But any time from June 15 to September 15 will answer for visiting either or all its great Parks; and I beg every Across the Continent traveler to give at least a week
and if possible a month to the interior regions of Colorado. To us their skies and their waters repeated the fabled fountain of perpetual youth. It is to them that we believe America will go, as Europe to Switzerland, for rest and recreation, for new and exhilarating scenes, for pure and bracing air, for pleasure and for health. They offer no wonderful valley like the Yo Semite; no continental river breaking through continental mountains like the Columbia; no cataract like Niagara; no forests like those of the Sierra Nevada range, no nor the equals, in diversified form and color and species, of those of New England or of Pemsylvania; and yet I am greatly mistaken if the verdict of more familiar acquaintance by the American people with America is not, that here,among these central ranges of continental mountains and these great companion parks, within this wedded circle of majestic hill and majestic plain, under these skies of purity, and in this atmosphere of elixir, lies the pleasure-ground and health-home of the nation.

## X.

## BY STAGE INTO UTAII.

The Old Stage Lines Across the Continent-Features of Domestic Life Among the Mountains - Some of the Women of the BorderThings in Cans-Game, the Antelope and the Grizzly Bear-A Rapid Stage Ride Down the Mountains-Entrance into the Salt Lake Valley - View of Salt Lake City-Its Beauty of Location, its Capacities of Wealth, and its Future Realizations-The Reception by the Mormons-A Sunday Morning Hot Sulphur Bath.

Our stage ride of 1865 from Denver to Salt Lake City is an experience now of the past. With delays by the Indians, it was a full week through scenery already described in the account of the Railroad route, but hardly to be enjoyed now in the quick movement of the trains. The stage enterprises of that day and this region were mammoth undertakings. The proprietors made and repaired the roads; bridged the streams; settled and subdued the coun-try,-building ranches every ten or fifteen miles, and wherever possible gathering harvests of hay and grain for their horses; fought the Indians, protected and supplied the emigrants and the freighters, and literally "run" the whole civilization and barbarism of all the interior West. Mr. Holladay, who owned most
of the continental lines then, covering nearly three thousand miles, had some six thousand horses and mules, and about three hundred coaches, paid a general superintendent ten thousand dollars a year, had to draw all his corn for the first thousand miles from the Missouri River at a cost often of ten to fifteen cents a pound, his hay frequently hundreds of miles, and his fuel fifty or a hundred miles; and though the government paid a great price for the mails and the fares were high, the business was very uncertain, and some years he lost money.

Two or three features of domestic and social life among the mountains and along the stage road constantly impressed themselves upon us. Housekeeping in large families,-and children do accumulate surprisingly there,-was a very serious burden to the wives and mothers. Their Eastern sisters, in their direst woes with poor servants, can have but faint appreciation of the burdens of living and entertaining there, where cooks and waiting girls were not to be had at any price. We went to rich dinners and bountiful teas at the homes of distinguished and wealthy eitizens, and sat and ate without the company of hostess or any other ladies. She and her friends were busy in the kitchen, and came out only to stand behind our chairs, and change the plates and pass the viands. There is an uncomfortable feeling in being thus entertained; but it was the necessity of the country, and all parties made the best of it.
But how women, especially, can live contentedly in some of those out-of-the-way places on the borders, working hard and constantly, among rough and self-
ish men, and preserve their tender femininity, keep themselves neatly and sometimes even gracefully dressed, and not forget their blushes under free compliments, would be passing strange, if we had not seen it daily in our journey, and did not know it by the whole history of the sex. We certainly have seen young women out here, miles away from neighbors, knowing no society but their husbands and children and the hurried travelers,-depending on the mails for their chief knowledge of what the world is doing,-who could pass, without apology or gaucherie, to presiding over a Boston dinner party or receiving in state at Washington. Not all, indeed, are such, but they are frequent enough to be noted with both surprise and pleasure.

Here, too, in the mining camps of the Mountains, and along the continental pathway,-away from home orchards and gardens, and city markets,-we wonder at as we enjoy the free use of canned vegetables, fruits, fish and meats. We realize for the first time how great is the extent of the business of their prepara-tion,-how useful and beneficent is the invention of the process. They are on every table; few New England housekeepers present such a variety of excellent vegetables and fruits, as we found everywhere here, at every hotel and station meal, and at every private dinner and supper. Corn, tomatoes and beans, pine-apple, strawberry, cherry and peach, with oysters and lobsters, are the most common; and all of these, in some form or other, you may frequently find served up at a single meal. These canned vegetables and fruits and fish are sold, too, at prices which
scem cheap compared with the cost of other things out here. They range from fifty cents to one dollar a can of about two quarts. Families buy them in cases of two dozen each. And every back yard is near linee deep in old tin cans.

Though the Indians did not dare to attack us, -so proudly did we sweep over the mountains with our armory of rifles, double-barreled guns and revolvers, -and game scented our approach and fled away; even a party of emigrants in our rear were thrown into terrible alarm by our firing at a mark in our front, -yet the ridiculous little prairie dogs and the fummer and ittler squirrels,-beautifully striped with black, and hardly bigger than a mouse,- - sported carelessly in our warlike presence. One rifle brought down an antelope, five hundred yards away, as he stopped to gaze through his limpid, liquid eyes in wonder on our turn-out; and we found him and his successors most luscious eating,-the most delicate of the deer family, tender, melting and digestible. The antelopes weigh from sixty to eighty pounds, are fawn-like in color and appearance, have short, branching horns, and are plenty at all seasons upon the high plains and in the mountains of the region. The elk, as large as a small cow, and with horns from four to six feet long, and the black-tailed deer, are rarer game; this was not the season for shooting them; and they cling closer to the momntains.

Only to the grizzly bear, terror yet tempter of all hunters, did we give the honors of the road; finding him in our path, the stage made a detour, as a tribute of respect. An old across-the-continent traveler,
who had met and slain every other enemy, tells the story of his at last finding his ambition gratified by coming into close range with one of these tough and hugging fellows. He had the advantage of seeing and not being seen by the animal. Now was the hour of his opportunity and his glory. Putting his rifle in order, and looking up his pistols, he again regarded the beast. How he had grown, meanwhile! But my hero quickly drew his rifle upon him; yet the strange animal grew so rapidly in size that he bethought himself of the means of escape, if he should miss a fatal fire. Satisfying himself as to these, he raised his rifle again; but the bear had grown into such a monster now that the hunter thought discretion was, on the whole, the better part of valor, and that if the animal would let him alone, he would let him, and withdraw from the seene while he could,and he did!

Out of the Indian dangers, aeross the dreary Bitter Creek desert, over the continental divide, into a welcome bed and breakfast at Fort Bridger, and then on over the rough but greener hills towards Salt Lake, our stage now rolled rapidly through summer and winter scenes, with sky of blue and air of amber purity; and when the round moon came up out from the snowy peaks, giving indescribable richness and softness to their whiteness, we kept on and on, now up mountain sides, now along the edge of precipices several hundred feet high, down which the stumble of a horse or the error of a wheel would have plunged us; now crossing swollen streams, the water up to the coach doors; now stammering through morass and
mire, plunging down and bounding up so that we passengers, instead of sleeping, were bruising heads and tangling legs and arms in enacting the tragedy of pop-corn over a hot fire and in a closed dish; and now from up among the clouds and snow, we tore down a narrow canyon at a break-neck rate, escaping a hundred over-turns and toppling on the river's brink until the head swam with dizzy apprehensions.

Finally, of a hot Sunday morning in June, the stage, winding through a long, dusty, narrow canyon, emerged from the hills, and came out upon the plateau or "bench," as they call it here, that overlooks the valley of the Jordan, the valley alike of Utah Lake and the Great Salt Lake, and the valley of the intermediate Great Salt Lake City. It was a scene of rare natural beauty. To the right, upon the platean, lay Camp Douglas, the home of the soldiers, and a village in itself, holding guard over the town, and within easy cammon-range of tabernacle and tithing-house; right beneath, in an angle of the plain, which stretched south to Utah Lake and west to the Salt Lake,-""and Jordan rolled between,"was the city, regularly and handsomely laid out, with many fine buildings, and filled with thick gardens of trees and flowers, that gave it a fairy-land aspect ; beyond and across, the plain spread out five to ten miles in width, with scattered farm-houses and herds of cattle; below, it was lost in dim distance; above, it gave way, twenty miles off, to the line of light that marked the beginning of Salt Lake,--the whole flat as a floor and sparkling with river and irrigating canals, and overlooked on both sides by
hills that mounted to the snow line, and out from which flowed the fatness of water and soil that makes this once desert valley blossom under the hand of industry with every variety of verdure, every product of almost every clime.
No internal city of the Continent lies in such a field of beauty, unites such rich and rare elements of nature's formations, holds such guarantees of greatness, material and social, in the good time coming of our interior and Pacific development. We met all along the Plains and over the Mountains, the feeling that Salt Lake was to be the great central city of this West; we found the map, with Montana, Idaho, and Oregon on the north, Wyoming and Colorado on the east, Nevada and California on the west, Arizona on the south, and a near comnection with the sea by the Colorado River in the latter direction, suggested the same; we recognized it in the Sabbath morning picture of its location and possessions; we are convinced of it as we see more and more of its opportunities, its developed industries, and its unimproved capacities. The only drawback lies in the Mormon and polygamous rule of Brigham Young and his associates, which repels freedom of settlement, and denies independent social, business and political action here, and keeps the city out of sympathy with the grand free movement of American life. But stubborn and fanatical as this element is, it must give way, I am sure, to the forcible logic of self-interest. The lust for many wives is weaker, after all, than the lust for many dollars.

Mr. Colfar's reception in Utah was excessive if not
oppressive. There was an element of rivalry between Mormon and "Gentile" in it, adding earnestness and energy to enthusiasm and hospitality. First "a troop cometh," with band of music, and marched us slowly and dustily through their Camp Douglas. Then, escaping these, our coach was waylaid as it went down the hill by the Mormon authorities of the city, on hospitable duty intent. They ordered us to dismount; we were individually introduced to each of twenty of them; we received a long speech; we made a long one,-standing in the hot sand with a sum of forty thousand lens-power concentrated upon us, tired and dirty with a week's coach-ride: was it wonder that the mildest of tempers rebelled ?-transferred to other carriages, our hosts drove us through the city to the hotel; and then,-bless their Mormon hearts for the thought,-they took us at once to a hot sulphur bath, that nature liberally offers just on the confines of the city, and there we washed out all remembrance of the morning suffering and all the accumulated grime and fatigue of the journey, and came out baptized in freshness and self-respect. A stream of hot sulphurous water like a big brook poured into a great basin that had been prepared for its reception; and swimming in its luxury of freshness and abundance, with anticipations of the tens of thousands that the Railroad will bring; of invalids seeking strength, of the dirty seeking cleanliness, of connoisseurs in life seeking comfort, we dedicated Salt Lake City to the use and the enjoyment of the great American people.


## XI.

## A WEEK IN SALT LAKE CITY.

The Hospitalities of Mormons and Gentiles-What we Saw and what we Didn't See-The Beginning and Growth of Utah-The Organization of Labor and Immigration - Character of the Population and of the Rulers-The Close Chnrch and State Government-Education -"The Tithings"-Brigham Young and his Power-Dining with the Twelve Apostles-Bathing in Salt Lake-The City and How it is Located and Built-The Tabernacles and Brigham Young's HaremIrrigation and Crops-The Basin Filling Up with Water-Are the Mormons to be Drowned Out?-The Productions of the MormonsThe Introduction of Manufactures-Gold and Silver Mining, and Brigham Young's Views on it-An Evening at the Mormon Theater.

We had a week and an extra Sunday in Salt Lake City, all passed under the most favorable circumstances for acquiring knowledge of its people, its institutions, and the natural beauties and phenomena of the neighborhood. Mr. Colfax and his friends were the official guests of the city authorities (Mormons,) who showered every attention, public and private, upon them, and, with Brigham Young and other high dignitaries in church and state, seemed eager to gain their respect and propitiate their favor. These representative Mormons asserted their rightmindedness towards the government, reasonably be-
fore and again since in doubt; talked vigorously against the South and slavery; explained freely and frankly the condition and affairs of their country; discussed polygamy with us alike on social, moral and religious grounds; gave us most excellent food and drink; and were every way hospitable, courteous, and as refined in manners and treatment as men can be who call their wives "women" and treat them as servants. They certainly "put their best foot foremost" in our presence; if it turned out, in some respects, a cloven foot,-for not long after we got away, they began abusing the party, assailing the govermment with vituperative language, and persecuting with new zeal the anti-Mormon elements of their population,-it was not perhaps strange, certainly it was no more than we expected. Such antagonisms as their peculiar institution of polygamy necessarily create, -such debasement of otherwise healthy natures as it produces, sufficiently explain these inconsistencies.

But their hearts and homes were open to us for the time; also, their most luxuriant and then strawberrybearing gardens; nothing was denied to us except familiar intercourse with their families. I am not quite certain whether this arose from the disposition to shut us out from the testimony of the wives on the polygamy question, or from their regarding the women so low as to be unworthy our attention; probably it was from a mixture of both reasons that the doors of their harems were not open to us. Prominent Mormons, who had but one wife each, were not slow to give us the pleasure of their society; but I remember only
one case where we were freely presented to double wives, -and then I know I felt more embarrassed than they seemed, in being introduced, one after another, to two Mrs. Jones's by the common husband. Though pretty and tidy, they acted the part and bore the manner of mere servants in his presence; and since, he growing wealthy and more saint-like, younger and prettier companions have been added to his retinue.

At the time of our visit, the "Gentiles," as the nonMormons are called, had both a pleasant and vigorous social organization in Salt Lake City. They had congregational worship, a Sunday-school, a daily paper, and frequent social festivities; and, though only two or three hundred in number, they comprised many families of culture and influence, merchants, federal civil officers, agents of telegraph and stage lines, and officers of the army, stationed near by, and were making a pretty strong aggressive warfare on the faith of the saints. Some of them were repentant and rebellious Mormons; and altogether they seemed the "cloud no bigger than a man's hand" that would spread over the whole Mormon heavens. But since that time, the life has been greatly stamped out of them by Brigham Young's cumning persecutions. Their men of business have been overawed by withdrawal of Mormon patronage ; in one or two cases, where Gentiles undertook to maintain legal rights against Mormons, they have been waylaid and shot; they have had no encouragement or help from the government at Washington,-for a full year a reign of terror prevailed among them, and their minister and many others retired from the field of confliet;
and only now again is there a positive nucleus of Gentile influence, social, religious and material, renewed in the city. Both Catholic and Episcopal missionaries are upon the ground; and with the results of railroad communication to aid them,-its additions to, and diversifications of, the populations and interests of the city and territory,--the Gentile elements seem sure to increase, to grow bold, and to make a permanent and successful contest for fair play and equal rights in this center of a religious, social and political despotism, as exclusive and as cruel as that of slavery ever was in the South.

It is over twenty years since the pioneer band of Mormons, driven off by the persecutions of their neighbors in Illinois and Missouri, and led by Brigham Young, though he was not yet the real head of the church, wandered wildly across the Plains and over the Mountains in search of a new home. Coming out of the last range of the Rocky Mountains, into this beautiful basin, no wonder they had a revelation to stop and plant their banners here. But it was then dry and unfruitful; the summer sun baked the earth ; the winter's snows covered it ; only by living on roots and coarse herbs and meanest of animals did they survive the first year; only by patient toil, and the introduction of irrigation over their lands, were they able to produce recompensing crops. But a fanatical zeal inspired them; necessity drove them; the will of a master-spirit in Young led them; and they established themselves, and sent back for their associates, scattered through the border States of the then West. With these began, too, the overland
emigration to California, inspired by the gold discoveries of 1849 , and out of the latter, they drew recruits, and better, they got a market for their surplus products. Thus they gained a foothold; thus,by gold and silver discoveries in territories beyond and around them, -have they largely gained their subsequent growth and wealth. California, Nevada, Idaho and Montana have each in turn contributed to the success of Utah. No industry, living within and on itself, no mere zeal of religion, no mere lust of flesh could have planted such a State, could have bred such a power as centers now in the valley of Salt Lake.

But the second great fact in the history of Utah is the recruiting of its population direct from Europe. America might furnish the leaders, but never the followers for such a society as this; and almost at the beginning, missionaries were sent among the ignorant and struggling farmers, miners and mechanics of England and the north of Europe, to gain converts and recruits. The appeals to their desire for greater physical comfort,--for a home of independence and plenty, -with the offer of the means of emigration, -firing them, where possible, with a simple religious zeal,-polygamy being in no general sense one of the motives offered, or doctrines preached,-brought abundant followers; and thus has the population of Utah been made up. Of its hundred thousand or more residents, five-sixths at least are the direct results of these emigration movements. Reaching here, their homes and their lives were assigned them; their industry organized and enforced; and they were made
not only self-supporting but contributors to the common wealth of the church. The expenses of their emigration were charged to them, and they were obliged to work them out. It is in the organization of this emigration, and of its labor after coming here, that the great ability has been displayed in the creation and maintenance of this State. No so widespread a community in the country probably has, on the average, so industrious and thrifty, and yet so ignorant a population. It thinks little, but works much; the dependence and mental debasement of their European life are continued; their only improvement is in physical well-being; their sole intellectual stimulus is in the direction of a coarse, material religion and a fanatical faith in the fathers of the church.

For never on the American Continent was there organized so complete a union of church and state as here. The political, social and business organizations of Utah are, each and all, subservient to that of the church. The machinery of that is complete and intimate; it reaches everywhere, it controls everything. Never was there a more perfect religious autocracy than governs Utah. The federal officers, sent here as the executive and judicial organization of the Territory, find themselves powerless. The Territorial Legislature, the juries, and the local police, are made up entirely of Mormons, subservient to the church organization. There is no sympathy here with the federal government, only a hollow, cheating recognition of it. Without an army, none of its laws can be enforced; no jury can be found even to recognize offenses under them. So the federal office-
holders either settle into a profitable and pleasant subserviency to Brigham Young; fret themselves with vain endeavors to uphold the central authority and resist the Mormon defiance ; or stand and wait, spectators and witnesses of offenses they camnot prevent or punish, bearing a vain testimony so far to the unity and completeness of a power as utterly foreign to the spirit of the Republic, as utterly antagonistic to its authority, as a branch of the Turkish empire, set down in the interior of our Continent, would be.

Conflict with federal authority is, however, carefully, cumningly avoided. It is a passive not an open resistance that is set up against it. And so thorough is the organization of the church, so subservient are the people, that this policy is not so difficult to maintain as it would be in any other American community. City and Territory are parcelled out into districts, with a bishop or elder, closely affiliated with the central authority, set over each. This man, bound by complicity in the cardinal sin of polygamy and the common opportunity of moneymaking, is preacher, chief of police and magistrate alike; monopolizes or shares in the trade of his precinct; and expounds and administers the law to the generally ignorant people of his precinct, who are kept to the simple industries of the farm and the household, and forbidden by the enforced levies of the church and the high prices charged for everything they may wish to buy, as well as by the feebleness of their ignorance, from ever rising above that sphere. Hard work and a simple morality are strictly
enforced habits. They rank along with faith in Brigham Young, subserviency to his decrees, and hatred of Gentiles, as the cardinal doctrines of Mormonism. Distilling and liquor-selling are monopolized by the ehurch and its officers; three or four "Gentile" liquor shops are permitted in Salt Lake City, but they are burdened with license charges of three hundred dollars a month each by the Mormon authorities; while the followers of the chureh are strictly forbidden to frequent them. Disorder, child of independence, would be a fatal element, and so everything which leads to either is most carefully eliminated from Mormon society. Thus, in the name of thrift and order and morality, is the subserviency necessary to Mormon rule maintained; and the conceded results of temperance and industry and aggregate wealth, so often pointed at with pride by the Mormon writers and orators, are purchased by the destruction of everything that marks or secures individual growth.

As a matter of course, general education is not in great favor. In 1865, there were no Sunday-schools in the Mormon Church, and no day schools but private ones, and these under the patronage and control of the church authorities. The criticism and example of the Gentiles, and the demands of the better class of their own parents, have since driven the Mormon managers to introduce Sunday-schools, and to increase the opportunities for general instruction. But the schools are still practically private; though the school-houses are built by the public, i.e., the church, tuition fees are charged; the teachers are of a low order and exclusively Mormons; the instruc-
tion is narrow and limited, and embraces, as a cardinal feature, faith in the Mormon rules; and such as it is, the last statistics show that only half of the children in the Territory, between the ages of 4 and 16, are able or are allowed to avail themselves of it.

Brigham Young is at the head of everything; all tributes pour into him; all authority flows out from him as the center of church and state. He dispenses favor; he administers justice and injustice; he receives the revenues, and he spends them,-both without any apparent accountability; the best farms are his; the largest saw-mills, the most prospering manufactories; of all the good things, whether women, or lands, or forests, coal mines, or contracts, he has, if not the monopoly, certainly the first choice, and the disposition of all. There is immense wealth in his possession; but what proportion of it he calls his own, and what the church's, no one knows,-he apparently recognizes no distinction. The church rule, that every man shall contribute one-tenth of all his productions or profits each year to the church, is rigidly enforced wherever possible without serious rebellion. The most of the population, particularly all those who cultivate the soil, observe it, paying their contributions "in kind;" and this practically gives the church the control of all the produce markets of the country. The few rich manufacturers and traders, who some years harvest great profits, but who are generally closely affiliated with Young, either escape the "tithing" altogether, or compound for it by a special money contribution. Some of the "Gentile" merchants have heretofore kept the peace
with the authorities by respecting, directly or indirectly, the "tithing" rate of the church; but lately Young and his coadjutors have undertaken to crush out all opposition by establishing, as a strict rule of the church, that Mormons must, on no account, trade with any but Mormons. The pains and penalties of exclusion from the church and utter damnation after death are threatened for those who disobey this rule. The first effects of this were greatly injurious, if not fatal, to many Gentile merchants in Salt Lake City; but its full results are not yet determined. It is probably not universally obeyed, and its force will weaken rather than increase with the movement of popalation and competition consequent upon the Railroad. There are certainly several very large and wealthy Gentile mercantile houses in Salt Lake City; and a considerable percentage of the trade and business life of the town is in such hands.

Next to Young, whose title is President, and whose province is unlimited, are a Council of Twelve Apostles, the first of whom is Vice-President. Relow these is the order of the Seventies, included in which are the Bishops and Elders; and these, with a small circle of capable business men, attached to Young and the church, apparently by mercenary or lustful motives alone, make up the entire governing power of City and Territory. Five hundred must be a large allowance for the men in authority and in influence, and half of these I should say were only powerful by reason of a narrow, bigoted zeal, that made them useful in carrying out the decrees of men of broader power and more mixed motives. Brigham

Young is not the only man of real power in this organization; and it is not safe to say it would crumble to pieces with his death; but the number of those, both capable and willing to lead a crusade for its maintenance, I do not believe exceeds a dozen. It is easy to recognize among many of the most prominent men in this autocracy mere camp followers, who would never, of choice, endanger either lives or property in its maintenance. Under strong pressure or temptation, they would hasten to make terms for themselves. But for the time, the organization is compact and vigorous, and apparently able and ready to make a fight for its existence and independence.

But this is not describing how we passed our week among the Saints and Sinners of Salt Lake City. We went out in the mornings to see the city ; the wonderful hot sulphur springs, baths for all the rheumatics and dyspeptics of our especially rheumatic and dyspeptic American nation ; the cotton-factory and model flouring-mill of President Young; the orchard and garden of "Brother" Felt; the great store and the new tamnery of "Brother" Jennings; the silk-worm beginnings of " Brother" Watt, who wanted to marry his half-sister, but Brigham Young, finding she was pretty, "sealed" her to himself; but, finding she was false, "sealed" her back again, and she is now one of her brother's wives; up the canyons for the waterworks and the view of the valley; and so on. In the afternoons, we dined out with the " twelve Apostles," on fat and juicy mutton, rich and rare roast beef, turkeys of the New England Thanksgiving pattern, vegetables to match in every variety, and plum-pud-
ding $\grave{\text { a l la }}$ King George, with golden seal champagne and deep old port to moisten their digestion,-what, ever these Apostles preach to their followers, they are not necessarily ascetics themselves; -while in the evenings, we went to Gentile strawberry festivals and danced with pretty girls who were content to have many lovers but one husband, or took a quiet tea with a one-wive Mormon. Again we spent the day with the soldiers at Camp Douglas, back of the city, and heard the black, sad side of Mormonism, as told to them by its victims, or made a long excursion over to Rush Valley, where the discharged California soldiers were hopefully developing silver mines. Our Mormon hosts took us, one day, on a pienic excursion to Salt Lake,—a "stag" picnic, be it noted,so we could bathe cne naturel, our friends said,-so we should not ask their "women" how they liked polygamy, we thought.
This Lake is, indeed, the phenomenon of the whole interior basin. It lies across the valley fifteen miles from the city, is very irregular in shape, but about fifty miles wide by a hundred long, and salter than any ocean ; so salt, indeed, that fish cannot live in it, that three quarts will boil down to one quart of fine pure salt, and on whose dense waters the bather can float like a cork, though the sharp brine must be kept from his mouth and eyes under penalty of severe smarting. High rocky islands stud its area; under the free wind of the open country, its waves have an ocean roll, and will breed sea-sickness at short notice; but its picturesque surroundings, the superb sunsets within its waters, and the buoyant brine, all invite to
pleasure-sailing upon its surface. What elements these, and the plentiful sulphur springs of the neighboring hills, and the charming scenery of the whole valley, and especially the fine location and premature development of the city, all are in the making of Salt Lake the great interior watering-place of the Continent! Invalids and pleasure-seekers will flock hither by the thousands; and the simplicity of Mormon life, with its single indulgence, will sooner or later be supplanted by the various resources of pleasure that fertile and self-indulgent fashion can combine around a new and greater Saratoga. But when we came out of our bath in Salt Lake, a thin crust of fine salt dried upon our bodies, and in rubbing ourselves off with towels, we had a most excellent substitute for a rough flesh-brush.

The city has, indeed, a most charming location, and is happily laid out and improved. Coming out of the mountains on the east and north, we enter upon a high plateau or "bench" of land, commanding the valley for forty or fifty miles to the south, and west to Salt Lake and the mountains that seem to rise from out of the water, and, stretching southward, guard the valley in that direction. The city lies directly below, on a second or third bench or gradation, as the open plain falls away into the lower valley, through which the River Jordan sluggishly winds its way from Utah Lake, forty miles in the south, into Salt Lake itself, the home of all the streams of the mountains and valleys around. Between river and lake, and under the highest mountains, on what seems almost a level plain, but holding a grade that keeps
the irrigating streams in quick motion, and promotes dryness and health,-with wide sweep of fertile valley before it, Salt Lake shimmering with the sunlight in the far distance, and the delaying Jordan ribboning the gardens of grain and grass below,-with mountains behind white-capped in snow even under the summer's sun, and hills in front that often rival them in hight and garniture,-Salt Lake City spreads itself with luxuriance of space, and with luxuriance of garden and orchard growth, that almost hides its buildings.

The streets are broad and regular,-one hundred feet from curb to curb,-_dividing the town into squares of just ton acres, and these again are divided into eighths, which leaves an acre and a quarter for each home. Only in the business streets and in the lower and poorer quarters are these home lots subdivided. The houses were originally altogether of adobe, or mud bricks dried in the sun; now, stone and red brick are introduced for the larger buildings and stores, and lumber varies with the carlier material in dwellings and second-rate business establishments. The houses are mostly small, and a story or a story and a half in hight; they often suggest the peculiar institution of the country by a long frontage with numerous distinct entrances. The number of wives a man has is frequently indicated by the number of front doors to his house.

A full square of ten acres in the center of the city is devoted to the central church edifices. Here is the old Tabernacle, a large, low, barn-like structure, holding several thousand people; also the new Tabernacle,
which will contain from ten to fifteen thousand, is two hundred and fifty feet long, one hundred and fifty feet wide, and ninety high, built of stone, covered by a grand arched dome, and looks in the distance like a huge deep platter turned bottom up. In the most conspicuous location of the same square lie the foundations of the Grand Temple, begun many years ago, and to be finished when the church has leisure and money enough. The plan proposes a structure that rivals the cathedrals of Europe, and is grander than any church edifice in America. This square is surrounded by a strong, high wall of adobe brick and plaster.

Similarly guarded from cumning eyes or profane entrance by a high, strong wall, is Brigham Young's entire square, opposite. Within this are the "tith-ing-house," where are gathered in the tenth part of every man's yearly productions or profits, the other offices and store-honses of the church, two large houses for Young and his extensive family and his private offices, a school-house with cupola for his children, immense barns and sheds for his animals, and far in the rear his grand model flouring-mill. Fine gardens and orchards fill up the vacant places. Here is the central life and authority of the State. The telegraph of the church, extending all over the Territory, centers here, and here is the office of the special church newspaper organ.

The principal business street is long and well built. There are a few stores of the very first character, both in size, amount and variety of goods, and extent of business done. There are several firms, some

Mormon, others not, that do a business of a million and over each every year. The great Mormon establishments often connect manufacturing of some kind with their business, and frequently have branch stores all over the territory; but they are all in the hands of close allies, relatives, or subservient instruments of Brigham Young, and are under his sharp surveillance. The hotels, two of which are large and well managed, are all kept by Mormons; and so far as possible, all the avenues to money-making, all the instrumentalities of life in the city, are in the hands of creatures of the head of this Church and State organization. If a Mormon is suspected of unsoundness, or is getting too rich and powerful, he is persecuted out of the way, or "called of God" to go as missionary somewhere, and leave his business in somebody else's hands, or the "tithings" are applied so sharply as to keep his fortune within reasonable bounds. Many cases are given in illustration of these and other ways of enriching the church and preventing the growth of individual power.
Within the last few months, a new plan has been devised for extending and compacting the business affiliations of the church. It is that of putting all extensive trade and manufacturing operations into cö̈perative associations, and inviting all the Mormon population to take shares in them. The great Mormon stores in Salt Lake City have been thus converted, and the principle is rapidly extending to all business enterprises in every part of the Territory. It has two advantages,-that of extending the common interests of the grand organization, and ensuring
the enforcement of the rule that Mormons shall buy only of Mormons, and that of distributing the losses of any revulsions in business, or any break-down of the Mormon rule, growing out of the revolutionary influences of the Railroad. It strengthens the power of the leaders, and it enables them to change their investments, or, as they say in Wall street, to "unload."

The long dry summers of all our New West render irrigation a necessity to all diversified culture of the soil. The Mormons were the first people in the United States to resort to this means of counteracting the peculiarities of this western climate. They began it at once on their arrival in the Salt Lake Valley, and have carried it to a good degree of perfection, especially in the city and its neighborhood. The streams that come out from the mountains are diverted and divided through the streets of the town, and among the farms of the valley above the River Jordan. Thus lively brooks course down the gutters of the streets, keeping the shade trees alive and growing, supplying drink for animals and water for household purposes, and delightfully cooling the summer air; besides being drawn off in right proportion for the use of each garden. Once a week is the rule for thus watering each crop; to-day a man takes enough for one portion of his garden; to-morrow for another; and so through his entire possessions and the week. Under this regular stimulus, with a strong soil, made up of the wash of the mountains, the finest of crops are obtained; the vegetable bottom lands of the New England rivers or of the interior prairies cannot vie with the prod-
ucts of the best gardens and farms of these western valleys and plains under this system of irrigation. There needs to be enough rain in the spring or winter moisture remaining to start the seeds, and there generally is; after that, the regular supply of water keeps the plants in a steady and rapid growth, that may well be supposed to produce far finer results, than the struggling, uneven progress of vegetation under dependence upon the skies, -a week or a month of rain, and then a like prolongation of sunsline. The gardens in the cities and villages are tropical in their rich greenness and luxuriance. I do not believe the same space of ground anywhere clse in the country holds so much and so fine fruit and vegetables as the city of Salt Lake to-day.

The soil of this and the smaller neighboring valleys is especially favorable to the small grains. Fifty and sixty bushels is a very common crop of wheat, oats and barley; and over ninety have been raised. President Young once raised ninety-three and a half bushels of wheat on a single acre. I should say the same soil located in the East, and taking its chances without irrigation, would not produce half what it does here with irrigation. Laborious and expensive as the process must be, the large crops and high prices obtained for them have made it a very profitable recourse.

But a singular change seems to be creeping over all our Western regions under settlement, in this matter of climate and of rain. Summer rains are palpably on the increase, and the necessity of irrigation is lessening, especially for the grains and slow-
growing vegetables. When the Mormons first came here, there was no rain from April to November; but now summer showers are of frequent occurrence. It is so in Colorado and in California,-there is a growth in the moisture of the summer and a lessening need of artificial watering for the main crops. The phenomenon is peculiar, and has yet received no satisfactory explanation. Comnected with this change, it is observed here that Salt Lake is growing in size and freshness, and the Jordan increasing in width and sluggishness of movement. In broader phrase, the whole basin, once evidently filled with water, is slowly returning to its old condition. The Lake is rising at the rate of a foot a year. General Connor's little steamboat, that has been carrying ties for the Railroad across the Lake during the last year, certainly rode for a mile over what was good grazingground five years before. Does Providence propose to drown the Mormons out, and with water solve the problem that is puzzling our moral philosophers and statesmen?
The country drained by the Great Salt Lake is about one hundred and fifty miles east and west, and two hundred and fifty north and south. Four or five large streams of fresh water pour into it; and the facts already stated, that it has no visible outlet, and that its waters are one-fourth salt, mock science and make imagination ridiculous. Other salt is found in the country; there is a mountain of rock salt a few miles away; and below in Arizona is a similar mountain, whose salt is as pure as finest glass, and a beautiful specimen of which Brigham Young showed to us.

The Territory of Utah covers the region drained by the Salt Lake, and perhaps one hundred miles more, both in breadth and length. But the Mormon settlements extend one hundred miles farther into Idaho on the north, and perhaps two hundred miles into Arizona on the south, clinging close, through their entire length of six hundred to seven hundred miles, to a narrow belt of country hardly more than fifty miles wide; for on the east of this are the mountains, and to the west the great Central American Desert, that forms part of the great internal basin of this section of the Continent, and leads the traveler on to the Sierra Nevada Mountains of the Pacific States. These settlements are mostly small, counting inhabitants by hundreds, gathered about the course of a mountain stream; but there are several places of considerable importance, as Provo in the south, and Ogden, where the Railroad enters the valley, in the north. They tempt a railroad line down to the Colorado River, which is navigable to a point six hundred miles south of Salt Lake City, and doubtless one will sooner or later be built. In 1865, before the Pacific Railroad was so quickly promised, the Mormons were making promising experiments in bringing their goods by steamboat up the Colorado River, and thence by teams up through the line of their settlements to the capital, as likely to be cheaper than teaming them across the Plains and over the Mountains from the Missouri; and this route is quite sure to be developed and improved in the near future.

The population of the Territory is probably from
one hundred thousand to one hundred and twentyfive thousand; of whom from twenty-five thousand to thirty-five thousand are in Salt Lake City. Before the entrance of the Railroad into the valley, not more than three or four thousand were non-Mormons or Gentiles. The policy of the leaders has been to confine their people to agriculture; to develop a self-sustaining rural population, quiet, frugal, industrious, scattered in small villages, and so manageable by the church organization. So far, it has been admirably successful; and it has created an industry and a production here, in the center of the western half of our Continent, of immense importance and value to the future growth of the region. The land is cut up into small sections, and most of the farms are very small. Indeed, of the forty-three million acres that the Territory measures, only about half a million are supposed to be capable of culture, and the number under cultivation is estimated at one hundred and thirtyfour thousand, or about one acre to an inhabitant. Every man is encouraged to raise everything possible needed for his sustenance, and this gained, and the church securing its share, there is not apt to be much left for profit.

Following out the principle of self-support and independence, the simple manufactures have been gradually introduced. Several small cotton-mills and one or two woolen-mills are in successful operation; hides are plenty, and there is a tannery, also a manufactory of boots and shoes; cotton grows in the southern settlements, and persistent and partially successful efforts have been made to introduce the
silk worm. Wood and lumber are scarce and high, the former fifteen dollars a cord, and the latter forty to sixty dollars a thousand. Coal is found in the mountains, but fifty miles away, and before the Railroad was open it cost in the city thirty to thirty-five dollars a ton. There are at least a hundred flouringmills in the Territory, and flour, grain, butter, bacon, home-made socks and yarn, and dried peaches are the principal productions in excess of consumption. Probably two hundred thousand pounds of dried peaches were sold to the Idaho and Montana miners in the year (1864) of the greatest emigration to those territories. Alive not only to all opportunities for making money, but to the necessity for supplying every want of their population, that there may be no room for an antagonistic element, the Mormon leaders are now alert to introduce such other and higher classes of manufactures as an increased prosperity and the facilities of the Railroad may put in demand. Among these are wagons and agricultural implements, for which a company is formed and other preparations made.

With wise instinct of its depraving distractions and its rarely recompensing pursuit, Brigham Young has persistently discouraged all mining operations among his people. He has been fortunate in having no rich discoveries made within his lines to tempt them to break his commands. Occasionally there has been a temporary excitement over placer diggings here and there in the mountains, or over discoveries of de. posits of gold or silver ores; but none of them have ever amounted to much. The Gentiles have, how,
ever, wasted much labor and money in prospecting and trying to work some silver mines in Rush Valley, about twenty-five miles from Salt Lake City, but though here and at other points there are undoubted deposits of the precious metals that, by and by, with cheap labor and simple processes for reduction, will pay to work, as yet nothing in this line has proved recompensing. Iron, the Mormons admit, exists in large quantities, particularly in the southern mountains; they have made some efforts to develop and work it, but failed for want of proper workmen and materials. But as to gold and silver, they are incredulous; and not only that, President Young argues that the world has many times more of both than it needs for financial purposes; that the country is poorer to-day for all the mining of gold and silver in the last twenty years; and that for every dollar gained by it, four dollars have been expended.

Chief among the distractions of the week was a performance at the Salt Lake theater in honor of the distinguished guests. For the worldly wisdom that presides here has made generous provision for the amusement of the people. The theater is one of the finest and largest buildings in the city; it compares well with the best opera-houses of the East in size and appointments; and the performances in it are always respectable and sometimes very superior. There is generally a star actor or two from the East or from California; but the principal portion of the performers are amateurs,-merchants and mechanics, clerks and laborers, wives and daughters of citizens of Salt Lake City. The scenery and dresses
are all first-class, and there is evidently a stage manager who understands his business. We had a drama and a spectacular farce for our evening's entertainment; and I have rarely seen a theatrical performance more pleasing and satisfactory in all its details and appointments. Yet the two principal men characters were by a day-laborer and a carpenter ; one of the leading women parts was by a married daughter of Brigham Young, herself the mother of several children ; and several other of his daughters took part in the ballet, which was most enchantingly rendered, and with great scenic effect.

The house was full in all its parts, and the audience embraced all classes of society, from the wives and daughters of President Young,-a goodly array,and the families of the rich merchants, to the families of the mechanics and farmers of the city and valley, and the soldiers from the camp. Babies were in plenty; and these, with long rows of wives, and a patriarchal-looking old gentleman at the head, testified to the polygamous institution. Out of respect to the strangers, Brigham Young sat with his "first wife" in a private box, and did not thrust the retinue of his lechery before us. He built and owns the theater, which cost $\$ 200,000$. It is run in the name of and for the benefit of the church; and as most of the actors and actresses cost nothing, and the institution is naturally popular, it is understood to be quite profitable. The prices of admission are nominally high; but the doorkeeper takes pay in "produce," and many a farmer from the valley drives up with the whole or part of his family, and a load of grain,
pork, or "garden sass," to buy their entrance to the evening's entertainment in the theater. It proves, indeed, a most useful and popular social center and amusement for the whole people, and its creation was a wise and beneficent thought.
But even all these were not the most interesting or important features of our week's experiences and observations in Salt Lake City.

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## MEN AND WOOMEN, OR POLYGAMY, IN UTAH.

Brigham Young, Heber C. Kimball, and other Leading ApostlesLong Interviews and Talks with Them-Discussion about Polygamy -Suggestion of a New Revelation against it-Later Extension of Polygamy-The Sabbath Services of the Mormons-Preaching by Brigham Young-Extracts from Mormon Sermons-Mr. Colfax in the Mormon Pulpit-How does Polygamy Work? -The Children -The Husbands and the Wives-What the Latter Say and How they Bear it-Illustrations of Polygamous Life and Habits-Brigham Young's Children and Wives - Beauty and the Beast-List of Young's Harem.

Of course we had a good deal of curiosity, while in Utah, to study the persons and characters of the Mormon leaders and the operation of polygamy; and though one avenue to information was largely denied us, every other was freely open, and the lacking in that was measurably made up to us by plenty of second-hand testimony from and about the fractional wives of the saints. When we arrived, Brigham Young was away from the city; but he soon came back in grand state, for he travels among his subjects like an oriental prince, with procession of carriages and men on horseback. He takes with him always two personal servants, one a barber, and the other


Salt Lake City-Brigham Young-Proposed Mormon Temple.
one of his wives. Directly he came, with half a dozen of his Apostles, to pay his respects to Mr. Colfax,-for the Speaker had given out that he should observe Washington etiquette, and not call first on him, which pleased the Gentiles,-and they spent most of a morning with us. We had free and familiar talk of the Territory and its industries, of the scenery, of irrigation, of the Indians, of everything but the one theme upon which both sides were the most eager to compare notes. Young explained to me the Mormon policy as to the Indians; in brief, it was that they had found it cheaper and easier to feed them than to fight them. But, he said, they could not last long; the food and the diseases of civilization are killing them off; even white bread, of which they are very fond, weakens and destroys their constitutions. And he told of an Indian boy, whom he took into his family, robust and healthy, but, though he fared as well as his own children, he soon sickened and died.

Brigham Young is a well-preserved, good-looking man of now near seventy years; stout, smooth-faced, self-controlled; slow and careful of speech; with a light gray eye, cold and uncertain; a thin, short un-der-lip and chin, betraying great power of will, and which shrank and curled and quivered under feeling with a most devilish ugliness. That lip and that chin were the only indexes to his character, as exhibited in his life, that I could find either in his face or manner; but they showed that he would allow nothing to stand in the way of his purposes. There was not the faintest sign of rashness or weakness, but
abundant token of the spirit that would send and has sent men to a sudden grave, in the most cool and relentless manner, for resisting his authority or standing in the way of his purposes. He is physically a handsome man, and takes great pains with his dress; but he was to me repellant in personal atmosphere. In conversation, he is cool, quiet, but intelligent and suggestive, has strong, original ideas, but conveys them with rather coarse and ungrammatical language. He was somewhat formal, but courteous, and at the last affected frankness and freedom, if he felt it not; and when his eye did sparkle and his lips soften, it was with most cheering, though not warming, effect; it was pleasant but did not melt you.

Heber C. Kimball ranked next to Young in church and state, when we were there, and was accounted by the Mormons to hold the gift of prophecy in even more divine degree than his leader. But he seemed to us, from all we saw and heard of him, a blessed old rascal; unctuous in looks and manners as Macassar hair oil, and pious in phrase as good old Thomas ì Kempis; but a consummate hypocrite, hard and tricky at a bargain in worldly matters, and tyramical to his long retinue of sorry-looking wives, the happiest day of whose lives was that of his death. His office appeared to be that of keeper of the seals of Heaven, and the fulminator of the Divine wrath or the dispenser of the Divine grace, and he distributed both about with equal vulgarity and repulsiveness.

George A. Smith is another of the head Apostles, and succeeded Kimball as Vice-President. He is one of the oldest and most faithful Mormons, very intelli-
gent in their history, and a heavy, full-orbed man, with solid qualities of body and mind, who contents himself with five wives. Two of the Apostles, Amasa Lyman and Franklin Richards, are Massachusetts men; several others are Englishmen, who are now creeping into place and power in the clurch; and they all average four wives each. Perhaps the most refined man of our hosts in personal appearance and manners was a Mr. Felt, originally from Salem, Mass.; he lived in a very neat two-story cottage, embowered with trees, and with two or three suggestive front doors. But the American proportion, both of leaders and followers, is fast decreasing. Brigham Young himself says that fifteen out of every twenty of the original American Mormons have apostatized; and Apostle Smith says five out of six.

Two or three of the party who called on us had fine faces,-such as you would meet in intellectual or business society in Boston or New York,-but the strength of most of them seemed to lie in narrowness, bigotry, obstinacy. They looked as if they had lived on the same farms as their fathers and grandfathers, and made no improvements; gone to the same church, and sat in the same pews, without cushions; borrowed the same weekly newspaper for forty years; drove all their children to the West or the cities; and if they went to agricultural fairs, insisted on having their premiums in pure coin.

When we came to return their call, and met at Brigham Young's office pretty nearly the same company of prominent Mormons, there was a full hour's frank talk of the whole matter of polygamy. He
had, just before we entered, been bothered by a man who could not keep his "women" straight, and either wanted a reinforcement of authority from head-quarters, or liberty to take an additional wife by way of equalizing the contending forces; and it was not long after we were seated ere he blurted out the blunt question to Mr. Colfax-_" Well, now you have conquered the South and abolished slavery, what are you going to do with us and our polygamy?" With his usual tact, Mr Colfax replied that he had no authority to speak for the government; but for himself, if he might be permitted to make the suggestion, he had hoped the prophets of the church would have a new revelation on the subject, which should put a stop to the practice of polygamy. He added further that, as the people of Missouri and Maryland, without waiting for the action of the general government against slavery, themselves believing it to be wrong and an impediment to their prosperity, had taken measures to abolish it, so he hoped the people of the Mormon church would see that polygamy was a hindrance and not a help, and move for its abandonment. Mr. Young responded quickly and frankly, and apparently as much to the surprise of his friends as to our own, that he should readily welcome such a revelation; that polygamy was not in the original book of the Mormons; that it was not an essential practice in the chureh, but only a privilege and a duty, under special command of God; that he knew it had been abused; that people had entered into polygamy who ought not to have done so, and against his protestation and advice; and that wives
and husbands, in polygamy, were constantly fretting him with their troubles. At the same time, he defended the practice as having biblical authority, and as having, within proper limits, a sound, moral and philosophical reason and propriety.

The discussion, thus opened, grew general and sharp, though ever good-natured. Mr. Young was asked how he got over the fact that the two sexes were about equally divided all over the world, and that if some men had two, five, or twenty wives, others would have to go without altogether. His reply was that there was always a considerable proportion of the men who would never marry, who were old bachelors from choice. But, retorted one, are there any more of such than of women who choose to be old maids? Oh yes, said he, most ungallantly; there is not one woman in a million who will not marry if she gets a chance! Mr. G. Q. Camnon, an Englishman, and probably the most learned of the Apostles, strongly pressed the biblical usage and authority for many wives, as above all laws and constitutions, but was asked as to the effect of the same usage and authority for human sacrifice,-would you, for instance, if commanded by God, offer up your son or your enemy as a sacrifice, killing them? Yes, he promptly replied. Then the civil law would lay its hands upon you and stop you, and would be justified in doing so, was the apparently effective answer.

In the course of the discussion, Mr. Young asked, Suppose polygamy is given up, will not your government then demand more,-will it not war upon the Book of the Mormons, and attack our church organ-
ization? The reply was, emphatically, No, that it had no right, and could have no justification in doing so, and that we had no idea there would be any disposition in that direction. The Mormons would then take rank and take their chances with the other Protestant denominations,--the Methodists, Baptists and Episcopalians, -and all would be left free to work and quarrel together on the same platform of equal rights.

The talk, which was said to be the freest and frankest ever known on that subject in that presence, ended pleasantly, but with the full expression, on the part of Mr. Colfax and his friends, of their hope that the polygamy question might be removed from existence, and thus all objection to the admission of Utah as a State be taken away; but that, until it was, no such admission was possible, and that the government could not continue to look indifferently upon the enlargement of so offensive a practice. And not only what Mr. Young said, but his whole manner left with us the impression that, if public opinion and the government united vigorously, but at the same time discreetly, to press the question, there would be found some way to acquiesce in the demand, and change the practice of the present fathers of the church.

But this indication of a change of base was not well received by the Mormon leaders generally. They protested against it, and very soon after we left, it was disowned or explained away, and polygamy took a fresh start. There has seemed, indeed, to be an effort to extend its complications and influences, and get
everybody into it of any character or power in the church or in society. When we were there, it was estimated that not more than one in six or eight of the men had embraced the practice; but since, it has increased from fifty to one hundred per cent., and one in three or four of the men have more than one wife each. So the evil has grown to formidable proportions, and its eradication, even its limitation, seems much harder to compass than it did in 1865.

Our afternoon's talk with Young and his associates included the proper way of treating the leading rebels and the merits of slavery in the abstract. He boldly espoused slavery per se as established by Divine authority, like polygamy, but denounced the chattel system of the South; and he opposed the hanging of any of the rebel chiefs as an unwise and aggravating policy. Now that peace is established, let all be pardoned, he said; but early in or during the war, he would have disposed of the rebel chiefs that fell into the hands of the government without mercy or hesitation. Had he been President when Mason and Slidell were captured, he would have speedily put them "where they never would peep," and negotiated with England afterwards. As he said this, the thin lip shortened and the lower jaw worked, most diabolically; and I felt sure he could be as good as his word, and no longer doubted where the inspiration for the Mountain Meadow massacres, the slaughter of the recusant Josephites, or the various assassinations by the "Danites" of individual rebels from the church or uncompromising Gentiles, came from. Young thoroughly believes in punishing his enemies
with fire and sword, and all in the name of the Lord his God. He is a resolute and literal Old Testament Christian in theory and practice,-thus far at least.

On looth Sabbaths we attended the Mormon religious services in the Church square. Meetings are held every Sunday, also, and on some week-day nights, in the church edifices in each of the twenty wards of the city, where the local bishops and elders drill the people in all the duties of life, instructing them with a plainness and with an autocratic authority as to their entire line of thinking and acting, that any other Protestant people or even any American Catholics would resent with indignation. But their ignorant, fanatical followers seem to take it all as law and grospel, and are under such strict surveillance and authority that most of them would not even dare to disobey or protest. At the Tabernacle building, the gathering is from the whole city, amounting commonly to several thousands, and the services are conducted by some of the Apostles. The congregations are naturally not of a very high grade, either of physical beauty or mental capacity,-they were as dreadfully commonplace as you can imagine the refuse of the English factory towns, with a sprinkling of the peasantries of Germany, Finland, Sweden, Scotland, Normay, even Iceland, would be. Yet they exhibited improvement over their probable former life in tidiness of dress and better living. But the small narrow heads told of limited brains and shallow thought. The handsome girls were few; the fine-looking women even fewer; intelligent, strong-headed men were more numerous; but the great mass, alike in size, looks and
dress, were below the poorest, hardest-working and most ignorant classes of our eastern large towns.

The gatherings and the services, both in speaking and singing, reminded me of the Methodist campmeetings of fifteen or twenty years ago. The singing, as on the latter occasions, was the best part of the exercises, simple, sweet, and fervent. "Daughters of Zion," as sung by the large choir one Sunday morning, was prayer, sermon, song and all. The preacher that day was Apostle Richards, but beyond setting forth the superiority of the Mormon church system, through its presidents, councils, bishops, elders and seventies, for the work made incumbent upou Christians, and claiming that its preachers were inspired like those of old, his discourse was a rambling, unimpressive exhortation, such as you may have heard from a tonguey deacon in any country Baptist or Methodist meeting-house of the last generation. The Bible, both Old and New Testaments, is used with the same authority as by all Protestants; the Mormon Scriptures are simply new and added books, confirming and supplementing the teachings of the original Scriptures. The rite of the sacrament is administered every Sunday, water being used instead of wine, and the distribution proceeding among the whole congregation, men, women and children, and numbering from three to five thousand, while the singing and the preaching are in progress. The prayers are few and simple, undistinguishable, except in these characteristics, from those heard in all Protestant churches, and the congregation all join in the Amen.

The next Sunday, especially for our edification, Brigham Young himself preached; but he was very unsatisfactory and disappointing in his effort. There was every incentive for him to do his best; he had an audience of four or five thousands spread out under the "Bowery," adjoining the Tabernacle, where the summer meetings are held; before him was Mr. Colfax, who had asked him to preach upon the distinctive Mormon doctrines; around him were all his elders and bishops, in unusual numbers; and he was fresh from the exciting discussion of the day before on the subject of polygamy. But his address lacked logic, lacked effect, lacked wholly magnetism or impressiveness. It was a curious medley of scriptural exposition and exhortation, bold and bare statement, coarse denunciation and vulgar allusion, cheap rant and poor cant. So far as his statement of Mormon belief went, it amounted to this: that God was a human, material person, with like flesh and blood and passions to ourselves, only perfect in all things; that he begot his son Jesus in the same way that children are begotten now; that Jesus and the Father looked alike and were alike, distinguishable only by the former being older; that our resurrection would be material, and we should live in heaven with the same bodies and the same passions as on earth; that Mormonism was the most perfect and true religion ; that those Christians who were not Mormons would not necessarily go to hell and be burned by living fire and tortured by ugly devils, but that they would not occupy so high places in heaven as the Latter Day Saints; that polygamy was the habit of all the children of God in the earlier ages, and was
first abolished by the Goths and Vandals who conquered and reconstructed Rome; that Martin Luther approved of it in a single case at least ; that a clergyman of the Church of England once married a man to a second wife while his first wife was living; and that in England now, if a man wanted to change his wife, he had only to offer her at auction and knock her off for a pot of beer or a shilling, and marry another. A good deal of boasting of the success of the Mormons, their temperance, frugality and honesty, and a sharp denunciation of the "few stinking lawyers who lived down in Whiskey street, and for five dollars would attempt to make a lie into a truth," were the only other noticeable features of this discourse of the President of the Church of the Latter Day Saints. It was a very material interpretation of the statements and truths of Scripture, very illogically and roughly rendered; and calculated only to influence a cheap and vulgar audience. Brigham Young may be a shrewd business man, an able organizer of labor, a bold, brave person in dealing with the practicalities of life,-he must, indeed, be all of these, for we see the evidences all around this city and country; but he is in no sense an impressive or effective preacher, judged by any standards that I have been accustomed to.

A good many Mormon sermons have been reported and published, some by themselves, others by Gentile listeners. Their language in many instances is shockingly blasphemous; in others, where rebellious or vain or wicked women are denounced, or the young girls are instructed in their duty to become con-
cubines and bear children as soon as the laws of nature will permit, it is positively filthy and disgusting, such as would not be tolerated elsewhere out of the rilest dens of great cities. As specimens, not of such sermons, but of the more decent sort, I quote a few independent sentences,-they are from Brigham Young, and Apostles Smith and Pratt:-
" When a man comes right out like an independent devil, and says 'D——Mormonism and all the Mormons,' and is off with himself to California, I say be is a gentleman ly the side of a nasty, sneaking apostate, who is opposed to nothing but Christianity. But now, you Gladdenites [a band of recusant Mormons,] keep your tongues still, lest sudden destruction come upon you. I say, rather than that apostates should flourish here, I will unsheath my bowie-knife aud conquer or die."
"There are sins that men commit for which they cannot receive forgiveness in this world, or in that which is to come; and if they had their eyes "pen to see their true condition they would be perfectly willing to have their blood spilt, that the smoke thereof might ascend to heaven as an offering for their sins, and the incense would atone for their sins. I know when you bear my brethren telling about eutting people offi from the earth that you consider it strong doctrine; but it is to sare them, not to destroy them. It is true that the blood of the Son of God was shed for sins through the fall and those committed by men, yet men can commit sin which it never can remit. There are sins which can be atoned for ly an offering upon an altar as in ancient days, but there are also sins which the hood of a lamb, of a calf, or of turtle dores cannot remit; but they must be atoned for by the blood of the man."
"No wonder that you grope in the dark; that you are sulject to doubts and fears concerning your eternal salration. The law of celestial marriage is right, lut you will not obey it, and those of you who do not accept the Gospel of Christ can expect nothing but darkness. There is no inducement for any man to beeome a Latter Day Saint unless he accepts the Spirit of God in his heart and oheys His teachings."
"If an elder has borrowed from you, and you find he is going to apostatize, then jou may tighten the screws upon him; but if he is
willing to preach the Gospel without purse or scrip, it is none of your business what he has done with the money he has borrowed from you. If you murmur against that elder, it will prove your damnation! No man need judge me. You know nothing about it, whether I am sent or not; furthermore it is none of your business, only to listen with opeu ears to what is taught you and serve God with an undivided heart."
"How was it with Mary and Martha, and other women who followed Jesus? In old times, and it is common in this day, the women, even Sarah, called their husbands lord. The word is tantamount to husband in some languages. Master, lord and husband are synonymous. When Mary came to the sepulchre, Jesus said unto her, Mary! She said unto him, Rabboni, which is to say master. Is there not here manifested the affection of a wife? These words were the kindred ties and sympathies that are common between husband and wife." The same discourse deelared that Jesus was himself the bridegroom at the marriage in Cana of Galilee, and that Mary and Martha were both his wives!

These are fair illustrations of the intellectual and religious husks on which these poor people are fed from Sunday to Sunday. Perhaps they are above the average in propriety and piety of expression; but they show, better than any characterization of mine, the spirit both of priests and people; how brutal is that of the one, how debased that of the other.

Mr. Colfax's presence in their pulpit was certainly a novelty for the Mormon audience. On the Sunday evening after Brigham Young's sermon, he repeated there, by request, his eulogy on the life and principles of President Lincoln, then a fresh theme everywhere in our broad land. The audience was swollen to five or six thousands; and, dull of comprehension and fanatically devoted to Young and his Apostles as most of them were, they could not have failed to feel that they were listening to a higher order of eloquence
and patriotism,-to nobler thoughts in nobler garb,than those which were usually doled out to them. At least they listened with rapt attention and apparent sympathy; and it is rare that they hear so lofty and loyal sentiments from that platform. The Mormon preachers never allude to the national government but to criticise, belittle and abuse.
But of polygamy in practice? How does it operate? -what are its results? - what its prospects? Most obviously, first, there are plenty of children. The houses and yards and streets swarm with them. The Divine injunction to increase and multiply, that they may people the earth, is held in great respect by the Mormon patriarchs. They quote it often in defense to Gentile doubters, or as injunction to hesitating believers, men or women, who fear to launch away on the sea of polygamy. The care of the children is obviously not of the best; it would not be strange if many of them were not wise enough to know their own fathers; but this is not the worst form of their ignorance. There are fathers who are loyal, there are mothers who are tender, of course, even the more tender because of their own sufferings, and the church exhorts and enforces a certain degree of care and instruction; but the general life of the Mormons is simple, material and hard; there is not only little unity in polygamous families, but a good deal of discord, and the children camot avoid suffering, not only from neglect and from the general debasement and materiality of life, but sharply and especially from the inevitable revenge that outraged nature, unelevated and undisciplined by cul-
ture, is forever certain to wreak on those nearest and even dearest to it.

Their religion is of course the great reason for polygamy; it is the excuse of the men; it is the reconciliation of the women. Many, perhaps most of both sexes really believe in it as a religious duty; but I find this part of their religion is much easier and more acceptable to the men than to the women. The former go to the sacrifice with a certain brutal joy; the latter with a hard, sad resignation. When men talk with men, as men, the truth camnot help but crop out as to such a matter as this; and the chances are two to one, that before you get through discussing polygamy with a many-wived Mormon, he will commend it, with a lustful leer, to the masterpassion of the sex. But with the women, ignorant and degraded as most of them are, the universal testimony of all but their husbands is, that it is a grievous sorrow and burden; only cheerfully submitted to and embraced under a religious fanaticism and self-abnegation rare to behold, and possible only to women. They are taught to believe, and many of them really do believe, that through and by it they secure a higher and more glorious reward in the future world. "Lord Jesus has laid a heavy trial upon me," said one poor, sweet woman, "but I mean to bear it for His sake, and for the glory He will grant me in His kingdom." This is the common wail, the common solace.

In some cases the common wives live harmoniously and lovingly together; oftener, it would seem, they have separate parts of the same house, or even separate houses. The first wife is generally the recog-
nized one of general, especially of Gentile society, and frequently assumes contempt for the others, regarding them as concubines, and not wives. But it is a dreadful state of society to any one of fine feelings and true instincts; it robs married life of all its sweet sentiment and companionship; and while it degrades woman, it brutalizes man, teaching him to despise and domineer over his wives, over all women. It breeds jealousy, distrust, and tempts to infidelity; but the police system of the church and the community is so strict and constant that it is claimed and believed the latter vice is very rare. As I have said, we had little direct communication with the women of the Saints; but their testimony came to us in a hundred ways, sad, tragic, heart-rending. One woman, an educated, handsome person, as yet a single wife, said, with bated breath and almost hissing fury, to one of our party, in some aside discussion of the sub-ject,-" Polygamy is tolerable enough for the men, but it is hell for the women." Poor creature, she has now bitterly realized in her own what she then saw in other lives, for her brute of a husband has since had "sealed" to himself, not only for eternity but for earth, two or three young and fresh girls.

The only half wives we saw intimately were two young Englishwomen, of nearly equal years; they appeared together in the parlor and in public with their husband, and dressed alike; but they had the same quiet, subdued, half-sad air that characterized all the Mormon women, young and old, that I saw in public or private. There is certainly none of that "loudness" about the Mormon ladies that an East-
ern man cannot help observing in the manners of our Western women generally. And I hardly think the difference is to be attributed to the superior refinement and culture of the sisters of the Salt Lake Basin; it rather and really is the sign and mark of their servitude, their debasement. Indeed, we have the frequent testimony of the husbands, and even of Brigham Young himself, to the irreconciliation of wives with the polygamous state. Said Young in a public sermon: "It frequently happens that women will say they are unhappy; and husbands testify that 'my wife, though a most excellent woman, has not seen a happy day since I took my second wife.'" And then he proceeded to scold them for their rebellious feelings, and to enjoin upon them the Divine duty of sweet submission!

The first generation of Mormon-born girls and boys is just now coming to maturity. Despite their education they are not very eager to embrace the Divine institution. But it is hard to escape its meshes. Some of the girls have bolted and married Gentiles; but more have been gobbled up as fresh victims for the middle-aged and old men of the church. The elders preach submission to this to the girls with sanctimonious solemnity as a Christian duty, and then make haste to take advantage of the conviction they have gained. Two unmarried Mormon young men stated the case very humanly when they said: "This polygany would be all right, only the women, you know, ' pull hair' so like darnation!"

Polygamy introduces many curious cross-relationships, and intertwines the branches of the genealogical
tree in a manner greatly to puzzle a mathematician, as well as to disgust the decent-minded. The marrying of two or more sisters is very common; one young Mormon merchant in Salt Lake City has three sisters for his three wives. There are several cases of men marrying both mother (widow) and her daughter or daughters; taking the "old woman" for the sake of getting the young ones; but having children by all. Please to cipher out for yourselves how this mixes things. Consider, too, how these children of one father and many mothers,-the latter often blood relations,-are likely to become crossed again in new marriages, in the second or third, if not the first, generations, under the operations of this polygamous practice ; and it is safe to predict that a few generations of such social practices will breed a physical, moral and mental debasement of the people most frightful to contemplate. Already, indeed, are such indications apparent, foreshadowing the sure and terrible realization.

In many cases, the Mormon wives not only support themselves and their children, but help support their husbands. Thus a clerk or other man, with similar limited income, who has yielded to the fascinations and desires of three or four women, and married them all, makes his home with number one, perhaps, and the rest live apart, each by herself, taking in sewing or washing, or engaging in other employment, to keep up her establishment and be no charge to her husband. He comes around, once in a while, to make her a visit, and then she sets out an extra table and spends all her accumulated earnings to
make him as comfortable and herself as charming as possible, so that her fraction of the dear sainted man may be multiplied as much as may be. Thus the fellow, if he is lazy and has turned lis piety to the good account of getting smart wives, may really board around continually, and live in clover, at no personal expense but his own clothing. Is not this a divine institution, indeed!

Brigham Young's wives are numberless; at least no one seems to know how many he has; and he has himself confessed to forgetfulness in the matter. The probability is he has from sixteen to twenty genuine or complete wives, and about as many more women "sealed" to him for heavenly association and glory. The latter are mostly pious old ladies, eager for high seats in the Mormon heaven, and knowing no surer way to get there than to be joined on to Brigham's angelic procession. Some of these sealed wives of his are the earthly wives of other men; but, lacking faith in their husbands' heavenly glory, seek to make a sure thing of it for the future by the grace of gracious Brigham. Down East, you know, many a husband calculates on stealing into heaven under the pious petticoats of his better wife; here the thing is reversed, and women go to heaven because their husbands take them along. The Mormon religion is an excellent institution for maintaining masculine authority in the family; and the greatness of a true Mormon is measured, indeed, by the number of wives he can keep in sweet and loving and especially obedient subjugation. Such a man can have as many wives as he wants. But President Young objects
to multiplying wives for men who have not this rare domestic gift ; and he finds great annoyance in being teased by men, unfit to drive double teams of women, to let them try their hands.

Brigham Young has in all some sixty or seventy children; the younger ones, as seen in his school, to which we were admitted, looked sprightly and bright and handsome; and some of his grown up daughters are comely and clever; but his older sons give no marked sign of ther father's smartness. Brigham, Jr., and Joseph A. have set up as polygamists and prophets for themselves. They are big and burly fellows; Prigham has shown some business capacity, and has been a good deal of the time for years in England and New York, forwarding the emigration of the church; but the accomplishments of the other are summed up as smoking good cigars, drinking good liquors, playing poker, licking his wives, and preaching the Mormon Gospel. It cannot be said, surely, that he does not practice what he preaches.

The grand Mead of the Church manages his household on strict business principles. A son-in-law acts as commissary; the wives have nothing to do with the table or its supply; and whenever they want new clothes or pocket-money, they must go to this chief of staff or head of the family bureau. He does not allow any of them to come begging or whining about him for any cause,-when he wants one, he sends for her. And the rule for children, "Speak when you are spoken to, and not otherwise," is the law of his domestic economy. Considering his oppor, tunities, he seems to have made a rather sorry selec.
tion of women on the score of beauty. The oldest or first is a matronly-looking old lady, serene and sober; the youngest and present pet, who was obtained, they say, after much seeking, is comely but common-looking, despite the extra millinery in which she alone of the entire family indulges; while all between are very "or'nary" indeed. Handsome women and girls, in fact, are scarce among the Mormons of Salt Lake, - the fewer Gentiles can show many more of them. Why is this? Is beauty more esthetic and ascetic? Or, good-looking women being supposed to have more chances for matrimony than their plainer sisters, do they all insist upon having the whole of one man, and leave the Mormon husbands to those whose choice is like Hobson's?

The following list and description of Brigham Young's family, made up from various sources by Mr. Coffin of Boston, who visited Salt Lake City in 1868, agree substantially with the information we obtained concerning them during our earlier visit. The extract will help my readers to a personal appreciation of the fact and operation of polygamy ; but it is an institution, after all, whose realities neither description nor imagination can fairly set before the mind :-
"This is the harem. A covered passage leads from the ground floor to another building East in which is the general business office of Brigham Young, and from which telegraph wires run to every hamlet in the 'Territory. Another passage leads to the private office of Brigham -back of which is his private bedroom, where his concuhines wait upon him,-Amelia to-day, Emeline to morrow, Lucy the day after.
"Brigham's lawfully wedded wife was Mary Ann Angell,--a native of New York,-the mother of five children,-Joseph, or "Joe" as he
is called at Salt Lake, Brigham A., John, Alice and Luna. She married the prophet while he was a young man, before he was a prophet, and with him accepted the revelations of Joseph Smith. She lives in a large stone building in the rear of the harem. Brigham does not often visit her now.
"His first coneubine is Lucy Decker. She is the lawful wife of Isaac Seely, mother of two children; but Brigham could make her a queen in heaven, and so, bidding good-by to Isaac, she became first concubine, and has added eight children to the prophet's household.
"Her younger sister, Clara Deeker, also aspired to be a heavenly queen, and became his sccond conculine, and is the mother of four children.
"The third is Harriet Cook, mother of one turbulent boy, who does pretty much as he pleases, as does the mother. When in her tantrums she does not hesitate to send Brigham to the realm of evil spirits.
"Lucy Bigelow is said to be one of the most lady-like of all the conculines. Mrs. Waite, wife of one of the United States Judges of the Territory, who saw all of the ladies of the harem, describes her as of middling stature, dark brown hair, blue eyes, aquiline nose and a pretty mouth. She is pleasant and affable.
"Miss Twiss has sandy hair, round features, blue eyes, low forehead, freekled face, but as she has no children, is not of much account in the eyes of the prophet. She looks after his clothes, sews buttons on his shirts, and acts the part of a housewife.
"Martha Bowker is another of the same sort, quiet, neat in dress, childless, and therefore of little account.
" Harriet Barney, like Lucy Decker, left her husband and three children to become a conculine that she might have exaltation in Heaven, but has not been honored in the harem, not having added any children to the household.
"Eliza Burgess is the only English woman in the harem, small of stature, black eyes, quick-tempered, but mother of several children.
"Ellen Rockwood, daughter of the jail-keeper, is another of the unfortunate women-not baving had children.
" Mrs. Hampton, whose first husband died at Nauvoo, afterward married a man by the name of Cole, who left her at Nauvoo and went to California. Brigham, hearing of his departure, sent for the wife, who obeyed the summons and became a concubine, lived in the harem
eight years, then was cast out by Brigham. She now lives at Ogden City with her son, Nephi Hampton.
" Mary Bigelow is another castamay. She lived in the harem several years, but Brigham became tired of her and sent her away.
" Margaret Pieree is another who, not having added to the glory of the prophet by being a mother, is of little account, though still in the harem.
" Emeline Free, as described by Mrs. Waite, is the " light of the harem," tall, graceful, mild, violet eyes, fair hair, inclined to curl. She was a lively young lady, and Brigham fell in love with her. Her father and mother were opposed to polygamy, but Emeline had ambitious projects, accepted his proposal and became the favorite of the harem. The favor shown her brought on a row. The other concubines carried this jealousy to such a pitch that the prophet had a private passage constructed from his bed-room to Emeline's room, so that his visits to her and her's to him could be made without observation. She has contributed greatly to his glory in the future world by presenting him with eight children in this.
"The poetess of the church is Eliza Snow, said to be quite intellectual. In one of her poems published in Brigham's paper, the 'Deseret News,' she thus exalts the Mormon religion;
> 'We have the ancient order, To us by prophets given : And here we have the pattern As things exist in heaven.'

"From which we are to understand that there are harems in heaven! So the Turk believes.
"Zina Huntington also writes poetry and acts as a sort of governess to the numerous children of the prophet. Zina came to Salt Lake with her lawfully wedded husband, Dr. Jacobs. Brigham liked her, sent the doctor on a missionary tour to England, took his wife into the harem, and became the spiritual father of her children,--made her his temporal concubine that he might also exalt her to be a queen in heaven! The doctor returned from his mission, apostatized, and went to California, where he now resides.
"Amelia Partridge has added four children to the prophet's household. She is said to be of a sweet disposition and is not jealous when the prophet turns his attentions to the other concubines.
"Mrs. Augusta Cobb was formerly a Bostonian, became converted to Mormonism eighteen years ago, left her home and accepted a position in the harem.
"Mrs. Smith, a devout Mormon, wished to be sealed to Brigham for eternity, but the prophet did not care to make her a heavenly queen. He sealed her to Joseph Smith for eternity and to himself for time.
"One 'poor unfortunate,' Clara Chase, became a maniac, and has gone to where the wicked cease from troubling.
"Amelia Folsom, a native of Portsmouth, N. H., is the mistress of the harem. She entered it on the 29th of January, 1863. She was then about nineteen and the prophet sixty-three. She has things pretty much her own way,-private box at the theater, carriage of her own, silks, satins, a piano, parlor elegantly furnished. If the prophet slights her, she pays him in his own coin."

## XIII.

## THE FUTURE OF THE MORMONS.

What of the Church and Polygamy? - How the Problem will be Solved-No Fit Successor for Brigham Young-The Past Neglect and Present Duty of the Government-The Division of the Territory -How the Soldiers attack Polygamy - The Order of Danite Assassins, and their Bloody Work-The Mountain Meadow Massacre-The Rebellious Morrisites and Josephites-Summing up of Observations in Utah and our Conclusions-Our Stage Driver "The Coming Man."

What will become of the Mormons? Is polygamy to be fastened upon our social institutions, and are we to have a State of polygamists? If not, how is the evil to be cured? These are questions that every visitor in Utah, every student of the anomaly there so flourishing, asks of himself and of his neighbor. They seemed easier of answer in 1865 than now in 1869 , for both polygamy and the power of the church that backs it have greatly increased since then; and yet I cannot but think we are nearer the solution of the problem,-not only as to time, but in means,now than then. The whole spirit of the social life, the religion, the political government in operation there, is in such antagonism to everything American, to everything modern, that it must give way. It is Romish,
barbaric, monarchical; it crushes and degrades the individual, to uphold a system as tyrannical over persons and property as that of any Czar ever was, as supreme over the mind as that of any Pope, as enslaving to woman as that of any Sultan. The Railroad now crosses the Territory; it will soon pass up and down through it; and though the Apostles say they are not afraid of its influences, either upon the Mormon church or its "peculiar institution," and Brigham Young declares that his "must, indeed, be a-poor religion, if it cannot stand one railroad," he and they will find out that it cannot and will not. Thousands of Gentiles will come in now, where tens came before; the railroads must have great work and supply shops at important points in the Territory; and they will bring a power of numbers and of influence, that cannot be met by the social, business or murdering persecutions, that have heretofore kept all foreign and resisting elements timid and weak.

What precise form the revolution will take,-where the wedge will be entered that shall split this rotten trunk to pieces, no one can wisely predict. The government cannot longer be so indifferent and neglectful of the situation here as it has been; it must come here with authority and power to protect citizens who are not Mormons, and will not be subservient to them, who will try titles to property with them, who will claim the right to marry their superfluous wives, who will set up rival churches and schools and papers, and all the other enginery of freedom and revolution. The work may be slow,-sapping the strength of the church by the processes of education, discussion and law, and
polygamy may fade away by degrees through the death of the old, and the absence of new disciples, -or it may come suddenly and sharply in a violent collision between the new settlers and the old, with the government taking the side of the former as the side of its long-neglected, long-outraged laws. But come it must and will. To doubt would be to question progress, to deny civilization, to outrage God.

I can discover no successor to Brigham Young. He has men of ability,-men of fanaticism and cour-age,-around him ; able instruments for his will; but I see no "coming man" for his place; no one who can stand alone in his shoes, who can command such obedience among followers, such fear among outsiders, such serene victory over himself. Most of his wisest and ablest associates, men inspired with the traditions of the church, and inspiring the faith of its members, are all old like himself. They and he must soon die; and, if not before, then will enter in the elements of doubt and difference and disintegration, in response to the elements of change and revolution and re-creation that follow the banners of civilization and of democracy everywhere. No Mormon will admit this, perhaps; but it is truth by a diviner sight than any that he possesses. Devout as a Mussulman, devoted as a Romanist, zealous as a Methodist, there is a higher truth than he has mas-tered,- the truth of revolution in the interests of equality, of individuality, and of woman's independence. These are against him; these will conquer him, pray he ever so sacredly, fight he ever so valiantly. Brigham Young, Louis Napoleon, the Sultan and the

Pope are all doomed by the same law. Slavery went down under it, polygamy will follow.

But the government should no longer hold a doubtful or divided position toward this great crime of the Mormon church. Declaring clearly both its want of power and disinclination to interfere at all with the church organization as such, or with the latter's influence over its followers, assuring and guaranteeing to it all the liberty and freedom that other religions sects hold and enjoy, the government should still, as clearly and distinctly, declare, by all its action and all its representatives here, that this feature of polygamy, not properly or necessarily a part of the religion of the Mormons, is a crime by the common law of all civilization and by the statute law of the Nation, and that any cases of its extension will be prosecuted and punished as such. Now half or twothirds the federal officers in the Territory are polygamists; and others bear no testimony against it. These should give way to men who, otherwise equally Mormons it may be, still are neither polygamists nor believers in the practice of polygamy. No employes or contractors of the government should be polygamists in theory or practice.

Here the government should take its stand, calmly, quietly, but firmly, giving its moral support and countenance, and its physical support, if necessary for fair play, to the large class of Mormons who are not polygamists, to missionaries and preachers of all other sects, who choose to come here, and erect their standards and invite followers; and to that growing public opinion, here and elsewhere, which is accumu-
lating its inexorable force, against an institution which has not inaptly been termed a twin barbarism with slavery. There is no need and no danger of physical conflict growing up; only a hot and unwise zeal and impatience on the part of the government representatives, and in the command of the troops stationed here, could precipitate that. There is a possibility still, as there was probability in 1865, that, upon such a demonstration by the government, as these pages urge, the leaders of the church would receive new light on the subject themselves, - perhaps have a fresh revelation, and abandon the objectionable feature in their polity. No matter if they did not,-it would soon, under the influences now rapidly aggregating, and thus reinforced by the govermment, abandon them.

In this way, all violent conflict would, I believe, be successfully avoided; and all this valuable population and its industries and wealth may be retained in place and to the Nation, without waste. Let the people continue to be Mormons, if they choose, so long as they are not polygamists. They may be ignorant and fanatical, and imposed upon and swindled even, by their church leaders; but they are industrious, thriving, and more comfortable than, on the average, they have ever been before in the homes from which they came hither; and there is no law against fanaticism and bigotry and religious charlatanry. All these evils of religious benightment are not original in Utah, and they will work out their own cure here, as they have done elsewhere in our land. We must have patience with the present, and possibly forgive-
ness for supposed crimes in the past by the leaders, because we have heretofore failed to meet the issues promptly and clearly, and have shared, by our consent and protection to their authors, in the alleged wrongs.

Though the Territory has abundant population for a State, there is and should be no disposition in Congress or the country to endow it with that organization, so long as its people continue to be so at variance with all the democratic principles of our nationality. It must be kept, at least, where the federal government can reach and govern it, so long as its local organization is such a pure religious autocracy, ruling in a manner defiant alike of the laws and constitution of the United States, and the first principles of a republican government. Not only is a free press and a free speech practically denied; not only is justice driven out of the courts; but the simplest rights of a man over his own property are outraged. When a Mormon dies, the church assumes control of his estate,-it goes practically into the common coffers, and the widows and children, however numerous, get henceforth only what the church chooses to give them. The idea of dividing the Territory up among the adjoining Territories is not practicable now; under it, the Mormons, instead of being divided and conquered, would divide and conquer; for, with their numbers and discipline, they could out-vote and outmanage three territories. The changes of population, by the opening of the Railroad and the discovery of new mines in adjoining sections of Nevada, will soon suggest the practical manner of reforming the Mor-
mons,-very likely reform them by their own operation, and without the government being more than a policeman on guard to keep the peace.
The soldiers at Camp Douglas, near Salt Lake City, were, during our visit, illustrating one of the ways in which polygamy will fade away before the popular principle. Two companies, who went home to California in the fall of 1864 , took about twentyfive wives with them, recruited froin the Mormon flocks. There were in 1865 some fifty or more women in the camp, who had fled thither from town for protection, or been seduced away from unhappy homes and fractional husbands; and all or nearly all found new husbands among the soldiers. Only the week we were there, a man with three daughters, living in the city, applied to Colonel George for leave to move up to the camp for a residence, in order, as he said, to save his children from polygamy, into which the bishops and elders of the church were urging them. The camp authorities tell many like stories; also of sadder applications, if possible, for relief from actual poverty and from persecution in town. The Mormons have no poor-house, and say they have no poor, permitting none by relieving all through work or gifts. But a late winter was so long and so severe, with wood at thirty and forty dollars a cord, that there was much real suffering, and the soldiers yielded to extensive demands upon their charity, that the church authorities had neglected to fulfill, or absolutely denied.

We hear less of late than in past years of the order of the "Danites," a band of secret Mormon assassins, who, under the direction of Brigham Young, put out
of the way any particularly threatening or provoking opponents of the church. But of their existence and diabolical operations there can be no doubt. In the fall of 1557 a Mormon sued Brigham Young for false imprisonment; the day before the suit came to court he was shot in his own house. In 1858, two men obtained a judgment of the court against a leading Danite, and both were shot in cold blood. About the same time, Mr. Babbitt, Secretary of the Territory, had a quarrel with Young, and was murdered. In 1866, Mr. Beanfield of Austin, Nevada, a highly respectable gentleman, had some difficulty with the Mormons, and was shot. In October, the same year, Dr. Robinson, Surgeon of the United States Army, who had taken possession of moccupied land, was called from his house at night to visit a patient, and was shot. In August, 1S67, three men,-Potter, Wilson and Walker,-who had given offense to the church, were arrested on the pretense of stealing a cow and put into jail. At midnight sixteen Avengers, disguised, broke open the jail and murdered all three. The United States Marshal arrested them, but the Mormon Sheriff permitted them to escape, without any effort to retain them ; and the "Deseret News," the organ of the church, published a threatening letter to Judge Titus and backed it up by editorials, warning the Chief Justice to leave the Territory, and menacing him with death if he remained!

Some of these sharp and swift punishments for offending or resisting the Mormons have been on a larger scale. The Mountain Meadow massacre of a dozen years ago, in the southern part of the Terri-
tory, is one of the most notable cases. Its history is as follows:-One of the Mormon missionaries, Parley P. Pratt, was in Southern California preaching, and made a convert of a married woman, whose husband was absent. She left home, joined herself to Pratt, and became his concubine. The husband determined to be revenged, followed them to Salt Lake, then to Arkansas, where Pratt was preaching, and took vengeance by shooting him. Months passed on. One day a party of emigrants from the county in Arkansas in which the homicide was committed reached Salt Lake, on their way to Southern California. It was a party well to do in the world,-forty wagons and about one hundred and fifty persons. In one wagon was a piano. One emigrant, with his family, rode in a well built carriage. They purchased provisions of the Mormons and passed on, reached the green meadow among the mountains and stopped to recruit their stock before entering the desert. Several Mormon settlements were near by; some houses within sight. Suddenly they were attacked by Indians, or white men disguised as Indians. It was at daylight. The emigrants fought from behind their wagons, threw up a ditch and kept the assailants at bay. The fighting lasted a week. One morning a Mormon advanced, told them that if they would give up their arms, the Indians would not harm them. They complied with his request. Then began the massacre. All but seventeen children were killed, and the oldest of these was only six years old, -too young to give certain testimony, except that their fathers were shot down, their mothers and sisters outraged, and then had their brains beaten out
by men, who, though wearing an Indian dress, could speak the English language. A few days after the massacre, the wagons, horses, carriages, and clothing of the murdered ones, were brought to Salt Lake and sold. Ten per cent. of the proceeds went into the treasury of the church. Brigham Young bought the carriage for his own use, and the piano is now owned by one of the leading Mormons.

There have been two or three prominent apostasies from the church in the Territory during its history. The two most important were those of Joseph Morris in 1860, and of Joseph Smith, Jr., son of the original prophet, in 1863-5. Of the followers of Morris, some were killed and nearly all robbed by the Mormon leaders in Salt Lake City in 1862, under pretense of enforeing the confiscations of the church against them for their rebellious conduct; and those who held out against this assault and the continuous persecution of the church, some eighty families, moved off to Idaho Territory, and have made a settlement there. The disciples of Joseph Smith, Jr., or "Josephites," are scattered in Missouri and Iowa, number about fifteen hundred, and include several hundred who left Utah in 186t-5, under government protection, for fear of massacre by the instruments of Young. Smith is a man of sincerity and purity, but lacks the courage and the force to cope fairly with the combination under Brigham Young at Salt Lake City. His creed denounces Young and his followers as apostates from the true Mormon church, forbids polygamy, and professes loyalty to the government. The Josephites are thus reduced to a mere sect of Protestantism, as

Mormonism would be in the overthrow of polygamy and the severance of its church govermment from State craft.

All our experience and observation in Utah tended, however, to increase our appreciation of the value of its material progress and development to the nation; to justify congratulations to the Mormons and to the country for the wealth they have created and the order, frugality, morality and industry that have been organized in this remote spot in our Continent; to excite wonder at the perfection and power of their church system, the extent of its ramifications, the sweep of its influence; and to enlarge our respect for the personal sincerity and character of many of the leaders in the organization;-but also, on the other hand, to deepen our disgust at their polygamy, and strengthen our convictions of its barbaric and degrading influences. They have tried it and practiced it under the most favorable circumstances, perhaps under the mildest form possible; but, now as before, here as elsewhere, it tends to and means only the degradation of woman. By it and under it, she becomes simply the servant and serf, not the companion and equal of man; and the inevitable influence of this upon all society need not be depicted.

And so we could not, and cannot yet, doubt that, sooner or later, before the influences of emigration, civilization and our democratic habits, an organization so aristocratic and autocratic as the Mormon church now is must modify its rule; it must compete with other sects, and take its chance with them. And especially, that its most aristocratic and uncivilized
incident or feature of plurality of wives must fall first and completely before contact with the rest of the world,-marshalled with mails, daily papers, railroads and telegraphs,-ciphering out the fact that the men and women of the world are about equally divided, and applying to the Mormon patriarchs the democratic principle of equal and exact justice. Nothing can save this feature of Mormonism but new flight and a more complete isolation. A kingdom in the sea, entirely its own, could only perpetuate it; and thither, even, commerce and democracy would ultimately follow it. The click of the telegraph and the roll of the overland stages were its unheeded death-rattle; the whistle of the locomotive will speedily sound its requiem; and the pickax of the miner is already digging its grave. Squatter sovereignty must ere long settle the question, even if the government continues to coquette with the offense and humor the offenders, as it has done. Our bachelor stage-driver out of Salt Lake, who said he expected to have a revelation soon to take one of the extra wives of a Mormon saint, is a representative of the Coming Man. Let the Mormons look out for him!



## XIV.

## THROUGH THE DESERT BASIN BY STAGE.

From the Rocky Mountains to the Sierra Nevadas by Stage-Through
Central Utah and Nevada - Characteristics of the Cormtry - A Fast Ride-The Alkali Deposits and the Dust-The Compensations in Nature - Reese River Valley, and Austin, a Representative Mining Town-A Classical Retreat-Virginia City and Gold HillThe Neighborhood of the Sierras-The Rich Valleys-Steamboat Springs-The Anomalies of the Great Basin-Why, Whence, What?

Our summer stage-ride of 1865 , through the center of the Great Interior Basin of the Continent,six hundred miles from the shadows of the Rocky Mountains to the shadows of their twin, the Sierra Nevadas,-was an experience that the Railroad now denies the opportunity for repeating. Dreary as the passage is by the cars, many times more dreary was the journey across it by stage. The route of the former lies along its only river; it is passed over in a single day; the path of the stage lay along its center, crossing many a range of mountains, often a dry ravine, rarely a feeble, sickly brook, and required a week of day and night travel.

The Salt Lake Valley belongs to the Great Basin, is its proem, gem and sub-specimen. Passing out 17
of it, up the Jordan River to Utah Lake, and through the mountain range that stretches southward from Salt Lake, the stage road crossed sixty miles of almost pure sand, that even water could not seduce into verdure, and then entered upon the general characteristics of the Basin country,-a dry, volcanic soil, absorbing all the water it could get, and hungrily begging for more, bearing the sage bush in profusion, and scantily the bunch grass, rarely an animal or bird, never a human being but such as the stage line necessitated, a succession of bare, brown, racant hills and valleys, gradually rising from the Salt Lake country at four thousand feet above the sea-level to mine thousand feet in the center, and then as gradually falling away under the Sierra Nevada range to four thousand again. Mountain and plain are alike above dew point; rain is a rarity,near neighbor to absolute stranger; and only an occasional range of the hills mounts so high as to hold its winter snows into the summer suns, and yield the summer streams that give, at rare intervals, sweet lines of green, affording forage for cattle and refreshment and rest for traveler. Springs are even more infrequent, but not altogether unknown, and water may sometimes, though very hardly, be got, when all else fails, by digging deep wells. Such streams as rise from springs or snow-banks in the mountains, begin to shrink as they reach the plains, and end in salt lakes, or sink quietly into the famishing earth.

But such a ride as the stage men gave us across this country! They doubled the ordinary speed of the horses, and made for us the quickest trip on
record. The stations for the stages were ten to fifteen miles apart; at every station fresh horses, ready harnessed, took the places of the old, with a delay of from two to four minutes only; every fifty miles a new driver took his place on the box; wherever meals were to be eaten, they were ready to serve on arrival; and so, with horses ever fresh and fat and gamey,-horses that would shine in Central Park and Fifth Avenue equipages, -with drivers, gentlemanly, intelligent and better dressed than their passengers, and a division superintendent, who had planned the ride and came along to see it executed, for each two hundred miles,-we were whirled over the rough mountains and through the dry and dusty plains of this uninhabited and uninhabitable region, as rapidly and as regularly as we could have been over macadamized roads amid a complete civilization. The speed rarely fell below eight miles an hour, and often ran up to twelve. But so wisely was all arranged, and so well executed, that not an animal suffered; to horses and men the ride seemed to be the work of every day, as indeed it was in everything but our higher rate of speed.

But we were content with the single experience. The alkali dust, dry with a season's sun, fine with the grinding of a season's stages and freight trains, was thick and constant and penetrating beyond experience and comparison. It filled the air,-it was the air; it covered our bodies,-it penetrated them; it soared to Almighty attributes, and became omnipresent, and finding its way into bags and trunks, begrimed all our clean clothes, and reduced every-
thing as everybody to a common plane of dirt, with soda, soapy flavor to all.

This alkali element in the western soil has yet received, as I can find, no intelligent scientific explanation. We met with it first on the Plains; then again in the Bitter Creek desert country in the Mountains; and now, in still greater degree, in the valleys and peculiarly desert plains of the Great Basin region. In some spots it prevails to such an extent as to clean the ground of all, even the scantiest vegetation; and wide, smooth, bare alkali plains stretch out before the eye sometimes for miles, and white in the distance like a snow-bank. In other places so strong is it that the earth when wet rises like bread under yeast. It taints the water everywhere, and sometimes so strongly that bread mixed with it needs no other "rising." Yet we found neither in Utal nor Nevada evidence of any general unhealthy effect from its presence, as was reported farther east; animals eat the grass and drink the water flarored with it; and though the dust chokes all pores and makes the nose and lips sore, the inconvenience and amoyance seem to be but temporary from even large doses of it.

In this grand desert ride, the joltings of the rocks and the "chuck holes" of the road, to which the drivers in their rapid progress could give no heed, kept us in a somewhat perpetual and not altogether graceful motion. There was certainly small sleep to be enjoyed during this memorable ride of three days and nights; and though we made the best of it with joke and felicitation at each other's discomfort, there was none not glad when it was over.

It is an interesting problem whether these unpromising valleys, gray and brown with an unnatural sunshine, can ever be subdued to the service o the population that the mineral wealth of these hills invites and will inevitably draw into them. For most of our journey, there was nothing in the soil itself that forbade valuable uses. It is made up of the wash and waste of the Rocky Momntains, and wherever even moderately watered is very productive. Some theorists contend that with the occupation and use of the country, rains will multiply; and the observations of the Mormons give encouragement to this idea. Another theory is, that by plowing during the later rains of spring, and sowing during the long, dry summer rest, the smaller and hardy grains will sprout with the fall rains, strengthen in the winter, and quickly ripen in the early spring. Such treatment involves a year's fallow, as the harvest would be too late for another plowing the same spring. This culture is doubtless practicable, as it has been proven, in the ligh sage bush plains in California; but it would seem as if these alkaline valleys of the Great Interior Basin were too cold, and go dry too long, for like successful treatment. It is worthy intelligent and persistent experiment, however; for I observe that wherever the sage bush can grow, other things can and will with the addition of water.

Do not think such a country is altogether without beauty or interest for a traveler. Mountains are always beautiful; and here they are ever in sight, wearing every variety of shape, and even in their hard and bare surfaces presenting many a fascination
of form,-running up into sharp peaks; rising up and rounding out into innumerable fat mammillas, exquisitely shapen, and inviting possibly to auriferous feasts; sloping down into faint foot-hills, and mingling with the plain to which they are all destined; and now and then offering the silvery streak of snow, that is the sign of water for man and the promise of grass for ox. Add to the mountains the clear, pure, rare atmosphere, bringing remote objects close, giving new size and distinctness to moon and stars, offering sunsets and sunrises of indescribable richness and reach of color, and accompanied with cloudless skies and a south wind, refreshing at all times, and cool and exhilarating ever in the afternoon and evening; and you have large compensations even for the lack of vegetation and color in the landscape. There is a rich exhilaration, especially, in the fresh evening air, dry, clear and strengthening, that no eastern mountain or ocean breeze can rival. In looking out through it after sunset on the starry heavens, and taking in its subtle inspiration, one almost forgets alkali, and for the time does not remember flowers and grass and trees.
Two-thirds the journey across the Basin,-half way through Nevada,-we came to Reese River Valley, and there, in the mining town of Austin, we struck the first wave of Pacific Coast life. Reese River is but a sluggish brook, that the shortest-legged man could step across at its widest, and yields itself up to the hot sands after greening a very narrow line in the broad plain through which it runs. And yet it is the largest and almost only stream that we met in
traveling westward from the Jordan which waters the valley of Salt Lake; and the two are four hundred miles apart!

Here, five hundred miles west of San Francisco, and two hundred from the Sierra Nevadas, huddled in a narrow canyon with steep hill-sides, just out of the valley, was the most representative mining town we had yet seen. Beginning in 1863, Austin had in a year's time a population of six to eight thousand, fell away in 1865 to four thousand, and now probably has no more than three thousand. Its houses are built anywhere, everywhere, and then the streets get to them as best they can; one side of a house will be four stories, the other one or two,--such is the lay of the land; not a tree, not a flower, not a blade of green grass anywhere in town; but the boot-blacks and baths and barbers are of European standards; it has a first-class French restaurant and a daily newspaper; the handsomest woman, physically, I ever saw presided, with almost comic queenliness, over one of its lager beer saloons; gambling went on openly, amid music, in the area of every "saloon"-miners risking to this chance at night the proceeds of the scarcely less doubtful chance of the day; while the generally cultivated and classical tone of the town may be inferred from this advertisement in the daily paper:-

[^2]All this appealed, of course, to our scholarly appetites, and we went early in search of so classical a bower of the senses. Result,-a cellar, whitewashed and sawdusted; two fiddles and a clarionet in harsh action in one corner; a bar of liquors glaring in another; while a fat, coarse Jew girl proved the sole representative and servant of all these proclaimed gods and goddesses. We blushingly apologized, and retired with our faces to Mistress Venus, Cupid, etc., as guests retire from mortal monarchs,-lest our pockets should be picked; and concluded we should take our mythology out of the dictionaries hereafter.

We stole a march by our rapid riding on Virginia City and Gold Hill, two hundred miles farther west than Austin, and got into town, had our bath, and were asleep in bed, when the patriotic citizens marshalled their procession, and were about to go out on the road, with brass band and welcoming speech, to give greeting to the distinguished visitors. We found in Virginia, the original "Washoe" of mining history, many contrasts to and improvements upon Austin. It is three or four years older; it puts its gambling behind an extra door; it is beginning to recognize the Sabbath, has many churches open, and closes part of its stores on that day; is exceedingly well built, in large proportion with solid brick stores and warehouses; and though the fast and fascinating times of 1862-63 are over, when it held from fifteen to twenty thousand people, and Broadway and Wall street were not more crowded than its streets, and there are tokens that its great mines are nearly dug out, it still has the air of permanence and of profit, and contains
a population of seven or eight thousand, besides the adjoining town or extension of Gold Hill, which has about three thousand more.

The situation of Virginia is very picturesque; above the canyon or ravine, it is spread along the mountain side, like the roof of a house, about half way to the top. Directly above rises a noble peak, fifteen hundred feet higher than the town, itself about six thousand feet ligh; below stretches the foot-hill, bisected by the ravine; around on all sides, sister hills rise in varying hights, rich in roundness and other forms of beauty, but brown in barrenness, as if shorn for prize fight, and fading out into distant plain, with a sweet green spot to mark the rare presence of water and verdure.

A few miles now bring us within the freshness of the Mountains, and the Desert is over and past. Adjoining Virginia City and Gold Hill are fertile valleys, in one of which the capital of the State, Carson City, is located, feeding upon the overflow of the gold ores of the mines for reduction, and upon the agriculture that the neighboring market invites, and the surrounding meadows permit. Just here, in fact, in the valleys of the Truckee, the Washoe, and the Carson Rivers, coming down from the mountain, is the garden of the State. Before "Washoe" was, it was occupied by a few Mormon farmers, colonists from the central settlement at Salt Lake, the whole territory from the Rocky Mountains to the Sierras then being Utah. But now the Mormons are displaced by a more vigorous and varied population, prosperous with farming, with lumbering among the
rich pines of the Sierras, and with quartz mills for reducing gold ores.

A not unfrequent phenomenon of the Great Basin hes just off the stage road in one of these valleys. For a mile or more along a little stream, underneath a thin crust of earth, water immeasurable is seething and boiling, and occasionally breaking through in columns of steam and in bubbling spouts and streams,too hot to bear the hand in;-the waste drawn off to a neighboring bath-house where chronic rheumatisms and blood affections are successfully treated, or tempering the cool river below. The boiling springs are flavored with sulphur and soda, and are similar to the more celebrated Geysers in California. In the winter the vapor fills the valley, and from this and the rumbling, bubbling noise of the seething waters, comes the name of Steamboat Springs, which is given them. Similar but more pronounced springs lie in Whirlwind Valley, a few miles south of the railroad line in the Humboldt Valley. They seem to be the faint breathings of dying volcanoes, or the gathering mutterings of new ones.

Indeed this whole Basin region of the Continent is full of the strangest anomalies of nature, puzzling the science and defying the industry of man, and almost insulting the beneficence of God. The questions why, whence, and what?-why was it so constituted, whence the forbidding and incongruous elements thrown together here, and what can man do with it?-press themselves upon every observing traveler. Nature seems to be incomplete here. Man has entered before she was ready for him, and finds
her unprepared for his reception. And yet, between the fanaticism of a religion and the passion for gold and silver, much has been done towards its settlement and subjugation. One State has grown up by agriculture, and another by mining, all within this strange desert land. And after learning her new conditions, her new laws here, Man comes to find Nature still a friend, still willing to minister to his wants. But she piques his curiosity, she challenges his flexibility of character and capacity as never before, as nowhere else. The great salt fields in the Basin are already put to use. A salt pasture of two thousand acres in the Smoky Valley, near the center of Nevada, furnishes all the neighboring settlements, including Austin, with salt for domestic purposes, and for reducing the ores. It gathers on the surface a thin deposit of half an inch to an inch, and is scraped off. The rain dissipates it; but the sun renews it. Perhaps the alkali fields will yet serve a practical purpose; and the deposits of sulphur around the bursting springs. But without an increase of rain, enlarging the areas of agriculture, no great population can be supported. There must be more grass and trees and grain, or even the rich deposits of minerals in the hills can never be worked with certain advantage.

## XV.

## the mines of nevada.

The Beginning of Silver Mining in Nevada and its Results-The Comstock Lode-Review of the Mines at Austin-How the Ore is Reduced-Details of Operations at Virginia City and Gold HillThe Comstock Lode Nearly Used Up-Inspecting the Mines-A Tour through the Gould \& Curry Mine-" Nature Abhors a Vaeuum"New Discoveries in Nevada-The White Pine Mines and their Promise- $\Lambda$ Warning to Brigham Young-How the Miners Divide their Fat Things-The Fascination of Mining-The Ease with which People are Swindled-Mines vs. "Faro Banks"-Advice in General and in Particular to those who have the Gold and Silver Fever.

In 1859, Nevada was not; and its mineral wealth was unknown. The whole Interior Basin was Utah; its sole inhabitants, beside Digger Indians, Mormons, who not only had not discovered any mines, but were told as of God not to look for them. In that year, the outcroppings of the great Comstock lode, at what is now Virginia City, were revealed by some wandering prospectors, and directly there followed the famous "Washoe" fever in California. Probably no other mining excitement in our country was ever so wild and wide-spread as this, or led to such reckless emigration and speculation. Adventurers of every sort hurried
over the mountains from Califormia, regardless of weather, or means, or any other element of comfort and success. There were of course wide disappointment and terrible suffering, much social disorder, and shocking political anarchy. But the greatest silver deposit in America was revealed; the science of mining was rapidly carried to a greater perfection than was ever reached before; and Nevada soon became a State, with a smaller population and a larger territorial area (Texas, California and Oregon excepted,) than any other in the Union. Her mines are almost exclusively of silver,--that is, the silver greatly predominates,and the precious metal is found only in its original form of rock veins in the mountains. From the Comstock lode, explorations have been made in all directions over the entire State; but nothing elsewhere has yet been found to compare with that grand deposit. Near one hundred millions of bullion have been worked out and taken to market from the State since 1859,-about one-third of which was gold, and the rest silver,-and at least eighty millions of it all came out of the Comstock mines.

At Austin, the second settlement of the State in size, we found the hill-sides dotted with huge ant-hills denoting discoveries. About six thousand locations had been made; yet no more than seventy-five mines have ever been worked up to the producing point, and probably not more than a dozen have really been profitable. The production of that district has been as high as one million a year, but it is not estimated now at above half that. The veins of precious deposit are very small, of inches, and rarely of feet in
thickness, but lie near together all around. If they are ever extensively and at the same time profitably worked, it must be by rumning a tunnel in under the mountain which shall reach a large number of veins at once. The ore is rich; from fifty to four hundred dollars a ton; but the silver is closely held with sulphurets, and can only be got out by roasting the ore with salt, or by smelting, and the former process cost about one hundred dollars a ton when we were there in 186.5. The Railroad, which lies ninety miles north of Austin, will bring to it cheaper labor, food and fuel; more likely it will take away its ores to be worked where all are cheaper still than they ever can be there.

If the reader has never seen the process of getting gold and silver out of the ores, he will be interested in a brief account of it, as we saw the work done at Austin. The precious metal can rarely be seen in the rock, and only the signs of its presence are detected by the practiced eye. After the quartz or rock has been extracted from the mine, it is taken to the mill, broken into pieces of from half a pound to two pounds in weight, thoroughly dried by the application of heat, and then crushed to powder in the mill. The crushing is done by stamps, or the dropping of heavy weights upon the quartz. Five stamps are usually arrayed side by side, weighing from five to seven hundred pounds each. They are raised a distance of from eight to ten inches, and dropped from sixty to eighty-five times a minute. The powdered rock then goes through a wire sieve, whence it is taken to a furnace, mixed with salt, which assists in freeing the
silver and gold from its surroundings or combinations, and then subjected to the action of a stream of flame from five to eight hours, during which time it is constantly stirred. As this flame carries off some silver bodily, it is made to pass through a long chamber, and exposed to cooler air before reaching the chimney, so that the silver can be saved. After being thus roasted, the pulverized quartz is ready for amalgamation. At the Midas Mill, which was considered to be the best mill at Reese River, the amalgamation is done by the Freiburg barrels, into which loose and irregular pieces of iron are placed for the purpose of mixing the quicksilver with the pulp, (as the pulverized quartz is called,) and which are then revolved over and over. In other mills, the pulp is put into tubs, and stirred in water for nearly an hour, and then the quicksilver is applied, and the mass is stirred by means of iron flanges for three hours. About seventy-five pounds of quicksilver are allowed for one thousand pounds of pulp, the quicksilver amalgamating with or taking up the little unseen particles of silver now separated from their original associations. After this, the water is drawn off, and a process like the distillation of cider brandy is resorted to for the purpose of saving the quicksilver, and the amalgam, composed of silver and quicksilver, is squeezed, to get out the quicksilver, after which it is put into the retort, and upon being subjected to heat more quicksilver passes off in fumes, and is saved, and the crude bullion which is left is ready to be taken to the assay office. This is substantially the process used at Reese River, where dry crushing is necessary,
on account of the presence of the baser metals. In Virginia and its vicinity, where the ore is of a different character, and far less rich, it is crushed wet, and not roasted, and the expense is much less. The common gold ores of Colorado and California are also treated in the latter way. Crushing by stamps and amalgamating with quicksilver are the two fundamental and universal features of all processes for reducing gold and silver ores, except that of smelting.

The operations on the Comstock lode at Virginia City and Gold Hill next and more thoroughly commanded our attention. Midway of a long hill-side, this ledge of metal-bearing rock rums for several miles; the towns are built in part directly over it; the excavations beneath in shafts and drifts foot up about thirty-five miles, and amount to much more than all the streets of the towns above; and the timber used in a single one of the forty mines that extend along upon the lode, for sustaining the walls of the excavations, exceeds all that employed in the buildings of Virginia City, with its ten thousand inhabitants! Occasionally the crust over a mine has broken in, and buildings have been swallowed up as in the vortex of an earthquake. The deepest shafts of the mines go down from seven hundred to eight hundred feet, and out from these long tunnels or chambers are opened at different points upon the line of the precious rock.

The richness and extent of this lode have introduced the most thorough system into the business of mining and milling; and the education of America in the science and practice of mining gathers around
the history of operations here. At the first there were great extravagance and wanton waste; all the machinery used and all the means of living had to be drawn over the mountains from California at enormous cost; but the lode was thought to be inexhaustible, and the great profits made by a few of the mines seduced all into the freest expenditures and recklessness. The history of the Gould \& Curry mine, one of the largest and most famous upon the lode, may be given in illustration both of the character of the property and its management. It owns twelve hundred feet on the upper surface of the lode, cost the stockholders originally but one hundred and eighty thousand dollars, and has yielded fourteen million dollars in gold and silver, and spent all but four millions, which the stockholders have received in dividends, in development, experiments, and improvements. It has a mill for reducing the ore which cost one million dollars. Had there been a railroad from San Francisco to Virginia City at the beginning, this mine's profits would have been twice as much. But now its glory has departed, and within the last two years it has had to call upon its stockholders for assessments to pay expenses. Another great company, the Ophir, has taken out thirteen millions of dollars, but used it nearly all up in expenditures, and probably not returned to the stockholders so much as they have paid in.

The Comstock ledge ore is, as already stated, with small exceptions, much more simple in its combinations than that at Austin, and the metal is extracted by simply crushing and amalgamating. Fifty dollars
was always a good average yield per ton; and this has now decreased so that the average of all the mines for the last two years has been less than forty dollars. To meet this lower yield per ton, however, is a greatly decreased cost of working the ore, and the whole expense of mining and reducing does not exceed twenty-five dollars a ton, and is even brought as low as eighteen and twenty dollars by the Gould $\&$ Curry company. The probability is that even this cost may be much reduced, and that ore which will yield but ten and fifteen dollars to the ton can soon be worked with profit. The great element in the cost of reduction is the high price of wood, which has often to be brought from long distances, and sells for from fifteen to twenty dollars a cord. There are nearly eighty mills or reduction works employed on ore from the Comstock lode, scattered through a region of twenty miles in extent, in order to be near as may be to wood and water. They get out but about two-thirds the metal in the ore; the rest is wasted, or remains to be obtained by reworking under a cleaner and cheaper process.

But now this great deposit of precious mineral gives signs of being nearly worked out. The surrounding walls of barren rock are closing in at the bottom of the mines; and though there is much valuable ore left on the sides of most, and at the bottom of many, of the mines, the more intelligent scientific opinion is, that there is henceforth to be a gradual lessening of the production of the lode, and a consequent gradual decay in the towns to which it has given birth and support. The total yield of all the
mines in the lode up to January 1, 1869, is little short of ninety millions of dollars, beginning in 1859 with fifty thousand dollars, going up to sixteen millions in 1864, and to sixteen and a half millions in 1867,-its year of greatest production,-but falling suddenly off in 1868 to about eight millions, which it will probably never again exceed. It is held, however, by many intelligent and interested parties, that deeper excavations will develop new deposits, and that, instead of the lode being nearly used up, there is really no end to it. Such theorists urge the construction of a great tunnel, from far down the valley, into the mountain and the lode, to be about four miles long, and to strike the deposits of mineral,-if it remains,-at a depth of two thousand feet from the surface. By this means, the mines would be easily drained of water, which, as they descend, often comes freely in and now requires to be pumped out at great cost; while the ore could be rolled out of the tumel much cheaper than it is now drawn up the shafts. But it is doubtful if there is faith enough in the continuance of the deposit among the capitalists of Nevada and California to secure the necessary two millions dollars for this great work; and the application to Congress for aid is simply preposterous, and will not be granted.

We had a good deal of experience, both at Austin and Virginia, in exploring the mines. At the former place, the prospectors were all anxious we should see every one of their several thousands of holes, and were a good deal disgusted that our party had but three days to spare for them. That is not time enough,
they said; you cannot begin to see what we have got; you might as well not have come. But let us try, was the reply; show us what you can in three days, and then see what is left that is new and strange. So we mounted; and there was an extensive cavalcade of local officials, practical miners, speculators, and genteel bummers generally. We went over and around hills, down into mines, through mills, everywhere that our guides led us; finding naturally great similarity of sights and testimony all about. By afternoon, our hosts had dwindled one-half. The next morning, instead of a dozen, we had but three or four guides; at noon, they were reduced to one, and at night we had exhausted not only his strength and patience, but all he had to show us. We had seen Austin and its mines, and had a day to spare!

The newer mines, whose shafts are but fifty or one hundred feet, are descended by a simple rope and bucket, worked by a common hand windlass; older and deeper ones, by the same contrivance, with steam power: if, as is often the case, the vein runs at an angle, or is reached below in that way, a little car runs down a steep track, held and drawn by a heavy rope and steam engine; while other shafts are provided with ladders, winding around, or set perpendicularly up and down. The latest and safest and readiest contrivance for descending a perpendicular shaft is a cage or box, let down by a rope with steam power, but provided with sharp, opening arms that, in case the rope breaks, will catch into the walls with such power as to hold the cage and its load. Its certainty was proven to us by cutting the rope with
an ax, when the cage sent out its fingers and clung midway in its passage. We reached the insides of other mines by long tumels, rumning into the veins from the surface, far down the hill-sides on which they were located.

The great Gould \& Curry mine at Virginia has four or five miles' length of shafts and tunnels, and it is a full half day's work to explore it thoroughly. We entered it through a long tumnel, that strikes the vein several hundred feet below the surface. There were half a dozen of us in the procession, each with a lighted candle, which would go out under the out-going draft, and so we soon contented ourselves with groping along in the dim, cavernous light. It seemed a very long journey, and the nerves had to brace themselves. The most stolid person, stranger to such experience, will hardly fail to find his heart beating a little quicker, as he goes into these far-away, narrow recesses in the bowels of the earth. I never failed to remember the principle that "Nature abhors a vacuum," and to wonder if she wouldn't take the present occasion to close up this little one that I was in! At last we reached the scenes of the ore and the work after it; and among these we clambered and wandered about, down shafts to this or that level, and then out on side tunnels through the vein in both directions; up again by narrow, pokerish ladders to a higher set of chanbers, in and out, up and down, till we were lost in amazing confusion. Here was, indeed, a city of streets and population far under the surface of the earth. Many of the chambers or streets were de-
serted; in others we found little coteries of miners, picking away at the hard rock, and loading up cars of the ore, that were sent out by the tunnels or up by the shafts to the surface above. Here, too, was a building in a wide hall under ground, and a steam engine to help on the work. Some of the chambers had closed in after being worked out of ore; others have been filled up to prevent caving in and causing great disaster overhead; but many of the open passages were stayed or braced open still with huge frame-work of timber. The annual cost of lumber for such purposes in all the mines of the Comstock lode is about a million and a half of dollars. In many of these passages, such is the outward pressure into the vacuum, that these timbers, as big as a man's body, are bent and splintered almost in two. Great pine sticks, eighteen inches square, were thus bent like a bow, or yawned with gaping splinters; and the spaces left in some places for us to go through were in this way reduced so small that we almost had to crawl to get along. Do you wonder that we began to grow weary, and thought we had seen enough? Besides, the mine was oppressively hot and close ; the mercury was up to one hundred degrees and more, and the sweat poured from us like water. One of our party grew faint and feeble, and we voted to take the nearest way out. This happened to be the most perilous and trying; but we did not realize that, and our miner guide, unsensitive from experience, did not think of it. So he took us into a long shaft, running straight up and down for several hundreds of feet, damp and dark as night,
with no breaks or landing-places, and there started us, one after another, up a perpendicular ladder fastened to its side. We only took in a sense of the thing after we had got started; each must carry his lighted candle, hold on, and creep ahead; a single misstep by any one, the fainting of our invalid, or of any of us, all weary and unstrung, would not only have plunged that one headlong down the long fatal flight, to become a very Mantilinean cold body at the bottom, but would have swept everybody below him on the ladder, like a row of bricks, to the same destination and destruction. There was, you may well believe, a stern summoning of all remaining strength and nerves, a close, firm grip on the rounds of the ladder, a silent, grave procession, much and rapid thought, and a very long breath, and a very fervent if voiceless prayer, when we got to the daylight and the top. Our part of the shaft and the ladder was about one hundred and fifty feet; it seemed very long; and we were content to call our day's work done when it was over. Brains won the victory over body; but both were weary enough at the end. But if I prolong this story any further, you will almost wish I had never got out of that shaft!

While the great silver deposit, which gave birth and being to Nevada, is apparently rapidly declining in richness, other discoveries are made in various parts of the State, new centers of mining and population are created, and the aggregate productiveness and the total number of inhabitants bid fair to increase rather than decrease. Nevada's claim to the name of the Silver State is not only good yet but brightening.

And, so, spite of the porerty of her soil and climate,forcing her to depend mainly on her neighbors for food to eat, and clothes to wear, and lumber to build with,-she vindicates her star's place on the Union flag. Many dispute whether she has yet paid ex-penses,-that is, returned as much money as has been expended upon her,-but she certainly has greatly stimulated the settlement of the Great Interior Basin of the far West, and redeemed it from its traditional dedication to desert and death. So, let us join in the popular toast, "Long may she wave!"

How well these later mining discoveries and developments are distributed over the broad area of the State will be impressed upon every student of the map. Beginning with Utah, they are seattered freely all through the central belt of the State to the California line, while north, to and along the Humboldt River, and south-east to the neighborhood of the Colorado River, and south-west to the Owens' Valley country in south-eastern California, more or less numerous mining camps are established, and more or less machinery, carted all the way from California at ten to thirty cents a pound, is pounding away on hopeful silver ores. The Ilumboldt, Austin, Belmont, Aurora, Silver Peak, Egan Canyon, Pahranagat, Cortez and Palmetto districts, representing every section of the State, are each probably good for half a million of silver a year on the average; while the new White Pine district threatens to rival the Comstock lode itself. These last discoveries are situated in the far easterly section of the State near Utah and south of the central line, one hundred and forty miles
south of the Railroad at Elko, and about seven hundred miles east of San Francisco, and perhaps one hundred and fifty south-west from Salt Lake City. They are located high up on the mountains,-from seven thousand to nine thousand feet above the sea level,-and great size of ore veins and great richness of ore are alike claimed for them. Two million dollars' worth of silver had been taken out of two or three of the mines before the 1st of January of this year, and ore containing an equal amount was at hand for working from a single mine a month later. No such excitement has been known among the miners and mining speculators of the Pacific Coast, since the early days of the Comstock lode revelations, as has been awakened over White Pine by these pretensions and facts. From four thousand to five thousand people have been spending the winter there; a few at work, more waiting impatiently for the snow to go away that they may work, but the most living by their wits and their vices. The great elevation of the location, the deep snows, the want of lumber, the scarcity of houses, even of shanties and tents, the distance from markets, and the high prices of everything, have combined to make the early days of White Pine exceed in severity of suffering and wantomess of life the ordinary experience of new mining settlements. We quote some of the winter prices of 1869 there:-

Lumber, $\$ 250$ to $\$ 300$ per thousand; hay, $\$ 300$ per ton; barley 15 cents per pound ; flour $\$ 16$ per cwt.; bacon, 45 cents; salt pork, 40 cents; beans, 28 cents; sugar, 35 cents; coffee, 70 cents; tea,
$\$ 1.50$ per pound; butter, $\$ 1$; cheese, 40 cents; rice, 38 cents; fresh meats, from 22 to 40 cents; sausages, 50 cents; lard, 38 cents; board per week, $\$ 15$; lodgings, $\$ 1$ per night; laborers get from $\$ 5$ to $\$ 6$ per day, and mechanics from $\$ 8$ to $\$ 10$.

Probably the summer of 1869 will witness the gathering in that region of fifteen thousand to twenty thousand people,-some estimates are of twice these numbers,-but even if the mines prove as rich as re-ported,-which is not at all probable,-the majority will share the usual experience of those who rush wildly after such excitements, and suffer disappoint. ment, loss, ruin, and probable depravation in body and soul.
But the development of so great an interest and the gathering so large a population will plant a stubborn colony of Gentiles on the southern border of Utah, and if the early discoveries prove half what they promise, there will speedily be a railroad down through Nevada or Utah to that section, seeking ultimately a connection with the Colorado River and the Southern Pacific Railroad. And then will Brigham Young, under like circumstances of alarm, repeat the prayer of the representative of the "twin barbarism," Jeff Davis, and ask, too late, to be "let alone."

With this record of the beginning of a new and important mining settlement, our readers, who are unaccustomed to the history of mining developments, will be interested to know how the discoverers and first-comers in such cases arrange their claims, and protect their rights to the precious land. The man-
ner of their proceeding is an illustration of the adaptability of the American people to self-govermment, and their strong instinct for fair play. At the outset the miners of a particular region get together, of their own motion, fix the limits and name of their district, and establish a series of rules, which may be altered in methods therein prescribed, for the location, holding and working of mines. The fundamental idea which runs through all of these rules is, that he who finds a mine shall have the right to locate upon the ledge a certain number of feet in his own name, after which other locations may be made by anybody. In practice the discoverer usually locates a number of claims in the names of his friends. The validity of these locations depends upon doing upon the ledge a certain amount of work within a certain time. Provisions are also inserted which are designed to meet such contingencies as can be foreseen; but, although the general principles are in accordance with just views of what is right, it is of course impossible to provide for every condition of things; and, besides, the rules themselves are expressed in language not always clear. In more familiar way, because we have been doing that ever since the organization on board the Mayflower, the miners organize their social and political government; and if that fails, or proves them false, they speedily rectify it with vigilance committees. Where mines prove valuable, there are apt to be many conflicting claims, some real, others bogus, and lawyers, and I am sorry to suspect judges also, often get very rich, suddenly, in the adjudication of such cases. Ques-
tions of fact constantly arise, whether enough work has been done to hold a claim, and whether two veins which appear on the surface to be different do or do not in fact ultimately rum into each other. If they do come together the oldest location prevails. It is well understood that there is a government title, which, if ultimately insisted on, is beneath all titles to mining property; but Congress has already sufficiently settled the principle that the claims of the discoverers and miners, and those who hold under them, as established by the laws of the mining district, shall be respected by the government. It should be added that the miners' rights are superior to all other rights of property except the government title. The survey, location and ownership of a piece of land as real estate gives no right, under the miners' laws, to the minerals which it contains.

Nothing is so extraordinary in human history as the fascination of mining for the precious metals, and the readiness with which people engage or invest in it, against the testimony of all experience, not merely to its uncertainty, but to its general direct loss. Except from the incidental, indirect results, as the opening up a new country, with the commerce and agriculture, that follow the original movement to the mines, the search for the precious metals has probably never, on the whole, paid expenses. Certainly Brigham Young's assertion to that effect is yet to be disproved. California has received a hundred million dollars in silver and gold from Nevada; but her wisest business men say, she has spent more than an equal sum to get it,-in roads, machinery, buildings,
labor, etc. The blanks are largely in excess of the prizes in the lottery of mining, even when everything is conducted honestly and wisely. But the swindling that enters into the business, and the success with which it imposes on the public, are equally astounding in extent. There were, for instance, seven hundred companies organized in California to work on the Comstock lode alone; yet only a hundred of them ever had real property there; and of these but about forty ever worked mines, and less than half of this reduced number ever paid dividends. One company, that owned and worked a mine, even on that rich lode, spent a million dollars, and got back nothing. Boston people have within five years put at least two million dollars into the mines of Colorado, and Reese River, Nevada,-and got back nothing! To those of us, who have traveled into these mining regions, and learned the facts upon the ground, it is indeed perfectly surprising to observe the recklessness with which investments in gold and silver-mining property have been made at the East. Prudent, sagacious, and experienced persons, who would not pay ten thousand dollars for a country house, or five hundred dollars for a horse, without careful consideration and examination, appropriate much larger sums to the purchase of mining interests, merely upon the representations of the sellers. Some purchasers invested with so little care that they will never be able to find even the ground where their pretended property lies,-lies, indeed it does! I do not wonder at the remark of a citizen of Nevada, that he didn't see why Eastern gentlemen invested
so freely in mines out there when there were "faro banks" so much nearer home! Probably he had no mines to sell!

But spite of all the warnings of experience, and the advice of the intelligent, the story of the gross swindlings and the foolish speculations of Washoe, of Reese River, of Idaho and Montana, is likely to be repeated with White Pine, and again and still again with whatever successors that now latest El Dorado may have. Yet I brave anew the weakness of human nature, and sum up in a few words of advice the results of our wide observation in the mining countries of the great interior:-

1. No investments should be made in mines except after the most intelligent and complete study of the whole subject, and of the merits of the special enterprise offered, either by the capitalist himself, or by some one in whom he can place the most implicit confidence. Not only the mine itself should offer assured evidence of value, and of favorable location, but the capitalist should also be satisfied of its management by persons of both intelligence and integrity. This point is as vital as the other, and as difficult, more difficult indeed, to be secured. These qualities of intelligence and integrity are rare in the market out here, and command a high price They can generally do better than to work for other people. Eastern capitalists, investing largely,-and it is certainly best to invest enough to command their personal attention, or not at all,-will always find it wise to send out one of their own number, or a person equally reliable, to oversee the expenditures
and direct the financial part of their operations, and let him find here that scientific and practical knowledge on the subject of mining that he cannot of course possess. This he will obtain in mining engineers of repute, and in old practical miners, the latter most often men who have been foremen or overseers in mines or mills. The discoverers and prospectors of mines are a class by themselves, and are rarely the right men to work a mine for other people. But the working miners as a body are of a higher grade than Eastern laborers, and they offer many individuals fit for the upper places in the business. I was impressed with the wisdom of an organization which a party of Rhode Island capitalists had made in Colorado. They combined four or five different mines and mills, each distinct in its affairs, under the general management or overseership of an experienced scientific miner from California, and sent along with him from home a common treasurer and accountant. In this way they got the benefit of the best talent and experience, and the most reliable guardianship over the expenditures, without making the cost thereof too heavy; but I believe they are still a million or two "short" of their original investments.
2. When somebody offers you a mine, whose ore assays one thousand or ten thousand dollars a ton, you need not necessarily disbelieve him, but do not necessarily conclude that all its ore, for an indefinite distance into the earth, is of equal value. The Comstock ledge was opened with a chunk that yielded twenty thousand to thirty thousand dollars per ton, or at that rate; but as I have told you, the mines on
that ledge that are paying at all, do not average forty dollars from their ore. Every day new discoveries are being made, south and north, in the State, of lodes whose surface ore pays, according to report, any amount this side of one hundred thousand dollars a ton; yet it does not follow that the mine below it will even pay for working. For these are among the doubtful things that are very uncertain in their progress. Even the poorest mines have their streaks and chunks of rich ore; do not, therefore, judge by a single fist-full nor by an assay; but invest your money only after you have ascertained how much your mine will practically work out, cart-load by cart-load, without culling.
3. Above all things, do not buy mills, "processes" or reduction works of any kind, until you are sure of your ore. Colorado is especially full of blunders of that sort,-expensive mills and no ore, or at least unproved mines; the money all spent in buildings and machinery, and none left to prove the real quality of the mines. There is a superabundance of mills and machinery in all the mining States and Territories already. Colorado probably has nearly or quite one hundred mills and "processes," not more than half of which are at work now, and all are not worth onequarter what they cost. Nevada has an equal number of mills, and probably a greater amount of machinery in all her mining districts, the lumber coming from the Sierra Nevadas and the machinery from San Francisco, and drawn over the mountains and across the desert by horses and mules, at a total cost of full seven millions dollars, and yet the whole not worth
to-day, more than two or three millions. At least two-thirds of these are probably at work now, and half of them profitably. The first business in every mining enterprise is to work the mine and get out the ore, which can be crushed at the custom mills, already or soon to be abundant, in the neighborhood of all the mining centers; and then, measuring the profits thus realized, and finding them sure and reliable, the managers can decide whether it is best to extend operations with them, by buying and working more mines or by running their own mills.
4. Do not make the capital of your mining company out of all proportion to the value or cost of the enterprise. Avoid putting up a property, that has cost one hundred thousand dollars and needs a working capital of as much more, to two millions, because you may hope sometime to pay a ten per cent. div. idend on such a sum. And then, again, do not insist on having a dividend at the end of the first thirty days, unless you are ready to pay an assessment at the beginning thereof to meet it.
5. And if you have neither time nor money enough, nor disposition, perhaps, to go largely into these mining enterprises, and follow their management intelligently, but still would like to make some small ventures to fortune in this direction, seek out some company that are in or going into the business, on these principles, and that have got a reasonably sure thing of it, and make your investment with them; and then be content with twenty-five per cent. return for your money. If it yields more, give it away in charity,-if less, or even nothing, don't swear or
mention it to your wife, for the confession will give her an undue advantage over you.
6. Those who undertake mining purchases in Nevada or elsewhere, or indeed any investments in this quarter, must not think to find these people out here wanting in sharpness at a bargain. Wall street is easily out-managed by Montgomery street, and an old miner, who is generally a traditional Yankee with large improvements, will fool a dozen spectacled professors from your colleges in a single day. The latter sort of people are, indeed, at a great discount in this region, as all the rules of science with which they come equipped, are outraged and defied by the location and combination of ores, rocks, oils and soils on this side of the Rocky Mountains.
7. Finaily, while it is true that the opening of the Pacific Railroad, reducing the cost of living and of labor, carrying ores to fuel, or fuel to ores, and machinery to mines, will greatly lessen the cost of mining in the interior States and Territories, I fall back on the testimony of an eminent scientific authority, Professor J. D. Whitney of the California State Survey, for proof that my advice and my warnings hold good as to the business of mining everywhere and under the most favorable circumstances:-

[^3]metals, including silver, copper, tin, lead, zinc, cobalt and nickel, have been observed; many of these have given rise to mining excitements, and have been taken up, worked for a time, abandoned, taken up again, abandoned again, off and on for the last fifty or even a bundred years, and always with partial, and usually with a total, loss of the money invested. There may be one solitary wine in Vermont which is paying a small profit to the share-holders; but with the exception of this, and a few mines of iron ore on the border of Massachusetts and Connecticat, there is not one which has not cruelly burned the fingers of those who have meddled with them. Even on Lake Superior, that region which is commonly appealed to as made up of solid copper, there bave been many hundreds of companies formed, and at least a hundred mines opened and worked more or less extensively; but for ten years after mining had begun to be actively carried on there, only two of the mines had paid back to the stockholders one cent of dividend. Even in England, it is the opinion of Mr. Hunt, the Keeper of Mining Records, who has devoted many years to the investigation of the statistics of this branch of the Nation's wealth, that mining for the metallic minerals, with the exception of iron, is not on the whole remunerative. There is a wonderful fascination about the mining business, which seems to blind the eyes and bewilder the senses of those who come within the sphere of its influence. The organ of hope seems to swell up and predominate over all the others:-what phantasmagoria will men not follow, if there is any metallic luster about it!"

## XVI.

## OVER THE MOUNTAINS TO THE OCEAN.

The Stage Ride over the Sierra Nevadas-The Mountain Toll Roads and Freighting and Staging upon them-Rapid Riding-A Breakneck Pace-The Scenery of the Sierras-Lake Tahoe-Placerville -Sacramento-A Steamboat Ride to San Francisco-The Patriotic Traveler on Reaching the Pacific Coast-The Unity of the American Pcople-The Wonderful Development of the Pacific States.

It was with fresh feelings that we turned away from Nevada, and began the last stage of our journey to the Pacific Ocean. The long looked-for Sierra Nevada Mountains confronted us; but their hights invited and not repelled, for they bore the companionship of Nature's life and glory, for which our hearts were hungry. Long on the desert plain and the barren mountain, -sad-eyed with weeks away from forests and sparkling waters, and the verdure of grass and vines and flowers,-they offered to us indeed the golden pathway to the Golden Gate of the Pacific.

The ride over the mountains, down their western slopes, on to the ocean, was a succession of delights and surprises. The surging and soughing of the wind among the tall pines of the Sierras came like
sweetest music, laden with memories of home and friends and youth. Brass bands begone, operas avaunt! in such presence as we found ourselves on the mountain top of a moonlight night, by the banks of Lake Tahoe, among forests to which the largest in New England are but pigmies, lying and listening by the water to the coming of the Pacific breeze and its delicate play upon the high tree-tops. All human music was but sound and fury, signifying nothing, before such harmonies of high nature. The pines of these mountains, indeed, seemed to us mon-sters,-three, four, five feet through, and running up to heaven for light, straight and clear as an arrow by the liundred feet. Rich green-yellow mosses clung to many a trunk; while firs and balsams filled up the vacant spots between the kingly pines; and laughing waters sported lustily before our unaccustomed eyes, among the rocks in the deep ravines, along and far below the road on which our horses galloped up hill and down at a fearful pace.

Our journey now, - be it borne in mind, - was before the Railroad, which has destroyed this, the finest bit of stage travel in all our continental journey. There were two well-graded toll roads over the mountains, from Sacramento in California to Virginia City in Nevada; one by Placerville and Lake Tahoe, the other by Dutch Flat and Donner Lake, and each about one hundred and sixty miles long. The Railroad takes substantially the route of the latter; but in the days of staging and teaming, the Placerville road was the favorite. The amount of traffic upon it was immense. Two or three stage loads of passen-
gers passed each way daily. Merchandise and machinery were carried in huge freight wagons, holding from five to ten tons each, and drawn by ten or twelve large, strong horses or mules, moving to the music of bells attached to their harnesses. In 1863, no less than twelve million dollars were paid for freight over the Placerville road, and the tolls received by the builders of the road amounted to six hundred thousand dollars. In 1864, a year of less business, seven thousand teams passed over the road. The charges for freight varied from five to ten cents a pound. To keep the road hard and in repair, as well as to allay the fearful dust that would otherwise have made the ride a trial rather than a pleasure, nearly the whole line was artificially watered during the long, dry summer. Luxurious as this seems,-the daily sprinkling of one hundred and fifty miles of mountain road, -and expensive as it was, it was found to be the simplest and cheapest mode of keeping the road in good repair. The stages were drawn by six fleet, gay horses, changed every ten miles, without the driver's even leaving his seat.

Thus munificently prepared, and amid the finest mountain scenery in the world, we swept up the hills at a round trot, and rolled down again at the sharpest gallop, turning abrupt corners without a pull-up, twisting among and past the loaded teams of freight toiling over into Nevada, and running along the edge of high precipices, all as deftly as the skater flies or the steam car runs; though for many a moment we held our fainting breath at what seemed great risks or dare-devil performances. A full day's
ride was made at a rate exceeding ten miles an hour ; and a continuous seven miles over the rolling hills; along the crest of the range was driven within twen-ty-six minutes. The loss of such exhilarating experience is enough to put the traveler out of conceit with superseding railroads.

All over the Sierras on our road, the scenery was full of various beauty; some of its features have already been mentioned; but another chief one was the high walls of rock, rising abruptly and perpendicularly from the valley for many hundreds of feet. Many a rich boulder, again a hill, and a frequent mountain peak of pure rock, thousands of feet high, like pyramids of Egypt, are seen along the passage. The whole scenery of the Sierras is more like that of the Swiss Alps than any other in America, and has even features of surpassing attraction.

Near the very summit, we stopped for a trout breakfast and an initial steamboat ride across Lake Tahoe, one of the largest and most beautiful of the mountain lakes of California. It is located six thousand five hundred feet high, overlooked by snowcapped peaks, bordered by luscious forests; stretches wide for eight by fourteen miles in extent, with waters clear and rare almost as air,-so rare, indeed, that not even a sheet of paper can float, but quickly sinks, and swimming is nearly impossible; and abounds in trout:-where, indeed, are more elements of lake beauty and attraction? Already, though far from large populations, it has its mountain and lake hotel, and draws many summer visitors from California and Nevada.

Placerville, the first large town in California, gave us a most hearty welcome. Mr. Colfax had to eat a grand dinner at midnight, and make three speeches to his enthusiastic hosts. Early in California history, i. e. in 1850, Placerville was the center of prosperous gold-mining; indeed, only twelve miles away, were the first gold discoveries in the State made; but that interest has since gone into decay. Next the outfitting for the mountain traffic to Nevada kept the town busy and prosperous; it built a railroad to Sacramento, and hoped to be on the line of the through continental track; but disappointed in that, its old life has faded away, and now it is falling back successfully on the capacities of the soil; and vineyards and mulberry groves and sheep-walks place its future beyond the chances of speculation and the shifting currents of trade. Lying in valley and on hill-side, well watered and with quick-answering soil, already it is a village of verdure; flowers and vines and fruit-trees almost hide its houses; and no place among the foot-hills of the Sierra Nevadas is better worth a stranger's visit.

Sacramento gave us the next greeting, with roses and fruit, and a luxurious breakfast, and speeches, and the inevitable brass band. The town lies flat and low, and yet most pleasantly, at the foot of the Sacramento Valley proper, and the head of heavy navigation on that river from San Francisco, fairly in the center of the State, the gathering point of its interior commerce, the diverging point for all its railways, the political capital, and a charming social focus and inland residence,-answering very much
to such Eastern towns as Springfield and Hartford, Cleveland and Columbus. Floods in the river have threatened its existence; but high banks now deny them entrance; manufactories of machinery of every grade, of cars and engines, of boots and shoes, of pren pared lumber, of flour, pottery, glue and brooms, are already in profitable progress; excellent schools and fine churches are provided; a State capitol of margnificent proportions is in rapid course of construction ; and with a population of twenty thousand to twenty-five thousand, engaged in a diversified industry or a legitimate trade, and rapidly increasing, the town will fully keep its place as the second in importance in the State, and always be one of the most interesting points for the traveler to tarry at.

An afternoon and evening ride, on a spacious and elegant steamboat, rivalling the best that ply on Long Island Sound or Hudson River, down the Sacramento River; through rich alluvial lands, yellow with ripening corn, or brown with harvested wheat, or amidst wide-reaching marshes of tule grass,-out into and across the broad circling bay of San Francisco ; under the shadows of Mount Diablo, representative of the coast mountains,- thus our journey was completed, and we landed upon the long rolls of sandhills that the Pacific Ocean has thrown up as a barrier to her own restless ambition, and over which San Francisco roughly but rapidly creeps into her position as the second great city of America.

Seven weeks of steady journeying,-four thousand miles of travel in a direct line, within hail of a single parallel, east to west, and still the same people, the
same Nation! Still the same Fourth of July,-for it was on its eve that we reached San Francisco; still the old flag, -the town was gay with its beauty that day; and best of all, still among hearts aglow with the same loyalty to and pride in the American Union, and the same purpose and the same faith for its future. Great the wonder grows with such experience as ours at the extent of the Republic; but larger still our wonder at the mysterious but unmistakable homogeneity of its people. San Francisco, looking westward to the Orient for greatness, cooling its summer heats with Pacific breezes, thinks the same thoughts, breathes the same patriotism, burns with the same desires, that inspire New York and Boston, whose outlook is eastward, and which seem to borrow their civilization with their commerce from Europe. Sacramento talks to-day of the same themes and with the same judgment as Hartford or Cleveland or Chicago; while Nevada, over the mountains, almost out of the world, anticipates New England in her opinions, and makes up her verdict, while those close to the "Hub of the Universe" are looking over the testimony.
It is this that is the greatest thing about our country; that makes it the wonder of nations, the marvel of history,-the unity of its people in ideas and purpose; their quick assimilation of all emigration,come it so far or so various; their simultaneous and similar currents of thought, their spontaneous, concurrent formation and utterance of a united Public Opinion. This is more than extent of territory, more than wealth of resource, more than beauty of
landscape, more than variety of climate and productions, more than marvelous material development, more than cosmopolitan populations, because it exists in spite of them, and conquers them all by its subtle electricity.

It was very interesting, indeed, to pass through and stand amid this civilization of half a generation; to see towns that were not in 1850 , now wearing an old and almost decaying air; to walk up and down the close built streets of the Pacific metropolis, and doubt whether they look most like Paris or New York, Brussels or Turin; to count the ocean steamers in the bay, or passing out through the narrow crack in the coast hills beautifully called the Golden Gate, and wonder as you finish your fingers where they all came from and are going to; to find an agriculture richer and more various than that of Illinois; to feast the senses on a horticulture that marries the temperate and tropical zones, and makes of every yard and garden and orchard one immense eastern greenhouse; to observe a commerce and an industry that supply every comfort, minister to every taste, and fill the shops with every article of convenience and luxury that New York or Paris can boast of, and at prices as cheap as those of the former city to-day; to find homes more luxurious than are often seen in the Eastern States, and to be challenged unsuccessfully to name the city whose ladies dress more magnificently than those of San Francisco.

Yet none of this surprises me. I had large ideas of the Pacific Coast and its developments; and I long ago gave up being surprised at a! $y$ victories of the

American mind and hand over raw American matter. Still, Nevada and California, with towns and cities of two to fifteen years' growth, yet to-day all full-armed in the elements of civilization, wanton with the luxuries of the senses, rich in the social amenities, supplied with churches and schools and libraries, even affecting high art, are wonderful illustrations of the rapidity and ease with which our people organize society and State, and surround themselves with all the comforts and luxuries of metropolitan life. The history of the world elsewhere offers no parallels to these.

## XVII.

## CALIFORNIA.

The Extent and Variety of California's Surface-Her Two Ranges of Mountains-The Sacramento Basin-The Coast Valleys-The Forests of the Coast Range and the Sierra Nevadas - The Lakes of the State-The Lake District of the Continent-The Harbors on the Coast-The Bay of San Francisco-The Dry Climate of CaliforniaAmount of Rain in the Valleys and of Snow in the Mountains-The Contrasts with a Former Era-The Peculiarities of San Francisco's Climate-The Varieties of Heat and Cold to be had in the StateThe Glory of Spring in California-The Grand Features of Nature in the State-Her Revolutions and Revelations in Nature and in Science-The Growth of California-Her Railroad System.

It is well for us to dwell briefly upon the great natural features and characteristics of this foremost and representative State of the Pacific Coast,-Cali-fornin,-amid whose scenery and society we now passed a hurried but most delightful summer month. Seven hundred miles long on the Ocean,-from $32^{\circ}$ to $42^{\circ}$, and representing the space from Charleston, S C., to Boston, Mass., on the Atlantic Coast; near two hundred miles in width; with two great ranges of mountains running through its length, meeting and mingling both in the north and in the south, opening in the center for a wide plain-like valley or basin, and
protecting uncounted smaller valleys in closer embrace; peaks ruming up to fifteen thousand feet of hight,-valleys on a level with the sea, one indeed below it; what wonder that it offers all climates, all varieties of soil and production, all phases of nature, all elements of wealth! The Coast Range and the Sierra Nevadas are one in the south, become two through the central portion of the State, and mark and make its peculiar natural features, and again become one in the north,-still again in Oregon to part, and repeat on lesser scale to that State in the Willamette Valley, the gift of the Sacramento to California.
This great central valley, or Sacramento Basin, is about four hundred miles long and fifty wide. It is nearly down to the sea level, and is drained by two great rivers, the Sacramento coming down from the north, and the San Joaquin coming up from the south, meeting in the center and flowing out together, with wide, delaying bays, through the Coast Range to the Ocean. These main rivers draw their waters from numerous streams coming out of the Sierra Nevada Mountains, which, by a peculiarity that the Coast Range repeats, confine nearly all their overflow of water to their western slopes. As the Coast Mountains contribute little water to the Sacramento Basin, sending all their streams directly to the Ocean, so the Sierras are sparing of their gifts to the consuming desert lands of Nevada, and endow the interior of California with the bulk of their hoarded treasures of rain and snow. The Sacramento Basin is occasionally broken by terraces, and beautiful with frequent oak groves, but generally is
a level, treeless valley, with a deep, rich, alluvial soil, especially favorable for the smaller grains. In the north, the valley is studded with lonely peaks or Buttes rising two thousand feet above the dead level around.

The Coast Mountains average only about half the hight of the Sierras, are more broken and irregular in line, and offer numerous valleys, strikingly picturesque in shape and surroundings, and abundantly rich with grass and trees,-the beautiful burr oak, with graceful, elm-like branches, distinguishing them,-and a soil for general culture. The wealth and beauty of the State lie very largely in these Coast Valleys. The hills about are for the most part bare of trees, but are beautiful in rounded outlines; though along the crests of many, and in the close canyons of nearly all are bountiful gifts of forest,-oaks and pines predominating, but the laurel, the cypress and the madrona alternating with their strange beauty. The redwood finds its home in the Coast Hills, also; a fine-grained, light, soft wood, white and red in color, much used for building purposes, belonging to the general cedar family, and closely akin to the peculiarly Big Trees of the Sierra Nevada Mountains. The madrona is an open growth evergreen tree, of the laurel species, with oval leaves, pea-green beneath and dark and shining above, and a smooth bark that peels off every year, and when new is greemish yellow, and when mature a bright red. This and the manzanita bush are two of the more striking peculiarities of the forest country of California to the visitor from the Eastern States. In bark and fruit, they bear
a resemblance to each other, though one is a tree and the other a shrub; and while the birds are fond of the berries of the madrona, the bears and the Indians live on those of the manzanita.

The forests of the Sierra Nevadas are more various and abundant. There is a wide variety of oaks and pines and firs and cypresses and cedars, varying in character and size from the first faint foot-hills to the highest mountain tops. The sugar pines are, excepting of course the distinctive mammoth trees, the larger and more remarkable of them all, and are distinguished by huge cones like ornamental tassels hanging all over their tops. Not unfrequently these trees are three hundred feet high and eight or ten feet in diameter, and they furnish the finest timber of the Pacific Coast region. Some of the firs are also remarkable for size and beauty. The Rocky Mountains do not compare with the Sierras in the variety and majesty of their forest wealth; and the richness of the Alleghanies is poverty by the side of the Pacific States mountains in this respect. Fine timber grows as high as nine thousand and ten thousand feet in the Sierras.

California is distinguished, also, for the wealth of water in reserve in her lakes, not only in and on the mountains, but under and around them. The Coast Range furnishes a few of these; but the Sierras offer at least two hundred in a distance of four hundred miles. Nearly all are of bright, pure, fresh waters; the reservoirs of melting snows; the sources of rivers wearing deep canyons in their eager course to the Sacramento and San Joaquin; the feeders of ditches
that the miners have laid to their banks of gold, and that, outlasting this use, will minister to orchards and vineyards and gardens, and thus heal their former wounds of nature ; some sunk deep in rocky chasms; some enriching a wide, tender meadow, a rich summer home and a safe winter retreat for game, for stock and for Indians; "some no bigger than the petty tarns of the English hills, while others would float a navy, and can mimic the commotion of the sea." The northeastern section of California is part of an especially grand lake country, destined perhaps to be the most distinguished in this respect of any portion of America, but now almost unknown. It extends over into southern and eastern Oregon, and includes part of northern Nevada and western Idaho. A portion of its waters flow down into the Sacramento; other lakes are the sources of the Klamath River, running through southern Oregon and northern California to the Pacific; others seek the Willamette; many pour east into the Snake, and more directly north into the Columbia; while still another portion of its lakes are the reservoirs of the rivers flowing east from the Sierra Nevada into the Great Basin, and have no outlet. Here, in a region bordering upon and chiefly north of the Great Interior Basin, a section of country from three hundred to five hundred miles square, is a perfect network of mountains, rivers, lakes and deserts, the home of several powerful Indian tribes, whom General Connor and General Crook have within a few years whipped into submission and a reservation, and across which a branch railroad from the main line in the Humboldt Valley is likely to be speedily built to
the Willamette Valley in Oregon. Then its wealth of nature, especially its wealth of lakes, will be revealed, and the claim for it, by the few who have traversed its unsettled wilds, of the name of the District of the Lakes, will be vindicated.

Turning to the Ocean, California is generously, even curiously, endowed with fine, open harbors and inland bays. They can float in perfect safety a world's commerce. There are along her coast four similar large inland bays, with entrances of from half a mile to a mile each, and of lengths varying from twelve to fifty miles. The best is that of San Francisco, which

- is eight miles broad and fifty long, and opens out farther inland into two other bays, one ten miles each way, and the other four miles by eight, and through which are received the grand flow of the rivers of the Sacramento Basin; the whole having an outlet into the Ocean, only a mile in width, but deep and well guarded; while all this wide wealth of inland sea is protected from the Ocean by a peninsula of high-rolling sand-hills six to fifteen miles in breadth. On the inner head of this peninsula, like an oriole balancing over the edge of his long, pocket nest below, stands San Francisco, looking down her farstretching bay, looking around through the Golden Gate crack in the rocks to the Ocean, looking up, with wide, open eyes, over the grand expanse of waters that float down from the interior, and, meeting the tides of the Ocean, delay and spread about in very wantonness of space. Humboldt Bay, near the northern end of the State, and San Diego, near the southern, are the best of the similar bays; they are
indeed miniature reproductions of that of San Francisco ; and the three, in place and in character, seem like a providential promise of the grand commercial future of the State. That of San Diego lies on the line of the Southern Pacific Railroad, and will be its direct ocean terminus. Humboldt Bay is the center of a rich lumber region, already greatly developer, and a railroad through the Coast Valleys will soon connect it with San Francisco.

The distinctive feature of the climate of California is dryness. It represents if it does not lead all our New West in this peculiarity. Out of the Sierra Nevada Mountains, the fall of rain in all parts of the State is less than half the average of that in the States on the Atlantic Coast. It amounts in San Francisco and Sacramento to about twenty-one inches a year against forty to fifty in New England and New York. Then it all comes between November and June; practically there is no rain in California through six months of the year; and for those six months, at least nineteen out of every twenty days are days of clear sunshine; while for the other six months, or rainy season, at least half the days are pleasant. Absolutely no rain falls at Sacramento in the three summer months; while San Francisco is only able to report the thirteenth of an inch as the average of many years. Thunder and lightning storms are almost unknown in California. The rain fall increases, however, as we ascend the slopes of the Sierras, and the excessive water supply from the rain and snow upon these mountains, compensates in some degree for the scant fall of the valleys and coast lines, and keeps
the streams full the year through. Sixty feet of snow fell in one winter on the crest of the mountains near the railroad line; and the rain fall of the Sierras in the season of $1867-8$ amounted to one hundred inches. There are exceptional years in the fall of rain in the lower and western parts of the State; thus in 1861-2, when there was a great flood, there were forty-five inches of rain at San Francisco in the four winter months; and at the same time nearly one hundred inches in the foot-hills of the mountains, and, reducing snow to rain, over one hundred inches on the crest of the mountains. By contrast, some winters have passed without rain, and for eighteen months at one time the valleys and coast regions received no moisture. But that was before the present settlement and organization of the State.

The tendency of the climate appears to be towards greater evenness, if not to an increase of moisture. The researches of Professor Whitney indicate that at one time the climate of all the Pacific region was as moist as it now is dry; that snow fell in the summer on the mountains, as it rarely or never does in this era, then producing and feeding glaciers, that the dryness of the climate at present forbids, and that, in fact, the now desert valleys of the Great Interior Basin of Utah and Nevada were, in the wet langsyne, vast inland seas! The surrounding mountains, now utterly bare of forest life, would then naturally have been clothed with the thickest and largest of trees. The contrast of present facts with this theory of the past is almost too great for the imagins ion to comprehend. What mighty means created the revolution?

Of course, with such extent of territory and such varieties and contrasts of elevation, all degrees of temperature, at every season of the year, are offered in California. The general facts are that the winters are warmer and the summers cooler than in the same latitudes and elevations at the East. 'I he nights, even of the hottest days of the summer, are always cool, whether in mountain or valley, and it is very rare that a double blanket is not necessary as bed covering in any part of the State. The summer sun is very fierce, even in the hills, but the atmosphere is so dry and always in such brisk motion that the heat is much less oppressive than the same degree of temperature in a moister climate with stiller air; while the nights are restoring and recompensing.

Along the coast, and especially at San Francisco, the Ocean winds temper the summer heat and the winter cold most remarkably. The climate of San Francisco is almost an idiosyncrasy; it is probably the mildest,-that is, freest from excess of heat or cold,-and most even of any place in the world. The average temperature for the year is $54^{\circ}$; the coldest month is January, which averages $49^{\circ}$; the warmest September, which averages $58^{\circ}$; while the other months range between these figures. Snow rarely falls, water as rarely freezes, in the Pacific metropolis during the winter, which is usually the more equable and pleasant season of the year there. The Ccean wind and mist pour in sharply in the summer afternoons, and, after a struggle with the dry atmosphere, which resists the attack bravely for a long time, they generally gain a partial victory, and nake a frequently
disagreeable evening. Such a contrast as $97^{\circ}$ at noon and $46^{\circ}$ in the evening has been known in San Francisco in July ; but the usual range in July and August is from $50^{\circ}$ to $70^{\circ}$. Woolen clothing of about the same warmth is needed constantly in that city, and no matter how warm the summer's morning may be, the stranger should never be tempted out for the day without his overcoat. For robust, vigorous bodies, there is no so favorable a climate as that of that city; it preserves health and keeps up the tone and strength of the system, and secures more working days in the year than that of any other town in America or the world; but to a weak constitution, and for a quiet, sedentary life, it is too cold. The men like it better than the women do. The doctors say it is the easiest place to keep well, but the hardest to get well in; and they usually order their invalids into the country.

But it is not difficult, as we have suggested, to find any shade of climate at short notice in California; by moving from one place to another, we may be in perpetual summer, or constant winter. The southern coast of California is softer than South Carolina; the Colorado desert country in south-eastern California is warmer than New Orleans; many a shaded spot upon the coast is an improvement over southern France or Italy; and the Sandwich Islands, which California holds to be a half-dependency, offer a climate to which all our tender invalids will soon be hastening,the thermometer at Honolulu rising neither to $80^{\circ}$ nor falling to $70^{\circ}$ in any month of the year. The great Sacramento Basin escapes the San Francisco fogs and sea-breezes, and is four degrees colder in winter, and
$16^{\circ}$ to $20^{\circ}$ warmer in summer. The summer days are often quite hot there; $100^{\circ}$ is not an uncommon report from the thermometers in the shade; but the cool nights are invariable. And would we have the tonic of frost, the High Sierras will give us fresh ice nearly every morning the summer through. A railroad of two hundred miles, running south-easterly from San Francisco, through Stockton, Sonora, the Mariposa Big Trees, the Yo Semite Valley, and reaching the tops of the Sierras at ten to twelve thousand feet, would offer any tolerable degree of heat and cold on every summer's day.

But the evemess of the climate between the mountains and the sea in California, and the indescribable inspiration of the air, are the great features of life there, and the great elements in its health. There is a steady tone in the atmosphere, like draft of champagne, or subtle presence of iron. It invites to labor, and makes it possible. Horses can travel more miles in a day than at the East; and men and women feel impelled to an unusual activity.

It is too early yet to determine the permanent influences of the climate of the Pacific Coast upon the race. The fast and rough life of the present generation there is not sure basis for calculation. But the indications are that the human stock will be improved both in physical and nervous qualities. The children are stout and lusty. The climate invites and permits with impunity such a large open-air life, that it could hardly be otherwise. There is great freedom from lung difficulties; but the weakness of the country is in nervous affections.

The best season for seeing the coast mountains, valleys, and Sierra foot-hills of California is the early spring, from February to June. Then the rains are dwindling away to greet the summer drouth, and vegetation of all sorts comes into its freshest, richest life, and then, according to all testimony, is the most charming season for the stranger. All these August bare and russet hills, these dead and drear plains, are then alive with vigorous green, disputed, shaded and glorified with all the rival and richer colors. The wild flowers of California fairly carpet all the uneultivated ground. No June prairie of Illinois, no garden of eastern culture can rival them. For luxuriance, for variety and depth and hight of color, for complete occupation of the hills and the plains, all agree that there is nothing like it to be seen anywhere else in nature. Then, too, the trees are clean and fresh; the live oak groves are enriched to brilliant gardens by the flowers and grass below; and the pine and fir forests hold majestic yet tender watch over all the various new life of the woods. But in these spring months of fresher nature, before the sun sears and the dust begrimes, the interesting regions of the higher Sierras are denied us; and most pleasure travelers will visit California in mid-summer, from June to September. Then the paths to the Big Tree groves, to the Yo Semite Valley, and to the lakes on the mountain tops, are open and inviting; and as the flowers and grass and trees of those regions are at that season condensing their spring and summer growth, we shall find there some compensation for the decayed nature of the lower regions of the State.

While the novelties of climate, the strange and wonderful variety of surface and form in nature, the combination of the beautiful and the anomalous, the fascinating and the repulsive, that California everywhere presents, arouse every enthusiasm and excite every interest, it is to the student of science that she seems the most original and proves the most engaging. He finds here not only revolutions in forms and facts, but revolutions in theory, and sees that he must begin anew to observe and recreate the science of the world's history. There are evidences of glaciers that surpassed those of Switzerland; there are proofs of volcanic revolutions that utterly changed the form of the Continent, and the nature of vegetable, animal and human life upon it; where these mountains now rise were once grand rivers; out of their depths have been dug the bones of a gigantic race that lived farther back in the ages than human life was ever before known, or perhaps suspected by the most audacious theorists; the State has diluvial deposits fifteen hundred feet deep, and granitic mountains twelve to fifteen thousand feet high, and others of lava and slate and metamorphic rock of nearly equal hight; silent craters are open upon many of her highest peaks; where Switzerland has one mountain thirteen thousand feet high, California has a hundred; she has a waterfall fifteen times as high as Niagara; she has lakes so thin that a sheet of paper will sink in their waters; others so voracious that they will consume a man, body, boots and breeches, within thirty days; she has inexhaustible mines of gold, quicksilver and copper; she keeps a miniature hell in blast as warning to the wicked
sons of men; she has dreary deserts with poisonous waters, where life faints; she has plains and valleys that will grow more wheat and vegetables than any other equal space in the whole Nation ;-in short, her nature is as boundless in its fecundity and variety, as it is strange and startling in its forms; while her men are the most enterprising and audacious; her women the most self-reliant and the most richly dressed; and her children the stoutest, sturdiest and the sauciest of any in all the known world!

The future of a State, of such various and boundless gifts; so favorably located with reference to the world's commerce; so inviting to enterprise, so encouraging to labor, can hardly be measured by any imagination. She has now a population of half a million, of whom nearly one-third are held by her commercial city. In twenty years, the whole extent of her life, she has both developed and subdued goldmining, outgrown its vicissitudes and conquered its dangers ; created an agriculture hardly second to that of any State in the Union, and twice the value of her mines ; and organized manufactures and commerce that are each of equal value with her mineral production. The world never witnessed elsewhere such growth in all the elements of wealth and power and social and political order.

Active now at all points, and increasing rapidly in wealth and population, California is fast perfecting wide-reaching railroad connections, both within and without the State. Besides the main Pacific Railroad, that stretches across her central borders, from Nevada to the Ocean, a distance of nearly three hundred
miles, she has an eighty mile line due south from San Francisco, the beginning of the Southern Pacific Road; a second short track from San Francisco Bay to Sacramento, and thence on north into the Sacramento Basin, reaching out towards Oregon; several short roads into the rich valleys among the coast mountains and into the foot-hills of the Sierra Nevada, all tributary to both Sacramento and San Francisco ;-in total, at least six hundred, perhaps seven hundred, miles of railroad track will be laid and in use within the State before the year 1869 closes. Very soon all her central sections will be thus bound to her political and commercial capitals; and but two or three years at the most can pass before her remotest south and her remotest north,-her tropic and her arctic regions, the orange groves of Los Angelos and the snows of Shasta,-will be brought within a day's ride of her temperate central life. Five years ago, her railroads were less than one hundred miles in all; and ten years ago the only winter communication California had with Nevada was by a single express messenger, who traveled on foot with snow-shoes, and whose claims for pay for the service are not yet settled!

## XVIII.

## SAN FRANCISCO.

The Mysterious Fascination of "Friscoe"-An Early Error in Laying Out the City-The Winds and Real Estate—The Grand Views from the City's Ilights-The Garden-Yards of the Town-Tne P'eculiarities of its Climate-The Anomalies and Contradictions of its Social and Business Life-The Smartness of the Old Californians-The Women of San Francisco-A Scandal-Making and Scandal-Loving Town-The Feminine Lunch Parties-The Tempering Influences of Time and the Railroad-Ilotels and Lestaurants-The "What Cheer House"-The Wells-Fargo Express Company-Tbe Markets of San Francisco-Fruit, Fish, Flour and Meat-Prices Here and in the East-Buildings and Earthquakes-The Excursion to the Cliff-The Seals and the Pelicans-Morals, Education and Religion -The Dominance of Northern and National Sentiments-SchoolHouses and Churches and Ministers-The Commerce and Manufactures of San Francisco-Interesting Statistics-The Certainties or the Future-London, New York and San Francisco Contrasted.
"Friscoe," or "the Bay," as the miners in the Mountains and over in Nevada familiarly call their pet city by the sea, holds a first place in all the life of the Pacific Coast. Capital and commerce center here; it is the social focus and the intellectual inspiration, not only of California, but of Nevada, Oregon and Idaho as well; an amual visit here is the one bright spot in the miner's desolate life; and scold they ever so much at its pretensions and its


Part of the Bay, Mare Island, San Francisco.


Montgomery Street, San Francisco.


Market Street, San Francisco.

absorbing influences, all the people west of the Rocky Mountains feel a peculiar personal pride in San Francisco, and, if they would confess it, look forward to no greater indulgence in life, no greater reward in death, than to come hither.

Why this fascination it is not so easy to see or say. It is like the magnetism of an ugly or very improper person. The town sprawls roughly over the coarse sand-hills that the Ocean has rolled and blown up, and is still rolling and blowing up, from out its waters. The business streets are chiefly on made land under the hills and by the bay. Up and out from these, the streets roll on irregular grades over the hills to the homes of the population. The early comers, having begun wrongly on the American straight line and square system of laying out the city, are tugging away at these hills with tireless energy, to reduce the streets to a grade that man and horse can ascend and descend without double collar and breeching help; but there is work in it for many a generation to come. They might have better accepted the situation at the first, made Nature engineer and architect in chief, and circled the hills with their streets and buildings, instead of undertaking to go up and then through them. Such a flank attack would have been much more successful and economical, and given them a vastly more picturesque city. Boston had the advantage of cow-paths to establish its streets by ; but no estray cow ever visited these virgin sand-hills of San Francisco, as innocent of verdure as a babe of sorrow or vice. Many of the streets up and over the hills are so steep that it is impossible to drive
upon them; and where, in the progress of shovel and cart, they are cut down, we shall see houses perched up a hundred feet or more in the air on the ancient grades of nature.

Wherever the hill-sides and tops are fastened with houses or pavements, or twice daily seduced with water, there the foundations are measurably secure, and the deed of the purchaser means something; but all elsewhere, all the open lots and unpaved paths are still undergoing the changing and creative process. The daily winds from the near Ocean swoop up the soil in one place and deposit it in another in great masses, like drifts of snow. We shall often find a suburban street blocked up with fresh sand; the owner of vacant lots needs certainly to pay them daily visit in order to swear to title; and the chance anyway is that, between one noon and another, he and lis neighbor will have changed properties to an indefinite depth. Incidental to all this, of course, are clouds of sand and dust through all the residence and open parts of the city, making large market for soap and clothes-brushes, and putting neat housekeepers quite in despair for their furniture. Naturally enough, there is a looseness on the subject of cleanliness that would shock your oldfashioned New England housewives.

But then, as compensation, the winds give health, -keeping the town fresh and clean; and the hills offer wide visions of bay and river, and islands and sister hills,-away out and on with varying life of shipping, and manufactures, and agriculture; and, hanging over all, a sky of azure with broad horizons.

Oceanward is Lone Mountain Cemetery; covering one of the hills with its scrawny, low-running, lise oak shrub tree, and its white monuments, conspicuous among which are the erections to those martyrs to both Western and Eastern civilization and progress, -Broderick, the mechanic and senator, James King of William, the editor, and Baker, the soldier. Here is the old Mission quarter, there the soldiers' camp, yonder, by the water, the bristling fort, again the conspicuous and generous Orphan Asylum, monument of the tenderness and devotion of the women of the city, and to the left of that still, the two Jerrish Cemeteries, each with its appropriate and tasteful burial chapel. No other American city holds in its very center such sweeping riews of itself and its neighborhood; and every visitor must make sure to secure them from the best points within and around the city; they are in themselves revelations of the future Pacific Coast Enpire, certainly of San Francisco's security as its metropolis.

Then the little yards around the dwellings of the prosperous, eren of those of moderate means, are made rich with all the verdure of a greenhouse, with only the cost of daily watering. The most delicate of evergreens; roses of every grade and hue; fuchsias vigorous and high as lilac bushes; nasturtiums sweeping over fences and up house walls; flowering tines of delicate qualitr, unknown in the East; geraniums and salvias, pansies and daisies, and all the kindred summer flowers of New York and New England, grow and blossom under these skies throughout the whole year,-the same
in December and January as in June and August,with a richness and a profusion that are rarely attained by any out-door culture in the East. The public aqueducts furnish water, though at considerable expense, and pipes convey and spread it in fine spray all over yard and garden. The result is, every man's door-yard in the city is like an Eastern conservatory; and little humble cottages smile out of this city of sand-hills and dust, as green and as yellow, and as red and as purple, as gayest of garden can make them.

San Francisco weather, as has been intimated, is altogether original; you cannot palm off old Thomas's almanac on the weather question,-"calculated for Boston, but equally applicable to any other meridi-an,"-in this town. There is nothing like it, either here on the Pacific Coast, or elsewhere so far as Bayard Taylor has traveled, or Fitzhugh Ludlow imagined in "Hasheesh." The anomaly is very much because the town is constantly "in the draft." While elsewhere, along shore, the Coast Hills uninterruptedly break the steady north-west breeze from the Ocean in summer, here they open just enough to let out the waters of the Sacramento River and San Francisco Bay, and let in like a tide of escape steam the Ocean breeze and mists. When winter comes, the wind changes to south-east, and blows to softer scale, and between showers,-for then comes the rain,-the sky is clearer and the air bahnier than in summer. Thus the people of San Francisco boast of their winters, and apologize for their summers; and invalids need to flee away from town in
the latter season. The ladies wear furs in July and August ; every man, not lined with a patent air-tight coal-stove, never ventures out without his overcoat; and many a day of our August visit did it feel as if the weather was coming down upon us with a snowstorm.

Kindred anomalies and contrasts force themselves upon the observant visitor in the business, social and intellectual life of San Francisco. Some of the finest qualities are mingled with others that are both shabby and "shoddy." There is sharp, full development of all material powers and excellencies; wealth of practical quality and force; a recklessness and rioting with the elements of prosperity; much dash, a certain chivalric honor combined with carelessuess of word, of integrity, of consequence; a sort of gambling, speculating, horse-jockeying morality,—born of the uncertainties of mining, its sudden hights, its equally surprising depths, and the eager haste to be rich,-that all require something of a re-casting of relationships, new standards, certainly new charities, in order to get the unaccustomed mind into a state of candor and justice. People, who know they are smart in the East, and come out to California thinking to find it easy wool-gathering, are generally apt to go home shorn. Wall Street can teach Montgomery Street nothing in the way of "bulling" and "bearing," and the "corners" made here require both quick and long breath to turn without faltering.

Men of mediocre quality are no better off in San Francisco than in older cities and States. Ten or fifteen years of stern chase after fortune, among the
mines and mountains and against the new nature of that original country, has developed men here with a more various and toughening experience in all the temporalities of life, and a wider resource for fighting all sorts of "tigers," than you can easily find among the present generation in the Eastern States. Nearly all the men of means in California to-day have held long and various struggle with fortune, failing once, twice or thrice, and making wide wreck, but buckling on the armor again and again, and trying the contest over and over. So it is throughout the Pacific Coast States; I have hardly met an old emigrant of '49 and '50, who has not told me of vicissitudes of fortune, of personal trials, and hard work for bread and life, that, half-dreamed of before emigrating, he would never have dared to encounter, and which no experience of persons in like position in life in the East can parallel.

In consequence partly of all this training, and partly of the great interests and the wide regions to be dealt with, the men we find at the head of the great enterprises of the Pacific Coast have great business power,-a wide practical reach, a boldness, a sagacity, a vim, that can hardly be matched anywhere in the world. London and New York and Boston can furnish men of more philosophies and theories,-men who have studied business as a science as well as practiced it as a trade,-but here in San Francisco are the men of acuter intuitions and more daring natures; who cannot tell you why they do so and so, but who will do it with a force that commands success. Illustrations of such men
and their bold and comprehensive operations may be seen in the Bank of Califormia,-the financial king of the Pacific States, with five millions of capital,-the California and Oregon steam navigation companies, controlling the inland navigation of these two States, the great woolen mills and machine shops of San Francisco, the Wells-Fargo Express and Stage Company, in the mining companies, especially on the Comstock lode, in the Central Pacific Railroad Company, even in the large farms of the interior valleys, and in the wheat dealing "rings" of the city.
"Society," too, is audacious and original, though somewhat difficult of characterization, in this representative town of the Pacific Coast. It holds in chaos as yet all sorts of elements; the very best, and the very worst, and all between. There is much of New York in it, much of St. Louis and Chicago, and a good deal that is original and local ; born of wide separation from the centers of our best social civilization; of the dominating materialism and masculineism of all life in San Francisco; of comparative lack of homes and families and their influences; of the considerable European and Asiatic elements mingling in its unsettled civilization. There are probably more bachelors, great lusty fellows, who ought to be ashamed of themselves, living in hotels or in "lodg. ings" in this town, than in any other place of its size in the world. There is want of femininity, spirituality in the current tone of the town; lack of reverence for women; fewer women to reverence, than our Eastern towns are accustomed to. You hear more than is pleasant of private scandals; of the vanity
and weakness of women ; of the infidelity of wives. "It is the cussedest place for women," said an observant Yankee citizen, some two or three years from home, and not forgetful yet of mother, sister and cousin,-" a town of men and taverns and boardinghouses and billiard-saloons."

Yet there seem to be plenty of women,-such as they are; and Montgomery Street will offer the promenader as many pretty and striking faces, perhaps more in proportion, than Washington Street or Broadway. But the dominating quality, like mercy, is not strained; it savors of the mannishness, the materialism, the "fastness" and the "loudness" of the country ; and, paradoxical as it may appear, by contrast with Eastern society, the men seem of a higher grade than the women,-better for men than the latter for women. Nor is this inconsistent with reason; the men, dealing with great practical necessities and duties, are less harmed, on the whole, by the dominant materialism of life here than the women, whose pressing responsibilities are lower and fewer;-as a fine, delicate blade is more roughened in cutting the way through bramble and brush than a tough and broader edge.

All which is not only natural, but inevitable. In all new countries, where the first fight is for life and wealth with rough nature, the masculine quality must ever be dominant; and the feminine elements must be influenced by it, more than they influence it in turn. The senses rule the spirit. All civilization, all progress tends to the increase of the feminine element in our nature, and in life ; contrast the cen-
turies, and we see it creeping in everywhere, in men and women alike, in religion, in intellectual culture, in art, in social intercourse,-softening, refining, hal-lowing,-the atmosphere of all modern life pictures. Women, who possess and represent this blossom of our civilization, are by no means wanting in California,no more perfect specimens have we ever met anywhere ; tender, tasteful, true ; and gaining in aggregate influence over society day by day; but yet not to-day representing, or, at least, controlling, what is called "society."

The ladies generally dress in good taste. Paris is really as near San Francisco as New York, and there are many foreign families here. But the styles are not so subdued as in our Eastern cities; a higher or rather louder tone prevails; rich, full colors, and sharp contrasts; the startling effects that the Parisian demimonde seeks,-these are seen dominating in balls and the public streets. In costliness of costume, too, there is apparent rivalry among the San Francisco ladies. Extravagance is lamented as a common weakness among them, and leading, where fortune is so fickle as here, to many a worse one often. Perhaps in no other American city would the ladies invoice so high per head as in San Francisco, when they go out to the opera, or to party, or ball. Their point lace is deeper, their moire antique stiffer, their skirts a trifle longer, their corsage an inch lower, their diamonds more brilliant,-and more of them,--than the cosmopolite is likely to find elsewhere.

Another "society" item, and we will pass on. The common dining hour being five or six o'clock, the
women are denied the esthetic, gossiping tea-party, so peculiar to New England. The "lunch party" is their substitute, and a famous feature of feminine social life it is. The hour is from high noon to two o'clock, when the men are busy at their work, and the women have this dissipation all to themselves. Richer and more various as a meal are the lunches than the teas they substitute ; the eating and attendant gcossiping often absorb a whole afternoon, leaving the participants appetiteless, it is true, for the family dinner, but with what compensating material for garnishing the meal for the household! We lave never even so much as seen through a crack in the dcor one of these California feminine lunch parties; but confidential confessions lead us to give them a high place in the social features and distractions of the life of the town. And yet for high art in the line of the delicate but industrious scandal-mongering and the virtuous plotting against masculine authority, that we are wont to attribute to these exclusive gatherings of our dear sisters, it does still seem to me that the New England conjunction of twilight and green hyson are much more favorable. Doubtless, these California Eves are bolder in their habits, as becomes their life and the grosser evils they are the victims of ; but how much more daintily and delicately the stiletto and the tongue, the knitting-needle and the eye, can do their sweet work under a little softening of the shadows and the inspiration of hot tea on a stomach that has already done its duty for the day!

But time tempers, and association softens, this redundancy and coarseness of fresh life in San Fran-
cisco. Already the Railroad and the telegraph carry its force back to the Atlantic cities, and bring in return the self-control and steadiness of an older society and a riper civilization. Henceforth San Francisco will rapidly rival our Eastern cities in the steadiness and certainty of business operations, and in the refinements and amenities of social life. The Railroad is the great chamel for the elements of order and elevation to come in. It introduces and fosters the things that make for peace. Praying for its construction, forecasting its influence, Rev. Horatio Stebbins well said in one of the San Francisco pulpits during our visit of 1865 :-
> "Whatever promotes the assimilation of mankind, whatever brings nations and peoples into communion, thus supplemeuting each other in the completeuess of humanity, is a step in the advancing kingdom of God. This earth is a musical instrument not yet fully strung. When every Coast shall be peopled, every mountain barrier overcome, every abyss spanned, and the peoples of the earth shall flow together as in prophetic vision to the mountain of the Lord's house, and harmony of common good shall persuade the lion and the lamb; when laws shall be greater than conflict, and order than violence; when manners shall enrobe the races as a garment of beauty, and religion conserve society as virtue conserves the soul,-then this earth shall give its sound in harmony with the Infinite intelligence, and the Providential purpose shall gleam from every summit as the beacon lights of mankind,"

In many of the materialities of life,--in excellence of hotels and restaurants, in facilities of inter-communication, in all ministrations to the sensuous wants of human nature,-San Francisco and California already set many an example to older communities. The hotels of the city are the equals of the very best of the Atlantic States; the restaurants the superiors.

The European habit of living in lodgings and taking meals at restaurants is very much in vogue in San Francisco, and has stimulated the character and equalized the prices of the latter. A dimner of several courses with wine is served in admirable style after the French form at the best of them for one dollar and a half; while a like meal in one of the fashionable eating-houses of New York and Boston would cost four or five dollars. Among the hotels, the "What Cheer House" is a California peculiarity; it is what would be called a second or third class hotel, but serves excellent meals and lodgings at fifty cents each; and grew up to popularity and fortume under the patronage of the miners, who, when they come into town from their distant camps and cabins, are not inclined to be satisfied with anything second-rate in the way of creature comforts, though somewhat indifferent to mere "style." The "What Cheer" has an especial office for receiving clothes to be washed and meuded, a well chosen popular library with five thousind volumes, full files of newspapers and magazines, an extensive and valuable cabinet of minerals, and a beautiful collection of stuffed birds, all for the accommodation and entertainment of its guests. Its reading-room is generally well filled with plain, roughlooking men, each with book or newspaper in hand. The rule of the establishment is for every guest to buy a supply of tickets for meals and lodgings on his arrival, at the uniform rate of fifty cents each, and the proprietor redeems with cash what have not been used up when the customer leaves.

Another illustration of how well certain agencies
of life's convenience are organized in this country is the Wells \& Fargo Express Company. It is our Eastern express company perfected and glorified. It extends to every village, almost to every mining camp in all these Pacific States and Territories. It anticipates, almost supersedes, the govermment in carrying letters; it does errands of every sort and to every place; it exchanges gold and greenbacks; it buys and sells gold and silver in the rough; it owns all the principal stage lines of the interior; it brings to market all the productions of the gold and silver mines; and, in brief, is the ready companion of civilization, the omnipresent friend and universal agent of the pioneer, his errand-man, post-boy, and banker. The first three establishments set up in a new mining town are a restaurant, a billiard saloon, and a Wells \& Fargo office. With these three, its first stage of civilization is complete. In the carrying of letters, this company has proven how, even in a new country, it is practicable for the government to abandon the post-office business without any very great inconrenience to the people. For years, it carried many more letters on the Pacific Coast than the government did; for, though it first paid the government postage on every one, and then added its own charges, the certainty and promptness of its carriage and delivery, together with its appearance on the ground before the representatives of the post-office, made this department of its agency very much in favor with the public. At all its offices are letters received and delivered as in a government post-office, and in a single year the number of letters going
through the hands of the express company was nigh upon three millions. In this and in many other ways, the express agency of the Pacific Coast is far in advance, in usefulness and omnipresence, of that of the East.
The food markets of San Francisco will certainly be a delight, perhaps a surprise, to the stranger. In supply, in variety, and in perfection of quality,-the results of the varions climates, and the fruitful waters and soils of the State,-the markets of no other city approach them. Here are spring, summer and fall vegetalles of every kind, all the time, and of the largest size and healthiest growth; here strawberries may be bought twelve months in the year; here, for months in succession, are grapes of many varieties from two to twelve cents a pound, Black Hamburghs, Muscats and Sweetwaters at the higher price ; here are apples from Northern California and Oregon, pears, figs, peaches, apricots, nectarines, plums and blackberries from the neighboring valleys, oranges, lemons, limes and bananas from the Southern counties, all in fullest perfection of form and ripeness and at moderate prices by the pound,-for fruits and vegetables are uniformly sold by weight; then, too, here is flour at half Eastern prices; and salmon throughout the year at ten to twenty cents a pound, with smelts, soles, herrings, cod, bass, shrimps, every treasure of the sea; while the variety of game is unequalled, and meats of all kinds are at least as cheap, and often cheaper, than in New England and Niddle State towns. The materials for living are in as rich supply, indeed, as the art of their prep-
aration is perfected; and it will not take the thrifty mind long to calculate that, so far as food is concerned, a family can be supported more cheaply in San Francisco than in New York or Boston. The prices quoted are of course specie,-for the Pacific States have persistently refused greenbacks and bank bills; but wages and profits are also in specie, and are higher, gencrally, than currency wages and profits in Eastern cities. But the fastidious Yankee, who never forgets his home or his mother's pies and preserves, insists that the quality of the fruit and vegetables is below that of the procluctions of the orchards and gardens of the Middle States and New England,that there is just a lower flavor and delicacy in them; a sacrifice of piquancy and richmess to perfection of shape and bulk. It may be this is only an illustration of that great moral truth that Burton used to impress upon his Chambers Street Theater audiences," that the sassengers of infancy never return;" and yet I am inclined to believe there is really something in it.

It is not easy to draw any very exact comparisons between wages and profits, and the expenses of living, in San Francisco and in the Eastern cities. Prices are fickle now everywhere; and a comparison true to-day wonid be false to-morrow by reason of changes in the value of money, always going on at the present time, and always impending. Food is certainly much cheaper, on the whole, in San Francisco than in corresponding cities of the East ; and wages and profits are as undoubtedly higher. But there is a rapid tendency to equalization; and the difference in favor
of the Pacific Coast will gradually but speedily fade amay. At present the gold or silver dollar buys perhaps twenty per cent. more in San Francisco than the paper dollar in New York, and can be got with say twenty per cent. less labor. But, on the other hand, there is less settled economy here than there. The free and easy, reckless extravagance of early California times is not wholly outgrown; in luck today a man drinks champagne and flaunts his jewelry at the Occidental; while, fortune frowning, to-morrow he is sponging his dimers and his drinks from his friends, and takes a fifty-cent lodging at the What Cheer House. Large profits are generally demanded by the traders; nothing is sold for less than"two bits" (twenty-five cents) ; and a fifty-cent piece is the lowest coin that it is respectable to carry, or throw to the man who waters your horse. At the best hotels, the Cccidental and Coomopolitan, the price is three dollars a day in gold, which is cheaper than the four dollars and a half currency charged by the fashionable hotels of Boston and New York. A "drink" at an aristocratic San Francisco bar is two bits (twenty-five cents); at a more democratic establishment one lit (ten cents). There is no coin in use less than a dime (ten cents) ; one of these answers as "a bit;" two of them will pass for two bits, or twentyfive cents; but the man who often offers two dimes for a quarter of a dollar is voted a "bummer." Rents and real estate are both high and advancing, and are probably above those of any Eastern city save New York.

The business portions of the city are handsome and
substantial with brick and stone. There are a few distinctively fine structures as the Bank of California and the halls of the Mercantile and Young Men's Christian Associations. Several churches are also attractive for size and architectural pretensions, But the earthquakes, to which the city and the coast are always exposed, and which within a few years have frequently visited them, admonish the citizens to build strong and low, even for business purposes; and, with the greater abundance and less price of lumber as a building material, lead them more to detached and wooden dwellings than is common in large cities. Brick tenement blocks are comparatively rare. Most of the homes are separate cottages, large and pretentious with the few, small and neat and simple with the many. The wide reach of the sand-hills and intervening valleys, that make up the peninsula on which the city is located, encourages this independent, spreading habit of building; and the extent of the street railroads of the city, about twenty-seven miles in all, shows what a large area has already been covered by its population.

We shall be of a very indifferent sort of persons, and have no friends, to escape during the first week of a visit to San Francisco an invitation to drive out to the Cliff House for breakfast and a sight of the sea-lions. This is the one special pet dissipation of the city, the very trump card in its hospitality. A night among the Chinese houses and gambling holes is reserved as a choice tit-bit for the pruriently curious few; but the Cliff and the seals are for all ages and conditions of mer and women. And, indeed, it
is a very pleasant, exhilarating excursion. A drive of five or six miles, along a hard-made road over the intervening sand-hills, brings us out to the broad Pacific, rolling in and out, "wide as waters be." We strain our eyes for Sandwich Islands and China,they are right before us; no object intervenes, and we feel that we ought to see them. Just at the right, around the corner, is the Golden Gate; and vessels are passing in and out the Bay. A rare cliff rock places us beyond the sands, within the Ocean; and a fine hotel on its very edge offers every hospitality, -at a price. Out upon half a dozen fragmentary rocks, like solid castles moored in the Ocean below and before, are the seals and the pelicans. The rocks are covered and alive with them. You remember Barnum's seals at New York and Boston, don't you ?great sleek and slimy amphibious calves,-all bodies, small heads and short, webby feet,-bobbing up and down in their water tanks, and almost making you weep with their large, liquid human eyes, like a hungering, sorrowing woman's? Well, here are their native water and rock; from these homes they were stolen away, and here by twenties and fifties you see their relations. Crawling up from the water, awkwardly and blunderingly like babe at its first creeping, they spread themselves in the sun all over the rocks, twenty and thirty feet high sometimes, and lie there as if comatose; anon raising the head to look about and utter a rough, wide-sounding bark; often two or three, provoked by a fresh squatter on their territory, get into combat, and strike and bite languidly at one another, barking and grumbling
meanwhile like long-lunged dogs; and again, tired of discord or weary of heaven, they plunge, with more of spring than they do anything else, back into the deep sea. An opera-glass brings them close to us upon the hotel piazza, and there is a singular fascination in sitting and watching their performances. They are of all sizes from fifty pounds weight up to two hundred and three hundred; and the biggest, burliest and most pugnacious one of all is known as "Ben Butler." Sea gulls and pelicans, the latter huge and awkward in flight as turkeys, dispute possession of the rocks; resting in great flocks, or with loud flaps flying around and around, overlooking the water for passing food. Weary of these sights, we seek neighboring charming coves among the rocks below, and lie there out of the wind, watching the rolling waves rising and breaking over the island rocks, and sweeping in up the seducing sands to toy with our feet. And again, mounting horse or carriage, we ride swiftly and smoothly along the neighboring broad beach of hard sand for several miles; the umbroken, wide-reaching, long-rolling Ocean is before our sight ; and our horse's feet dance in merry race with the incoming surf;-and thus solemnly awed with ocean expanse, alternate with dainty titillation of amused senses, we close our charming half day at the Cliff. We ride back to town by mother and longer road, see its proud Orphan Asylum and its old Mission grounds on the way, and appreciate how much room for growth these wide-rolling sand-hills afford.

In affairs of public morals, and education and re-
ligion, there is much activity in San Francisco; a high attaimment is already reached; and a healthy progress in the right direction is visibly constant. The New England elements are clearly dominant here and through the whole Pacific Coast region ; softened in many of their old Puritanic notions and habits,marrying themselves to the freer and more sensuous life of a new country with a cosmopolitan population, but still preserving their best qualities of decency, of order, of justice, of constant progress upward in morality and virtue. The "Pikes" were the first people all over this country,-emigrants from Missouri, to which again they had been emigrants from the Southern States,-and, joined to some direct importations from the home of the chivalry, they gave tone to society, and law, or rather want of law, to the government of city and State. But the Vigilance Committee revolution of 1855 , a mob in the interest of justice and order and morality,-inaugurated a new era. That was the North against the South,the clash of their civilizations; and the North, seizing the instrumentalities of violence, rose and destroyed violence itself. There was, again, at the opening of the civil war, a fresh suffusion of the Northern and national spirit. It came like a whirlwind, and swept away all opposition, all questioning in its path. Unionism became a passion, rather than a sentiment; and all who sympathized with the South, all who hesitated to espouse the side of the North, were relentlessly persecuted. It was in voicing this uprising of nationality, in seeming to lead and inspire it, indeed, that T. Starr King, then the Unitarian
minister in San Francisco, won such renown abroad, such faith and popularity here; and only his early death prevented his assuming a prominent and permanent position in the politics of the Pacific Coast. These eras of political and moral and social reformation have fixed the character of San Francisco and the Pacific States ; put it in sympathy with our best Eastern civilization; and most strikingly illustrated the capacity of the American people for progressive self-government; for conquering and curing the infirmities of social disorder and political corruption, whenever they grow into threatening preponderance. A moral throe, an uprising, a revolution, and behold, without the firing of a gun, or the loss of a life, perhaps, the evil is sloughed off, and its very servants are reformed, and minister henceforth to the good.

Ambition and pride in the things that are respectable and proper are singularly prominent in all this new society of the Pacific States; and men contribute lavishly to build fine school-houses and support churches, whose lives are not especially controlled by the influences that school-houses and churches create. The gamblers give way graciously to the progress towards decency and respectability, and join in outward observance of the Sabbath, help to build churches, and make orderly the street life of the towns. It is very interesting to watch the various stages of this progress upward, from the new mining town of one or two years' life, up to San Francisco and Portland, which are the fullest flower of Pacific civilization. The order and decorum of the streets of these two cities are as perfect as those of Boston;
the San Francisco police system is admirable, and a woman may walk the streets of that city in the evening with less danger of insult and amoyance than in those of many an inland Eastern city even.

Money is lavished, even, on the school-houses, which are the most stately and elegant buildings in town; and the schools themselves have all the "modern improvements," good and bad. There is special life, too, in the churches; the Sabbath is certainly as well observed as in New York; the congregations are large, day and evening; the Sunday-schools even boast of a larger attendance, in proportion to the population, than those of any other city in the country; new church edifices are constantly going up; and, as many Eastern parishes have reason to know, there is an eager secking of the broadest and best pulpit talent to fill them. The demand seems to be for smart, effective orators, as well as holy men; and the churches are not easily pleased. There is naturally a letting-down from some of the strict discipline of the Eastern churches in matters of social life and public amusement. We meet good Presbyterians at the opera and at balls, as we should not do in the Eastern States.

The population of San Francisco is now about one hundred and fifty thousand, which is nearly onethird that of the whole State. Commerce and manufactures are the great interests of the town; and the growth of both is now very rapid. Already the third, San Francisco will speedily rank as the second commercial city of the Republic; about forty ocean steamers go and come in her waters,-to China and

Japan, Mexico, Sandwich Islands, Oregon, British Columbia, and Panama; and over three thousand sailing vessels entered her Bay in 1868. Most of the latter are employed in the coast trade for lumber, coal and grain ; but the importation of merchandise from Europe and the Atlantic States, and the exportation of wheat and wool in return, have employed a large fleet of first-class ships. The foreign imports for 1868 were over fifteen millions of dollars in value; the domestic imports, from the Atlantic States and the coast ports, are not calculable, but those coming in by the steamers from Panama alone amounted in value to fifty millions of dollars; the freight-money paid for all imports amounted for the year to near ten millions of dollars; the merchandise exports for 1868 were of the value of twenty-three millions, of which seventeen millions were of domestic products, the prineipal items being, flour three millions, wheat eight and a hall millions, wool two and a half millions; the exports of bullion (gold and silver) aggregated thirty-six and a half millions, of which nearly seven millions went direct to Asia; the United States Mint at San Francisco coined over seventeen millions of gold and silver in 1868; the duties on imports were eight and a half millions; and the internal revenue paid by San Francisco for the last year was four millions of dollars.

Some other statistics of the business done in San Francisco will be usefur in further illustration of its importance: Ten millions of dollars were disbursed for army expenses in 1868 at that city, as headquarters for all the army operations in the Pacific

States; three millions (or a falling off of one million from 1867) were paid in dividends from gold and silver mining companies, operating mostly on the Comstock lode in Nevada and in the Grass Valley mines of California, but all chiefly owned in San Francisco; banking, gas, water, insurance and similar local corporations paid two millions and a half of dollars in dividends for 1868 ; the northern cad fisheries brought half a million dollars worth of fish into the city last year; there were six thousand seven hundred sales of real estate amounting in all to over twenty-seven millions of dollars, and three thousand mortgages were made representing eleven and a half millions, while two thousand releases of mortgages were executed, representing over five millions of property; the average price of flour during 1868 was $\$ 6.39$ a barrel, of wheat $\$ 2.12$ per hundred pounds; number of hides received at San Francisco during the year, one humdred and six thousand; amount of wool received over fifteen millions of pounds; number of ships sailing with cargoes of wheat, one hundred and ninetytwo, including ninety-seven to Great Britain, fortyseven to Atlantic States, eleven to China and twentytwo to Australia. These figures show the variety as well as present extent of San Francisco's traffic ; but they are only the faint begimnings of its future ; and soon she will have no other rivals in commercial importance than London and New York.

The extent and variety of the manufactures of the city are equally significant and promising. They are already worth thirty millions of dollars a year, or more than the product of all the gold mines of the

State, and equal the value of the wheat crop. Machinery and woolens are the two most conspicuous and perfected branches of the manufacturing business. They already leave no room for importations, except of the very choicest articles. Cars, locomotives, steam-engines, all machinery for mining purposes, everything that the best machine shops of Massachusetts and Pennsylvania can produce, are here made as well and at as fair prices. The woolen business is carried to an even higher degree of perfection ; for all substantial goods, there is nothing better to be had anywhere than those which the San Francisco mills manufacture ; and their blankets are not equalled in any comntry for use, beauty, or durability,-they are, indeed, among the real curiosities of the Coast. Fine jewelry is also extensively manufactured; all the powder needed in the Pacific States is made not far from the city; cotton mills are rumning in the city and its suburbs; and sugar-refining is an important business, the raw material coming from the Sandwich Islands; while furniture, pianos, type, carriages, boots and shoes, brooms, cigars, clothing, glue, soap, candles, cutlery, fire-works, and hose and belting, are among the numerous articles already successfully and extensively made here in the city. Cigar-making is an especially extensive business, no fewer than fifty millions of cigars being made amually. San Francisco leads off for the State and Coast in all these manuficturing operations; but her example as her capital are rapidly extending them on every hand; and vast as must always be California's wealth in commerce, agriculture and minerals, it seems evident that manu-
facturing will speedily take a first rank in the elements of her power and prosperity. The materials are most abundantly at hand; the markets are those of the whole Pacific Coast, from end to end ; and the certainty of the business will be weleome in contrast to the sickening doubts of mining, and the fickleness of a vast system of agriculture, dependent on a climate so tricky as that of California, and on the distant markets of Europe and $\Lambda$ sia, for its reward.

Location, surroundings, climate, facilities, these briefly sketched beginnings, all give certain assurance of a grand future for San Francisco. Never, does it seem, were such elements of sure and rapid growth gathered over mother eity, as now gather about this. What London is to Central and Western Europe, what New York to the Atlimtic States, that certainly San Francisco will be to the Pacific Coast region. Then she is nearer that great store-house of population and wealth, Asia, than either of her rivals. She has a nearer and more various agriculture, also, tham either can boast of. She is the center and seaport of the great mineral-producing region of the continent, of the world. Our East, Europe, $\Lambda$ sia will alike come to her for gold and silver and for wheat. What greater evidence of her advantage and their dependence, than this simple fact. Her population is more likely to treble than to double in ten years; and wonderful as the changes upon these sand-hills in the twenty years since gold was discovered in California, still more complete and revolutionary will those of the next ten years be.

Even now San Francisco will impress all her visitors
deeply in many ways. They will see it is very new; yet they will feel it is very old. Civilization is better organized here in some respects than in any eity out of Paris; some of its streets look as if transplanted from a city of Europe; others are in the first stages of rescue from the babbaric, denert. Asia, Europe and America have here met and embraced each other; yet the strong mark of America is upon and in all; an America, in which the flavor of New England can be tasted aloove all other local elements; an America in which the flexibility, the adaptability, and the allpenctrating, all-stibduing power of its own race, are everywhere and in everything manifest.

## XIX.

## COUNTRY EXCURSIONS IN CALIFORNIA.

Southern California-Los Angelos, etc.-The Country About San Francisco-Oakland. Santa Clara, San Jose, etc.-A Ride Around the Bay-The Old Mission Establishments and their MistoryThe Country in Summer-A Trip to the Geysers-Russian River, Napa and Sonoma Valleys and their Characteristics-" llell on Earth" Indeed-The Fashionable "Baths" of California-A San Francisco Cirl "Takes a Drink"--The Wines of California-Champagne the Mother's Milk of the True Californian-Back to the City.

Far away in the south of California, where the tropical fruits grow so luxuriantly and where the Spanish-Mexican life still holds sway, though rapidly yielding to the tide of American influences, are most interesting regions for the traveler. San Diego, Los Angelos, San Bernadino, and Santa Barbara, and the valleys and hills about, are full of natural beauty and wealth; of immense flocks, of wide vineyards, of orange and lemon groves, of grand wheat and barley fields; and no one can be said to have fully seen California who has not visited them, taken in a sense of their vast capacities, and studied the mingling Spanish and American civilizations there planted. But the general characteristics of climate and scenery are the same as in the more central regions of the State;
intervening are less interesting and still more laggard counties; and few mere summer visitors will care to go so far from San Francisco, until the Railroat, now pushing rapidly down into and through all this Southern Coast section of the State, to meet and bring north the Southern Pacific Railroad as it comes across the Continent, is completed.

That which is most interesting to be seen in California, out of the Sierra Nevadas, lies in the countics around and adjoining San Francisco Bay, north and south. These are the present garden of the State; here the best and the most of its rural populations, its largest and finest vineyards, its most fruitful orchards, its most remunerative wheat fields; here, too, the best of that charmingly close union of hill and valley, of grove and open plain, of mountains crowned and canyons filled with forests, and momitains naked in every part, that so wonderfully characterize the Coast Range region of California.

The long summer drouth and the sharp summer sun had made everything dry, dusty and brown; except the sprawling evergreen oaks, looking in the distance like huge apple-trees, there was absolutely nothing green for the eye to rest upon, outside the vineyards and orchards and irrigated gardens; and unless the wind blows against the traveler's course at this season, he is almost constantly clouded in dust. But taking the always fresh breeze aright, everything is pure and sweet, and an open ride over these hills and through these valleys, within fifty miles of San Francisco, is exquisite, exhilarating pleasure. The dry pure air, clear and sharp and yet softening shapes
and colors with a thin haze that the eye feels but rarely sees, is one element of this satisfaction; while another lies in these bare rounded hills, "so sleek and so dainty, the despair of artists, the inspiration of all observers; green in winter, thousand-blossoming in spring, and in summer and autum golden-browned yet many colored under the soft clear sumshine,"their fasemation is, indeed, wonderful and indeseribable. It seems to be mere beauty and satisfaction of shape.

Directly across the Bay, seven miles from San Franciseo, and comected by hourly steamboats, lies Oakland, the principal suburban town. A great oak grove of fifteen hundred acres was its location, now well covered with pleasant cottage homes for seven thousand people, away from the cold summer breezes of the city. Here are the favorite schools for the young, the embryo but ambitious State University, the asylum for the deaf and dumb and blind, and here the first cotton mill on the Pacific Coast began its work. Ranges of the Coast mountain hills radiate ont from the town, and protect choice orchards and gardens for the city markets.

Below the city, along the Bay, mother string of charming suburban towns, San Mateo, Redwood City, Sinta Claria and San Jose, occupy fertile valleys, and stretch up into forested nooks among the hills that keep off the sea breeze. A ride around the Bay, down one side and up the other, a hundred miles in all, offers most recompensing experiences. Railroads alrealy cover most of the journey, which is better made more leisurely in carriages, however, so as to linger in some of the grand orchards and gardens, that
wealth and taste have developed, observe in detail the rich gifts that agriculture has brought to this commtry, and visit the old Mission churches and homes, and eat figs and peaches and pears and plams from their overgrown gardens of the last century.

There are several of these old Mission establish1ments around Sian Francisco Bay, and many others in Southern California. They were the ontposts of the Spanish and Catholic civilization in Mexico, planted one hundred and more years ago, among the Indians of California. Soldiers and priests carried the banners of the sword and the cross together ; and made short and sharp work of converting a feeble race of savages, who became the simple slaves of their new masters, and wasted away under the influences of a Christianity without compassion and a civilization without conscience. The construction of these quaint old churehes and long capacious dwellings, built slowly up of clay and stones, without wood or nails, was performed by the Indians under the lead of their Spanish taskmasters, while the savages themselves, more wretched than in their original condition, were crowded into miscrable adjacent liuts. The cultivation of the soil, and the varicty of food that resulted, were the only real gifts bestowed upon the natives; such salvation of soul as soldier and priest united to confer could hardly have been a blessing. But the capacities of the country for fruits and grains were thus first developed by these missionary pioneers; their example and their triumph here are all that remain for which the present generation has to thank them, unless it be for beginning the
work of civilizing the Indians out of existence. Modern convents and churches prove the continued presence of the same Catholic elements, but so changed in character that their old and new civilizations would hardly recognize one another. Now they offer the best education that our Puritan emigrants to California can give their children here, and temper the winds of their religion to the shorn lambs of this free and material California life.

The season was over, and nature was at rest in all these valleys; the oaks occasionally made parks in the open plains; or the orelards and gardens presented green, oasis-like spots in the landscape; but for the most part, the ground was yellow with the stubble of the grain, or brown with the dry grass, that is hay ungathered, and rich feed still for cattle and horse. And yet, form and color and sky gave the abundant recompense; and we yielded to the fascinations of a new nature; for, spite of all the reasonings of experience and education, here were beauty and exhilarating life, without rain for many months, without forests, without green grass or bright flowers, without fresh rivers.

A longer and more varied excursion was that into the counties north of San Francisco, through the Petaluma, Santa Rosa, Russian River, Napa and Sonoma Valleys, to see the Geysers, or famous boiling springs, and the vineyards. There is more variety of scenery in this region than directly around the Bay; and it is all thickly-strewn with pleasant, thriving villages, whose prosperity is the out-growth of the soil. We went by steamboat across the northern branches of the

Bay, up Petaluma Creek to Petaluma, and then took horses for the rest of the trip of three days. Largest and most bountiful of these Coast Range valleys, that we visited, was that of Russian River, distinguished for its kindliness to our New England crop of Indian corn, and its toothsome grouse, the bome bouche of the gournand's dimner in town, and grand with wide open fields of grain, as beautiful with frequent oak groves, the hills about guarding the area from the entrance of rough winds, and framing the whole in a picture of imposing beauty.

Sunrise the second morning found us whirling along a rough road over the mountains to the especial object of the excursion. But the drive of the morning was the more remarkable feature. We supposed the Plains and Sierras had exhausted possibilities for us in that respect. But they were both beaten here; and for bold daring and brilliant execution, our driver that morning must take the palm of the world, I verily believe. The distance was twelve miles, up and down steep hills, through enclosed pastures; the vehicle an open wagon, the passengers six, the horses four and gay, and changed once ; and the driver, Mr. Clark T. Foss, our landlord over night and owner of the route. For several miles the road lay along "The Hog's Back," the crest of a mountain that ran away from the point or edge, like the sides of a roof, several thousand feet to the ravines below; so narrow that, pressed down and widened as much as possible, it was rarely over ten or twelve feet wide, and in one place but seven feet; and winding about as the crest of the hill ran; 一
and yet we went over this narrow causeway on the full gallop.

After going up and down several mountains, holding rare views of valleys and ravines and peaks, under the shadows and mists of carly morning, we came to a point overlooking the Geysers. Far below in the valley, we could see the hot steam pouring out of the ground ; and wide was the waste around. The descent was almost perpendicular; the road ran down sixteen hundred feet in the two miles to the hotel, and it had thirty-five sharp turns in its course. "Look at your watch," said Mr. Foss, as he started on the steep decline; crack, crack went the whip over the heads of the leaders, as the sharp corners came in sight, and they plunged with seeming recklessness ahead,-and in nine minutes and a half they were pulled up at the bottom, and we took breath. Going back, the team was an hour and a quarter in the same passage. When we wondered at Mr. Foss for his perilous and rapid driving down such a steep road, he said, "Oh, there's no danger or difficulty in it,-all it needs is to keep your head cool, and the leaders out of the way." But nevertheless I was convinced it not only does require a quick and cool brain, but a ready and strong and experienced hand. The whole morning ride was accomplished in two hours and a quarter; and though everybody predicts a catastrophe from its apparent dangers, Mr. Foss has driven it, after this style, for many years, and never had an accident.

The Geysers are exhausted in a couple of hours. They are certainly a curiosity, a marvel; but there is no element of beauty; there is nothing to be stud-
ied, to grow into or upon you. We had seen something similar, though less extensive, in Nevada; and like a three-legged calf, or the Siamese twins, or any other monstrosity, once seeing is satisfactory for a life-time. They are a sort of grand natural chemical shop in disorder. In a little ravine, branching off from the valley, is their principal theater. The ground is white and yellow and gray, porous and rotten, with long and high heat. The air is also hot and sulphurous to an unpleasant degree. All along the bottom of the ravine and up its sides, the earth seems hollow and full of boiling water. In frequent little cracks and pin holes it finds vent; and out of these it bubbles and emits steam like so many tiny tea-kettles at high tide. In one place the earth yawns wide, and the "Witches' Caldron," several feet in diameter, seethes and spouts a black, inky water, so hot as to boil an egg instantly, and capable of reducing a human body to pulp at short notice. The water is thrown up four to six feet in hight, and the general effect is very devilish indeed. The "Witches' Caldron" is reproduced a dozen times in miniature, -handy little pools for cooking your breakfast and dimer, if they were only in your kitchen or back yard. Farther up you follow a puffing noise, exactly like that of a steamboat in progress, and you come to two fitful volumes of steam struggling out of tiny holes, but mounting high and spreading wide in their force and heat. You grow faint with the heat and smells; your feet seem burning; and the air is loaded with a mixture of salts, sulphur, iron, magnesia, soda, ammonia, all the chemicals and com-
pounds of a doctor's shop. You feel as if the ground might any moment open, and let you down to a genuine hell. You recall the line from Milton, or somebody: "Here is hell,-myself an hell." And, most dreadful of all, you lose all appetite for the breakfast of venison, trout and grouse, that awaits your return to the hotel. So you struggle out of the ravine, every step among tiny volumes of steam, and over bubbling pools of water, and cool and refresh yourself among the trees on the mountain side beyond. Then, not to omit any sight, you go back through two other ravines where the same phenomena are repeater, though less extensively. All around by the hot pools and escape valves are delicate and beautiful little crystals of sulphur, and sorla, and other distinct elements of the combustibles below, taking substance again on the surface.

All this wonder-working is going on day and night, year after year, answering to-day exactly to the descriptions of yesterday and five years ago. Most of the waters are black as ink, and some as thick; others are quite light and transparent; and they are of all degrees of temperature from one hundred and fifty to five hundred. Near by, too, are springs of cool water; some as cold as these are hot, almost. The phenomena carries its own explanation ; the chemist will reproduce for you the same thing, on a small scale, by mixing sulphuric acid and cold water, and the other unkindred elements that have here, in nature's laboratory, chanced to get together. Volcanic action is also most probably connected with some of these demonstrations.

There must be utility in these waters for the cure of rhematism and other blood and skin diseases. The Indians have long used some of the pools in this way, with results that seem like fables. One of the pools has a fame for eyes; and, with chemical examination and scientific application, doubtless large benefits might be reasonably assured among invalids from a resort to these waters. At present there is only a rough little bathing-house, collecting the waters from the ravine, and the visitors to the valley, save for curiosity, are but few. It is a wild, unredeemed spot, all around the Geysers; beautiful with deep forests, a mountain stream, and clear air. Gane, too, abounds; deer and grouse and trout seemed plentier than in any region we have visited. There is a comfortable hotel; but otherwise this valley is uninhabited. The entire region for two miles in length and half a mile in breadth, including all the springs, is owned by one man, who offers it for sale. Who would speculate in a muadane hell?

Back on the route of our morning ride, we soon turned off into the neighboring valley of Napa, celebrated for its agricultural beauty and productiveness, and also for its Calistoga and Warm Springs, charmingly located, the one in the plain and the other close among the mountains, beautifully embowered in vines and forests, and both serving as fashionable summer resorts for the San Franciscans. The water is sulphurous; the bathing delicious, softening the skin to the texture of a babe's; the country every way charming; but we found both establishments, though with capacious head-quarters and numerous
family cottages, almost deserted of people. A rail. roald now co:nects these Springs with Sin Francisco; and their we and popularity will increase and be permament. In the attractions of nature and the appointments of art for the comfort of strangers, they are more like some of those charming country "baths" in Cermany than anything we have in the Eastern States. It was here, at the "Warm Springs," that I saw a "loud" San Francisco belle, young and handsome and beantifully dressed, march up to the open bar and take her "night-cap drink" with some of the first gentlemen of the town.

Past firms and orchards, through parks of evergreen oak that looked as perfect as if the work of art, we stopped at the village of Napa, twin and rival to Petaluma, and from here, crossing another spur of the Coast Range, we entered still another beautiful and fertile valley, that of Sonoma. There we lingered most of a day, among the vineyards, in wine cellars, upon grand estates like those of English noblemen or German princes. But we did not find the wines very inviting; they partook of the general character of the Rhine wines and the Ohio Catawba, but were rougher, harsh and heady,-needing apparently both some improvement in culture and manufacture and time for softening. As doctors are said never to take their own medicines, the true Califormian is slow to drink his own wine. He prefers to import from France, and to export to the East; and probably both kinds are improved by the voyages. More French wines are drank in California, twice over, than by the same population in any part of the East-
ern States. Champarge is mother's milk, indeed, to all these people; they start the day with "a champagne cock-tail," and go to bed with a full bottle of it under their ribs. At all the bar-rooms, it is sold by the glass, the same as any other liquor, and it answers to the general name of "wine" with both drinker and landlord.

From Sonoma, over another hill, to our steamboat of three days before, and by that back in a few hours to the city. These few days seemed long, they had been so rich in novelty and knowledge, in beauty of landscape, in acquaintanceship with the best riches of California. These valleys are, indeed, her argricultural jewels, and should be held as prouder possessions by the State than her gold mines. The small grains, fruits and vegetables are their common, chief productions; and the yields are enormous, while culture and care are comparatively light. No part of California is more readily accessible to the stranger; and none more abundantly repays a visit than this.

But our longest and most recompensing excursion in California was to the Yo Semite Valley and the Big Tree Groves in the Sierra Nevada Mountains; and this invites a special chapter.

## XX.

## the yo semite valley and the big trees.

The Impressions of the Valley-General Description of its FeaturesIts Columns of Rock-Its Waterfalls-How to lronounce Yo Semite -The Journey to the Valley-The Big Tree Grove and the Yo Semite Dedicated to Public Use-June the Season for the ExcursionThe High Sierras above and around the Valley-What they lie-real-'The Coulterville Road and Bowers' Cave-The Big Tree Groves-Interesting Facts about the Trees-The Largest Excursion Party to Valley and Trees.

Tife Yo Semite! As well interpret God in thirtynine articles as portray it to you by word of mouth or pen. As well reproduce castle or cathedral by a stolen frieze, or broken column, as this assemblage of natural wonder and beauty by photograph or painting. The overpowering sense of the sublime, of awful desolation, of transcending marvelousness and unexpectedness, that swept over us, as we reined our horses sharply out of green forests, and stood upon the high jutting rock that overlooked this rolling, upheaving sea of granite mountains, holding far down its rough lap this vale of beauty of meadow and grove and river,--such tide of feeling, such stoppage of ordinary emotions comes at rare intervals in any life. It was the confrontal of God face to face, as in
great danger, in solemn, sudden death. It was Niag. ara, magnified. All that was mortal shrank back, all that was immortal swept to the front and bent down in awe. We sat till the rich elements of beauty came out of the majesty and the desolation, and then, eager to get nearer, pressed tired horses down the steep, rough path into the Valley.

And here we wandered and wondered and worshiped for four days. Under sunshine and shadow; by rich mellow moonlight; by stars opening double wide their eager eyes; through a peculiar August haze, delicate, glowing, creamy, yet hardly perceptible as a distinct element,-the New England Indian summer haze doubly refined,--by morning and evening twilight, across camp fires, up from beds upon the ground through all the watches of the night, have we seen this, the great natural wonder of our western world. Indeed, it is not too much to say that no so limited space in all the known world offers such majestic and impressive beauty. Niagara alone divides honors with it in America. Only the whole of Switzerland can surpass it,-no one scene in all the Alps can match this so vividly before me now in the things that mark the memory and impress all the senses for beauty and for sublimity.

The one distinguishing feature of the Yo Semite is a double wall of perpendicular granite, rising from half a mile to a mile in height, and inclosing a valley not more than half a mile in width on the average, and from six to eight miles in length. It is a fissure, a chasm, rather than a valley, in solid rock mountains; there is not breadth enough in it at many
points for even one of its walls to lie down; and yet it offers all the fertility, all the beauties of a rich valley. There is meadow with thick grass; there are groves of pine and oak, the former exquisite in form and majestic in size, rising often to one hundred and fifty and even two hundred feet in hight; there are thickets of willow and birch, bay trees and dogwood, and various flowering shrubs; primrose and cowslip and golden rod and violet and painted cup, more delicate than Eastern skies can welcome, made gay garden of all the vacant fields in August; the aroma of mint, of pine and fir, of flower, loaded the air; the fern family find a familiar home everywhere; and winding in and out among all flows the Merced River, so pure and transparent that you can hardly tell where the air leaves off and the water begins, rolling rapidly over polished stones or soft sands, or staying in wide, deep pools that invite the bather and the boat, and holding trout only less rich and dainty than the brook trout of New England. The soil, the trees, the shrubs, the grasses and the flowers of this little Valley are much the same in general character and variety as those of the valleys of New England; but they are richer in development and greater in number. They borrow of the mountain fecundity and sweetness; and they are fed by occasional summer rains as those of other California valleys rarely are.

Now imagine,-can you?-rising up, sheer and sharp, on each side of this line of fertile beauty, irregularly-flowing and variously-crowned walls of granite rock, thrice as high as the Connecticut Valley's Mounts Tom and Holyoke, twice as high as

Berkshire's Graylock, and quite as high as New Hampshire's Mount Washington. The color of the rock greatly varies. A grayisl drab or yellow is the dominant shade, warm and soft. In large spots, it whitens out ; and again it is dark and discolored as if by long exposure to rain and snow and wind. Sometimes the light and dark shades are thrown into sharp contrast on a single wall, and you know where the Zebra and Dr. Bellows' church were borrowed from. More varied and exquisite still are the shapes into which the rocks are thrown. The one great conspicuous object of the Valley is a massive, two-sided wall, standing out into and over the meadow, yellowish-gray in color, and rising up into space, unbroken, square, perpendicular, for full threequarters of a mile. It bears in Spanish and Indian the name of the Great Jehovah; and it is easy to believe that it was an object of worship by the barbarians, as it is not difficult for civilization to recognize the Infinite in it, and impossible not to fee? awed and humbled in its presence.
In other places these mountain walls of rock take similar and only less majestic shapes; while as frequently they assume more fintastic and poetical forms. Here and there are grand massive domes, as perfect in shape as Boston's State-house dome, and bigger than the entire of a dozen State-houses. The highest rock of the Valley is a perfect half-dome, split sharp and square in the middle, and rising near a mile or five thousand feet,-as high as Mount Washington is above the level of the sea,-over the little lake which perfectly mirrors its majestic form at its
foot. Perfect pyramids take their places in the wall; then these pyramids come in families, and mount away one after and above the other, as "The Three Brothers." "The Cathedral Rocks" and "The Cathedral Spires" umite the great impressiveness, the beauty and the fantastic forms of the Gothic architecture. From their shape and color alike, it is easy to imagine, in looking upon them, that you are under the ruins of an old Gothic cathedral, to which those of Cologne and Milan are but baby-houses.

The most common form of the rocks is a slightly sloping bare wall, lying in long, dizzy sweeps, sometimes horizontal, sometimes perpendicular, and stretching up and up so high as to cheat the Valley out of hours of sunshine every day. Here huge arehes are carred on the face; there long, narrow shelves run midway, along which and in every available crevice, great pines sprout and grow, yet appearing like shrubs against the broad hight of the wall; again, the rock lies in thick folds, one upon another, like the hide of a rhinoceros; occasional columns stand out as if sculptured upon the surface; sometimes it juts out at the top over the Valley like the brim of a hat; and then it recedes and sharpens to a cone. Many of the various shapes and shades of color in the surface of these massive walls of rock come from the peeling off of great masses of the granite. Frost and ice get into the weak crevices, and blast out huge slices or fragments, that fall in boulders, from the size of a great house down to that of an apple, into the Valley below.

Over the sides of the walls pour streams of water
out of narrower valleys still above, and yet higher and farther away, rise to twelve and thirteen thousand feet the culminating peaks of the Sierra Nevadas, with ever visible fields of melting snows. All forms and shapes and colors of majesty and beauty cluster around this narrow spot; it seems created the home of all that is richest in inspiration for the heroic in life, for poetry, for painting, for imaginative religion.

The Water Falls of the Valley, though a lesser incident in all its attractions, offer much that is marvelous and beautiful. Our August visit was, however, at the season of their feeblest power. It is in May and June, when their fountains are freshest, that they appear at their best, and assume their proper place in the grand panorama of beauty and sublimity. In the main portion of the Valley, the Bridal Veil is the first conspicuous fall,-now a dainty rivulet starting over a precipice nine hundred feet high, but nearly all lost at once in delicate spray that sways and seatters in the light breeze, and fastens upon the wall, as sign of its being and its beauty, the fabled rainbow of promise. The name of this fall is well chosen; it is type of the delicate gauze, floating and illusory, by which brides delight to hide their blushes and give mystery to their charms. Farther up, before the hotel, you see the Yo Semite Fall, perhaps twice the size in volume of the Bridal Veil, but distinguished for its hight,- the greatest hight of any water-fall yet diseovered in the world. It is broken about twothirds the way down its high wall of rock by projecting masses of the mountain, giving it several hundred feet of cataract passage; but counting its
whole fall from top to bottom, it is two thousand six hundred feet in hight, which is only fifteen times as high as Niagara Falls! Now, it was a mere silvery ribbon of spray, shooting down its long passage in delicate rockets of whitened foam. Earlier in the season, when ten times the volume of water pours down, it must, indeed, be a feature of fascinating, wonderful beauty.

The Valley above this point separates into three narrow canyons, and these are soon walled in by the uprising rocks. At the end of one of these, the main branch of the river falls from its upper fountains over two walls, one four hundred feet high and the other six hundred, at points half a mile apart. The lower and lesser fall is called the Vernal, and pours down its whole hight without a break, and forms at the base a most exquisite circular rainbow, one of the rarest phenomenon in all nature. The upper fall bears the name of Nevada, breaks as it comes over its crest into a grand blossom of spray, and strikes, about half way down its six hundred feet, the obtruding wall, which thence offers just sufficient slope to keep the water and carry it in chasing, circling lines of foam to the bottom. This is the fall of falls,-there is no rival to it here in exquisite, various, fascinating beauty; and Switzerland, which abounds in waterfalls of like type, holds none of such peculiar charms. Not a drop of the rich stream of water but is white in its whole passage,-it is one sheet, rather one grand lace-work of spray from beginning to end. As it sweeps down its plane of rock, each drop all distinct, all alive, there is nothing of human art that
you can compare it with but innumerable snow-white point-lace collars and capes; as much more delicate and beautiful and perfect, however, as Nature ever is than Art. For half the distance between the two falls, the river runs swift over a solid plane of granite, clean and smooth as ice, as if Neptune was on a grand sliding-down-hill frolic.

The excursion to this head of the chasm from the stopping-place below is through narrow defiles, over fallen rocks, up the sides of precipices, and over perpendicular walls by ladders, for a total distance of about four miles, and is the most difficult and fatiguing one that confronts the visitor ; but both in the beauty of its water-falls, and the new and rare shapes of rock scenery that it oflers, it is most richly compensating, and never should be omitted.

The name that has attached to this beautiful Valley is both unique and euphonious. It rolls off the tongue most liquidly when you get the mastery of its pronunciation. Most strangers render it Yo Se-mite, or Yo Sem-ite; but the true style is Yo Sem-i-te. It is Indian for Grizzly Bear, and probably was also the name of a noted chief, who reigned over the Indians in this, their favorite retreat, and from this chief comes the application of the name to the locality and its marvelous scenery. The foot of white man never trod its limits,-the eye of white man never looked upon its sublime wonders till 1851, when lie came here in pursuit of the Indians, with whom the settlers were then at war. The red men had boasted that their retreat was secure; that they had one spot which their enemies could never pene-
trate; and here they would gather in and enjoy their spoils ummolested. But to the white man's revenge was now added the stimulus of curiosity; and hither he found his way, and, coming to kill and cxterminate, he has staid, and will forever henceforth stay, to wonder and worship.

The journey from San Francisco to this sublime charm in California scenery is at present long and tedious. The Yo Semite Valley lies about a hundred and fifty miles south-east of the city, in a direct line, far up among the Sierra Nevada Mountains. Stockton, at the foot of the San Joaquin Valley, is the real point of departure for the Valley, and from here the distance varies from a hundred to a hundred and forty miles, according to the route traveled. Stockton is a hundred and twenty miles from San Francisco by water,-an evening and night steamboat ride; but the Pacific Railroad passes through it on the way from Sacramento to San Francisco, and by the cars it is but a three or four hours' ride from either of those places. At present, the best route on from Stockton is the longest, and by way of Mariposa. $\Lambda$ day's stage ride up the San Joaquin Valley,-a broad and - rich area, now greatly given up to wheat-growing, and dry and dusty to suffocating degree in summer, -leaves the traveler at Bear Valley or Mariposa for the night. These are villages on the famous Fremont estate, and offer better accommodations for visitors than the neighboring mines return dividends to their stockholders. Here horses, guides, and, if desired, tents, blankets and food, for continuing the journey, may be procured. The wagon road con-
tinues twenty-five miles beyond Bear Valley, or twelve from Mariposa, to White and Hatch's, which may be reached for dimer the second day from Stockton; and Clark's Ranch, twelve miles farther up among the Mountains, along a narlow but safe trail, up and down steep hills, through grand woods of firs and pines, invites us to supper and rest. Here we shall stop over a day, to visit the Mariposa Grove of Big Trees, some four or five miles off the trail to the Yo Semite. Mr. Clark is the State's agent for the care of the Yo Semite Valley and the Grove, and a genuine child of the great Nature around him; and whether within his wide-spreading cabins, or under his protecting hay-stack, or in our own tent by the side of his grand opeu-air fires, he will care for us as father for children, feed us on trout and venison, and be proud to have us praise his trees, his river and his mountains.

It is twenty-five miles now to the Grand Valley; and taking our lunch along, we shall ride it comfortably in a single day, and find hotel accommodations at night within the Valley. The day's ride takes us as high as eight thousand feet above the sea level, treats us to the finest forest and meadow scenery of the Sierras, and drops us down by a very precipitous trail to the scenes that have invited and will so richly compensate us. The Valley itself is about four thousand feet above the sea level; the mountain walls rising up from it range from two thousand to five thousand feet higher, or from six thousand to uine thousand feet high, while on beyond the crests of the great range add three to five thousand feet to these.

It is not at all necessary that visitors should bring camping and cooking outfits with them; hotels and ranches are scattered along either route with sufficient frequency to give all essential accommodations; but, if they do, they will reap great satisfaction in the independence that follows. With plenty of blankets, a safe, dry and comfortable bed is ever at hand, and the limit of the day's journey is always your own choice. All the distinctive features of the Valley may be seen in three days; indeed, its great beauties lie at once and together before the eye; we nearly see the end from the begiming; and the Valley closes up so sharply, both above and below, that it is easier to get in and out by scaling the walls than by following the stream. But no week in any life could be more memorable than the one that should be spent under the rocks and by the side of the waters of the Yo Semite.

The Valley, together. with the Mariposa Grove of Big Trees on the road to it, were some years since wisely voted by Congress to the State of California, on condition of their preservation for public use. They have been put in charge of a Commission, with a local agent to protect the trees from destruction and the limited lands from misuse; and the purpose of these officers is to improve the access to these great natural attractions, and furnish every facility to visitors for seeing all their interesting features at the least cost of labor, time and money. The idea is a noble one, and, though somewhat obstructed temporarily by the claim of several squatters in the Valley to nearly all its available lands, we cannot doubt it will
in time be fully realized. It is a pity that other great natural objects of interest and points of attraction for travelers in our country could not be similarly res. cued from subjection to speculating purposes, or destruction by settlement. If Niagara Falls, for instance, and a fifty miles square of the Adirondacks in New York, and a similar area of Maine lake and forest, could be thus preserved for public use, what a blessing it would be to all visitors, what an honor to the Nation!

On the whole, June is the best month for this excursion. It is early spring among the mountains, then, and there may be an occasional snow-drift in the path; but nature is at its freshest, and, above all, the water-falls in the valley are then in their fullest force and beauty. Besides those we have mentioned, others at that season trickle in bright beauty over the high rock walls of the Valley; and the Bridal Veil, the Yo Semite, the Vernal and the Nevada are vastly more impressive and beautiful than later in the summer. There is a rapid falling off in the amount of water flowing in these streams after May or June. Clouds are rare visitors to California's sky in any part of the summer; and the deep haze that may be found in many famous paintings of Yo Semite scenery is an addition of the artists, not a gift of nature. In later summer there is a thin, soft haze, hardly perceptible, and only just tempering the clear, sharp sunlight that is the characteristic of California's atmosphere. But the photographs do more exact justice to this than the painters have.

How was this curious freak of Nature formed? is a question that every visitor at least will ask. It is
a puzzle to the imagination, and baffles even the scientific student. Professor Whitney of the State Survey discusses the question elaborately in his admirable volume upon the Yo Semite, the Big Trees and the High Sierras, which, with its maps, should be the companion of every one who visits these regions. He rejects, as impossible, the idea of water having worn it out; or that it was the work of a glacier; or that it was split open by a convulsion of nature ; but concludes, as the only practicable supposition, that the bottom dropped out! There is no other way of accounting for what is gone but that it is sunk below. It is not carried down stream ; it does not remain in the Valley,-there would be no valley if it did; there are but comparatively small deposits of rock in the Valley under the walls,-no more than the waste, by frost and ice and water, of a few generations at the most; and, indeed, there seems no other supposition that meets the mystery than that the missing rocks are swallowed up below. It would appear, too, as if the chasm had not been long filled up to its present point, and that originally, and until within a comparatively recent period, the whole Valley was a grand, deep lake. This is a peculiar theory; it applies but rarely to the strange forms of nature scattered over the earth's surface; but the Yo Semite is a peculiar phenomenon,--it justiffes, it, indeed, demands a peculiar explanation, and no other fits it so reasonably as this.

In connection with this excursion, the visitor to California should, if possible, take another week to mount the High Sierras above and around the Yo

Semite Valley. In their grand majesty and sublimity, they are nowhere else more representative or more easy to reach, than at this point. With guide and camping outfit, there is no hardship to one accustomed to out-door life in the trip; there are well-defined trails to all the desirable points; rich meadows, sparkling streams and beautiful lakes not only lend a sweet variety to the grand mountain rocks, but furnish fine camping-grounds; while abundant trees offer shade for the noon si ssta and fuel for cooking and the cool nights. Few persons have as yet visited this region for pleasure; but the search for mines or for the wild sheep of the mountains has made the paths familiar to many people in the neighborhood; and Professor Whitney's enthusiastic description of the grand views to be obtained, in the circuit, not only into the Valley of the Yo Scmite, but over and along the crest of the Sier ras, - here reaching to twelve and thirteen thonsar $\bar{d}$ foet high;-great masses of rock varying with great fields of snow, relieved with dark and deep lakes, and patches of meadow and forest, furnishing the near, and the distant ranges of the Interior Basin, with their vast desert valleys, the remote landscape,-all will kindle the curiosity of the traveler and lead many to follow out the trails and the suggestions his book lays down.
This upper mountain excursion carries us to the head waters of the streams that pour over the Yo Semite walls; it brings us to the shores of beautiful Lake Tenaya; by a detour of a few miles it will lead us to another Yo Semite Valley on the Tuolumne River, called the Hetch-Hetchy Valley, which but for
its grander rival would have a world-wide fame, and will yet be a favorite resort of Sierra pleasure travel ; it exhibits to us the scene of former glaciers, that must have been eight hundred and a thousand feet thick with ice and snow, and a mile and a half wide; it lifts us to the top of representative peaks as Hoffman and Dana, whence the world seems to start away from our feet,-so central and vast the view; it will lead us, if we choose to branch cff from our circuit, on down the eastern slope of the range to Mono Lake, a large sheet of water, dense, sluggish, bitter, acid and corrosive, forbidding all life within, consuming all life from without,--the bodies of a party of Indians who jumped into these death waters to escape their pursuers being thoroughly decomposed, with all their clothing, in a few weeks,-an outpost warning, indeed, against the Desert and Death's Valley beyond; after which we may return with delight to fresher waters, and stand over the grand Nevada Fall of the Yo Semite, and see the Little Yo Semite, a continuation in miniature of the Valley we have adored; then pass under the shadows of Mount Starr King, one of the grandest of the outlying peaks of the Valley; next come to the top of the Sentinel Dome, whence we get the finest views into and of the Valley, and especially of its highest column, the Half Dome; and now finish our circuit by reaching the main Mariposa trail. This scenery of the Upper Sierras is of a type of its own, as distinctive as that of the Swiss Alps, as that of the Parks and Mountains of Colorado, as that of the Yo Semite itself below; unlike either, but entitled to rank with them all in the first place among
the grand Nature of the world. In the two elements of sublimity and grandeur, it probably surpasses all the others; while it lacks the beauty and variety that give them a tenderer hold upon human sympathy. The Rocky Mountains are vast piles of broken stone; these Upper Sierras are great smooth castellated peaks or rounded domes of solid granite, sometimes unbroken and unscaried almost for thousands of feet, but often made up of vast concentric layers of rock, reaching from a broad base to conical pimnacles, like cathedral spires, and to the eye almost toppling in their dizzy hight.

Entering the Yo Semite region by the Mariposa road, it is best to go back by the Coulterville track. Thus new scenes are spread before the traveler, and all the various beauty and wonder of the California mountains are impressed upon his mind. On the Coulterville road is Bowers' Cave, a great hole in the rock, one hundred and thirty-three feet long, eighty-six wide and one hundred and nine deep, and opening out below into recesses that may be followed for a considerable distance. A large pool of water is at the bottom, and three maple trees starting below send their tops out into the open world above. The bottom of the cave can be reached by steps, and a boat offers a ride upon its subterranean waters.

Included in the Yo Semite excursion, as already indicated, will naturally be a visit to one or more of the Big Tree Groves of California. No other one of the natural curiosities of the Pacific States has become so notorious as these trees. They were dis-
covered in 18.52, and their fame ran rapidly over the world, accompanied with greatly exaggerated statements as to their size and age. The first sight of them is therefore generally disappointing; they are not so big, generally, as has been reported; and they do not seem to be as big as they are. In no case do these mammoth trees make an exclusive forest of their own; but they have been found scattered among the other trees of the mountain forests at some eight different places along the sides of the Sierras, at elerations of from four thousand to seven thousand feet, and within a distance of one hundred and fifty miles south of the center of the State. None have ever been found out of this line; and the only trees to which they bear any close resemblance are the Redwoods of the Coast Mowntains. Both are peculiarly California trees, and one is confined exelusively to the Coast and the other to the Sierra Mountains. They bear the common name of the Serquoia, in honor of the celebrated Cherokee Indian who made an alphabet and a language for his tribe; but the Big Trees proper add the distinguishing title of Gifantea. The Redwood frequently makes up an exclusive forest of its own, and some of its individual trees are fifty feet in circumference and two hundred and seventy-five feet high ; so that it even challenges attention and divides glory with the Gigantea itself. One Redwood stump is reported, indeed, as having a diameter of thirtyeight feet, and, having been burnt out, it held thirtythree pack mules at one time, which is as large a story as can be told of any one of the Big Trees proper.

The Calaveras Grove of Big Trees is the most northerly of the series, was the first discovered, and by itself is the most res iny visited. But the Mariposa Grove or collection is the one selected by Congress and the State for public use, and, lying near the favorite road to the Yo Semite Valley, is likely to prove the most popular hereafter. Besides, it is the most numerous, and some of its trees are larger than any in the Calaveras collection. The hight of the larger trees in both groves ranges from two hundred and thirty to three hundred and twenty-five feet, and the circumference of their trunks from thirty to one hundred feet. The Mariposa Grove, located, as noted, only four or five miles from Clark's Ranch, hollds about six hundred trees, one hundred and twenty-five of which are over forty feet in circumference each, and several from ninety to one hundred feet each. "The Grizzly Giant" is one of the largest and most notable, though far from being so comely as many others; it is ninety-three feet in circumference, and at ninety feet above the ground sends out a branch which is six feet in diameter, or as large as the biggest trees known in any of the Eastern forests.

But these mammoth trees are quite as impressive for their beauty as their bigness. The bark is an exquisitely light and delicate cinnamon color, fluted up and down the long, straight, slowly-tapering trunk, like Corinthian columns in architecture ; the top, resting like a cap upon a high, bare mast, is a perfect cone; and the evergreen leaves wear a bright, light shade by which the tree can be distinguished fiom afar in the forest. The wood is a deep, rich red in
color, and otherwise marks the similarity of the Big Trees to the Redwoods of the Coast, but it is of even finer grain than the flesh of their lesser kindred; and both that and the bark, the latter sometimes as much as twenty inches thick, are so light and delicate, that the winds and snows of the wirter make frequent wrecks of the tops and upper branches. Many of the largest of these trees are, therefore, shorn of their beautiful cones. One or two of the largest in the grove we visited are wholly blown down, and we rode on horseback through the trunk of an old one that had been burned out. Many more of the noblest specimens are scarred by fires that have been wantonly built about their trunks, or swept through the forests by accident. The trunk of one huge tree is burned into half a dozen little apartments, making capital provision for a game of hide and seek by children, or for dividing up a pienic of older growths into sentimental couples.

Wild calculations have been made of the ages of the larger of these trees; but one of the oldest in the Calaveras Grove being cut down and the rings of its wood counted, its age proved to be thirteen hundred years; and probably none now upon the ground date back farther than the Christian Era. They began with our Modern Civilization; they were just sprouting when the Star of Bethlehem rose and stood for a sign of its origin; they have been ripening in beauty and power through these Nineteen Centuries; and they stand forth now, a type of the Majesty and Grace of Him with whose life they are coeval. Certainly they are chief among the natural curiosities
and marvels of Western America, of the known world; and though not to be compared, in the impressions they make and the emotions they arouse, to the great rock scenery of the Yo Semite, which inevitably carries the spectator up to the Infinite Creator and Father of all, they do stand for all that has been claimed for them in wonderful greatness and majestic beauty.

Our excursion to the Valley and the Trees was made with one of the largest parties of ladies and gentlemen that ever visited them in company. We exhausted all the horses of the kingdom of Fremont, and created famine in our path. Lodgings were abundant, however, for whom house and tent did not hold, the wide expanse of heaven safely covered, and the hay-stack warmed. The out-door beds, indeed, came to be at a premium; for in the dry, pure air of this region, there is not only no harm, but actual health in sleeping upon the ground either under tents or wholly in the open air. The mountain pastures,-scattered meadows rich at this season with a vernal green,-furnish mutton sweeter and richer than even English breeders or butchers can give you; the forests yielded their deer, and the rivers their trout to our appetites; the Valley has its one vegetable garden,-so that, however our immediate successors fared, we had no complaint to make of the commissary department.

## XXI.

## THE CIIINESE.

The Human Nature Curiosity of California-The Sixty Thousand Chinese-Their Character, IIabits and Occupations-The Pacific Railroad built by Them-How they are treated by the People-The Indran and the Chinaman-The Limitations of the Chinese MindStony Soil for Missionary Labor-The True Elements of Lufluence over Them-The Bath-Ilouse and the Restaurant the Real Missionaries of Civilization and Christianity-The Morals, Religion and Vices of the Chinese-Picture of an Opium-Eater-A Grand Chinese Banquet to Mr. Colfax-A Specimen of "Pigeon English"-Description of the Dinner and how we Ate it,-and then went out to get Something to Eat-Summing up of the Chinaman in America.

But Human Nature, too, has its curiosities in California. The presence of the Chinese in such large numbers in all the Pacific States, but especially in California, and the share they have taken already in the industry and growth of the country, will be a surprise to most strangers. They are freely seattered everywhere west of the Rocky Mountains and Utah; every considerable town has its Chinese quarter; they fairly line the Pacific Railroad; they swarm in the old mining gulches of the mountains; and in every village of California, Oregon, Idaho, Nevada, and even of British Columbia, we shall find them in more or less of the kitchens, or gardening in the out-


Two Chinese Merchants, San Francisco.


Indian Girl, Oregun.


Indian Chief, Oregon.
skirts, or "taking in" washing and ironing, which, by a sort of prescription, has fallen almost exclusively into their hands in all the Pacific Coast States. They began to come in 1852, when there was an immigration of about twenty thousand; in all, over one hundred thousand have emigrated to Califomia, but full forty thousand have returned, and the present number in all the States is about sixty thousand. They do not come to stay or become citizens, but simply to make their fortunes and go back home and enjoy them. Neither their families nor their priests follow them; they show no desire to domesticate themselves here; they dread nothing more than to die and be buried here, and nearly every China-bound steamer or ship carries back home the bodies of Chinamen, overtaken, as death overtakes us all, in the struggles of their labor and ambition.

There are a few men of great intelligence and wealth and ability among them. These are of larger stature and finer presence than the rest, who, although not the poorest and most debased classes of the Chimese, —not the Coolies proper,-are yet of a low type, mentally and physically, and show little capacity for improvement. Most of them can read and write, but all their education lies in a simple, harrow range, and here, as in their work, they all show a certain sure and uniform attaimment, beyond which it seems impossible for them to go. They can beat a raw Irishman in a hundred ways; but while he is constantly improving and advancing, they stand still in the old ruts. It is this power as well as disposition for illimitable growth, that distinguishes the

European races in contrast with the Asiatic, who seem to have been cast in an iron mould ages old. The superior men of the Chinese have somewhat the same limitation, though their type is broader and higher than the rest. They are mostly merchants, supplying their countrymen, and also dealing heavily in teas and silks with the Americans and Europeans here. They are generally men of personal and business honor, with aristocratic manners and impressive presence, and are much respected by the American citizens. Grouped around these as leaders or managers are gathered all the Chinese on the Coast. They are divided into six different companies, representing the different sections or localities in China from which they came; each company has head-quarters in San Francisco, to which all its followers resort for assistance and protection; and the managers send out for new immigrants, or return those who wish to go back to their homes, and engage to transmit the bodies of those who die for burial in China. They act, indeed, as jobbers in Chinese labor, and guardians of the interests of their countrymen in America.
The occupations of these people are various. There is hardly anything in the way of manual labor that they camnot turn their hands to,-the work of women as well as men. They do the washing and ironing for the whole population; and sprinkle the clothes as they iron them, by squirting water over them in a fine spiay from their mouths. Everywhere, in village and town, you see rude signs informing you that See Hop, or Ah Thing, or Sam Sing, or Wee Lung, or Cum Sing, wash and iron; How Tie is a doctor, and

Hop Chang and Chi Lung keep stores. They are good house servants; cooks, table-waiters, and nurses; better, on the whole, than Irish girls, and as cheap,fifteen to twenty-five dollars a month and board. One element of their usefulness as cooks is their genius for imitation; show them once low to do a thing, and their education is perfected; no repetition of the lesson is needed. But they seem to be more in use as house servants in the country than the city; they do not share the passion of the Irish girls for herding together, and appear to be content to be alone in a house, in a neighborhood, or a town.

Good farm hands are the Chinese, also; in the simpler and routine mechanic arts they have proven adepts; in fact, there is hardly any branch of plain labor in which, under proper tuition, they do not or cannot succeed most admirably. The great success of the woolen manufacture here is due to the admirable adaptation and comparative cheapness of Chinese labor for the details. They are quick to learn, quiet, cleanly and faithful, and have no "off days," no sprees to get over. As factory operatives they receive twenty and twenty-five dollars a month, and board themselves, though quarters are provided for them on the mill grounds. Fish, vegetables, rice and pork are the main food, which is prepared and eaten with such economy that they live for about one-third what Yankee laborers can. Four or five hundred of the Chinamen are employed in the San Francisco woolen mills; there are two thousand of them making cigars in the same city; and seven hundred and fifty are enrolled washermen. Indeed, they are participating
in all the various big and little manufactures that are so rapidly springing up in San Francisco; and their cheap and reliable labor lies at the bottom of the diversified manufacturing wealth of Califormia.

Many are vegetable gardeners, too. In this even climate and with this productive soil, their painstaking culture, much hoeing and constant watering, make little ground very fruitful, and they gather in three, four and five crops a year. Their garden patches, in the neighloorhood of cities and villages, are always distinguishable from the rougher and more carclessly cultured grounds of their Saxon rivals. But the greater number, as many as thirty thousand it is estimated, are gleaners in the gold fields of the interior. They follow in crowds after the white miners, working and washing over their deserted or neglected sands, and thriving on results that their predecessors would despise. A Chinese gold washer is content with one to two dollars a day; while the white man starves or moves on disgusted with twice that. A very considerable portion of the present gold production of California must now be the work of Chinese painstaking and moderate ambition. The traveler meets these Chinese miners everywhere on his road through the State; at work in the deserted ditches, or moving from one to another, on foot with their packs, or often in the stage, sharing the seats and paying the price of their aristocratic Saxon rivals.

But for the Chinese, too, the Pacific Railroad must have been delayed some years, and cost a third more money. Substantially, the grading of the whole road,
through California and Nevada, was done by them; and as many as twelve thousand were employed upon the work at once during the last year. Their wages were about one dollar a day and board, which was half the cost of ordinary white labor. This is the usual proportion between the wages of the Chinese and other laborers; and though the former are not so strong as the Americans and Europeans, lack the force and flexibility of the latter, and fail in executive or superintending duties, yet they are so deft in details, so patient and plodding in their industry, so reliable and prompt always, that their work is, on the whole, worth about as much as that of the whites with whom they compete.

Labor, cheap labor, being the one great palpable need of the Pacific States,-far more, indeed, than capital the want and necessity of their prosperity,we should all say that these Chinese would be welcomed on every hand, their emigration encouraged, and themselves protected by law. Instead of which, we see them the victims of all sorts of prejudice and injustice. Ever since they began to come here, even now, it is a disputed question with the public, whether they should not be forbidden our shores. They do not ask or wish for citizenship; they show no ambition to become voters; but they are even denied protection in persons and property by the law. Their testimony is inadmissible against the white man; and, as miners, they have long been subject to a tax of four dollars a month, or nearly fifty dollars a year, each, for the benefit of the County and State treasuries. Thus ostracised and burdened by the State, they, of
course, have been the victims of much meanness and cruelty from individuals. To abuse and cheat a Chinaman; to rob him; to kick and cuff him ; even to kill him, have been things not only done with impunity by mean and wicked men, but even with vain glory. Terrible are some of the cases of robbery and wanton maiming and murder reported from the mining districts. Had "John,"-here and in China alike the English and Americans nickname every Chinaman "John,"-a grood claim, original or improved, he was ordered to " move on,"-it belonged to somebody else. Had he hoarded a pile, he was ordered to disgorge; and, if he resisted, he was killed. Worse crimes even are known against them ; they have been wantonly assaulted and shot down or stabbed by bad men, as sportsmen would surprise and shoot their game in the woods. There was no risk in such barbarity ; if "John" survived to tell the tale, the law would not hear him or believe him. Nobody was so low, so miserable, that he did not despise the Chinaman, and could not outrage him. Ross Browne has an illustration of the status of poor "John," that is quite to the point. A vagabond Indian comes upon a solitary Chinaman, working over the sands of a deserted gulch for gold. "Dish is my land,"-says he, _-"you pay me fifty dollar." The poor Celestial turns, deprecatingly, saying: "Melican man (American) been here, and took all,-no bit left." Indian, irate and fierce,-_" D__ Melican man,-you pay me fifty dollar, or I killee you."

There is now a steadily growing improvement in public opinion on this question, however. It is less
popular to curse and persecute the Chinese than it was; and the benefits conferred by their labor are more and more realized and confessed. In some branches of work they mquestionably come in competition with white labor, both male and female, and tend to degrade its character and cheapen its price; but it is so clear that, except for them, many interests, now prosperous, never could have been developed; much wealth, now secure, never could have been harvested; many public improvements, now complete or in progress, would hardly be thought of, except as unattainable, that their value and their necessity stand vindicated and acknowledged. The clamor against them is mainly based upon the prejudices and jealousy of ignorant white laborers, - the Irish particularly-who regard the Chinese as rivals in their field, and clothes itself in the plausible conceit about this being a "white man's country," and no place for Africans or Asiatics. But without regarding fealty to our national democratic principle of welcoming hither the people of every country and clime, the white man of America needs the negro and the Chinaman quite as much as they need him; the pocket appeal will override the prejudices of his soul,-and we shall do a sort of rough justice to both classes, because it will pay.

There is no ready assimilation of the Chinese with our habits and modes of thought and action. Their simple, narrow, though not dull minds, have run too long in the old grooves to be easily turned off. They look down even with contempt upon our newer and rougher civilization, regarding us barbaric in fact, and
calling us in their hearts, if not in speech, "the foreign devils." And our conduct towards them has inevitably intensified these feelings,-it has driven them back upon their naturally self-contained natures and habits. So they bring here and retain all their home ways of living and dressing, their old associations and religion. Their streets and quarters in town and city are China reproduced, unalleviated. Missionaries have found it hard, slow work to make progress among them with our education and our religion. But latterly an entering wedge has been made with Sunday schools and evening schools for teaching the English language. The latter appeal especially to a necessity of their success among us, and several hundreds are now gathered in attendance upon these schools. It is also proposed to found in San Francisco a high school or college for thoroughly educating such of the Chinese as wish, in our language and science.

But as laborers in our manufactories and as servants in our houses, besides their constant contact with our life and industry otherwise, these emigrants from the East cannot fail to get enlargement of ideas, freedom and novelty of action, and familiarity with and then preference for our higher civilization. Slowly and hardly, but still surely this work must go on; and their constant going back and forth between here and China must also transplant new elements of thought and action into the home circles. Thus it is that we may hope and expect to reach this great people with the influences of our better and higher life. It is through modification and rev-
olution in materialities, in manner of living, in manner of doing, that we shall pave the way for our thought and our religion. Our missionaries to the Five Points have learned to attack first with soap and water and clean clothes. The Chinese that come here are unconsciously besieged with better food and more of it than they have at home. The bath-house and the restaurant are the avant couriers of Christian civilization.

The morals and the religion of these Chinese are as much an anomaly to the American mind as the singular contrast of their mental attainment and mental limitation. Their literature overflows with a sentimental moralism. The "be good and you will be happy" philosophy they know by heart. The wisdom of Confucius is on all their lips. But they are mean and nasty in their vices; cunning, revengeful and wicked in their differences with each other. Assassination is not uncommon among them. Leaving their wives at home, they import Chinese prostitutes, like merchandise, and fight among each other for the possession of them. In many cases these base women are taken as a sort of temporary wives, and children are reared by them. But as a rule there are no Chinese homes here. They live in close quarters, not coarsely filthy like ignorant and besotted Irish, but bearing a savor of inherent and refined uncleanliness that is almost more disgusting. Their whole civilization impresses me as a low, disciplined, perfected, sensuous sensualism. Everything in their life and their habits seems cut and dried like their food. There is no sign of that abandonment to an emotion,
to a passion, good or bad, that marks the western races. Their great vice is gambling; that is going on constantly in their houses and shops; and commercial women and barbaric music minister to its indulgence. Cheap lotteries are a common form of this passion. Opium-smoking ranks next; and this is believed to be indulged in more extensively among them here than at home, since there is less restraint from relatives and authorities, and the means of procuring the article are greater. The wildly brilliant eye, the thin, haggard face, and the broken nervous system, betray the victim to opium-smoking; and all tense, all excited, staring in eye and expression, he was almost a frightful object, as we peered in through the smoke of his half-lighted little room, and saw him lying on his mat in the midst of his fatal enjoyment.

The Chinese have no Sunday; they are ready to work seven days in the week, if it is desired, and they are paid for it. Their religion is the Buddhistic idolatry of India; and on their holidays, or occasions of death or departure of friends, they worship, in a cheap, sentimental way, various graven images in their little "Josh" Houses, that are, in style and ornament, an exaggeration of the ruder chapels among an ignorant Romish peasantry. These "Josh" Houses are not numerous, but seem to be run on commercial principles for whoever can own or control them. There are no public gatherings in them,-no forms of public worship,-only individual offerings of gifts to the gods,-or their owners,-with the burning of candles, and similar childish rites. The whole matter of the Chinese religion seems very negative and in-
conclusive; and apparently it has very little hold upon them. There is no fanaticism in it,-no appreciable degree of earnestness about it.

The impressions these people make upon the American mind, after close observation of their habits, are very mixed and contradictory. They unite to many of the attainments and knowledge of the highest civilization, in some of which they are models for ourselves, many of the incidents and most of the ignorance of a simple barbarism. It may yet prove that we have as much to learn from them as they from us. Certainly here in this great field, this western half of our Continental Nation, their diversified labor is a blessing and a necessity. It is all, perhaps more even, than the Irish and the Africans have been and are to our Eastern wealth and progress. At the first, at least, they have greater adaptability and perfection than either of these classes of laborers, to whom we are so intimately and sometimes painfully accustomed.

The managers of the six Chinese companies and the leading Chinese merchants of San Francisco all hold friendly relations with the leading citizens and public men of California. Occasionally, when distinguished people are visiting here, they extend to them the courtesy of a grand Chinese dinner. Such honor was proffered to Mr. Colfax and his companions. The preliminary formalities were stately and exten-sive,-they would have sufficed for a banquet of the royal sovereigns of Europe, or the pacification of the ambitions and jealousies of the first families of Virginia; but when these were finally adjusted, questions of precedence among the Chinese settled, and a
proper choice made among the many Americans who were eager to be bidden to the feast, all went as smooth as a town school examination that the teacher has been drilling for a month previous.

The party numbered from fifty to sixty, half Chinese, half white citizens. The dinner was given in the second story of a Chinese restaurant, in a leading street of the city. Our hosts were fine-looking men, with impressive manners. While their race generally seem not more than two-thirds the size of our American men, these were nearly if not quite as tall and stout as their guests. Their eyes and their faces beamed with intelligence; they were quick to perceive everything, and alert and au fait in all courtesies and politeness. An interpreter was present for the heavy talking; but most of our Chinese entertainers spoke a little English, and we got on well enough so far as that was concerned; though hand-shaking and bowing and scraping and a general flexibility of countenance, bodies and limbs had a very large share of the conversation to perform. Neither here nor in China is it common for the English and Americans to learn the Chinese language. The Chinese can and do more readily acquire ours, sufficiently at least for all business intercourse. Their broken or "pigeon" English, as it is called, is often very grotesque, and always very simple. Here is a specimen,- a "pigeonEnglish" rendering of "My name is Norval," etc.:-

My namee being Norval topside that Glampian Hillee, My father you sabee my father, makee pay ehow-chow he sheep, He smallo heartee man, too muehee take eare that dolla, gallo? So fashion he wantchee keep my, counta one piece chilo stope he own side,

My no wantchee long that largee mandoli, go knockee alla man;
Littee torn Joss pay my what thing my father no like pay
That mourn last nightee get up loune, alla same my hat,
No go full up, no got square; that plenty piece
That lobbie man, too muchee quisi, alla sane that tiger,
Chop-chop come down that hillee, catchie that sheej, long that cow,
That man, custom take care, too muchie quick lun away.
My one piecie owne spee eye, look see that ladlone man what side he walkee,
Hi-yab! No good chancie, findie he, lun catchie my flew:
Toc piecie loon choon lun catchie that lobbie man! he
No can walkee welly quick, he pocket too much full up.
So fashion knockee he largee.
He head man no got shutte far
My knockie he head, Hi-yah! my No. 1 strong man,
Catchie he jacket, long he toousa, galo! You likee look see?
My no likee takee care that sheep, so fashion my hear you got fightee this side.
My takee one servant, come your country, come helpie you,
He heart all same cow, too muchie fear lun away.
Masquie, Joss take care pay my come your house.
We were scated for the dinner about little round tables, six to nine at each table, and hosts and guests evenly distributed. There was a profusion of elegant China ware on each table; every guest had two or three plates and saucers, all delicate and small. Choice sauces, pickles, sweetmeats and nuts were also plentifully scattered about. Each guest had a saucer of flowers, a China spoon or bowl with a handle, and a pair of chop-sticks, little round and smooth ivory sticks about six inches long. Chi Sing-Tong, President of the San Yup Company, presided at Mr. Colfax's table.

Now the meal began. It consisted of three different courses, or dinners rather, between which was a
recess of half an hour, when we retired to an anteroom, smoked and talked, and listened to the simple rough, balbaric music of a coarse guitar, viol drum and violin, and meanwhile the tables were reset and new food provided.

Each course or dinner comprised a dozen to twenty different dishes, served generally one at a time, though sometimes two were brought on at once. There were no joints, nothing to be carved. Every article of food was brought on in quart bowls, in a sort of hash form. We dove into it with our chop-sticks, which, well handled, took up about a mouthful, and, transferring this to our plates, worked the chop.sticks again to get it or parts of it to our mouths. No one seemed to take more than a single taste or mouthful of each dish; so that, even if one relished the food, it would need something like a hundred different dishes to satisfy an ordinary appetite. Some of us took very readily to the chop-sticks; others did not,-perhaps were glad they could not; and for these a Yankee fork was provided, and our Chinese neighbors at the table were also prompt to offer their own chop-sticks to place a bit of each dish upon our plates. But as these same chop-sticks were also used to convey food into the mouths of the Chinese, the service did not always add to the relish of the food.

These were the principal dishes served for the first course, and in the order named: Fried shark's fins and grated ham, stewed pigeon with bamboo soup, fish sinews with ham, stewed chicken with water-cress, sea-weed, stewed ducks and bamboo soup, sponge cake, omelet cake, flower cake and banana fritters,
bird-nest soup, tea. The meats seemed all alike; they had been dried or preserved in some way; were cut up into mouthfuls, and depended for all savoriness upon their accompaniments. The sea-weed, shark's fins and the like had a glutinous sort of taste; not repulsive, nor very seductive. The sweets were very delicate, but like everything else had a positively artificial flavor; every article, indeed, seemed to have had its original and real taste and strength dried or cooked out of it, and a common Chinese flavor put into it. The bird-nest soup looked and tasted somewhat as a very delicate vermicelli soup does. The tea was delicious,-it was served without milk or sugar, did not need any such amelioration, and was very refreshing. Evidently it was made from the most delicate leaves or flowers of the tea plant, and had escaped all vulgar steeping or boiling.

During the first recess, the presidents of the com-panies,-the chief entertainers,-took their leave, and the prominent Chinese merchants assumed the post of leading hosts; such being the fashion of the people. The second dinner opened with cold tea, and a white, rose-scented liquor, very strong, and served in tiny cups, and went on with lichens and a funguslike moss, more shark's fins, stewed chestnuts and chickens, Chinese oysters, yellow and resurrected from the dried stage, more fungus stewed, a stew of flour and white nuts, stewed mutton, roast ducks, rice soup, rice and ducks' eggs and pickled cucumbers, ham and chicken soup. Between the second and third parts, there was an exchange of complimentary speeches by the head Chinaman and Mr. Colfax, at
which the interpreter had to officiate. The third and last course consisted of a great variety of fresh fruits; and the unique entertainment ended about eleven o'clock, after a sitting of full five hours. The American resident guests furnished champagne and claret, and our Chinese hosts, invariably at the entrance and departure of each dish, invited us, with a gracious bow, to a sip of the former, in which they all faithfully and with evident relish joined themselves.

The dinner was unquestionably a most magnificent one after the Chinese standard ; the dishes were many of them rare and expensive; and everything was served in elegance and taste. It was a curious and interesting experience, and one of the rarest of the many courtesies extended to Mr. Colfax on this coast. But as to any real gastronomic satisfaction to be derived from it, I certainly "did not see it." Governor Bross's fidelity to the great principle of " when you are among the Romans to do as the Romans do," led him to take the meal seriatim, and eat of everything; but my own personal experience is perhaps the best commentary to be made upon the meal, as a meal. I went to the table weak and hungry; but I found the one universal odor and flavor soon destroyed all appetite; and I fell back resignedly on a constitutional incapacity to use the chopsticks, and was sitting with a grim politeness through dimer number two, when there came an angel in disguise to my relief. The urbane chief of police of the city appeared and touched my shoulder: "There. is a gentleman at the door who wishes to see you, and would have you bring your hat and coat." There
were visions of violated City ordinances and "assisting" at the police court next morning. I thought, too, what a polite way this man has of arresting a stranger to the city. But, bowing my excuses to my pig-tail neighbor, I went joyfully to the unknown tribunal. A friend, a leading banker, who had sat opposite to me during the evening, and had been called out a few moments before, welcomed me at the street door with: "B——, I knew you were suffering, and were hungry,-let us go and get something to eat,-a good square meal!" So we crossed to an American restaurant; the lost appetite came back; and muttonchops, squabs, fried potatoes and a bottle of champagne soon restored us. My friend insisted that the second course of the Chinese dinner was only the first warmed over, and that that was the object of the recess. However that might be,--this is how I went to the grand Chinese dinner, and went out, when it was two-thirds over, and "got something to eat."

Every visitor to San Francisco will be piqued with the presence of these Orientals and the problems they suggest. He will be tempted to peep into their quarters, attend one of their theaters, look in at the brazen altars and idols of their "Josh" Houses, -certainly be seduced into their attractive stores, where genuine Chinese silks and Chinese wares are set out by first hands, and sold by Chinese grandees for the highest prices they will fetch. He will see that, though our American and European laborers quarrel with and abuse these strange people; though the law gives them no rights, but that of suffering punishment;
though they bring no fanilies, and seek no citizenship; though all the Chinese women here are not only commercial, but expressly imported as such; though they are mean and contemptible in their vices as in their manners; though they are despised and kicked about on every hand; still they come and thrive, slowly improve their physical and moral and mental conditions, and supply this country with the greatest necessity for its growth and prosperity,cheap labor. What we shall do with them is not quite clear yet; how they are to rank, socially, civilly and politically, among us is one of the nuts for our social science students to crack,-if they can; but now that we have depopulated Ireland, and Germany is holding on to its own, and so the old sources of our labor supply are drying up, all America needs them, and, obeying the great natural law of demand and supply, Asia seems almost certain to pour upon and over us countless thousands of her superfluous, cheapkeeping, slow-changing, unassimilating, but very useful laborers. And we shall welcome, and then quarrel over and with them, as we have done with their Irish predecessors. Our vast grain, cotton and fruit fields; our extending system of public works; our multiplying system of manufactures, all need and can employ them. But must they vote ; and if so, to what effect?


## XXII.

## MINING IN CALIFORNIA.

California the Child of Gold-Her Total Production and Present Yield
-The Mineral Belt of the State -The Different Processes of Mining
-The Dead Rivers, the Deep Diggings and Hydraulic Mining-The Quartz Mines and Mills - The Fremont Fizzle in Mariposa-The Increasing Reliability of Mining as a Business-The Providence in the Gold and Silver Discoveries-Their Mission Nearly OverDecrease in the Production of the Precious Metals in America and the World-Valuable Statistics on the Subject-The Other Mineral Wealth of California.

Califorma is the child of gold, and, though only twenty years old, has outgrown her parentage, and depends more upon agriculture, commerce and manufactures than upon mining for her prosperity. Yet in these twenty years, she has added eight hundred millions of dollars in gold to the world's wealth, and is still producing every year about twenty-five millions. No other State or Territory yet produces so much yearly as California still does; and though mining is now her third or fourth interest, she is, and is likely long to be, not only from her past but by her present and continuing production, the leading and representative mining State of the Nation. Her greatest yield of gold was in 1853, when the production ran up to sixty
millions of dollars, since which time $i_{0}$ has been gradually falling to twenty-five millions a year, where it seems to be stationary. Her gold-bearing territory lies along the whole western slope of the Sierra Nevada Mountains; but it is richest in the central counties. The maps of five years ago show this section crowded with the names of mining villages, while all the rest of the State seemed bare of settlements; but now half of these are wholly deserted, and the others, with few exceptions, are in a decaying condition, with many houses and stores unoccupied, and often with only a small proportion of their old populations. Many of those who remain in them have turned their attention to other pursuits; and though the population of the twelve principal mining counties shows a falling off of from one himdred and forty thousand to one humdred and thirteen thousand only since 1860, it is fair to state that no more than half as many people are now engaged in mining in California as in 1860.

The great mineral belt of California bears no silver; it is on the opposite slopes of the Mountains, in Nevada, that the silver ore predominates; and though it is more than twenty years since the first discoveries were made, still the greater portion of California's production is obtained from the sand and gravel washings rather than the quartz rock deposits. The latter is of course the original and natural condition of the precious metals. But so grandly has Nature worked in California in reducing the gold-bearing rock to powder, and leaving the gold particles free in the beds of rivers, dead and alive, under the eaves
of the mountains, that there seems to be more wealth of mineral lying in this form than in the original rock. Washing with water is the universal means of getting at these deposits of the gold. But the scale on which this work is done, and the instrumentalities of application vary, from the simple handpan and pick and shovel of the individual and original miner, operating along the banks of a little stream, to grand combination enterprises for changing the entire course of a river, rumning shafts down hundreds of feet to get into the beds of long-ago streams, and bringing water through ditches and flumes and great pipes for ten or twenty miles, wherewith to wash down a hill-side of golden gravel, and get at its precious particles. The simple individual pan-washers have mostly " moved on" for the richer surface sands of Idaho and Montana; what of this sort of gold seeking remains in California is in the hands of patient and plodding "John Chinaman," who works over the neglected sands of his predecessors, and is content to reap as harvest a dollar's worth a day.

But all the forms of gold-washing run into each other, and companies of two or three, sometimes of Chinamen, with capitals of hundreds of dollars, buy a sluice claim or seize a deserted bed, and with shovel and pick and small stream of water, run the sands over and over through the sluice-ways, and at end of day, or week, or month, gather up the deposits of gold on the bottoms and at the ends of their sluices. From this, operations ascend to a magnitude involving humdreds of thousands of dollars, and employing hundreds
of men as partners or day laborers for the managers. Sometimes, too, the enterprise is divided, and companies are organized that furnish the water alone, and sell it out to the miners or washers according to their wants. The raising of auriferous sands and gravel from the deeply covered beds of old streams, by running shafts down and tunnels out into and through such beds, and then washing them over, is called "Deep Diggings," or "Bed-rock Diggings," and in their pursuit the bottoms of ancient rivers will be followed through the country for mile after mile, and many feet below the present surface of the earth. The miners in this fashion go down till they reach the bedrock, along which the water originally ran, and here they find the richest deposits. These dead rivers are not dry, open beds, be it understood, but huge strata of sand, gravel and quartz, filling up what were once river channels, and lying now from a hundred to a thousand feet beneath the foot-hills of the mountains. They lie parallel with the mountains and diagronally to the rivers now coming out of the mountains; they were sponged up and filled up by the upheaval of the mountains; and their place was made known by the modern streams cutting down through them, revealing on the walls of the canyons the peculiar goldbearing materials that now occupy their beds. Out of these dead rivers, three hundred millions of gold have been taken, and they still yield eight millions a year.

Kindred with the work upon these deep diggings is what is known as Hydraulic Mining, in which powerful streams of water are brought to bear on
great masses or hills of soil above the supposed gold deposits, with such force as to tear them down and wash them away with a rapidity that shames shovels and wheelbarrows. The water is brought long distances from mountain lakes or rivers, through ditches and flumes, sometimes supported by trestle-work fifty to one hundred feet high, to near the theater of operations. Then it is let from flumes into large and stout iron pipes, which grow gradually smaller and smaller; out of these it is passed into hose, like that of a fire engine, and through this it is fired with a terrible force into the bank or bed of earth, which is speedily torn down, and washed, with resistless, separating power, into narrow beds or sluices in the lower valleys, and as it goes along these, hindered and seduced at various points, the more solid gold particles deposit themselves. Usually, in large operations of this kind, the main stream of water is divided in the final discharging hose into two or more streams, which spout out into the hill-side as if from several fire engines, only with immensely more force. One of the streams would instantly kill man or animal that should get before it, and frequent serious and even fatal accidents occur from this cause. Near Dutch Flat, where extensive hydraulic mining is in progress, a water company taps lakes twelve to twenty miles off in the mountains, and turns whole rivers into its ditches; and as further illustration of its majestic operations, we learned that it spent eighty thousand dollars in one year in building a new ditch, and yet made and divided one hundred and twenty thousand dollars in additional profits that same year. Up near

Yreka, in northern California, a ditch thirty miles long, and costing two hundred thousand dollars, was constructed for this business ; but in this instance the enterprise did not prove profitable.

The extent of the operations of this description may be inferred from the fact, that there are in the State over six thousand miles of artificial ditches for carrying water to the gold-washings, which cost over fifteen millions of dollars. Some of the investments of this sort have paid grand profits; others have been ruinous failures. But increased certainty is being secured to this form of gold seeking; new and extensive enterprises in it are added every year; and it bids fair to long continue as the most productive phase of mining in the State. The returns obtained in some cases of extensive deep diggings and hydraulic mining are very great. A thousand dollars a day are often washed out by a company holding rich soil and employing a large force; and "runs of several weeks" averaging fifty dollars and one hundred dollars a day, to the hand, are frequently recorded. A single "cleaning up," after a few weeks' washing in a rich place, has produced fifty thousand dollars in gold dust and nuggets; and in other cases, even one hundred thousand dollars are reported.

Of course all these enterprises create a wide waste in their path. Tornado, flood, earthquake and volcano combined could hardly make greater havoc, spread wider ruin and wreck, than are to be seen everywhere in the track of the larger gold-washing operations. None of the interior streams of California, though naturally pure as crystal, escape the
change to a thick yellow mud, from this cause, early in their progress out of the hills. The Sacramento is worse than the Missouri. Many of the streams are turned out of their original channels, either directly for mining purposes, or in consequence of the great masses of soil and gravel that come down from the gold-washings above. Thousands of acres of fine land along their banks are ruined forever by the deposits of this character. There are no rights which mining respects in California. It is the one supreme interest. A farmer may have his whole estate turned to a barren waste by a flood of sand and gravel from some hydraulic mining up stream; more, if a fine orchard or garden stands in the way of the working of a rich gulch or bank, orchard and garden must go. Then the torn-down, dug-out, washed to pieces and then washed over side-hills, that have been or are being subjected to the hydraulics of the miners, are the very devil's chaos, indeed. The country is full of them among the mining districts of the Sierra Nevada foot-hills, and they are truly a terrible blot upon the face of nature. The valley of the Yuba, a branch of the Sacramento, was one of the worst illustrations our journeying has presented; and when we came to the sign over the "grocery" of a now deserted mining camp, indicating that this was "Yuba Dam," we thought of the famous anecdote connected with this name, from its repetition, without the benefit of spelling, to an inquiring colporteur, and were fain to confess that the profane compound fairly represented the spirit of the lawless miner.

The quartz mines are mostly in the same neighbor26
hoods with present or past gold-washings; in the hills back and above the rich stream beds and gravel banks. Theirs is the universal and familiar process of all rock mining, following the rich veins into the bowels of the earth with pick and powder, crushing the rock, and seducing the infinitesimal atoms of metal from the dusty, powdered mass. The gold in the California quartz is generally free from sulphurets or pyrites, and is worked in the simplest manner. It is also nearly uniform in its value, where valuable enough to pay for working; that of the best and most profitable mines yielding from twelve to seventeen dollars a ton. But ore yickling only eight and ten dollars a ton can often be profitably worked. Ore worth over fifty dollars a ton is very rare, and is found only in small quantities. There are now over four hundred quartz mills in existence in the State, using five thousand stamps, and costing about six millions of dollars. Many of these,-how large a proportion it is impossible to say, but probably a great majority,are idle part or all the time; and the total annual production of the quartz-mining of the State is not more than a third of the whole gold product, or say seven millions a year. It is increasing in amount, however, and in certainty.

The most successful quartz-mining is in Amador and Nevada Counties ; and the Grass Valley district in the latter is peculiarly and persistently prosperous in this form of mining. It is almost the only mining locality in the State that has continued steadily to grow in wealth and population. Mariposa County is a sad ruin in comparison. Here is the famous

Fremont property. Its mines have rarely paid a profit, and now only two or three of them are being worked. The population is decreasing ; the few inhabitants that remain are only held together by a combination of hope and despair, and the slow introduction of agricultural operations; and much more money has been made on Mariposa stock and bonds in Wall Street than from Mariposa gold in California. Indeed, the only great capacity there ever seemed to be in the property here was in carrying an immense, a magnificent indebtedness. The illustration of the whole lies best, perhaps, in the sincere boast attributed to its most gallant but never thrifty original owner. "Why," said General Fremont, "when I came to California I was worth nothing, and now I owe two millions of dollars!" Yet there are certainly several of the mines, on this estate, that, if worked by private parties whose living depended upon success, would return a reliable and reasonable profit.

There is an increasing permanency and reliability in the business of gold and silver mining in America, more especially in California. It is being reduced to a level with other industries; and though the degree of order and certainty, that belongs to agriculture and commerce and manufactures, can never attach to mining, it is forced to come into competition with them, and so to submit to the same general laws. One result is, that, though there are fewer occasional rich returns, there are less fearful losses; and the demoralizing influences of the business upon society are growing weaker and weaker.

The grand mission of the gold and silver discoveries
in all parts of this Western half of our Republic is realized in their settlement and civilization. No other passion than that excited by the presence of the precious metals could have done this work so speedily and completely. But the possession secure, the States organized, their share in the work declines, and other interests come in to sober the people, and lead them on to a higher civilization and a surer prosperity. The hand of a grand Design, of a wonderful Providence may thus be seen in all the history of gold and silver mining on this Continent. The most remote and forbidding parts of our national domain are now under occupation and development through its leader: ship; and as fast as other interests come in, and each State becomes able to stand and grow without its stim. ulus, that element falls away and becomes secondary.

The gold and silver production of America is now slowly decreasing. The falling off in California from sixty millions of dollars in 1553 to twenty-five millions in 1866-7 and $S$, has been made up by Nevada, Idaho, Colorado and Montana; and the production of the whole country was probably at its maximum in 1866 or 1867 , when the total yearly yield was about seventy-five millions of dollars. But since, there has been a certain and general decrease. The amount of gold and silver centering at San Francisco in 1868 was not far from fifty millions of dollars; made up in round numbers of twenty-five millions from California, seventeen from Nevada, two millions from Oregon and Washington, four millions from Idaho, and one million each from British Columbia and Arizona. Montana yielded perhaps eight millions, and Colorado two,-
these going East to market,-and making a grand aggregate of sixty millions, which, though perhaps not distributed with exactness in the above statement, undoubtedly fully covers the whole production of the year. The White Pine discoveries in Nevada will probably no more than compensate for the falling off in the production of other sections of the same State; and there is more probability that the gold and silver product of the United States will fall back to fifty millions than that it will rise again above sixty millions. Yet at no time before was the business so uniformly profit able as now; there are fewer " grand strikes," but, on the contrary, much fewer terrible losses and wastes of labor and capital; and henceforth there is reason to believe that the mining for the precious metals in America will pay a direct profit, which few students of the subject have been bold enough to claim for it heretofore.

The same fact of decrease in the yield of gold and silver, that we thus perceive in America, is evidently true of other parts of the world. Australia, the great rival of California, has fallen off in the same proportion, or from sixty millions of dollars in gold in 1853 to thirty millions in 1867. The total production of gold and silver in the world was in 1853 nearly two hundred millions of dollars; but in 1867 it was reduced to one handred and eighty millions, and probably fell below one hundred and seventy-five millions in 1868. As the first rich gleanings of the surface deposits are exhausted, the production rapidly falls off; and the gold and silver era of 1848 to 1868 ,-in which three and a half billions of dollars' worth were
added to the world's stock of the precious metals,will probably never be repeated again. The dependence of the production upon quartz-mining and such similarly systematic and expensive processes as are involved in the hydraulic mining of California, inevitably takes away the more abnormal elements from the business, and brings it into fair competition with the other avocations of man, and so necessarily limits the yield to the great laws of comparative supply and demand.

California is rich in many minerals besides gold; but copper and quicksilver are the only others that she has produced to an exporting extent. Of these, she has exported an annual average of a million of dollars' worth each for the last five years; but the copper business is now depressed, and its export for 1868 was but a quarter of a million of dollars, while the value of the quicksilver exported in that year was a million and a quarter. The New Almaden quicksilver mine of California has no rival in richness and extent in the world but the old Almaden mine of Spain; and together they control the quicksilver markets everywhere. Deposits of coal, lead and iron are found in various parts of the State, but not of sufficiently good quality or large quantity to supply the home wants as yet. Better coal is found on the Northern Coast; but a large part of the supply for the steamships and for manufacturing purposes is brought around Cape Horn from the Atlantic States in sailing vessels. The State has gone through her petroleum fever; at one time she thought herself supremely rich in deposits of oil ; but hardly in a single
case has the boring for the luscious liquid been attended with profitable results. Few States are so richly endowed with mineral wealth as California; by it she was wakened into being; but scarcely another State in the Nation is more independent of it now for her future growth and prosperity.

## XXIII.

## FARMING IN CALIFORNIA.

The Romance of California's Agriculture - Its History and its Present Condition-The Wheat Production-The Vineyards and the Wine-Mulberry Trees and Silk-The Vegetables and Fruit-The Culture of Oranges-The Nuts and Dried Fruits-The Cheapness of Production - The Strange Facts of Climate and Culture in Cali-fornia-Six Months of Seed-time and Six Months of HarvestNo Manure and No Turf in California - The Yield of Grain per Acre-The Wheat and its Flour-No Irrigation Required-The Moisture in the Soil-Land and its Price-The Need of Small Farms and Diversified Culture-The Growth of the Agricultural Counties-Advice to Emigrant Farmers.

Tiere is the same element of romance in the history and character of the agriculture of California, that is scen in all else relating to her growth. The old Spanish missionaries proved the adaptability of her soil both to fruits and grains; and thirty and forty years ago the Russian and English settlements in the North sent to them for their surplus wheat. The Mexican ranchero or herdsman followed the missionaries, and great droves of wild horses and cattle roamed over the Southern hills and valleys. Hides and beef fat became the staples of Califormia commerce ; and up to 1849, these were the only ob-
jects of attraction for American or European vessels. In that year the gold discoveries brought a new and strange population and broke up the habits of the old. The former could not believe that, with such a rainless, parching summer, agriculture was at all practicable; while the lesser latter, who knew better, were swept into the eager liunt for gold; so that for years California was fed on flour from New York. In 1852, flour sold for $\$ 50$ a barrel at wholesale in San Francisco, while among the mining camps its cost was alnost fabulous, and a famine was threatened. Such prices and the disappointments of mining drove attentior back to the soil; and by 1855, wheat-growing and grinding had become a considerable business, and by 1858 , the production had exceeded the home demand.

From that time on, California has been an exporter of wleat; but not until 1866 did the business assume such proportions as to impress the grain markets of the world, and fairly revolutionize the industry of Califoria. Then with a great crop came heavy demands from England; high prices and large profits resulted; and with true California vehemence the people mished into wheat raising. The year 1867 yielded : still larger crop, and the Eastern States were added to Europe as customers. The fever thus fed spreat wider; there was a great speculation in agriculural lands; the area of cultivation was immensely enlarged; a third favorable season was passed, and 1868 realized the largest wheat crop ever harvesed in Califormia, and she became one of the first the if not the very first wheat-growing State in the Union. Look at the revolution: in

1848 the State raised nothing ; in 1858 just enough for her own population ; in 1864, a year of winter drouth, she had to send to Chili for supplies; and in 1868, she had the largest surplus of any State in the Republic! The wheat crop of 1866 was fourteen miilions of bushels, that of 1867 the same, and that of 1868 at least fifteen millions and probably seventeen. With three continuous years of such crops, and improved harvests in Europe and the East in 1868, the supply exceeded the demand, prices fell away, and California carried over into 1869 a balance of wheat equal to her own wants for a full year, and is accepting the lesson that diversification in agriculture is as necessary to permanent profit as in any other pursuit.

But though she has made wheat-growing her one great interest for two or three years, her other agricultural products are almost startling in rapidiy of development and degree of attainment. The erop of barley, which is the staple feed for horses and cattle, for 1868 was between eight and nine nillions of bushels; that of oats between two and three millions; while the wool crop, which was less than half a million of pounds in 1865, and four millionsin 1866, was in 1S68 over fifteen millions of pouds; and potatoes yielded a million and a half of buslels ; butter over five millions of pounds; cheese ver three millions; and hops over half a million. Tie receipts of agricultural produce at San Francisco during 1868 amounted in value to near forty million of dohars; and the total value of the agricultural products of the State for that year is not unreasonably estimated at sixty millions of dollars, or twice and a ialf the value
of the products of the mines. Of these, over twenty millions' worth were exported, and the rest consumed or stored up at home. The chief items of the agricultural exports were, wheat and flour about twelve millions of dollars' worth, and wool two and a half millions of dollars' worth.

After the grains and wool, in the agricultural wealth of California, come the vineyards. There is scarcely a limit to the possible production of the grape in the State. Her valleys and her foot-hills are alike favorable to its growth. The volcanic soil of the lower hills of the Sierra Nevadas is proving, indeed, the most congenial home of the vine, and there, rather than in the Coast Valleys, which have heretofore been the chief fields of its culture, is destined to be its greatest triumphs. The grape was introduced by the old missionaries, and in their choice locations it grew and flourished most luxuriantly. A notable vine in the southern part of the State is fifteen inches thick, and bore in one year six thousand five hundred pounds of grapes. Until within a very few years there has been no other variety than that domesticated by the missionaries and known as the Mission grape. Nearly thirty millions of vines of this variety are now in bearing condition in the whole State; they are capable of yielding fifteen millions of gallons of wine, and one million of gallons of brandy a year; but the wine production of 1868 was not over seven millions of gallons, though this was twice the yield of 1866. Nost of this is still held in the State, the export of wine for 1868 not exceeding a quarter of a million of dollars in value.

The counties of Santa Clara, Sonoma and Napa near San Francisco, and of Los Angelos in the southern part of the State are at present the most forward in this business; but it is rapidly extending in all quarters, and more especially and promisingly in the districts under the Sierra Nevada Mountains. The vine and the mulberry are apparently destined to take the place of the mines in these districts, and stay their decay in wealth and population. The Mission grape varies in quality with the soil and culture; but everywhere it is strong and hearty, both as a vine and a fruit, and rich in all wine-making qualities. At first the wines were crude and coarse and heady; and they still lack the delicacy of the best European wines; but age and increased skill in the manufacture are exhibiting great improvements; and the California wines are early destined to a high and wide popularity. They already are distinguished for a high fruity flavor, a rich saccharine body, and a purity that the ease of culture and manufacture is likely to protect. New and better varieties of grape are rapilly coming into cultivation, and the admixture of these with the native, and the tempering of the virulence of the strong, fresh soil by use, will both fast contribute to the improvement of the wines and brandies of the State. The Catawba and the Isabella, the Muscat, Black Prince, White Malaga, Black Hamburg and Rose of Peru are already grown very extensively, and though the choicer of these varieties are thus far largely absorbed for cating, they will all speedily be so productive as to be used for wine-making. This last year (1868), these foreign varieties were sold for
wine-making in considerable quantities at two to three dollars per hundred pounds, or about double the price paid for the Mission grape. Grape-growing and winemaking are becoming two separate interests; the growers of the grapes selling the fruit by the pound or the juice by the gallon to the manufacturers, who have, in some cases, large and expensive establish. ments and machinery for the treatment of the product. Hock or white still wine, port, angelica, a sweet reddish wine, and champagne are the principal kinds of wine so far made; but sherries and clarets are being successfully introduced. At first hands, the white wine sells for twenty-five cents a gallon, the red wine for thirty to thirty-five, and port and angelica at sixty cents.

Another interest, already firmly planted and rapidly extending, is that of silk-growing. Five millions of mulberry trees are now growing to furnish the food for the worms; the climate is favorable alike to tree and worm ; and the production of silk cocoons, of which twenty-five thousand dollars' worth were sent to market in 186S, is certain to move as rapidly forward as wheat and wool-growing and wine-producing have done, and become a prominent element in the agricultural wealth of the State.

The capacity of the State for fruits and vegetables of every variety has already been alluded to. Green garden food is in perpetual, inexhaustible supply; potatoes can be dug from the ground ten months in the year; beans and peas are green in the market from March to January; cabbages, lettuce, beets, celery, cauliflowers, artichokes, spinach, turnips, car-
rots, and parsnips, all stand green in the garden the year round; strawberries and tomatoes are ripening through eight months in the open air. All these reach their fullest perfection and grow to enormons size with the stimulus of a strong soil. We read of cabbages of seventy-five pounds, onions of four, turnips of twenty-six, and watermelons of eighty. As large a section of the State as all Massachusetts is favorable to orange culture; and Los Angelos County has ten thousand trees in bearing condition, and one hundred thousand more coming forward; while there are many protected points in the central counties where the fruit can be successfully grown. The orange of Southern California is also of the finest quality; it begins to ripen in December, is in its prime in January, and lingers in market till April. The profit of its culture is generous; it requires ten years to bring an orange grove into bearing; but then a single tree will return fifty dollars a year, and an acre of trees three thousand dollars. The lime and the lemon ripen where the orange does; the olive flourishes still farther north; the fig grows in all the valleys of the State, producing two crops a year in the south, and one in the center and north; the date palm, the pomegranate, the almond, and the walnut, all flourish and ripen their fruit in the southern and central counties; the pine-apple and banama are alone of all the leading tropical fruits limited and uncertain; while forty varieties of grapes are already grown successfully in California, that would not live in the Eastern States north of the Carolinas; and peaches, plums, pears, apples, cherries and apri-
cots, all the fruits of the temperate zone, find congenial homes and perfect development in the valleys and on the hill-sides of the central and northern counties. The dried fruits, cured by sharp sunshine and dry air, hold in rich supply the juices of their ripeness, and furnish a sauce far surpassing all ordinary dried fruits in acceptance to the palate and gratefulness to the stomach.

But the great security of California's agricultural wealth lies not alone in the richness of her soil nor in the wonderful variety of her productions. The cheapness with which her crops can be grown is the more pregnant and assuring fact. With labor from twentyfive to fifty per cent. dearer than in the Eastern States, she yet offers food of nearly every variety as cheap if not cheaper than it is sold for in the East, and harvests $\boldsymbol{x}$ more generous profit on its production. San Francisco sells flour to-day at half the prices of New York, and with a profit at every stage of its manufacture. California would like no better assurance of wealth than to raise wheat and grapes at two cents a pound year by year, or beef at half New England prices. Yet this is the country that Eastern emigrants in 1849-50 cursed for its barrenness, while they ate flour from Michigan and Indiana, by way of New York and Cape Horn, at twenty-five and fifty cents a pound. But how such fruitfulness can be, when for six months of every year no rain falls, and no dew drops, and the dusty valleys and the parched hill-sides testify to the death of nature, is still a mystery to everybody who has not wintered and summered in California, and yet the occasion of wonder to all not born and reared on the
soil. That here, where all the laws of nature, as we have been accustomed to learn and see them, are violated, nature should be more bountiful than any where else, mocks our intelligence, and almost makes us feel as if Providence had insulted us.

Let us consider some of the salient facts of the climate and cultivation of California. There are but two seasons in the year; in the mountains, winter and summer; in the plains and valleys, spring and summer. With the rains of November, spring and seed-time commence with the farmer. Then the grasses green, and the fruits and flowers prepare to bud. As soon as the ground gets fairly wet, by December generally, the farmer begins to plow and plant; and this work he can keep up till April. May and June perfect his crops, and from then till October is harvest time. He is not limited to thirty days for his planting, nor to another thirty for his harvesting. The season waits on his leisure, and invites him to an unlimited area of culture. Full half the days of his winter or spring are bright and pleasant, and the rest are showery rather than rainy; all the days of his summer are fair and dry. From May to November, he need not lose a day for himself or his laborers. He may cut his grain in June, and not gather it till September or October. No barns are needed for his harvests; the kindly sky, the dry air protect them till they are sent to market. The thrashing, the winnowing, the packing for shipping are all done upon the ground. Nor do his animals require cover; they need no kindlier protection than nature grants; even his laborers sleep sweetly and safely upon the field through the long, dry summer.

A single ploughing and planting secures two crops of grain. The waste of the first crop is abundant seed for the second, and this "volunteer" yield is only twenty or twenty-five per cent. less than the original, and it costs nothing save the gathering. The ploughing is shallow, only four to six inches deep; for the farmers say deeper ploughing evaporates the moisture of the land. But the soil is light and open when the crops are growing, and only gets baked and hard when the long dry summer has spent its hot suns upon it. Then it must wait for rain before the plough can move through it. There is no manuring yet, except from the burning of the straw upon the ground. Stable manure does not rot, but dries up, and its goodness evaporates, so that something else must take its place to keep up the fertility of the soil in California. But if manure thus spoils, meat does not, and the farmer can cut and come again from the same quarter of beef in midsummer for a month. Most of the harvesting is done by machinery; "reapers" or "headers" sweep over the wide grain fields; more or less directly their gatherings are brought to a huge threshing-machine, run by steam or horse-power, which, amid terrible dust and din, separates grain and chaff, when the former is sacked and piled up on the ground to await sale and transportation to market.

There is no turf in California; the long summer kills the grass at the roots; oats and barley, cut green and cured in May or June, answer for hay; but wild oats, bunch grass, and other wild and nutritious grasses and grains start up freshly under the rains, are converted into standing hay and grain by the
summer sun, and afford luxurious and abundant food for the vast herds of cattle, horses and sheep on the mountain ranges, and in the unsubdued valleys. Their only time of trial is in November, when the rains beat down their old feed, and have not started the new. Never but once did they fail to sustain themselves in their open roamings. The year 1864 was distinguished by a winter's drouth, and of course this left the summer barren of their food. The results were terrible; thousands of animals perished from starvation and thirst; it is estimated that half the native herds of the State were thus lost; and the business of herding has not yet recovered from this blast.

The soil of the State is everywhere more or less volcanic. It is permeated with alkaline elements. The air, too, is rich in ammonia. These are the secrets of the great crops, and the slow deterioration of the soil under continued cultivation. Barley is the surest and cheapest crop ; it yields on the average forty bushels to the acre, but special cases of one hundred and even of one hundred and twenty bushels to the acre are recorded. Oats are not much less sure or bountiful. The average wheat yield is twenty bushels to the acre; but it is not uncommon to see sixty and seventy bushels produced to the acre, and wellproved instances of a yield of eighty-four bushels are reported. But, under careless culture and continued cropping without rest or the replenishing of the soil, the production is decreasing per acre, and the quality of the grain is degenerating. The wheat is ordinarily of a high grade ; it bears a hard shell, a white, pure,
rich kernel, very dry, and requires more moisture in the manufacture into bread than our eastern wheats. With the proper treatment, California flour takes the first rank in all the markets of the world. Rye is almost unknown, and buckwheat is rarely cultivated in California; and Indian corn is generally unremunerative; the cool nights and want of moisture in the summer are very unfavorable to its perfection.

It has taken some years to teach California cultivators how independent they really are of irrigation. They resort to it less and less every year. By following the suggestions of nature, and ploughing and planting amid the early rain, every crop will get such strength and perfection before the suminer drouth, that it is independent of any more moisture. So it is with trees and vines; they obtain such a hold in the winter or spring months, as to require no farther help than nature has granted to perfect their fruit. If fresh flowers and grass and vegetables are desired through the long summer, then irrigation is required. But this answers to eastern culture under glass. Nature is fully up to man's reasonable wants in California, and will rarely or never cheat him, provided he only follows her teachings. Then the soil is wonderfully retentive of moisture; the roots of trees and vines seem to riot all the summer in depths of unseen moisture below; and by a curious provision, that seems like a miracle, when the six months of drouth are half over, and the trying time seems to have come, then, in August and September, the hidden secretions rise up anew to the surface, the ground and the plants seem to have been rained on from below, and dried
up springs begin to show freshmess and even dead chamels of winter streams trickle with a new and mexpected life. Orehards and vineyards were at first thought to be only safe and profitable in the lower and moister valleys; but now they are seen to thrive best and to produce a higher quality of fruit as they are planted high up among the foot-hills of the mountains.

Though there has been a rapid increase in the amount of land cultivated in California during the last few years, not over two millions of acres, out of a total of sixty-five millions adapted to agriculture, are yet improved. There has been a vast amount of land bought up by speculators, however, within two years; and the larger part of the twelve millions of acres of valley land in the great Sacramento Basin are now taken out of the first hands of the government. All the lands of the Coast Valleys around the waters of San Francisco Bay have been in even greater demand, and are held at high prices. Here are the great farms of the rich men of San Franciseo. It is here that the chief of the wealth that the last three years have drawn from the soil of Califormia has been garnered. Much of these lands neighboring to the City and the Bay are held at from one hundred to five hundred dollars an acre. But there is plenty of good land to be had in more remote but still accessible parts of California for from two to ten dollars an acre. The speculators cannot hold on to what they have hastened to gobble up; and millions of acres still remain to be pre-empted from the government.

What California agriculture now needs is diversi.
fied farming. She has overdone vast vineyards and sea-like wheat-fields for the present. She may well glory in single vineyards of a million vines, and wheatfields of a thousand acres, producing fifty thousand bushels of grain at a single harvest; but she now requires more small farms and small farmers, making homes of comfort and luxury upon the land, introducing variety in its culture, and thus improving the gifts of both climate and soil by multiplying the products of the State. There is scarcely anything, that is food for man, which these do not offer to her; and to develop and secure all, to make her own people independent of other markets, and to minister to the wants and tastes of as many other nations as they can reach with their surplus,-this is the rare opportunity and this the selfish duty of California. Even her wide swamp wastes, along her great rivers, known as the tule lands, from the coarse reed that covers them, have the capacity for redemption to cotton and rice culture. Asia is learning to eat her wheat, and will welcome her surplus rice; while the entire Pacific Coast, north and south, cannot escape the economy and necessity of living upon her surplus.

The organization and development of the agricultural wealth of California is, in fact, almost as wonderful a phase in her history as was her gold-mining; and close upon these now treads a manufacturing era, that promises to be as rapid in progress, as far-reaching in effects, as either of its preceding industries has proven. The twelve principal agricultural counties of the State have grown in population from seventy-nine thousand in 1860 to one hundred and forty-five thou-
sand in 1868, and in property valuation from thirty-four millions of dollars to fifty millions; but San Francisco, which represents her commerce and manufactures, exhibits a development twice as great, twice as rapid.

The "Overland Monthly Magazine" of San Francisco, from whose pages we have supplemented our own observations with many facts on these questions, says there is now no room in California for clerks and merchants, but for farmers, soil, climate and markets are all inviting. And we conclude this chapter with a quotation from its pages:-
"Farmers who have means to buy a house and maintain themselves one year have a sure thing if they will enter into more varied culture than only wheat. The garden and orchard go far to supply the table the whole year in this elimate, if you have water for the farmer. Every place has grapes. These pay, if you can make and hold your wine, and they have a sure future, not far off. Mulberry trees grow like weeds. There are five nillions now growing. You can get them one year old. In two years these will feed silk-worms. Any quantity of reeled silk is salahle. All your family can work at this; and two crops of cocoons are certain. There is no such country for silk, in quantity and quality. Flax, castor bean, hops, tobacco and many such things might be mentioned. Wood planting in this treeless country would pay largely. and ten jears give growth that other climates and soils would not give in twenty years; for all winter long the growth keeps on with little interruption. The dairy farm pays at once and handsomely. We still import butter and cheese. Farm hands and miners would find steady work at large wages in gold. Miners get three dollars a day. In conclusion, Califoruia is especially recommended to persons whose health demands a genial atmosphere. Drink no spirits; but domestic wine in moderation. Eat sparingly of meat, take your coffee weak, and avoid speculative excitements. Then, if you bring a liver not entircly leathered and lungs not over balf consumed, and choose from a rariously distributed climate the locality best adapted to your complaint, you may live yet long in the land."

## XXIV.

## OREGON - WASHINGTON - BRITISH COLUMBIA.

Overland to the North-The Surprises of Oregon, Washington and Puget's Sound-A Week's Ride in a "Mud Wagon"-Up Through the Sacramento Valley-Chico and General Bidwell, Red Bluffs and the John Browns-The Mingling Mountains and New Valleys - Shasta, Yreka and Jacksouville - Mount Shasta and Pilot KnobThe Forests in Whole and in Detail-Joe Lane and Jesse Apple-gate-The Willamette Valley, the Garden of Oregon-Its Beauty, Fertility and Settlements - The Rains of Oregon-The Web Feet -Portland-The New England of the Pacific-Through Washington Territory to Puget's Sound-"Shookem Chuck " and OlympiaThe Forests of Washington-The "Square Meal" Feature of Pacific Coast Civilization-The Lumber Wealth and Water and Forest Beauty of Puget's Sound - Victoria and Vancouver's Island-New Westminster and British Columbia-British Taxation and Rebellious Subjects-Decrease of Population and Wealth - A Good Time at Victoria-John Bull and Brother Jonathan Fraternize Over Food and Drink-The San Juan Dispute - The Hudson Bay Company's Depots-The Snow Mountains and the Summer Gardens of Victoria-Contrasts there and with the East.

Between our California excursions, we made an overland tour through Oregon and Washington and into the British Provinces of the North. Its revelations of beautiful scenery, of natural wealth, of material development were more unexpected than those of California. For the latter we were in a measure prepared; but the former had somehow been hidden
from us. The audacity both of California nature and of California life had thrust her fully before the public, and shaded the quality and the growth of her less sensational but scarcely less interesting neighbors. So we had the always delicious element of mexpectedness in the scenes and experiences of our northern tour. But there was some rebellious flesh among us, when we were told that to see Oregon we must take another week of day and night stage riding; much of it over rough mountain roads, and in a "mud wagon" at that. We thought to have been through with that sort of travel. Yet no week's riding gave us greater or richer variety of experience; more beauty of landscape; more revelation of knowledge; more pleasure and less pain, than this one up through Northern California and Middle Oreson, between the Coast Mountains and the Sierra Nevadas.

It is six hundred and fifty miles from Sacramento in mid California due north to Portland in mid Oregon. The beginnings of the Railroad that is to connect them carry us on fifty or sixty miles through Marysville to Oroville. These are the principal, as they are very pleasant and prosperous, towns in the Sacramento Valley, above the capital. But they are even hotter and drier in summer than Sacramento or Stockton. For one humdred miles more, we rode through the broad alluvial fields of the Valley,-sometimes rolling in waves of earth, then flat and wide as flattest and widest of Illinois prairies, often treeless and uncultivated, though never uncultivatable ; and again charming with old oak groves, and fruitful with grain fields and orchards, that yield an increase
unknown in all Atlantic valleys or Mississippi basin bottoms. Chico was one of its first and most attractive settlements; the central feature being the home of General Bidwell, a pioneer of California life, and now a leading citizen, with a grand estate here of twenty thousand fertile acres, on nine hundred of which he raised so long ago as in 1863 thirty-six thousand bushels of wheat. His garden and orchard occupy one hundred acres alone. When we stopped and took supper with him, he was a newly elected Congressman and a forlorn bachelor; now he is an ex-Congressman and a happy husband. The fates were certainly propitious to rescue him, unscathed, from such double perils.

On through a like productive country, crossing streams whose banks are lined with an almost tropical growth of trees and vines, along roads bordered with fences and trees, past farms and orchards rich in grains and fruits, we made our first night ride, passing in the gray morning the prosperous little town of Red Bluffs, which is noteworthy as the head of navigation on the Sacramento River,-some three hundred miles from its mouth,-and so a central point of commerce for all Northern California and Southern Oregon, and as the present home of the widow and three daughters of the immortal John Brown. They straggled in here, weary and poor, yom their overland journey, but found most hospitकle greeting from the citizens and have secured a prmanent home. A subscription among the Califenians gave them a nice cottage home; Mrs. Brown ws earning both love and support as a successful
nurse and doctor, particularly for children; and her daughters were teachers in the public schools.

Now the Great Central Basin of California begins to narrow; and soon the Coast Range and Sierra Nevada Mountains, breaking up their lines, meet and mingle. For the remaining two hundred miles of California, and the first two hundred of Oregon, our road winds painfully among and over the hills, and up and down narrow valleys, first of tributaries of the Sacramento, and then of minor though earnest streams,-Trinity, Klamath, Rogue and Umpqua,that steal their way, among the scattered and embracing ranges of the Coast and the Sierra Nevada, west to the Ocean.

Shasta and Yreka are the two remaining villages of importance in California, with perhaps fifteen humdred inhabitants each. Born of rich placer gold diggings in neighboring valleys and gulches, but bereft of half of their former populations by the discovery of more tempting fields elsewhere, and the imherent migratory character of gold seekers, they present the sad array of unoccupied stores and houses, so common to the interior mining towns of California. Their second reactionary stage has since begun, however; a more careful and intelligent working of the gold sands and banks proves them still profitable,in some cases richly so; the Chinese are coming it to work over the neglected courses, satisfied with smaller returns than the whites ; and best of all, ag1culture, hitherto despised, is asserting its legitimee place as the base of all true and steady prosperiy. The valleys, though small, are fiuitful, and manyof
the hill-sides are equally rich for grain and fruit. These hills of Northern California and Southern Oregon seem, indeed, the true home of apple, pear and grape, and are sure to have a large place in the future fruit-growing and wine-making prosperity of the Pacific Coast. A little five years' old orchard, on the hill-sides near Shasta, produced in 1864 three thousand bushels of peaches, one thousand five humdred bushels of apples, and grapes by the ton, for which the owner found market among the miners in the mountains around, and in the villages north and south.

Along here, individual mountains assumed a rare majesty; snow peaks were visible, ten thousand and eleven thousand feet high; and soon, too, Mount Shasta, monarch of the Sierras in Northern California, reared its lofty crown of white, conspicuous among hills of five thousand and six thousand feet, alike for its vast fields of snow, its perfect shape, and its hight of fourteen thousand four hundred feet above the sea level. We saw it from various points and all sides, and everywhere it was truly a King of the Mountains, and is entitled to rank among the first dozen mountain peaks of the world.

Jacksonville was the first conspicuous town in Oregon, and showed obvious first-cousinship to Yreka and Shasta. But its neighboring gold diggings made better report; many of the five hundred men engaged upon them in the county were very prosperous, and all were making good wages; promising quartz mines were also discovered; and we found, everywhere almost in these mountain counties of Northern Cali-
fornia and Southern Oregon, gathering evidences of . much gold yet unwashed or undug, that would still form the basis, with cheaper and more abundant labor and capital, of a large population and a new material growth for this region. The northern county of California (Siskiyou) counted no fewer than two thousand Chinese among its population, and of these, eleven hundred were engraged in gold digging, from whom as foreigners the State gathered a tax of four dollars a month each, or from fifty thousand to sixty thousand dollars a year. That they could stand this enormous tribute, and still keep at work, showed well enough that it paid them to wash and re-wash the golden sands of these valleys.

The scenery of this region is full of various beauty. Of conspicuous single objects, Pilot Knob, a great chunk of bare rock standing on a mountain top, ranks next to Mount Shasta ; it must be eight humdred to one thousand feet high in itself, and, seen from all quarters, it has been famous as a pilot to the early emigrants in their journey across the mountains. The hills are rich with pine forests, and these grow thicker and the trees larger and of greater variety, as also the valleys widen and seem more fertile, as the road progresses into Oregon. Firs rival the pines and grow to similar size, one hundred and two hundred feet high and three to five feet in diameter. Farther up in Oregon, about the Columbia River, the fir even dominates, and is the chief timber, and specimens of it are recorded that are twelve feet through and three hundred feet high! The oak, too, has its victories in the valleys, and we
ride through groves and parks of it that are indescribably beautiful. That fascinating parasite of British classics, the mistletoe, appears also, and shrouds the branches of the oak with its rich, tender green, and feeds on its rugged life. Many an oak had succumbed to the greedy bunch boughs of the mistletoe, that fastened themselves upon it, and, despite its beauty and the sentimental reputation it brings to us from British poets, I came to shrink from its touch and sight. More graceful and inviting and less absorbing of life,-rather token of death,—was the pendent Spanish moss, hanging gray and sere and sad from the pine branches and trunks, along our way in Southern Oregon.

The birch, the ash, the spruce, the arbor vitae, and the balsam, all contribute to these forests. Only the transcending elm of the New England valleys was lacking to give every variety of tree beauty. But for extent of forest wealth, for size and beauty of pines and spruces and firs, for amount and quality of timber, as timber, and for groves of oaks, there can be no competition in the East to the Sierra Nevadas and the Coast Mountains and their intermediate valleys in California and Oregon. Their forests become the perpetual wonder and admiration of the traveler, and are destined to prove the wealth of many a generation of settlers.

The cross valleys of the Rogue and Umpqua Rivers present many rich fields for culture. The soil is a gravelly loam, warm and fertile, and more favorable for fruits, especially the grape and the peach, than the more northern valleys of Oregon. But the way
to market is long and hard; and the products of agriculture here must mainly go out to the world on the hoof or in wool, until the Railroad comes. So that the temptation to the farmer is not yet very strong. Still we found a few rich farms and prosperous gentlemen farmers. "Joe" Lane, famous in the politics of Oregon, had an estate near the road; and we stopped and breakfasted with another and more worthy pioneer of the country, Mr. Jesse Applegate. He came here from Missouri near thirty years ago,-for Oregon dates back farther than California, farmers and politicians coming hither from Missouri, and Methodist missionaries from New England, full ten years before the gold discoveries of the Golden State,-and has had a constant share in the material, moral and political growth of the State. But a reformer and philosopher by nature, he has kept his thought so far in advance of the popular current,-abreast, indeed, of the Greeleys and Summers of the East,-that he has failed to be placed in representative positions. It was both surprise and refreshment to meet in this almost hermit of the woods so pure and vigorous a thinker on our current politics ; and we learned then and afterwards to place Jesse Applegate foremost among the men of Oregon. Sending his three sons to fight for the country, he staid at home to carry on their farm of two thousand acres. But farming here, he says, is but a cheap, careless process; labor is so dear, and grain grows so easily, and the market is so distant, that there is no incentive for real cultivation and care in the business. Grass grows naturally, abundantly; timothy seed, thrown upon
the unbroken soil, gives the best of permanent mowing ; and so mild are the winters, and so abundant the feed upon hill and plain, that even that is only improved as a precaution against exceptional snow. Though he feeds cattle by the hundreds some seasons, and thousands in others, he had then one hundred and twenty-five tons of hay that he cut two years before, but for which he had yet had no use.

Two days and a night of rough riding from Jacksonville over rather unmilitary roads, built for the government some years ago by the since famous General Hooker, brought us out, of a sweet, Junelike afternoon, upon the hill that overlooks the head of the Willamette (Wil-lam-ette) Valley. Here the mountain ranges cease their mazy dancing together, and take their places again east and west, feeding a river that runs midway nortl one hundred and twenty-five miles to the Columbia River, and watering a valley through that length and for fifty miles wide. This is the Willamette River and Valley,--the garden of Oregon,-itself Oregon; that which led emigrants here years before the gold discoveries on the Pacific Coast; the home of nearly two-thirds of all the inhabitants of the State; the chief source of its present strength and prosperity, and its sure security for the future; lifting it above the uncertainties of mining, and giving guaranty of stability, intelligence and comfort to its people.

We were led down into this indeed paradisiacal valley through richest groves of oak; the same are scattered along the foot-hills on either side. or people the swelling hills that occasionally vary the prairie
surface of its central lines; while the river, strong and free and navigable through the whole valley a part of the year, and through the lower half at all times, furnishes a deep belt of forest along the very middle of the valley. Never beheld I more fascinating theater for rural homes; never seemed more fitly united natural beauty and practical comfort; fertility of soil and variety of surface and production; never were my bucolic instincts more deeply stirred than in this first outlook upon the Willamette Valley. The soil is a strong, clayey, vegetable loam, on a hardpan bottom, holding manures firmly, and yiclding large crops of the small grains, apples and potatoes. Wheat and apples are the two great crops at present; much of the improved land being set out with apple orchards, that come into full bearing in from two to three years after planting. Wool and beef are, also, as in the lower valleys, leading items in the agricultural wealth of the Willamette. The hills and valleys of interior Oregon furnish almost inexhaustible and continuous pasture grounds. The spring is too cold and wet for peaches; the summer nights are too cold for corn, though it is grown to a limited degree; but Isabella and Catawba grapes ripen perfectly; it is the home of the cherry; and pears, plums and all the small berries reach high perfection. The average yield of wheat in the valley is twenty-five bushels to the acre; but fifty is often obtained with careful cultivation.

Though this valley supports a population of sixty thousand by agriculture only, probably not one-sixth of its area has yet felt the plough, and certainly not
much over one-half is under fence. Its best lands can be bought for from ten to thirty-five dollars an acre, depending upon improvements and nearness to villages and river. Only specially favored farms go higher, as some do to fifty and even one hundred dollars an acre. Much of the farming is unwisely done; the farms are generally too large, the original locations being mostly of six hundred and forty acres each ; and the agricultural population are largely Missourians, Kentuckians and Tennesseeans, of that class who are forever moving farther west, and only stop here because there is no beyond but the Ocean. The Eastern men proper in Oregon, of whom there are indeed many, are mostly in the villages and towns, leaders in trade, and commerce, and manufactures, as well as in the professions.

The long summer drouth, that distinguishes the climate and tries the agriculture of Utah, Nevada and California, is unknown in Oregon. There is no suggestion of irrigation here. Her fertile region,so made fertile, indeed,-between the Coast Mountains and the Sierras, or the Cascades, as the interior range of mountains is called in Oregon, is abundantly supplied with rain the year round. There is enough in summer to ripen the crops, and not too much to interfere with harvesting; and the winter is one long shower of six months. The Californians call their northern neighbors the Web Feet; and from all accounts there is something too much of rain and mod during the winter season; but the fertility and perfection, which its agriculture enjoys in consequence, leave the practical side of the joke with the Orego-
nians. There is no snow in the valleys of Middle and Western Oregon; only rain and mist deaden the dormant season; but February is usually a clear and warm month, and the work of the farmer then actively begins. The summers are long and favorable, with warm days but cool nights, -more endurable for the human system than New England summers, and kinder for all vegetation, with the single exception, perhaps, of Indian corn. The average temperature of the Willamette Valley for the six summer months is from sixty-five to seventy, and of the six winter months from forty to forty-five degrees. And grass grows through all the so-called winter.

Eugene City, Corvallis, Albany, Salem, Oregon City and Portland are the chief centers of population in the Willanette Valley, in the order in which we passed them, coming down to the Columbia. Salem is the State capital, and is a beautifully located, thriving, inland town, with woolen mills and the State institutions and excellent schools for the evidences and means of its progress in civilization.

From Salem, we took steamboat passage, fifty miles, to Portland, the commercial and business center of the State, half rival to San Francisco itself, and the only other town, indeed, of prominence on the Pacific Coast, that showed signs of steady, uninterrupted prosperity during the summer of our visit. At Oregon City, part way between Salem and Portland, we paid respect to the original capital of the Territory, inspected a new and extensive woolen mill that cost seventy-five thousand dollars in gold, and were railroaded around the falls of the Willamette, which,
though not a brilliant feature in the natural scene, offer temptations and almost inexhaustible waterpower for the manufactures, that the agricultural productions of the State invite, and the enterprise of its citizens is already wisely and eagerly reaching forward to.

Portland, by far the largest town of Oregon, lies very pleasantly on the banks of the Willamette, twelve miles before it joins the Columbia River, and one hundred and twenty miles from where the Columbia meets the Pacific Ocean. Ships and ocean steamers of highest class come readily hither; from it spreads out a wide navigation by steamboat of the Columbia and its branches, below and above; here centers a large and increasing trade, not only for the Willamette Valley, but for the mining regions of Eastern Oregon and Idaho, Washington Territory on the north, and parts even of British Columbia leyond. Even Salt Lake and Montana, too, have taken groceries and dry goods through this channel, and may yet find it advantageous to buy more and continuously; such are the attained and the attainable water communications through the far-extending Columbia.

The population of Portland is now from eight to ten thousand, who keep Sunday with as much strictness almost as Puritanic New England does, which can be said of no other population this side the Rocky Mountains at least. Whether this fact has anything to do with it or not, real estate we found to be very high in Portland,-four hundred dollars a front foot for best lots one hundred feet deep on the main business street, without the buildings. In religion,
the Methodists have the lead, and control an academic school in town and a professed State university at Salem; the Presbyterians are next, with a beautiful church and the most fashionable congregation, and favor a struggling university under Rev. S. H. Marsh, located twenty miles off in the valley; perhaps the Catholics rank third, with a large Sisters of Charity establishment and school within the city. Iron mines are successfully worked in the neighborhood, and the city has prosperous iron foundries and machine shops, and is reaching forward to other manufacturing successes. But agriculture is the first interest of the State; wheat and wool and apples are her principal exports; her commerce is wide-reaching and amJitious; her gold mines, in the eastern and southern parts of the State, yield about one million of dollars a year; and her people and their prospects make in many ways a pleasaut and hopeful impression upon the traveler.

The Oregonians lack many of the advantages of their neighbors below; their agriculture is less varied and rampant, but it is more sure; mining has not poured such irregular and intoxicating wealth into their laps; they need, as well, a more thorough farming and a more varied industry; they need, also, as well, intelligent, patient labor and larger capital; but they lave builded what they have got more slowly and more wisely than the Californians; they have less severe reaction from hot and unhealthy growth to encounter,-less to unlearn; and they seem sure, not of organizing the first State on the Pacific Coast, indeed, but of a steadily prosperous, healthy and
moral one,-they are in the way to be the New England of the Pacific Coast.

We umrolled our maps now and looked up towards the North Pole. So near the north-western limit of the Republic and not to touch it; so close to John Bull and not to shake his grim paw, and ask him what he thinks of the preposterous Yankees since they have re-established and re-invigorated the Republic by war and freedom; so near to that rarely beautiful sheet of water, Puget Sound, and not to sail through it, and know its commercial capacities and feel its natural attractions,-it would never do. So we put out of Portland, steamed down the Columbia for fifty miles, and up its Cowlitz branch for two miles (all that is now navigable), and landed on the Washington Territory side, at two houses and a stage wagon, bearing the classic name of Monticello. Mr. Jefferson of Virginia was not at home; but in his place was the everlasting and all-subduing Massachusetts Yankee, testifying, like all the rest of these border settlers, away from schools and churches and society, that there was no such other country anywhere, and that you could not drive them back to the snows and cold winters of "the States."

The next question was, how to put eleven passengers in an open wagon that only held seven, for a ninety-mile and two-day drive across the Territory. It was successfully achieved by putting three of them on saddle horses and the other extra one in somebody's lap; and off we bounced into the woods at the rate of three or four miles an hour. Most unpoetical rounding to our three thousand miles of
staging in these ten weeks of travel, was this ride through Washington. The road was rough beyond description ; during the winter rains it is just impassable, and is abandoned; for miles it is over trees and sticks laid down roughly in swamps; and for the rest,-ungraded, and simply a path cut through the dense forest,- the hight and depth are fully equal to the length of it. Those who worked their passage, by whipping lazy mules whose backs they strode, and paid twenty dollars for the privilege, made the best time, and had the easiest experience. Yet for days afterwards I observed that, with tender memories of hard saddles, they preferred to "stand and wait" to sitting upon wooden chairs.

But the majestic beauty of the fir and cedar forests, through which we rode almost continuously for the day and a half that the road stretched out, was compensation for much discomfort. These were the finest forests of all we had traversed or beheld,the trees larger and taller and standing thicker; so thick and tall that the ground they occupy could not hold them cut and corded as wood; and the undergrowth of shrub and flower and vine and fern, almost tropical in its luxuriance and impenetrable for its closeness. Washington Territory must have more timber and ferns and blackberries and snakes to the square mile than any other State or Territory of the Union. We occasionally struck a narrow prairic or a thread-like valley; perhaps once in ten miles a clearing of an acre or two, rugged and rough in its half-redemption from primitive forest; but for the most part it was a continuous ride through forests,
so high and thick that the sun could not reach the road, so unpeopled and untouched, that the very spirit of Solitude reigned supreme, and made us feel its presence as never upon Ocean or Plain. The ferns are delicious, little and big,-more of them, and larger than can be seen in any of the Eastern States, -and spread their beautiful shapes on every hand. But the settlers apply adjectives less complimentary to them, for they vindicate their right to the soil, in plain as well as forest, with most tenacious obstinacy, and to root them out is a long and difficult job for the farmer.

We dined on the second day at Skookem Chuck (which is Indian for "big water,") and came at night to the head of Puget Sound, which kindly shortens the land-passage across the Territory one-half, and were ushered into Olympia, the capital, amid the roar of camon, the din of brass band, and the waving of bamners, by its patriotic and enthusiastic citizens. It lies charmingly under the hill by the water-side; counts its inhabitants by the hundreds, though still the largest town of the Territory, save the mining center of Wallula, away down in the south-east towards Idaho; numbers more stumps than houses within its city limits; but is the social and political center for a large extent of country; puts on the airs and holds many of the materials of fine society ; and entertained us at a most comfortable little inn, whose presiling genius, a fat and fair African of fifty years and three huudred pounds, robed in spotless white, welcomed us with the grace and dignity of a queen, and fed us as if we were in training for a camibal's table.

If there is one thing, indeed, more than another, among the facts of civilization, which the Pacific Coast organizes most quickly and completely, it is good eating. From the Occidental at San Francisco to the loneliest of ranches on the most wilderness of weekly stage routes, a "good square meal" is the rule ; while every village of five hundred inhabitants has its restaurants and French or Italian cooks. I say this with the near experience and the lively recollection of one or two most illustrious exceptions, where the meals consisted of coarse bacon, ancient beans and villainous mustard, and where, o' nights, the beds could e'en rise and walk with fleas and bedbugs. When the Puritans settled New England, their first public duty was to build a church with thrifty thought for their souls. Out here, their degenerate sons begin with organizing a restaurant, and supplying Hostetter's stomachic bitters and an European or Asiatic cook. So the seat of empire, in its travel westward, changes its base from soul to stomach, from brains to bowels. Perhaps it is only in obedience to that delicate law of our later civilization, which forbids us to enjoy our religion umless we have already enjoyed our victual, and which sends a dyspeptic to hell by an eternal regard to the fitness of things. And, certainly, the piety that ascends from a grateful and gratified stomach is as likely to be worthy as that fitfully fructified by Brandreth's pills.

Is it not a little singular that only our forty-oddth State should bear the name of Wasmingtor? That it was left to this day and to this far away corner Territory to enroll his name among the stars of the

Republic's bamner? Washington Territory is the upper half of old Oregon, divided by the Columbia River and the fortieth parallel for the southern boundary, and extending up to the forty-ninth, to which, under the reaction from the unmartial Polk's "fifty-four-forty or fight" pretensions, our northern line was ignominiously limited to. Its population is small, not more than twenty thousand, and not likely to grow fast, or make it a State for some years to come, unless the chance, not probable, of rich gold and silver mines within its lines should flood it with rapid immigration. But it holds sure wealth and a large future through its certain illimitable forests and its probable immense coal deposits. Of all its surface, west of the Cascade or Sierra Nevada Mountains, not more than one-eighth is prairie or open land; the rest is covered by a growth of timber, such as, both in density and in size, no other like space on the earth's surface can boast of. Beyond the mountains, to the east, the comntry partakes of the same characteristics as that below it; hilly, barren of trees, unfruitful, whose chief promises and possibilities are in the cattle and sheep line. Its arable land this side the momntains, where the forests are cleared or interrupted, is less fertile than that of Oregon and California; but it sufficeth for its present population, and even admits of considerable exports of grain and meat for the mining populations in British Columbia, and will grow in extent and productiveness probably as fast as the necessities of the Tewritory require.

We were a full day and night in passing down through Puget Sound to British Columbia, on the
steamer from Olympia; loitering along at the villages on its either shore, and studying the already considerable development of its lumber interests, as well as regaling ourselves with the beauty of its waters and its richly-stored forest shores. Only the upper section of the southern branch of these grand series of inland seas and rivers, that sweep into the Continent here, and make Vancouver's Island, and open up a vast region of interior country to the Ocean, is now called Puget Sound,—only forty miles or so from Olympia north. Formerly the whole confines went by that name; and rightfully it should remain to all which runs up into Washington Territory from out the Strait of San Juan de Fuca, for this has a unity and serves a similar purpose. For beauty and for use, this is, indeed, one of the water wonders of the world ; curiosity and commerce will give it, year by year, increase of fame and visitors. It narrows to a river's width; it circles and swoops into the land with coquettish freedom; and then it widens into miles of breadth; carrying the largest of ships anywhere on its surface, even close to the forests' edge ; free of rocks, safe from wind and wave; the home of all craft, clear, blue and fathomless.

It is the great lumber market of all the Pacific Coast. Already over a dozen saw-mills are located on its shores; one which we visited was three hundred and thirty-six feet long, and turns out one hundred thousand feet of lumber daily; three ships and two barks of five hundred to one thousand tons each were loading with the product direct from the mill; and the present entire export of the Sound,
in prepared lumber and masts and spars, reaches nearly to one hundred millions of feet yearly, and yields at the average price of ten dollars a thousand about one million of dollars. San Francisco is the largest customer ; but the Sandwich Islands, China, all the Pacific American ports, south and north, and even Buenos Ayres around on the Atlantic, come hither for building materials, and France finds here her cheapest and best spars and masts. Much of the shipping employed in the business is owned on the Sound ; one mill company has twelve vessels of from three hundred to one thousand tons each. The business is but in its very infancy ; it will grow with the growth of the whole Pacific Coast, and with the increasing dearth of fine ship timber in other parts of the world; for it is impossible to calculate the time when, cut and saw as we may, all these forests shall be used up, and the supply become exhausted.

The size of these Washington Territory trees was rather overpowering,-for we had not then seen the Big Trees of California,-and not daring to trust unaccustomed eyes, we resorted to the statistics of the lumbermen. Trees, six and seven feet in diameter, and two hundred to two hundred and fifty feet high, are very common, perhaps rarely out of sight in the forest; eight feet in diameter and three hundred feet high are rarer, but still not at all uncommon;--the builder of the telegraph line had hitched his wire in one case to a cedar (arbor vitæ) which is fourteen feet in diameter; a monster tree that had fallen,the forests are full of fallen trees,-measured three hundred and twenty-five feet long; and another tree,
at the distance of ninety feet from its root, was seven feet in diameter! Masts for ships are readily procurable, straight as an arrow, and without a knot for one hundred feet, and forty inches in diameter at thirty feet from the base.

Out of the Sound and straight across the Strait, twenty miles, we encounter the rocky shore of Vancourer's Island; searching along we meet a hidden hole in the wall, and, steaming in, there opens out a little wash-bowl of a bay; and here is Victoria. It was a charming surprise, 一the prettiest located and best built town on the Pacific Coast, and next to Portland in size and business,-a healthy copartnership of American enterprise and enthusiasm, and English solidity and holdfastness. The population ranged from twenty-five hundred in summer and dull times to five thousind in winter and the flush season, when the mining across on the main land of British Columbia had paid well, and the miners came to town to spend their harvest. Out of the town and its trade, the Island offers little development; there are some poorpaying gold-mines; good bituminous coal is found in abundince, and profitably worked; here and there is farming in patches, which is extending, but most of the food eaten on the Island comes from California and Washington. The whole population of Vancouver's Island did not exceed five thousand, at least half of whom were Americans. Across the Gulf, in the province of British Columbia proper, were perhaps an aggregate of seven thousand people more, but scattered from its capital of New Westminster, at the mouth of Frazer River, north and east for six
hundred miles to the gold diggings of the Upper Frazer, the Carriboo country, and the Kootenay, a branch of the Columbia River.

There was little or no wealth in either province but such as came from the fickle and now fading gold-mines and the also lessening fur-gatherings of the Hudson Bay Company. The majority of the miners were emigrants from California and Oregon, and were animated by no loyalty to the British authorities. Yet both at Victoria and New Westminster there were set up the cumbersome and expensive machinery of English colonial governments. The governors were almost more numerous than the governed; and the latter made bitter complaint of the severe taxes that were levied upon them for the bencfit of the former. The year we were there, nearly half a million dollars had been squeezed out of the people of little Victoria alone by a system of taxation, much more burdensome than our civil war had thrown upon the American people, and including a tax on all sales, special licenses for every kind of business, and an income tax at the end. The taxation in one province averaged one hundred dollars a year to each resident, and in the other to seventy dollars. Since 1865 , the two provinces have been consolidated, and one set of government machinery saved; but the governor of these ten or twelve thousand people,-for there are no more than that in all British Columbia,-still has a salary equal to that of the President of the United States, and his subordinates are paid in proportion; while baronial castles have been built for their homes at the ex-
pense of the people. Good roads to the mines, built by the government, and importations free of duty are the only compensations offered in return. But all the mines of British Columbia, which began to be discovered in 1858 , and produced three millions of dollars of gold in 1863, and have yielded in all about twenty millions, are now reduced to one million of dollars a year. Agriculture has little to offer as a source of permanent prosperity, in competition with that of California and Oregon. So the province is not growing or likely to grow in wealth and population, and the aristocratic and expensive foreign govermment over them is becoming more and more absurd and distasteful to the people. Probably a majority of them are ripe for amexation to the United States; and if this would not give them, as many blindly believe it would, a new prosperity, it certainly would relieve them of full half their present burdensome taxation. And now that we have bought the country north of theirs, these lightly-held, half-rebellions colonists of Great Britain hardly need an invitation to desert to the American flag.

But our day and a half in Victoria made a very charming experience. The American residents gave Mr. Colfax and his friends cordial welcome; the English were no whit less hearty in demonstration of good feeling and respect; there was what the French call a "grand dimer," the eating whereof lasted from seven to ten P. Mr., and the speaking whereat continued from ten to three A. m.,-the result of which was that all little international differences and accounts were amicably adjusted, Andy Johnson
and Queen Tictoria were married, and the two grand nations of the Anglo-Saxon race were joined into one overpowering, all-subduing, all-fructifying Republic! "And what a bloody country that would be," exclaimed an enthusiastic Britisher at one of the clock in the morning.

How could the little question of the title to a group of small islands in this inland sea, and known by the name of the largest, San Juan, be thought of in such a fraternal baptism? And, indeed, by the cool of the morning after, it seemed a very small affair. The question turns on the point whether the boundary line runs from strait to gulf by one channel or the other, this side the islands or that. Neantime, each government supports a captain and corporal's guard of soldiers on San Juan; all Irish emigrants, probably, only distinguishable one from the other by the blue and the red of their uniforms, and fraternizing daily, doubtless, over a game of cards and a whisky bottle. Palpably, by the map, and by the course of occan travel, the American claim to these islands is the right one ; but in view of the certainty of all this apple falling into our lap as soon as it is ripe enough to be really valuable, the present status may as well as not go indefinitely on.

Victoria has an importance, also, as the great depot of the IIudson Bay Company ; all their business from the Pacific Coast to the Red River of the North, beyond Minnesota, centers here; and their warehouses of accumulating furs and of distributing goods to pay for them are among the chief curiosities of the place. They do a general trading business wher-
ever they have stations or stores; and you can buy calicoes and cottons, hardware and rum at their counters, as at any old-fashioned country store of the last generation in New England.

Up here, above the latitude of Quebec and Montreal, we basked in the smile of roses that are even denied to us in New England. Mounts Shasta and Hood of California and Oregon are more than rivaled in deep snow fields and majestic snow peaks by Mounts Rainier and Baker of Washington ; sailing down Puget Sound, we take in the former from base to three peaked summit of thirteen thousand feet in hight, all aglow with perpetual white,-a feature of deep beauty and impressiveness; along the sea coast, on the opposite side, the hills also rise to the region of continuous snow, and look down bald and white through the long summer days into the tropical flower gardens and orchards and hot streets of Victoria; and here, within this circle of the softening sea, everywhere under these wintry shadows, reigns a year that knows no zero cold, and rarely freezing water or snow; that winters fuchsias and the most delicate roses, English ivies and other tender plants, and summers them with rioting luxuriance; that grows the apple, the pear, and all the small fruits to perfection, and only cannot grow our Indian corn.

The climate of all this Pacific Coast certainly presents many solaces and satisfactions in comparison with that of our own New England. I do not wonder its emigrants here find new health and life and much happiness in the greater comparative evenness; but I do not yet recognize that which would compensate
me for the loss of our slow, hesitating, coying spring times, our luxuriously-advancing, tender, red and brown autumns, aye, and our clear and crisply-cold winter days and snow-covered lands, with the contrasting evergreens, the illuminated sky, the delicately fretted architecture of the leafless trees, the sunsets, the nerve-giving tonic of the air. Surely there is more various beauty in the progress of a New England year than any which all the Pacific Coast can offer.

## XXV.

## THE COLUMBIA RIVER-IDAHO-MONTANA.

The Extent and Importance of the Columbia River-The Scenery of its Conflict with the Mountains-Fort Vancouver and General Grant -The Caseades and The Dalles-The Railroad Portages-No River Seenery so Grand as that of the Columbia-Mount Hood-The Pivalry of the High Mountains-The Extent of the Navigation of the Columbia, East, North and South-Railroad Connections with Salt Lake and the Rest of Mankind-The Stage Lide over the Blue Mountains, Through Idaho, to Salt Lake-The Scenery and the Mines on the Route-The Shoshone Falls, the Rival of NiagaraThe Stage Lines Through Idaho and Montana-A Trip Through Montana-Its Mountains and its Mines-'The Northern Pacific Rail-road-Montana's Present Development and Future Prospects-The Boat Ride Down the Missouri River Home.

Wien an enthusiastic Oregonian told me the Columbia River was the largest of the Continent, and watered a wider section of country than any other, I thought of the St. Lawrence and the Mississippi, and smiled with mild incredulity. But unroll your map, and trace its course into the heart of the North-western interior, through the Cascade Mountains, back into the great basin between them and the Rocky Mountains, and then, by its main branches, stretching up north and winding out through all British Columbia, and south and east into Idaho, and over

SCENERY OF TIIE COLUMBIA RIVER.


Moust Hood.


Scene on the Columbia Riyer.


Castle Rock.
into the bowels of the Rocky Mountains, touching with its fingers all the vast area north of the Great Desert Basin and west of the Rocky Mountains; then sail with me up and down its mile and a half wide sweep of majestic volume, at the distance of one hundred and fifty miles above its mouth; see what steamboats already navigate its waters, and the points to which they reach; and listen to the wide plans of the navigators for the use of its most distant upper waters, in British Columbia and Idaho,sapping the very yitals of British dominion in the North-west, and practically tapping the Pacific Railroad as it comes west at Salt Lake for the benefit of Portland and Oregon,--do all this, and we will make our bow together to the Oregonians and their great river.

Only more full surveys can determine the literal correctness of their claims to the superiority of their great river to all others in the Continent; the Columbia, with its chief division, the Snake, may be anywhere from twelve hundred to two thousand miles in length;-but that it ranks among the three or four great rivers of the world, and that it is the key to vast political and commercial questions and inter-ests,--giving to its line the elements of a powerful rivalry to the great central commercial route of our Continent, of which San Francisco is the Pacific terminus,-no one who examines its position and extent, and witnesses the various capacity of the territory it waters, can for a moment doubt.

As yet, however, the Columbia is most known abroad for the rare beauty and majesty of the scen-
ery developed by its passage through the great Andean range of North-western America. Alone of all the rivers of the West has it broken these stern barriers, and the theater of the conquering conflict offers, as might naturally be supposed, many an unusual feature of nature. River and rock have striven together, wrestling in close and doubtful embrace,sometimes one gaining ascendancy, again the other, but finally the subtler and more seductive element worrying its rival out, and gaining the western sunshine, broken and scarred and foaming with hot sweat, but proudly victorious, and forcing the withdrawing arms of its opponent to hold up eternal monuments of its triumph.

In order to witness these scenes, before leaving Oregon, our party made an excursion up the Columbia, through and beyond the mountain range. As comfortable and capacious steamboats cut its waters as those of the Hudson; and it was like sailing on an inland sea to pass up and down its broad and majestic track upon them. Out of the Willamette, we soon felt the grand movement of the mountain conqueror. Near at hand on the river shore was Vancouver, a famous spot in this valley, first as a leading station of the Hudson Bay Company for many years, and since and now as the chief military post of the United States in the interior North-west. Here many of our prominent military men have served apprentice-ship,-Grant, Hooker, McClellan and Ingles among them. They are all well remembered in the days of their captaincies in Oregon by the old inhabitants. Grant was the same quiet, close-mouthed man then
as now, but gave no indication of that great mastery of himself and of others, that he has within these few years so nobly, and to such high purpose, demonstrated. It was while here that he left the army originally, to come back to it in the hour of the Nation's need, a new and nobler man.

Fifty miles of steaming up through heavily wooded banks brought us to the foot-hills of the Cascade Mountains, and soon we were upon the charmed ground. High walls of basaltic rock rose slowly on either side; huge boulders, thrown off in the convulsion of water with mountain, lay lower down the valley, or stood out in the stream,-one so large, rising in a rough egg-shape some thousand feet up into the air, as to become a conspicuous and memorable element in the landscape. The river gets too fast here, at the Cascades, as they are called, for farther progress by boat; we change to a railway of five miles, under rock and along river, at the end of which we come to navigable waters again, and find, to our surprise, another large and equally luxurious steamer. During these five miles of the Cascades, the river makes a descent of forty feet, half of it in one mile, but it takes the form of rough and rocky rapids, and not of one distinct, measurable fall. The second boat took us from the Upper Cascades to the Dalles, fortyfive miles, all the way through the mountains. The waters narrow and run swift and harsh; the rocks grow higher and sharper; and their architecture, by fire and water, assumes noble and massive forms. The dark, basaltic stones lie along in even layers, seamed as in the walls of human structure; then they
change to upright form, and run up in well-rounded columns, one after another, one above another. Often there is rich similitude to ruined castles of the Rhine; more frequently, fashions and forms, too massive, too majestic, too unique for human ambition and art to aspire to. Where the clear rock retires, and sloping sides invite, verdure springs strong, and forests, as thick and high as in the valleys, fill the landscape.

At The Dalles lies the second town in Oregon, bearing the name of The Dalles, and holding a population in 1865 of twenty-five hundred. It is the entrepot for the scattered mines in Eastern Oregon, for we are now on the eastern slopes of the mountains, and very much also for the Boise and Owyhee mines in Idaho. The miners come in here to winter, send their earnings in here, and buy here many of their supplies. Two millions of dollars in gold dust were brought in from Eastern Oregon and Idaho during the single month of June, 1865.

At this point, too, there is another interruption to the navigation of the river, and another railway portage of fifteen miles is in use. The entire water of the Columbia is compressed for a short distance into a space only one hundred and sixty feet wide, lined, bottom and sides, with stone, from which came the French name of The Dalles to this whole section of the river. Through this it pours with a rapidity and a depth, that give majestic, fearful intensity to its motion; while interfering rocks occasionally throw the stream into rich masses of foam. Through these second rapids of fifteen miles, the rock scenery at first rises still higher and sharper, and then fast grows tame; the moun-
tains begin to slink away and to lose their trees; the familiar barrenness of the Great Interior Basin reappears; and the only beauty of the hills is their richly rounded forms, often repeated, and their only utility pasturage for sheep and horses and cattle. The fifteen miles of railway, which, with the lower portage of five miles, are built as permanently, and served as thoroughly, with the best of locomotives and cars, as any railroads in the country, landed us on still another large and luxurious steamboat,-" and still the wonder grew,"-built far up here beyond the mountains, but with every appointment of comfort and luxury that are found in the best of eastern river craft,-large state-rooms, long and wide cabins, various and well-served meals.

Our last steamboat carried us beyond the mountain range,-out into the dry, treeless, half-desert country of Eastern Oregon,-where, the scenery becoming common and tame, we turned back, after having gone as far as two hundred and sixty miles above the mouth of the grand River. Retracing its passage through the mountains and forests to Portland, we worshiped anew, and fixed our first impressions that here was the grandest river scenery in the world. It has much of the distinguishing elements of the Hudson in its palisades, of the Rhine in its embattled, precipitous and irregularly shaped sides, and of the Upper Mississippi in its overhanging cliffs. Each of these holds a beauty that is not here; but the Columbia aggregates more than any one the elements of impressiveness, of picturesque majesty, of wonder-working, powerful nature. There is, how-
ever, a general uniformity in its characteristics; one five miles, repeats another; and once seen, you are indifferent as to a second sight,-before next year, or unless with the accompaniment of new and beloved eyes.

A distinguishing feature in the landscape of this ride up the Columbia,-apart from it, yet bounding it, shadowing it, yet enkindling it with highest majesty and beauty,-is Mount Hood. This is the great snow peak of Oregon, its Shasta, its Rainier, its Mount Blanc. Lying off twenty or thirty miles south of the river, in its passage through the mountains, it towers high above all its fellows, and is seen, now through their gorges, and again at the end of apparent long plains, leading up to it from the river. Most magnificent views of it are obtained through nearly all the boat ride up and down from Portland. That which Bierstadt has chosen for its perpetuation on canvas, and which is thus familiar to eastern eyes, is the most complete and impressive, and is recognized upon the steamboat. In it, the mountain secms to rise, apart, out from an upward-going plain, snow-covered from base to summit, oppressive in its majesty, beautiful in form, angelic in its whiteness,the union of all that is great and pure and impressive. The Oregonians, in their pride, claim for it a greater hight than that of any other of the representative peaks of the North-west; but the fact is that it does not excced thirteen thousand feet, is certainly below Shasta in Northern California, and probably below the high peaks of Washington Territory, Rainier and Adams.

The contest for the highest mountain peaks in the United States, though narrowing down rapidly, is still an unsettled one. Shasta is the highest of those of the North-west, being fourteen thousand four humdred and forty feet; but Colorado has three or four peaks that press closely upon similar figures. No one of them is yet known to be fourteen thousand five hundred feet high; but Long's, Pike's and Gray's Peaks and Mount Lincoln are all over fourteen thousand feet, and it is not certain that one or more of them will not prove, on an accurate measurement, to rise as high as Shasta. The palm is so far won, however, by Mount Whitney in Southern California, which was visited in 1864 by a delegation of the California Geological Survey, and found to reach to fifteen thousand feet. The only possible disputant for this hight, now in the field, is Sopris Peak, in Western Colorado, which has never been measured, but looks as if it might mount still higher than Whitney. Our new Arctic Territory of Alaska has threatened to bear off the prize with Mount St. Elias ; but the greatest hight authentically claimed for that grand old volcano is inside of fifteen thousand feet (14.970), and, in fact, it has never been accurately measured. Besides, Alaska is hardly naturalized territory yet.

But wherever the highest may lie, there are none so beautiful as these grand snow-covered mountains of the North-west. And of all these, that we saw in our journeyings, none appeared to so fine advantage as Mount Hood from the Columbia River,-it is hard, indeed, to imagine a more magnificent snow mountain; and adding this crowning element to the scen-
ery of the Columbia River, it is probably just to say of $i t$, that this excursion offers more of natural beauty and wonder to interest and excite the traveler, than any other single journey or scene which the Pacific Coast presents, except the Yo Semite Valley. That must, of course, stand first, unrivaled and unapproachable. But to this I give the second place.
The part, which the navigation of the Columbia River is to play in facilitating railroad connections with the North-west and settling the lines and points of continental commerce, is an important one. With the holp of the two short railroad portages already described, stemboats run up the river continuously to the junction of the Snake or southern branch with the northern fork, a distance of four hundred miles from the mouth of the Columbia. This is the present starting-point for land travel and freight to Idaho and South-eastern Oregon. The business of these boats amounted in 1864 to twentytwo thousand tons of merchandise and thirty-six thousand passengers. The navigation company owned cighteen or twenty steamboats, the railroad portages, extensive warehouses, altogether a property of two millions of dollars, all, and more too, made out of the profits of the business. By a wagon road of one hundred and fifty miles north from the junction of the forks of the Columbia, we can reach a. portion of the northern branch, which is navigable for stcamboats for two hundred miles farther north into the very center of British Columbia and the Hudson Bay Company's territory; and already a boat has been built and set in motion on these far away upper
waters. It reaches into some of the richest of the fur and gold regions of British Columbia, its whistle and its wheels arousing the wilderness as far north as the fifty-second and fifty-third parallels.

Turning to the Snake River fork, for half the year it is navigable for one hundred miles beyond the junction, or to Lewiston, where the boundaries of Oregon and Washington and Idaho meet together. But starting from the junction of the forks at or near Wallula, a wagon road of one hundred and ten miles through the Blue Mountains, and across a wide circle of umnavigable waters, strikes the Snake at the Powder River, whence it is navigable for steamboats through the heart of Idaho for one hundred and fifty or two hundred miles on the direct route towards Salt Lake, and to within one hundred or one hundred and fifty miles of the present Pacific Railroad at that point. Thus about three hundred miles of railroad over these two parts of the route from Salt Lake to the main Columbia River, would seeure steamboats and cars all the way to Portland, Oregon; or, skipping the navigable part of the Snake River, and making a railroad track all the way to the Columbia at Wallula, only five hundred miles would have to be built to secure quick, eertain and constant steam communication with the Pacific Coast through Oregon, while Idaho would be opened by the same means direetly to the railroad connections of the Continent and to the Pacific Ocean.

The construction of this branch or extension of the present Paeific Road is the ambition of the Oregon people, and the purpose of the Union Pacific

Railroad Company. It would give the latter a direct connection of their own with the Pacific Ocean, and render them in a certain sense independent of the California company. Then a railroad through the woods of Washington Territory, for but ninety miles north from the Columbia River to Puget's Sound at Olympia, would bring the far Nortll-west into the circle of steam travel and traffic, and go far to anticipate the service allotted to the Northern Pacific Railroad. Montana would alone, under this arrangement, be unprovided for; but the Union Pacific Company have also in contemplation a branch road into that Territory from their line either at the Green River crossing or from the Salt Lake Valley. But this is a more doubtful and less inviting enterprise than the Idaho, Oregon and Puget's Sound line.

On the other hand, the company owning the Califormia end of the Pacific Road propose to reach and accommodate Oregon by a branch starting out from their track in the lower part of the Humboldt Valley, and rumning north-west through the lake region of Southern Oregon and over the Cascade Mountains to the head of the Willamette Valley, up which the Oregon people are already rapilly constructing a railroad line. From a similar starting-point in the Humboldt Valley, the California Pacific Railroad Company propose to annex Idaho to their end of the route by a branch rumning north-east. Thus, without waiting for the through northern continental line, whose completion, whatever its claims and necessities, must apparently be postponed for some years, perhaps to another generation, the whole North-west of Idaho,

Oregon, Washington and British Columbia are certain to be speedily joined to the rest of the Nation in the blessed bands of iron, and made near to us by the swift coursers of steam.

But I invite the traveler into our New West not to postpone sceing Oregon, Idaho, or even Montana until even the earliest of these advantageous routes are open. Instead of returning down the Columbia, as our party did in 1865, let him go on and take the delightful stage ride from the end of navigation at Wallula through Idaho, back to the present railroad line at Salt Lake. The Blue Mountains of Eastern Oregon are to be crossed before we enter Idaho; but the ascent and descent are easy, the roads hard and smooth, and not only the mountains themselves, but the Grand Ronde Valley, beneath and among them, offer most agreeable and picturesque scenery, with different features from those we have witnessed before. Sometimes we pass high up along the very edge of a deep ravine, where a capsize on the wrong side would precipitate us hundreds of feet into the rocky gorge below; again, we are upon a lofty mountain top, where the scenery, as far as vision can reach, is as wild and beautiful as eye ever rested upon; then we are in the bottom of a deep gorge, where mountains above us, covered with immense forests, tower almost out of sight; and now we find ourselves in a natural park, stretching miles away, studded with bright yellow pines and carpeted with luxuriant grass. Thus the panorama is ever changing, ever inspiringly grand and enchanting. The first day's ride leaves us at an already improved watering-place. Several springs of
warm sulphur water offer most welcome and healthful baths; and we go on under a new inspiration.

The Blue are often pronounced "the best mountains in America;" the most gradual of ascent, with the finest soil, grass and timber. Upon their highest summits, where the timber is not too thick to permit their growth, the best qualities and greatest quantities of natural grasses are found. The Grand Ronde Valley is a beautiful, level tract of country, from forty to fifty miles in length and twenty or thirty in width, surrounded on every side with mountains. It is a pleasant spot to look upon, but much too elevated for general agricultural value. For years the emigrant to Oregon has passed through this valley on his weary way to the Willamette. Occasionally a late party would winter here, on account of the abundant grass, and resume their journey in the spring. But all were deterred from settling by the long winters and late and early frosts.

The ride now grows less interesting; the valleys are more barren, the plains and hills treeless and volcanic; but we cross the Snake River and enter upon the gold and silver mining regions of Idaho, in the gulches of its eastern branches. The precious metals were discovered here in 1862; and at one time there was a population of about thirty thousand in the Territory; but it is not now over half that number. Probably thirty millions of dollars' worth of gold and silver have been taken from its placer diggings and quartz mines; the largest yield of eight millions being in 1866; but the production of 1868 was probably not more than five milliciss of dollars, perhaps not
over four millions, and the latter is as large a yield as can now be calculated upon, without new discoveries. The Boise Basin and South Boise, north and east of the Snake River, and Owyhee, south and west of it, are the three principal mineral districts. There are thirty-five stamp-mills with three hundred and fifty stamps for the reduction of quartz ores in the Territory; and several of the rock mines have proved very remunerative. But the majority of those opened or offered for sale,-many being put upon the market that were never opened even,-have, as elsewhere, proved absolutely worthless, or not rich enough to pay for working till prices recede and machinery is cheaper and more searching.

There is nothing in Idaho to attract the traveler or the emigrant but the mines ; and these have no greater interest, on the whole, than those of several other States and Territories. The name of the Territory has a prettily poetic meaning,-_" the gem of the mountains;"-but only a comparatively small portion of its vast surface is susceptible of tillage, and mining must ever continue its principal interest. In the mountains a great depth of snow falls in the winter; but the climate is milder than in like latitudes and altitudes on the Atlantic side.

But in the southern part of the territory, along the Snake River, and within from one hundred to one hundred and thirty miles of the north end of Salt Lake, are to be found several peculiar and grand freaks of nature, which the traveler should leave the stage for a day or two, to observe. The first, coming east, is the canyon of the Malade River, a branch of
the Snake on the north; for miles it flows through a narrow gorge of solid lava rock, in some places fifty feet deep, and yet only eight or ten feet across, the confined waters coursing rapidly and angrily along below. Next at Snake River Ferry, the waters of its Lost River branch, having sunk beneath the ground a long distance back, emerge to light again just at the point of junction, and pour over rocks one hundred and fifty feet high into the main stream. Ten or fifteen miles from this point, though only seven miles from the stage road at another place, are the Shoshone Falls in the Snake River itself. They rank next to Niagara in the list of the world's water-falls, and by some visitors are held to be entitled to the first place in majesty of movement and grandeur of surrounding feature. All about is volcanic rock-wide lava fields give an awful silence for this grand voice of nature to speak in. The river, two hundred yards wide, deep and swift, has worn itself a channel one hundred feet down into the rock; then, as if in preparation for the grand leap, it indulges in a series of cascades of from thirty to sixty feet in hight, and, now gathering into an unbroken body, it swoops down, in a grand horse-shoe shape, twelve hundred feet across, a two hundred and ten feet fall, into the bottomless pit below. The river is not so wide as Niagara, nor the volume of water so great, but the fall is higher, and quite as beautiful. It is difficult to get near to the falls, because of the high, rough and perpendicular walls of rock that guard the stream ; but they can be reached with hard climbing both above and below. A perpendicular pillar of rock rises one hundred feet
in the midst of the rapids above; islands stand in the stream just over the cataract; and two huge rocky columms have a place on each side of the falls, as if to sertinel the scene, and guard it from sacrilegious hands. Either by a day's detour in the trip from the Columbia River to Salt Lake, as we have suggested, or by a special journey of three or four days from the railroad at the latter point, these distinctive and distinguished marvels of nature will soon be freely visited by Pacific Railroad travelers, and the details of their sublimity more thoroughly catalogued by pen and photograph for the general public.

The stage lines for Idaho and Columbia River, and also for Montana, now leave the railroad route near the head of Salt Lake. The distance to the capital of Idaloo is two hundred and fifty miles, and to the Columbia River five hundred. On the Montana line, it is three hundred miles to Virginia City, four hundred and twenty-five to Helena, and five hundred and sixty through to Fort Benton, the head of navigation on the Missouri River. The rates of stage travel are about twenty cents a mile, and the meals at the stations along the roads generally one dollar and a half. This is the quickest route for reaching Montana. The only alternative is to go up the Missouri River on steamboats to Fort Benton, which is within one hundred miles of the heart of the Territory. But the river journey is long, near two thousand miles, and tedious, requiring from two to three weeks. The mere visitor to Montana, at least, should go by the stages from Salt Lake, cross to Fort Benton, and then pass down the river either by steamboat or on an 30
open floating boat to Omaha. Such a trip would take in all three weeks to a month, but be a very interesting and recompensing cireuit. The stage service on the Montana route is perhaps the best on the Continent, the roads are hard and excellent, the scenery, through an open mountain country, fresh, picturesque and every way inviting.

Montana lies three hundred miles north of the Central Railroad line, chielly on the eastern slopes of the Rocky Mountain range, and amid the head waters of the Missouri River, the Gallatin, the Jefferson and the Yellowstonc, and their branches. Its mountains are lower and more open than those of the same range in Colorado, and high grazing plains and fertile valleys lie frecly and spread widely among them. Frequent and farorable passes through the range invite easy communication with the western slopes, where the head-waters of the Columbia start with such volume and gather force so quickly, as, in Clark's Fork, within the Territory, to become mavigable for steamboats, and lead on readily to the main waters and the Pacifie Coast through Oregon. So freely is Montana thus slashed with streams on both sides her mountains, so closely does one series interlock with the other, and so low and gradual are her passes, that her Territory offers perhaps the most favorable line in the whole length of the Republic north and south for a continental railroad. Though three hundred and four hundred miles north of the present Central Railroad, the route of the proposed northern road is much less exposed to winter snows than that of the former. Though hard to conceive or explain,
this fact seems to be well-assured, and, with the richness of Montana, both in mineral and agricultural wealth, it offers abundant security for the completion and profitable use of the northern continental road. Though delayed, as it probably will be, till after a second and more southern road than the present is constructed, this cannot long remain umbuilt. No line is so short, no other road can probably be built so cheaply, or will be so richly aided by water comnections and tributaries, or will pass through a more uniformly fertile country.

The gold mines of Montana were first discovered in 1862, and have produced in all up to 1869 about fifty millions of dollars. Claims are made for them as high as eighty-five millions; but the lower estimate is the more reasonable. The years 1865 and 1866 were those of the greatest excitement and emigration and goll production in the Territory. In the latter year, probably thirty-five thousand people were there, and twelve to fifteen millions of dollars were taken out, mostly from the sides and bottoms of gulches. Two men alone washed out a ton of gold, and from a single "bar" in Confederate gulch three companies took a million and a half of dollars' worth. All kinds of gold-mining are in progress in the Territory; the several forms of dirt-washings,-panning, "long-toms," sluicing and hydraulic,-and vein or quartz excavations with stamp-mills; and those who wish to witness the various processes, and all stages of every process, can see them nowhere so well as in Montana. Bannock, Virginia City and Helena are the centers of the three principal mining districts;
some twenty-five or thirty quartz-mills, with two hundred and fifty stamps, have been set up; and the present gold production of the Territory is about eight millions of dollars a year, and its population twenty-five thousand.

The protected valleys and high plains, all richly watered, have encouraged a rapid agricultural development. Wheat often yields fifty bushels to the acre, and enough of the staple articles of food for home consumption are already produced in the Territory. All the small grains and vegetables grow freely, and there is rich grazing for animals the year round. The snows are not heavy, nor do they lie long; Helena reports but ten days of sleighing for the winter of 1869 . Timber grows freely along the rivers; saw-mills, tanneries, flouring-mills, and mechanic shops are in active and profitable operation; the feverish days have passed in the history of the gold-mining, and by no means exhausted the rich and recompensing deposits ; so that, with a climate almost as favorable as that of Colorado, and a soil nearly as fertile, and an industry similarly diversified, Montana seems reasonably sure of a steady and healthy growth henceforth, and an important place in the future of the central regions of the New West. The boat ride down the Missouri to his home the traveler will find monotonous; for the river is muddy, the banks are barren; but it will be a new experience in his western touring, and give him opportunity for reviewing and digesting all the various impressions and instructions that his summer's journey has garnered.

## XXVI.

## SANDWICH ISLANDS-COLORADO CANYON.

Hospitalities to Mr. Colfax—What was Left Unseen-The Sandwich Islands-Their Past, Present and Future-Their Sugar, Scenery, Volcanoes and Climate-Alaska and Arizona-The Country to be Opened by the Southern Pacific Railroad-The Canyon of the Col-orado-The Unknown Land of the Republic-The Solitary Passage of the Canyon-Professor Powell and His Plans-Underground Rivers and the Secret of the Gulf Stream-Scientific Explorations of the New West-The Slang Words and Phrases of Colorado and California - The Indians of the Pacific States-Sentimental Leavetaking at San Fraucisco.

We came back to San Francisco by steamer from Victoria. The first welcome was renewed, and we passed our remaining days there in a round of hospitalities, public and private, as generously offered as they were gratefully received. The greetings with which Mr. Colfax was welcomed everywhere in his journeyings through the Pacific States showed equally his wide-spread and deep-felt personal popularity and the hearty enthusiasm of the people. His was almost the first visit of a leading public man to these interior and Pacific States for the simply patriotic purpose of informing himself of their interests; and the compliment was most generously reciprocated at
every point and on every hand. No courtesy was omitted, no attention withheld from him or his companions; and the party gained rapid and complete knowledge of the countries and the people they came out to see. But wide as was our travel, close as was our observation, time made a limit to them; and we left some inviting regions unvisited, some interests unexhausted,-to tempt other travelers, to seduce ourselves again.

The Sandwich lslands, for instance, so foreign a country in the thought of the people of the Eastern States, are but outlying provinces of our New West, and offer many peculiar attractions both to the lovers of fresh scenery and the students of our political and commercial growth. Between New England missionaries and whalers, the graces and the viees of Christian civilization have been distributed among their native populations, with fatal results. Like the natives of the American Continent, they have proven incapable of the trials of civilization, and are so rapilly dying out that by the year 1900 there is a promising prospect that none of the original stock will be left. When Captain Cook first introduced them to the world in 1742 , there were three hundred thousand of them; they had eaten each other down one-half by 1820 , when our missionaries first went among them; and since then, the measles, whoopingcough, small-pox, influenza, syphilis and other Christian diseases, supplanting cannibalism, have reduced them to fifty thousand. But the condition and habits of those who linger are, on the whole, greatly improved; and the rate of decrease will probably be
sensibly lessened in the future. But the missionaries, who went to teach and pray, have staid to trade and cultivate the soil; commerce has invited American merchants; and the natives have gladly sought Americans to help them on in government. The English and the French are both considerably represented on the Island; but by far the greater part of the forty-five hundred white population are Americans, mostly men and women of intelligence and character, and leading the Island by sure tendencies into the arms of the American Republic. The Califormians see and seek this result, the Islanders, native and foreign, very largely accept it. Few suppose the independence of the Islands will last beyond the reign of the present King, and his deposition and their amexation may be precipitated at almost any moment.

The business of the Islands is mostly with San Francisco; they send hither annually over a million dollars' worth of raw sugars and tropical fruits, and take in return dry goods, wheat and flour, and the material ministries of life generally. Sugar is their great crop; but not one quarter of their capacity for its production is improved; the business has been badly conducted, and of late years very much depressed; but it is now passing into more vigorous management, directed or inspired from California, and the production for 1867 was forty millions of pounds. It invites emigration, skill, capital and labor, and receiving all, these Islands will rapidly become the producers of all the sugar and molasses consumed in our Pacific Coast States. Steamers ply twice a month between

Honolulu and San Francisco, the voyage being made in about eight days, and sailing vessels are moving constantly back and forth in twice or thrice the time; and the familiarity with which the Eastern visitor finds "the Islands" spoken of in California,-the accounts he receives of their strange scenery, their wonderful volcanoes, their delightful climate, their various and rich tropical fruits,-all will strongly invite him to make them a visit. Indeed, though his portfolio may contain choicest specimens of coloring and of contour, new harmonies of tint, new measures of grandeur, fresh surprises of form,- gathered in sojournings among the mountains and parks of Colorado, or in the deep canyons of the Sierra, yet he must not close it, feeling that he has exhausted the revelations that this Western World has to make to him, until he has added a few sketches at least of the yet more unique scenery of the Hawaiian Islands.

Breezy and sunny.a group of a dozen, though only half the number inhabited, these Islands lie two thousand miles south-west from San Francisco, and we reach them through a voyage of serene softness, and are welcomed in Honolulu to a mixture of the New England country village and the New England seashore town, clustered under tropic-laden hills by the sea. Beyond the general features of tropical countries, tempered by the circling ocean of this island home.-narrow, sharp valleys, almost fissures in abrupt hills, again broad fields for the sugar cane, and ligh rolling hills, everywhere covered with the broad leaves, the sprawling trees and shrubs, the interweaving vines, all of the deep but varying greens of south-
ern elimes, fed here especially by abundant rains and a high even temperature,-the volcanoes play the part of special curiosities, and irresistibly invite the traveler to their localities. The live Kilanea volcano, high up on the lofty Mauna Loa Mountain, on the Island of Hawaii, and the stupendous extinct Haleakala on the island of Maui are the two representatives of this phenomenon, that no one can excuse himself for not seeing. Though the smaller, so vast is Kilauea that it is impossible to get any idea of its gigantic proportions till we have climbed down its almost perpendicular walls, and traversed its ten mile circuit. The condition of its activity varies gieatly at different times; sometimes a chain of fiery lakes, comected by subterraneous channels, hems in the molten mass; sometimes it overleaps its barriers, and pours out rivers of fire over the floor of the crater. No words could depict the awful fascination of those fiery cauldrons, boiling and hissing and roaring, and tossing up fountains of liquid flame. The most effective time to see it is at evening. Then the whole sky is lighted up with the reflection of the fire, and the surrounding darkness serves to highten the effect of the glowing, seething mass. But Haleakala is a cone ten thousand feet high, with a crater three times the size of Kilanea, or thirty miles in circumference, and over a thousand feet deep. No scene could possibly combine more elements of the grand and the beautiful than that presented upon its edge at the time of the setting sun; the soft floceulent masses of clouds silently rolling in and out of these Tartarean depths, through the great gap in the
mountain wall, toward the sea, occasionally breaking to reveal the frightful blackness beneath; then, as the sum sinks, it touches the whole cloud-landscape with a rose-gray glow; long lines of trade-wind cloudlets, like fleets of phantom ships, go scudding over the sea; the three lofty summits of Hawaii, and the lesser hights of the islands surrounding Maui, repeat the sumset tints, and the whole seems like a scene of enchantment. Little steamers connect the principal of the INlinds; but for the rest of his travels, the traveler must depend upon his own horse,- to be bought for from five to twenty dollars,-and the never-failing hospitality of the scattered white resi-dents,-planters and missionaries, - who welcome every guest, and send him away with a new appreciation of the kindly elements in human nature.

As the natural wonders and beauties of these Islands will invite the cmious, and the adaptability of their soil for sugar, coffec, sweet potatoes, wheat, corn, oranges, bananas, pine-ipples and cocoa-nuts will welcome cultivators and attract merchants, so will the climate, -which unvaryingly presents just that delicious blending of heat and coolness that leaves one puzzled to know whether he is only comfortably warm or refreshingly cool,-encourage the visite and residence of the invalids. The lowest the merruy ever goes is $60^{\circ}$, the highest $88^{\circ}$, while the average temperature of no month is less then $71^{\circ}$ (January), or more than $79^{\circ}$ (August). Could tropical sums and ocean breezes combine to produce anything more kind to human weakness than this? It imposes no burden; it takes away no strength; the
world may be searched in wain for a softer and more even climate.

The more distant portions of our widely-spreat western possessions,-Alaska on the north, stretching to Behring's Straits and the Arctic Ocean, and Lower California, Arizona and New Mexico on the south, reaching close on to the Halls of the Montezumas, where the "Sick Nan" of America feebly reigns,remain unfamiliar to ordinary travelers, and are almost mknown lands to the gencral public. But while they invite the curiosity, they alarm the love of comfort. Their promises of pleasure or profit are not yet sure enough to overcome the hardships of travel among them. Alaska offers rich stores of fish and furs. and in Mount St. Elias, a claimant to the highest mountain in the United States; but accompanies them with a long, severe winter, and a short. hot summer, with little of grace or beauty in landscape, or fertility in soil. The plains of Arizona, New Mexico and Lower Califormia are dry and barren for most of the year, and very hot for much of it. It is spiritually reported of an acclimated inhabitant of this region, that, after translation to the warmest departments of that bourne whence no traveler re-turns,-however he may rap back his feelings and thoughts,-wrote to his old home with shivering suffering to beg that his blankets might be sent to him per first express! Arizona holds out the assurance of the richest gold-quartz on the continent; but the Apache Indians, the sturdiest of the American savages, and the least amenable of all our old settlers to bribery or bullets, stand guard over them. Lower

California promises copper and grain, coffee and rice, but waits for cheap labor and more abundant capital.

The Southern Pacific Railroad will reveal the mysteries and awaken the capacities of all this southern tier of Territories, between Missouri, Arkansas and Texas, and the Pacific Coast. It has a wealth of rivers, especially in its eastern portions, that are guaranty of fertile valleys; we know it offers high and broad and dry plains; the latitude assures us of a mild climate; and if the precious metals prove scant or unremuncrative, we may be certain that agriculture has treasures untold within its lines. Of all our grand continental area, we popularly know the least of that broad belt, stretching from the Mississippi River south of St. Louis through to the Pacific Ocean,-between the thirty-seventh and thirtieth par-allels,-yet we are likely to be the more astonished at its revelations under the unveiling of the second continental railroad, whose track will pierce through near its center, than we have been over all that settlers and travelers have told us of the now more familiar northern sections of our New West.

But the great mocking mystery of our geography is the Grand Canyon of the Colorado and the region of country along and around it. The government maps, noting only what is absolutely known, carry a great blank to represent it. Rivers end abruptly, and, three or four hundred miles below, their common receptacle, a monster stream, begins as abruptly. This vacant region comprises the northern part of Arizona, and the south-eastern part of Utah, and is three hundred miles from north to south and two
hundred miles from east to west. Is any other nation so ignorant of such a piece of itself? We know this simply of it, - that it is generally high, barren tableland, of a volcanic rocky character; that the waters of the western slopes of the Rocky Mountains in Colorado and Wyoming and Utah, making up the Grand and Green Rivers, come together within it, and form the grand Colorado of the West; and that this stream then flows for three hundred miles between massive walls of solid rock, averaging three thousand feet of perpendicular hight, up which no one can climb, down which a safe descent is impossible, and between which the confined stream courses always rapidly, often madly, with falls and eddies, ever fearfully to whoever should commit himself to its waters. Every one, who has ever come to these high banks, has found it impossible to reach the waters beneath; no one has ever dared knowingly to enter the Canyon from above and go down the stream; and its ascent from below has been too severe an undertaking for any personal enterprise.

We have only one authentic account of a passage through this mysterious, majestic Canyon. It was a terrible voyage, indeed; unwittingly begun, almost miraculously completed. Three men, hunting for gold in south-western Colorado in the summer of 1867, were attacked by Indians while in camp near where the San Juan River enters the Colorado; one was killed, the others with a part of their provisions escaped, and took to the stream on a rough raft. With little knowledge of what they were doing, they drifted into the Colorado, here with open banks, and
on down its broad smooth current; soon they found themselves within the high walls, and among foaming rapids; but on the second day, the provisions and one of the men was swept off and lost in going over a cataract; the other, James White, having lashed himself to the logs, remained, and, alone, and without food, upon these strange waters, the sun almost consuming him with its direct rays, rapids and whirlpools tossing him hither and thither, and calling on all his strength to keep from following the fate of his comrade, the rocky walls on each side never less than one thousand fect high, and often as he thought a mile and a half, wild berries on little islands at first giving him trilling nourishment, and in their absence the lizards tantalizing his hunger by escaping his reach,thus this uneonscious pioneer of, perhaps, the most wonderful phenomenon of the world, with sufferings of body and mind indescribable, made the long voyage, and at the end of fourteen days, for seven of which he had no food whatsoever, came out of the prison walls of the stream, and reached the Indian and white settlements near Callville, the head of narigation on the Colorado River. He was scarcely alive, and one of the first persons who saw him exclaimed, "My God, that man is a hundred years old!" But he recovered, and lives as testimony to what had been before a marvelous fable, and is still a fact that calls keenly for further exploration and description.

We shall not now wait long for this probably. Before even this experience was known, Professor Powell, an enthusiastic geologist of Illinois, had secured government assistance in a personal plan for
exploring the Parks and Mountains of Colorado, and then going down the Canyon of the Colorado. He and a corps of young scientific assistants spent the summer of 1868 in carrying out his first purpose, and passed the winter of 1869 in camp on one of the tributaries of the Colorado, with the intent of entering the Canyon the ensuing summer. The progress of the experlition will be awaited with great interest. Professor Powell is well edncated, an enthasiastic, resolute, and gallant leader, as his other title of Major and an absent arm, won and lost in the war, testify,seemingly well-endowed, save in his single arm, physically and mentally for the arduous work of both body and brains that he has undertaken.

Nearly all of the rivers of Colorado and Utah and many of those of California run for brief distances, from one to twenty-five miles, through such gorges of rock; or they "canyon," as, by making a verb out of the Spanish noun, the people of the country describe the streams as performing the feat of such rock passages, where their banks are inapproachable, and trails or roads are sent over or around; but this rockguardel carcer of the great river of the Interior Basin of the Continent is the Grand Canyon of the world, and one of its most wonderful marvels. Its passage in well protected boats by careful navigators can scarcely be deemed impracticable, however dangerous; but the general judgment of residents in Colorado amd Arizona is, that it should be made from below, ascending the stream with the help of poles and ropes, mather than descending it from above, which would expose the navigators to the freaks of falls,
rapid currents, and whirling eddies, that they will come upon without warning. White, the hero of the first voyage, estimates that he must have gone near five hundred miles upon the river, for most of the way within the confined Canyon, impassable as a fortress, a dungeon over a cataract.

This secret being explored, who shall next solve the deeper enigma of two great under-ground rivers, larger and longer each than Mississippi or Columbia, one rmming beneath the Rocky Mountains from north to south, and debouching unseen into the Gulf of Mexico, and the other coming up under the South American Andes, and entering the Caribbean Sea,both heated by the internal volcanic fires through which they pass, their volume and force of outflow not only accounting for the elevation of the waters of the gulf and sea above the ocean, but originating that mrsterious river of the ocean, the Gulf Stream? That such things be is the faith of Mr. George Catlin, who, having exhausted the Indians of North America, has of late turned his studies to its mountains and rocks and rivers, with this result. His grand theory has the advantage certainly of not being readily disproved. But most travelers and scientific explorers will find enough to do for a generation to come, at least, in unraveling the mysteries and cataloguing the curiosities above ground in all this New World of ours ; and Mr. Catlin's theory must wait for its proof till the Colorado gold-miners dig down into his grand river beneath their mountains.

The hand of science has as yet touched but lightly here and there over the vast area of Western Amer-
ica. Professor Whitney has done much to reduce Califormia to intelligent order, but much also remains to complete so intricate and important a work. Professor Powell's gleanings in Colorado through all the fields of science will be valuable as guides for more thorough explorations in the future ; and Mr. Clarence King is completing with government assistance an important recomnoissance of the mineral deposits and agricultural capacities along a hundred-mile belt between the Plains and California, through the center of which runs the first Pacific Railroad. Beyond these, our exact knowledge of what this country was, is and may be rests upon the imperfect reports of emigrants, gold and silver seekers, and superficial railroad surveys; and these, though valuable, provoke and confuse the scholar, rather than satisfy his thirst for information.

The fresh idiomatic phrases and "slang" words, that potir in on the ear of the traveler through our New West, and especially in its mining districts, will greatly amuse and interest him. The language seems to be finding an invigoration among these hearty and candid residents of the borders of civilization. They are not drawn, indeed, from "the well of English undefiled;" but they bubble up from fresh springs, sometimes all sparkling with wit and meaning, and many of them will win their way and keep their place in the common stream of our mother tongue. What wealth of new words and new meanings for old ones would Shakespere not have gathered up in a week's life among the miners of White Pine for instance? "You bet" is an emphatic affirmative;
"get up and get" an earnest command to go; "pan out," borrowed from washing sands for gold, signifies turning out or amounting to.-thus a man or a speculation "pans out" good or bad as the case may be; "weaken" is widely used to express all kinds of failing or failure; a finely dressed woman "rags out;" a humbng or cheat is a "bilk;" a loafer is a "bummer;" "shebang" is applied to any sort of a shop, honse or office; "outfit" to anything new you have got; and "affidavit" comprehends everything for which no other word is handy; "bull-whacking" is driving an ox team, a business in which the present Senator Stewart of Nevada began his life in that State; "how" is adopted from the Indians as an abbreviation for "how do you do?" or "how are you?"; "peter out" stands again for failure; "bed rock" for the end or bottom of things; "show" or "color" indicates promise or prospect; the Spanish "corral" is adapted to any sort of capture or control,-as that a broker had "corralled" the stock of a certain company; a "biled shirt" is a white one; "square" anything excellent or perfect; "on it" signifies an earnest pursuit of any special end, and applied to a woman settles her character the wrong way; "you can't prove it by me," a general doubt or denial; "none of it in mine," a declination ;-and so on indefinitely almost, a new phase or word coming up into society from below every little while, having its run and trial, and becoming a permanency or being banished, as it is found to stand the tests of taste and of genuine meaning, or not.

Except the Apache tribe in Arizona, who are a
strong, warlike and implacable race, the Indians are generally subdued and inoffensive throughout all the Pacific Coast region. In California, they numbered over one hundred thousand in 1823, while now they are reduced to twenty thousand, or less. These live mostly on reservations, and engage successfully in agricultural labors. The Indian tribes of California and Mexico seem alike a branch of the Asiatic races, rather than kindred to the genuine North American Indian. In Oregon, and Nevada, and Washington, the Indians are also few and fading, and rarely now come into collision with the whites. Those of British Columbia and Alaska develop the characteristics of the Esquinaux, and the white settlers have little serious trouble with them. In Idaho and Eastern Oregon, the tribes have been at times rebellious against their destiny, and now make travel in some sections dangerous. But as a rule, the Indians west of the Rocky Mountains are peaceful, have ceased to struggle against their conquerors, and take such terms as they can get, and stoically look decay and death in the face. Travel is more likely to encounter trouble from white highway robbers, or "road agents," in the vernacular of the West, than from the enfeebled red men. These adopt the style of the Italian and Mexican bandits, mask themselves, stop the solitary traveler, or a stage-coach of passengers, despoil them of money and valuables, under threat of instant death from levelled muskets at any resistance, and then let their victims pass unharmed bodily, but very empty in pocket and sheepish in feelings. The interior is destined, probably, to pass through an era
of this sort of crime; already it has broken out on the remote roads of California, and on the regular routes in Nevada and Idaho. The vicious and vagrant populations that followed the progress of the Railroad in its building, and have been set loose by its completion; the similar elements turned adrift by the failure of mining enterprises, both furnish the needy and desperate characters for the business. Not unlikely they may grow bold enough to stop and "go through" a railroad train. But the spirit of the country will meet such violence with sharp pumishment. The "road agents" will get no benefit from the law's delay, and their career will not be long.

But we must not linger longer on the interesting themes that seenery, society and civilization so thickly present to us in this new land of Western America. We grew sentimental as the close of our experiences on the Pacific Coast approached. With ball and dinner, with flowers and friendship, our hosts made the parting both sweet and sad. Dainty in phrase as hearty in feeling, the San Franciscans, half Frenchman and wholly American, gave the coup de grace to such a summer of hospitality, both of sense and spirit, as was never ours before.

But all is over now,-the Speaker has made his farewell speech; Governor Bross has addressed the last Sunday-school ; the brass band is hushed,-

> "And silence, like a poultice, comes,
> To heal the blows of sound ;-"
the final photograph is taken,-and rare photographs, indeed, both of faces and scenery, do the skill of the
artist and clearness of the air combine to produce on this Coast: the tongue has wagged its last goodbye; and the hour of waving and drying handkerchiefs is passing! Through the Golden Gate, the "Golden City" takes us out into the Pacific Sea; and we turn our eyes and our thoughts forward for Home. But California and her sister States enlarge upon the inward, the backward vision. It runs quickly and surely to a world-encircling commerce, a world-embracing civilization, an Empire that shall be the glory and the culmination of the American Republic!

## XXVII.

## hOME BY TIIE ISTHMIUS.

The Steamship Line between San Francisco and New York by the Isthmus-Its Business, and its Relations to Pacific Coast Life-The Revolution of the Railroad-Our Voyage IIome-Life on a California Steamer-The Sceuery Along the Coast-Panama and its Bay-The Ride Across the Isthmus-Tropical Sights and Experi-ences-The Quick Trip on the Atlantic Side to New York - The Continental Journey Ended and Summed Up-America Realizes Herself and lecognized by the World.

Trougn the Pacific Railroad entirely changes the manner and course of travel between the Atlantic and Pacific States, no account of California life is complete, no review of the social and business development of our Pacific Coast Empire can be intelligent, that does not present the steanship service by the Pamama route. This has been the grand avenue of travel and of business between our East and our West. Previous to 1869 , where one person went to Nevada or California or returned, overland, one hundred at least went and came by the steamers and crossed the Isthmus. This travel built the Railroad across the Isthmus, and created lines of ocean steamers, that carried more passengers, and with greater
comfort and luxury, than any other steamship line in the world.

Back and forth on this line for years have passed from three to six thonsand persons a month; it carried to the Pacific States in 1868 nearly fifty thousand passengers, and brought back over twenty thousand. In the same year over fifty-five thousind tons of merchandise were carried into San Framcisco over this steamship and Isthmus route; their total value being nearly fifty millions of dollars, and the charges for freight nearly three millions of dollars. Here alone was freight enough from New York to San Francisco to load a railway train of thirty cars with five tons each, every morning in the whole year! The average tariff of charges by the steamers for the service in 1868 was forty-five dollars a ton; while in 1867 they carried only about half as many goods at sixty-five dollars a ton. These figures do not include the freight coming from California to the East, which of course is not near so much as that going the other way, though during the Eastern demand for flour last year, very heavy; but they serve to exhibit the great amount of business done upon the steamship and Isthmus route, and convey an idea of the traffic which the Continental Railroad,-performing the same service in less than half the time,-has offered to its competition in the begimning. The steamers will, of course, lose all freight in which speed is a first object, and the greater part if not the whole of their through passengers; but they expect to so increase their general merchandise business, from the enlarged traffic of the two sides of the Continent,
and the diversion of much of the Asiatic trade in this clirection, as to maintain their lines profitably.

The glory of their history is departed, however; the romance, the comedy, the tragedy of a trip to or from California, down to and through the tropies and across the Isthmus, and back again on another shore, are all over. The steamers will be deserted of the gay, the rich and the beautiful; and Love has lost one of its great American opportumities. How can sentiment flourish on a whistling, wheezing, bouncing railroad train, every passenger begrimed with dust, and denied all opportunity of clean clothes, even of a tolerable toilet? Only the coarse freight, only the poor emigrants, to whom money is more than time, will now occupy the steamers. The world henceforth gocs with Pullman by rail; and the poetry of the California joumey, which has so long fluttered in white linens and delicate muslins, and lounced along broad and canopied decks, or cooed in capacious staterooms, is supplanted by the plain prose of repellant cloth and raper collars. and a single seat and a narrow berth in a crowded car.

But our return home in 1865 was made when the steamship service was in its best estate; the trip introduced us to strange scenery and society,-to the life and peoples of the tropics,-to varied and unique experiences with nature and human nature; and it was a fit rounding of our gay and anomalous Pacific Coast summer. The European voyage is ten or a dozen days of a rough sea, out of sight of land, and with a hundred or two of people very like yourself; often a dreary confinement in tossing berth,--a
penitentiary without its security. But the California sea trip is to this as kaleidoscope to common spectacles; it occupies over three weeks; we sail for most of the way on seas as smooth as inland lakes, by shores rich with tropic greens; our vessel is larger, more convenient and luxurions; we have a thousand companions,-more or less, and oftener more than less,-of the all-est sorts of people; we sit down to tables as varied and abundant as those of first-class hotels; and everything invites a season of repose, of luxury, of the senses.

The crowd is the only source of standing discomfort. We are as thick as flies in August; four and five in a state-room; we must needs divide into eating battalions and go twice for our meals: would we have chairs to sit in shade around the decks, we must buy and bring them: there is no privacy; gamblers jostle preachers; commercial women divide staterooms with fine ladies; honest miners in red flamel sit next my New York exquisite in French broad-cloth:-and as for the babies, they fairly swarm,the ship is one grand nursery; and like the British drum-beat, the discordant music of their diseomfort follows sum, moon and stars through every one of every twenty-four hours. There were at least one hundred of them on our ship; and new and kinder notions of old King Herod prevailed among suffering passengers. The new historian Froude makes saint and anchorite of wife-changing, woman-killing Henry the Eighth : why should not some ambitious rival, gaining new light from the California voyage, make public benefactor of baby-slaughtering Herod?

The Const hills along California make rough and barren work of the shore view; but as we get down to Mexico, the hills open and become clothed with deep green. The weather, never cold, grows hot; flamels come off; the fortunate in white linen blosfom out in spotless garb; the close and crowded state-rooms turn out their sleepers on the cabin thors, the decks, everywhere and anywhere that a breath of air can be wooed; babies lie around roosely and au naturel; you have to pick your way at night about the open parts of the ship, as tender visitor to fresh battle-field. The languor of the tropies comes over you all; perspiration stands in great drops, or flows in rivulets from the body; a creamy, hazy feeling possesses the senses; working is ab:untoned; reading becomes an effort; card-playing ecases to lure; dreaning, dozing and scandaltalking grow to be the occupations of the ship's com-pany,-possibly scandal-making, for the courtesans become bohl and flament, and the weak and imprudent show that they are so.

Half way down, at the end of the first week, we stop at Acapulco, the chief Mexican port on the Pacific Coast, founded by Spain, and famous in the days of her prosperous American commerce. It lies beautifully under the hills, back of an island, which forms an exquisite and safe bay. Here we taste of tropical life on shore; here we sample the Mexicans and Mexican Republic. It is a pitiful civilization that they present, and not very inspiring of sympathy or hope. The Mexican population is several thousands, and there are only two or three families
of whites. The Mexicans are a mulattoish race, an apparent cross between Indians and negroes, with here and there a vein of Spanish blood. Indolence and incompetency mark their life and character. The prineipal loeal industry appears to be the supplying of the passengers on the steamships, that stop here, going either way, for coal and provisions, with fruits and fancy shell-work. The houses are low, adobe, and with thick walls, and whitewashed on the outside; the streets no wider than a generous city sidewalk; the plaza or church square opens broad but barren,-and here is the market-place, where, from little stands or on the pavement, the simple wares and food and fruits and faney shells of the people, are offered for sale by gross women, dreary old lags, or precocious girls; and chaffering goes on day and evening with citizen and stranger. A few of us landed and spent the evening on shore; it was a weird scene that the market-place presented under the rude and scant torch-light. Occasionally we found a comely girl among the stands, with rounded arm and bright eye, and sueh usually got the best bargains from our party. A triek of their trade is to make the stranger a present of some petty article, even to foree it upon him, with fiattering mamer and speech; and then to exact gallant and munificent return in coin. This is type of tropical trading the world over, and in all ages, I believe. Did not Abraham or other of the old prophets buy land for burialplace for his kindred under such embarrassing circumstances? Close and heavy was the evening's heat; and the people, not busy trading with the

Yankees, lay around loose in hammocks, or on the floors of piazza, thinly raimented, stolid, indifferent and idolent.

Though Acapulco is the largest town in the west of Mexico, and its chief Pacific port, there is not a single road out from it to the interior ; there is no ingress or egress save on foot or horseback; no other means of sommunication between it and the capital. The town has no wheeled vehicle of higher pretensions than a wheelbarrow. What can be done for a people who, with two hundred years and more of contact with civilization, ean do no more for themselves? It was season of religious festivity when we were there; and among the distinguished personages we were presented to, was a fat old mulatto priest, who had come in from the interior to preside at the church ceremonies, and had brought along with him, for Christian solace and refection for himself and followers, a couple of hundred rare fighting cocks! But here were the groves of palin, of banana, of cocoanut; here, luxuriant in the open air, the broad leaves and rich colors of many plants that are seen in the temperate latitudes only in hot-louses; here, fresh from trees, on the trees, were the delicious fruits that come to us at home only after long voyages, and often stale and tasteless.

On down the Coast again, past Mexico, out of sight, of course, but not out of thought of its mammoth volcano, Popocatapetl, the highest known mountain of North America, (seventeen thousand seven hundred and eighty-three feet); across the gulf Tchuantepec; past Guatemala; past its wonderful and beautiful vol-
canic mountains, peaceful now, but exquisite in outline, perfect in cone-shapes, and rising to thirteen and fourteen thousand feet in hight; past San Salvador; amused with the lively little flying fishes that single or in shoals skipped from wave to wave, flashing in the sumlight, as dexterous boy skips bright stone over the water, and awed with tropical lightning that made the heavens all aglow with wide and frequent Hashes; past Nicaragua, where one of the American lines of steamers stop, and their passengers cross to Atlantic waters; then Costa Rica; steering easterly ail this while to keep the tapering Continent; last, New Granada; and on early morning, at the close of a fortnight from San Francisco, rounding into the wide, warm bay of Panama, where the narrow neck of land, that connects and divides two seas and two Continents, confronts us. It is a charming scene, as we go past the richly-green islands of the bay, one with thriving-looking town at its base, another holding sacredly exclusive the sad burial-place for strangertravelers, another the depot for the steamships, others undisputed with luxuriant and grasping nature, and anchor, amid all, in front of the quaint old city of Panama. The harbor itself is center for wide commerce North and South, gathering here to cross the Isthmus, and reach American and European centers; but a bad bar forces the slow use of lighters for passengers and freight.

Panama we found to be only an improvement over Acapulco; it mingled more modern quality with its as ancient features; the streets were broader; the houses of two stories; and carts and rickety omni-
buses, and a fine carriage or two, as well as retail stores by Jews or Yankees, and large warehouses under English or American superintendence, showed the imnovations and elevations of commerce. There was a flavor of Spanish about everything, however; the food, the clurches, the stores, the town generally; decayed, effete, luxuriant, tropical Spanish. The natives were a good deal mixed, bearing all the mulatto shades; the women flaunting in narrow, sleazy white gowns, rich with wide negro rufles and furbelows; and the children rollicking in single, short, wide chemises, or unblushing and bold with utter absence of covering. The churches, ancient, cheap and mossgrown, won no veneration except for their antiquity; they told of no interest in religion; of nothing but a tawdry, rulgar fanaticism; a lazy, cock-fighting priesthoorl, and an indifferent parish. We found the bats flying about in the arches above and behind the altar, and priests and boys firing guns at them, among the poor tinselry of the worship, with results more damaging to "bell, book and candle" than birds.

At mid-day, the long and crowded passenger train started across the Isthmus,--treasure and baggage waited for a second,-and we had that ever-memorable ride, in the experience of all who have ever made this trip, between the Continents, from Ocean to Ocean, in the very fullness of the tropics, over rails fairly built upon luman bodies, so fatal was the miasma of the country to nearly all classes of imported laborers. The road is fifty miles long, and the run is made in two to three hours. Monopolizing the commerce of all the Pacific Coast of both North
and South America, the gateway for all travel from Continent to Continent, it is a rich possession to its owners. The fare for this two hours' ride is no less than twenty-five dollars, and freights are correspondingly high. The sleepers and ties of the track are of lignum-vite wood, the telegraph posts of cement, as thus only are both protected from rot and insect. The road is well appointed in other respects, and the service unexceptionable.

But the ride was rare revelation. All was substantially new and strange to our unused northern eyes; and we stared and wondered and absorbed through all this tropical passage. The sun was not fierce: one will suffer more from heat in a ride from Springfieid to New York of a dry and dusty August day; but the warmeth was deep and high,-it lay in thick, heary, sensuous folds in the air,-it did not fret, but it permeated and subdued and enriched. With Nature, it was season of rest,-colors were dulled from the spring and early summer hues,but what quantity! what ripeness and fullness! what luxuriant, wanton rioting! There was no limit to variety or aboundingness of tree and shrub, and plant and flower and grass. Waste and robbery, there could not be in such abundance; the vacancy of to-day's ax or fire is filled to-morrow; only daily use of hatchet and scythe keeps open path. Palms everywhere, singly and in groves, with great rough fruit, rich in oil; ferns as trees and in forests; clusters of banamas as hig as an honest two-bushel charcoal basket, yet hidden by the generous leaves of their tree; bread-fruit and cocoa-nuts ripening and
rotting out of reach of man or beast; tall oaks and short oaks; little trees and big trees of every family, interlaced so closely that you could not tell where one begun and the other left off; vines, tender and strong, marrying everything to everybody, rumning up, and rumning down, and rumning around, dropping down lines straight and stiff like ropes, all through the woods, making swings everywhere, but permitting no place for their play; great, coarse, flaming flower, and delicate, tender microscopic blossom holding up its cup by roadside, between rails, on every hand; occasionally bright plumage of gay bird tluttered across the vision among thick foliage, and hid behind leaves so wide and long that we knew why Adam and Eve needed no tailor or mantua-maker,one would suffice for all ordinary length of naked-ness:-thus and more like it and continuously was our ride across the Isthmus.

At frequent intervals along the road are well-built stations with handsome yards and gardens and American occupants. Adjoining, and at other points, we passed crowded negro hamlets and villages; their houses frequently thatched both on top and side with the generous leaves of the adjoining forests, and their food the easy-growing fruits and vegetables of the tropics. What work they will do the Railroad probably furnishes. The mark of the white man is among them; if dead, he yet liveth in the blood of the native; but the habit of the negro is dominant. The climate and their rude wants invite a lazy, sensual life, and such is theirs. There is small expenditure for clothes; boys and girls, even of full growth,
stroll freely about before the passing trains, and among their fellows, with not a rag of clothing to their bodies; and the men, when they do work, strip as fully to the task.
We pass by the thick and sinuous Chagres River, up and down which in flat-boats the early passengers by this route were pushed by the negro; along whose banks in this slow and painful passage many laid down to die; and out of whose fetid breath came many a long-lurking and finally fatal fever. The passage is now made so quickly in the cars, that there is little danger at any season of taking the fever of the country.

We came into Aspinwall, in the first rain storm that we had felt since rain and hail pelted us so mercilessly on the Plains near Fort Kearney, nearly four months before, and found that a dreary new town of one street, lined with hotels and shops and Jamaica negroes and negresses. These people are proof against this climate; they luxuriate and thrive from the start here, and it was due to their importation that the Railroad was finally completed, as it was, after all other importations, white and black alike, had fallen in their tracks along its line of rotting nature, stirred to revengeful miasma by shovel and pick. Aspinwall has no past like Panama, no present and no future but what the Railroad and Steam-ships make for it; and we welcomed the summons to the new steamer for New York.

The finest of weather, and the quickest trip ever made from the Isthmus to New York,-six and a half days,-waited upon us. The September equi32
noctial was past due, but we escaped even the breath of it; the Carribbean Sea forgot its accustomed crispness and spared our stomachs and appetites; and, threading our way through the West India Islands; stopping at none, and catching glimpse of but few ; passing near but outside Cuba, and waving our hands to its eastern shores, we swept up on calm waters, under summer skies, into the broad Atlantic; caught the Gulf Stream and crossed it; cherished our fears of a rough time "off Hatteras," and awoke to find the dreaded spot the smoothest sea of all; and passed into ever beautiful and now dearly welcomed New York harbor on a soft September morning. It is five thousand miles from San Francisco to New York by this route; our trip was made in twenty-one days; it could easily be brought within eighteen; but the steamers more often occupy twentyfour.

Thus we closed our tour of the American Continent; from longitude one degree to longitude thirtyfour degrees; from latitude fifty to latitude seven; journeying in all some twelve thousand miles, half by sea, and a third by stage; crossing the great mountain ranges of the Continent; exploring the forests, the mines, the commerce of a new world; seeing and learning the field of a new empire; enjoying the most generous of hospitality in every possible and imaginable form; and came back to our homes in a trifle more than four months from the day of leaving them, rich with knowledge and growth, with fuller measure of the American Republic and larger faith in its destiny. What few saw then is admitted
now ; what was then promised is now half-realized; the continental railroad, then but just begun, is now completed; and over its swift line, through its quick development, America sees and welcomes her New West, and the World recognizes America!

## A TWO MONTHS' JOURNEY

TO AND THROUGI THE PACIFIC STATES BY THE PACIFIC
RAILROAD.
From Omaha to Cheyenne and Denver, . . . . . . . . 2
Excursions in Colorado, . . . . . . . . . . . . . 9
To Salt Lake City, . . . . . . . . . . . . . . . 2
Stay in Salt Lake City, . . . . . . . . . . . . . 2
To Virginia City and there, . . . . . . . . . . . . 2
To San Francisco, with two days to stop on the way, . . . . . 3
In and about San Francisco, . . . . . . . . . . . . 7
Yo Semite Valley and Big Trees, . . . . . . . . . . 10
Overland to Oregon, . . . . . . . . . . . . . . 6
From Portland to Victoria, through Washington Territory and
Puget's Sound, and back, . . . . . . . . . . 7
From Portland to Salt Lake by Columbia River, Idaho and Sho-
shone Falls, . . . . . . . . . . . . . . . 8
From Salt Lake to Omaha, . . . . . . . . . . . . 2
Total, . . . . . . . . . . . . . . . $\overline{60}$
This is obviously a short allowance for so comprehensive a journey ; but every traveler can enlarge it to suit his comfort and convenience. He cannot advantageously cut down Colorado, San Francisco and its neighborhoods, or the Yo Semite, but may well add a week to each. Another month would allow the traveler to return through Montana and down the Upper Missouri, besides scattering an extra week
along through the previous portions of his journey. Two months more still,-or from June 1 to November 1,-would include, with all the above, a liberal excursion to the Sandwich Islands. And the weather in all these five months would be favorable for every part of the grand trip; only in the Islands would water-proofs and umbrellas be needed. For the two months' journey, we would recommend July and August; for the three, July, August and September. California is in its summer glory in April and May; but that is too early for its mountains or the Yo Semite; and the Parks and Mountains of Colorado, though passable in June, are much more accessible in July and August.


[^0]:    Entered according to Act of Congress, in the year 1869, by SAMUEL BOWLES,
    In the Clerk's Office of the District Court of the District of Connecticut.

[^1]:    S. 1 .

    Springfield, MLass., March, 1869.

[^2]:    "Mammoth Lager Beer Saloon, in the basement, corner Main and Virginia streets, Austin, Nevada. Choice liquors, wines, lager beer and cigars, served by pretty girls, who understand their business and attend to it. Votaries of Bacchus, Gambrinus, Venus or Cupid can spend an evening agreeably at the Mammoth Saloon."

[^3]:    " Extremely few metalliferous veins are equally rich for any considerable distance, either lengthwise or up and down; the valuable portions of the ore are concentrated in masses which are frequently very limited in extent, compared with the mass of the vein, in which they are contained. Indications of valuable ores on the surface do not always, nor once in a hundred times, lead to masses of ore beneath the surface of a sufficient extent and purity to be worked with profit. There are, literally and truly, thousands of places in New England where ores of the

