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COLORADO:

ITS AGRICULTURE, STOCKFEEDING,
SCENERY, AND SHOOTING.

BY

S. NUGENT TOWNSHEND, J.P.

("ST. KAMES.")

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CONTENTS.

CHAPTER I.

PAGE

INTERNATIONAL PRESS PARTY—PUEBLO—GRAND CAÑON OF THE ARKANSAS—TEXAS CREEK—MINING AND MINERS—SAN LUIS VALLEY—DEL NORTE—HEIGHTS OF PEAKS—RETURN TO PUEBLO	1
---	---

CHAPTER II.

DENVER—"OREGON BILL"—SPORT IN THE ROCKIES— ESTIMATE OF OUTFIT—RETURN TO DENVER	23
---	----

CHAPTER III.

VISIT TO CHEYENNE—DENVER AT CHRISTMAS—VISIT TO MR. G. GRANT'S FARM—THE ROCKIES IN WINTER— BEAVERS—ENGLISH SETTLERS	46
--	----

CHAPTER IV.

CLEAR CREEK VALLEY—ENGLISH MINING SPECULATIONS AND NATIVE PECULATIONS—THE 'COLDSTREAM MINE —FISH BREEDING AT GREEN LAKE—EMPIRE—IDAHO SPRINGS	61
---	----

CHAPTER V.

	PAGE
THE VETA PASS—MR. LIVESAY'S RANCHE "GOODNIGHT"	
— SUCCESSFUL INVESTMENT OF CAPITAL — WET	
MOUNTAIN VALLEY	76

CHAPTER VI.

THE GARDEN OF THE GODS—UTE PASS—MANITOU PARK	
—TROUT BREEDING—COLORADO SPRINGS—CAÑON CITY	
—WHO SHOULD AND WHO SHOULD NOT SETTLE IN	
COLORADO—CLIMATE—IRRIGATION—GENERAL CON-	
CLUSIONS	98

TO

G. W. E. GRIFFITH,

OF DENVER AND LEADVILLE, COLORADO.

ONE WHO OFFERS THE BEST AND MOST DISINTERESTED ADVICE TO HIS
FELLOW COUNTRYMEN IN "THE CENTENNIAL STATE;" WHOSE HEART
BEATS EVER WARMLY FOR, AND WHOSE PURSE HAS OFTEN BEEN
OPEN TO, MANY OF BRITAIN'S YOUNGER SONS, WHO HAVE
FOUND TO THEIR COST THAT IN COLORADO LAY NOT
THEIR VOCATION; AND TO WHOM THE AUTHOR IS
INDEBTED FOR THE KINDEST HOSPITALITY,
AND THE KEENEST AND MOST HIGH-
MINDED APPRECIATION OF HIS
MISSION AS ONE OF THE PIONEERS
OF BRITISH EMIGRATION.



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PREFACE.

THE reader will perhaps have to make some little allowance for variation of dates and seasons in this book, as occasional expeditions made in three successive years through Colorado, have been mixed up to form one continuous journey through the State; the figures, also, where needful, have been revised, so as to make them as applicable as possible to the present day.

With the exception of this, and a good deal of matter being cut out, as at present of no emigrational importance, the text is the same as that of my letters under the *nom de plume* of "St. Kames" in *The Field* of 1876, '7 and '8.

Only one important change has taken place in Colorado since I wrote these letters, and that is the springing up of the town of Leadville, about eighty miles N.W. of Cañon City, and S.W. of Denver. Leadville has now a population of 10,000, yet over the site of it—a grassless mountain desert, with not a human habitation in sight—I walked in 1876. The wonderful progress in this portion of the country is altogether owing to rich silver veins being found there; but as I have only sufficient

technical knowledge of mines to be a dangerous authority on them, I do not include any account of Leadville here.

Should the success of this volume with the public give sufficient encouragement, similar publications will appear; 1, on Nebraska, Wyoming, and Utah; 2, on Kansas; 3, on Texas, that great empire State of the south-west; and perhaps, 4, sketches of Arkansas, Illinois, Missouri, and Indiana.

In all of these States, young fellows with some brains, muscle, and determination, with principle, moral courage, and courtesy, and without any extra amount of nonsense, affectation, political bigotry, or even capital, have succeeded very well and can do so now as well as ever.

Colorado, only because it was the first State I visited, forms the subject of the first of my books of explorations for emigrants, and I in no way wish to have it implied that I think its emigrational advantages are equal to those of Kansas, or Nebraska, or for the pastoral settler, of Texas; but the Colorado climate and its scenery are so infinitely better than those of any of these, that life there offers greater inducements to many.

S. NUGENT TOWNSHEND.

ST. KAMES ISLAND,
CHURCH CROSS,
CO. CORK.

May 12, 1879.

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CHAPTER I.

INTERNATIONAL PRESS PARTY—PUEBLO—GRAND CAÑON OF THE ARKANSAS
—TEXAS CREEK—MINING AND MINERS—SAN LUIS VALLEY—DEL
NORTE—HEIGHTS OF PEAKS—RETURN TO PUEBLO.

MY Introduction to Colorado was in this wise. Having spent the summer of 1876 at the Centennial Exhibition, Philadelphia, I accepted an official invitation to become a member of an international press party to visit the Western States of North America, dipping far out of the regular route into the Ex-Confederate States, so as to see the best parts of the reclaimed, but only partially settled, lands of that region. Our leader was the Chevalier Ernst von Hesse Wartegg, special correspondent of the *Illustrirte Zeitung*, Vienna; Belgium sent Leo von Elliot, special artist of the Brussels *Monde Illustré*; Russia was represented by Count Adam Steenbock, a lieutenant in the Imperial Horse Guards; Henri De La Mothe was special correspondent of *Le Temps*, Paris; Professor Paul Oeker, of the *Vossische Zeitung*, Berlin; and F. Bornemann, an American citizen; the writer being the least known to journalistic fame of the party. We all pursued slightly different objects, mine being agriculture, stock-feeding, scenery, and shooting.

Passing over our limited experiences in Ohio, Kentucky, Tennessee, Missouri, and New Mexico, and leaving the more extended observations on Kansas and Texas for future separate chronicle, I may commence the present narrative with my journey by rail from Peabody, in Kansas, in the early autumn of the same year. The last 250-miles run in that State was through a country almost utterly barren and devoid of interest, save what it borrowed from old Spanish and Mexican legends. We followed the Arkansas River all the way; the air was thick with grasshoppers flying low, and antelopes in numerous herds often ran within six or seven hundred yards of the train. Thousands of fairly fat cattle dotted the apparently grassless plains. One of these herds numbered 8000; yet that was a good year in prices, and all herds were much thinned by sales. Two cattle proprietors sold 50,000 horned cattle this year, their chief range being, however, not here, but in New Mexico. Passing Syracuse, we saw a large post labelled "Kansas." In a moment the other side became visible, bearing the name Colorado. "What about the Switzerland of America? This is a horrible desert," we exclaim. "Wait and see," said a fellow traveller; "do you notice that little blue cloud westward? That lies on Pike's Peak. Get there to-morrow, and then talk of Switzerland as you will." At Granada, a little farther on, grass appeared; but in this extraordinary district the cattle appear as fat where grass is not found as where it is. We here crossed the Arkansas on a long timber bridge, and saw a long train of hay-laden waggons drawn by eight oxen, each plodding southwards to the drier plains. Beyond, was a fair lot of timber, but so valuable for shelter, that the settlers' little cots are all built of stone. Rabbits with long white ears flitted about; a fat lazy cow stood gazing at us from the centre of the line, and I rang the bell, while the stoker whistled, and the engineer put on his Westinghouse break hard, jerking us all pretty well about, and the inquisitive cow whisked her tail at the last moment, and moved

off just as her impending destruction was inevitable. We met with these exciting incidents at least a dozen times in our 600-mile run on the Santa Fé line.

A herd of pretty horses race us as we get near the historic town of Las Animas, with its "doby" or adobe built houses. It would be rude to say that Las Animas is built of mud, so I will not make that remark, especially as we had a remarkably good dinner at its chief hotel, Vandiver House. The Kansas Pacific Railway also ran here, on a now abandoned line, alongside of us for eighteen miles to La Junta. None of the rails are "chaired," merely spiked down to the sleepers, on these western lines; but the sleepers are hard wood, and only a few inches interval between them, the reason being that iron is dear and timber cheap. At La Junta we went to see a ship of the plains, or prairie waggon, being loaded at Chick, Brown, and Co.'s large store. Nine of these craft were being filled with flour and almost every conceivable commodity for Santa Fé: in one waggon alone were 5000lb. of flour. Here one sees for the first time the wretched Mexican in full costume, and almost at home, for not long ago all this country was Mexican, passing as an outside territory to the United States by the Spanish treaty of 1819. The next eleven miles to Rockyford is an absolute desert. At this place an attempt at irrigation is made, but the agriculture does not nearly supply the place with grain or vegetables. Pike's and Spanish Peaks now look about 1000 feet high, and herds of horses are round us everywhere. An occasional herd of fat cattle is seen at intervals to Lico, and, crossing the Denver and Rio Grande narrow-gauge branch line, we are at the foot of the long-wished-for Rocky Mountains at Pueblo.

Pueblo is nearly 5000 feet above the sea level; but it was as hot as any place we had previously been in. Vivid lightning played all night round Pike's Peak, and it was long ere we could bring ourselves to retire from viewing so grand a sight. We were, however, informed that General Palmer

would next day send very early a special train to take us to Denver over the line of which he was chairman, the Denver and Rio Grande, which since has become a leased branch of the Atchison, Topeka, and Santa Fé. We slept the sleep of the weary, and at 8.30 next morning were careering along the enterprising little narrow-gauge line of which the Coloradians are so justly proud, which runs along the base of the "Old Rockies" for nearly 300 miles, and pushes an occasional branch right into their mineral heart, apparently regardless of time, trouble, expense, or gradients. I travelled 1450 miles back round Kansas before I returned to Pueblo; but as the present narrative is confined to Colorado, I will ask the reader to take leave of the international press party for the present, and pursue with me a western excursion from Pueblo to the Grand Cañon of the Arkansas, and by Barlow and Sanderson's fine stage coaches through the great San Luis Valley, to the San Juan silver-mining district; then we will come back and rejoin the internationals, thus finishing our travels in Colorado.

I started by a branch of the Denver and Rio Grande Railroad for a run of twenty miles to Cañon City just at the base of the foot hills, and only ten miles from the Grand Cañon of the "Arkansaw," as it is here called—indeed, once westward of Kansas, the Arkansas is always called the Arkansaw. The Grand Cañon, or Canyon, is one of the wonders of the world, and has been so often described, that describing it again is like writing on Niagara. It is a mile wide, and 2000 feet perpendicularly deep. You must see it from the top, because you cannot very well get at the bottom of it. Looking directly down 2000 feet is a thing that no one ever did before he or she got here, and it is impossible to describe the sensation. There are numerous jutting rocks on which it is safe to go out and look over, seeing the granite walls all the way down. The Arkansas is only a broad white band at the bottom. Guides bring crowbars and dislodge boulders,

for you to mark the great height by the time these take to descend. How small they look before they reach the river, and how little noise is made by the fearful impact they make on some river-bed brother boulder! Just before I was here this time, "Nym Crinkle" stated that the Atchison, Topeka, and Santa Fé Railway had a hundred men in the cañon cutting sleepers and floating them down the Arkansas, and that it was found necessary to post a polite notice to visitors requesting them "not to throw stones or play at avalanches."

The Rockies, when once you devote yourself entirely to seeing them, put shooting aside, and go direct from one point of grand scenery to another, must certainly etherialise the most unpoetic mind. I said farewell to the Grand Cañon for a long time, and, getting on the box seat of one of Barlow and Sanderson's fine six-horsed mail coaches, went off at a swinging pace from the Cañon City Hotel just before sunrise.* Only five passengers and little luggage made the well-matched greys' labour almost one of love; no rumbling, heavy, awkward, old rattletrap was behind them, but a light, long, canvas-covered coach; harness, far lighter than in English style, sat easily and gracefully on them; the centre pair of horses had, as well as the wheelers, a pole between them, which was hooked on to the pole proper; the whip was a matter of form, and in no case would have reached beyond the wheelers. The human whip was a fine, Saxon-looking, jovial mortal, who swung his team to an inch. Few of the places we traversed had names; there was little to tell about any, but everything to be seen; so I got out my pipe and note book, and began practising word-painting.

Our first sight of interest as we ascended the winding mountain road was a Mexican camp: a young Mexican brunette was lacing her boots, in total disregard of the

* This line of stages has now been abandoned, as the Atchison, Topeka, and Santa Fé Railway run their narrow gauge trains to Alamosa, *viâ* the Veta Pass, subsequently described.

admiring glances of the U.S. mail coach passengers; her male relatives were frying some bacon at the camp fire; they had no tent, and must all have slept in the open air. Then we drove to the Devil's Gate Pass, only a little thing for the Rocky Mountains, about a hundred feet high, the strata of granite being all in stones of regular string courses. A little good driving was required here, and we emerged into "Eight Mile Park," seeing one hundred mountain peaks of the Sangre de Cristo range scattered all round to our front and left, nearly all snow-capped. The park was soon passed, and we drove down a narrow ravine, so rough that I had to steady myself by putting one foot on the lamp; the gentleman next me moored himself in some similar way by his feet, and then we held on to each other. If we lurched to port, I saved him; when we rolled to starboard, he was my only hope and stay. Now my knee nearly touched a boulder, and my head a pine bough; at the same moment the splint bar of the off leader grazed a rock, while the near hind wheel grazed on the opposite side of the ravine wall, as we swung round a sharp bend. "What a place for the Four-in-Hand Club to practise!" I said to our Jehu. He shook his head. "I once had one of them here," he replied, "and he got so nervous, that he would have given his best team to be off the coach when half-way through." Here he flung a small pebble at one of the leaders, who was believed to intend to misconduct himself in some way; the evil projects of the gallant grey were supposed to be frustrated by his being hit on the flank with this granite specimen. "I have plenty more," warningly added our whip to his off leader, and the animal addressed appeared to see the force of the remark, and ceased pulling. Cañon Gulch station was soon reached, twelve miles having been done in 1 hour 25 minutes; and we took a fresh departure across Cañon Bridge, where the Arkansas enters the Grand Cañon—never but once traversed, except in severe frosts, by mankind.

Here we exchanged our six for four other dark greys, as the thirteen miles to the next station, Texas Creek, ran level or down hill through Copper Gulch, a long winding ravine, full of yellow-flowered cactus, some four feet high, colossal cottonwood trees, and stunted oak, covered with a woolly-flowered creeper. The hills on each side varied in height from 90 feet to 1000 feet. The head of this gulch opens into a beautiful sweeping valley, from the head of which the Sangre de Cristo range shows very imposingly. What a spot for residences this fine natural park would make! Fifteen peaks, 10,000 feet to 13,000 feet high, tower above it; glades, dells, smooth sloping lawns, thickets, clumps, and single trees are scattered about, now thickly, now thinly, here inclosing 20 acres, there 1000. If any man wants to plant with taste, let him study nature here; not one foot of this land is taken up, it is all to be had for the asking by naturalised citizens. The society offered by the district is at present but deer, bear, and grouse; but "the Switzerland of America" spreads all her natural charms to entice the stranger hither, and retain him when caught; and the wonder is that only Lord Dunraven has, from the eastern world, picked up "for a song" a park in the western hemisphere which laughs to scorn the beauties of home ones. True, these parks are very useless save for sport and health; ten thousand acres of them will not feed as many cattle as five hundred Kansan acres. If I had not known of the mining wealth here, I would have said Colorado is handsome and good for nothing, Kansas ugly and good—the old balance so often urged against female beauty all the world over. Water is often scarce, in elevated plateaus here grass is bad and sparse, and the air, easily heated to a very high temperature by the mid-day and afternoon sun, is too rarefied to retain a particle of it directly "Sol" turns in for the night, and forthwith a frost sets up and makes your cattle look very seedy unless furnished with shelter—an expense and trouble

quite uncalled for in Kansas for eleven months out of the twelve. A large range is required here for few cattle, but even on this soil of mixed sand and gravel, the animals look very well. Just beyond here, in Wet Mountain Valley, quite a number of English gentlemen are permanently settled—great pets in the district, good sportsmen, and good stock breeders; but of these more anon.

Texas Creek was soon reached, and a picture of our dining room here may be interesting. A well-laid table in the centre, with scrupulously clean cloth and napkins; a bed, snowy in whiteness as the summit of Pike's Peak, in one corner; in the other a washstand, at which, with what I think was rather a false sense of politeness, we insisted upon our two lady passengers making their toilettes first; they appeared, however, to take it as a matter of course, performing their ablutions and doing up their pretty back hair as unconcernedly as though we were "ten thousand miles away." We got a very good dinner, with a second course of plum butter and some other condiments, novel as they were palatable, and paid 3s. for our banquet. Six fresh greys were attached to our vehicle here, and away we rattled again, through a park so lovely that any Englishman would at once ask, Where is the residence on this estate? A fellow passenger bemoaned a rather severe loss in his herd of horses from the "poison weed," which he described as very like the watercress, with a purple blossom, and which, though rarely found, cattle eat voraciously when they get a chance. We skirted a curious heterogeneous mass of hills to the north, through dense oak scrub, being below the level of the pines, whilst descending into Pleasant Valley on the Arkansas, and scuttling down a tremendous decline towards it, the back wheels almost absolutely locked by a powerful foot-brake. The sides of these oak hills appeared as though built of rubble masonry, unfenced precipices yawning grimly, often on one side, sometimes on both, and the descent into

Pleasant Valley taking as many turns as an hereditary lawsuit. The October foliage was scarlet red or crimson on the hill-sides, absolutely golden as we got lower down; and as we reached the river alternate green and gold, like a cottonwood tree seen from the north or south, for the southern sides were always gold, and the northern green. Then we leave behind a neat settler's cottage, and ford a clear stream, out of which our brave greys would dearly like to have taken a nip, but drink was forbidden until they reached Pleasant Valley station, eleven miles from the last. From here we do not follow the Arkansas, but strike S.W., and the coachman appears in a fit of eccentric capriciousness to have run into this lovely valley, at some risk and great inconvenience, only to cut right across and get out of it as quickly as possible.

The temperature was 70°, though on all sides we were surrounded by snow-clad mountains. Two ranches, a country post-office, and two sparkling mountain streams, with their autumn-goldened cottonwood fringes showing clearly amongst the dark green pines far away up the Sangre de Cristos, are our only objects of interest; but our coachman, as though he had given up the idea of forcing his way through the mountains, slowly makes a cut for the valley higher up, passing a deserted ranche whose former owner had tried irrigation from a mountain stream, which dried, and the settler in disgust had fled. The air here was extraordinarily dry; half an hour after I had ducked my head in the river and used my handkerchief as a towel, hair and kerchief were as dry as lime-burners' wigs. This occasional immersion was absolutely necessary, as dust flew fast and furious, and a couple of hours' dry sun here almost blinds one. We crossed the Arkansas at Roger's station in this valley, over a very good bridge, the river being four feet deep, very rapid, and the scenery along its banks most varied—from flat, sandy, low shores to rocky bluffs, and, from being broad and placid, contracting occasionally between high rocks, and flowing

with noisy force over boulders and snags—keeping, however, like all the rivers in Colorado, its belt of cottonwood, green, gold, or brown according to the season, all along its course. We were passing some copper mines, and, as the coach was full of miners—men of much intelligence, some who had started in Cornwall, mined in the Urals, gone to Australia, and then tried back nearer home here—and, as they were all willing to communicate their experiences freely, I let this part of the Arkansas take care of itself, and commenced my investigations into the silver mining of Colorado. The details of the gold, I had previously mastered with the “internationals” further north.

To begin with, a miner here pays nothing for his land. He buys in Denver or Pueblo a coffee pot, a frying pan, a camp kettle, a bake-oven, a bread pan, three tin plates, a knife and fork, a coffee mill, a tin cup, and three spoons, which cost him 1*l.* 3*s.*, all the clothes he can carry or buy, a Sharp rifle, three double blankets, 4*l.* worth of miner’s tools, and some powder; and he then gets as far west as a coach or waggon will take him to Silverton, Ouray, Mineral City, or Lake City, and thence tramps onwards towards Parrott City, the Gunnison river, the Rio la Plata, or Rio Animas. He shoots all he wants to eat, and often violates the State Game Laws by shooting elk, deer, and mountain sheep before August 1; and worse still, another State Game Law, that forbids “the wanton destruction of game at *any* period.” The miner thinks these Acts nonsense; but he believes in another Act that he thinks passed the State legislature too late, viz., the penalty of 100*l.* to 200*l.*, with one to fourteen years in a penitentiary, for salting ores, for many good mines have been lost by actual or verbal salting of their ores; and two men who had worked on the notorious “Emma,” declared that it always was a good paying one—no better than a hundred others they had been on, but one where the miner knew he was earning as much for his employer as for himself,

provided no misrepresentations were made, and no preposterous amount of capital were raised. These men go off into the wilds in twos or threes, and shoot and prospect. Every man who knows anything of his work finds something; then he claims it on oath before a county official, stakes off 300ft. by 1500ft., puts up a big signboard with his name and his new mine's name, and his title is established beyond question, provided he spends 20*l.* per annum on his enterprise, and sinks or drives 10ft. the first year. If he works on his own mine for fifteen days, he is presumed to have spent 20*l.* When 100*l.* worth of work is done, the United States grant a patent, which is indefeasible; but the moment the patent is sealed, the mine is smartly taxed, whether it pays or not. In fact, so long as you spend 20*l.* a year on your mine, you are just as well secured of its possession as though you had a patent, and just as free to sell. If you buy a mine, of course seeing a clear patent is a comfort. Since the "Emma" swindle, English capital has been steadily withheld from these mines; and there is very little machinery in this San Juan district. Some of the 4500 located mines here have over 80 tons of ore (assaying from "The Tom Thumb" 8*l.* to the ton, to the "Bonanza" 3000*l.* to the ton) waiting to be stamped, or crushed, or smelted; and, these mines being chiefly small and owned by working men, who cannot work long without selling, often fall into the clutches of greedy capitalists—in one case I know of, a claim was actually sold for 10*l.*, which the following month fetched 4000*l.* in New York. 3*l.* per ton is the average cost of extracting ore, and I can imagine that few better or safer enterprises could be started, both from a commercial and philanthropic point of view, than a lot of stamping mills. Professor Hayden, in his Geological report of 1873, gives most reliable data respecting this district; and "The San Juan Guide," written by the Hon. Sidney Clarke for the Santa Fé Railway, who intend to push their line into that

country, is an interesting work, though giving only the bright side as far as the mining of Colorado is concerned.

As regards the Colorado miner personally, I like him extremely, and I cannot get on with my journey westward without treating of him. He is essentially a man of the world; there is no comparing him for a second with our English miner. He is nearly always educated, he is often a gentleman, has seen life in many and varied phases, is a good shot, a good fisherman, and usually a good billiard and card player, as he cannot work during the winter, and has to live—which he does well—in hotels. One is disposed to pity the miner's life, and to shun him, as seen from a distance; but he should be seen at home in Colorado with his wife and family, or with his "chum." He seldom dies a wealthy man; but his life is one full of hope, that great spring of all energy. He earns his 16s. a day, and spends it nearly all; but he saves in a year just enough for the outfit previously referred to, and, with some kindred spirit he penetrates the wilds, a hundred miles N., S., E., or W. of a frontier town, with his pick and rifle, trusting to find a claim which, though he cannot hope to work it for lack of funds, he may be able to sell to some capitalist for a sum that will render him thereafter independent. He finds a vein, establishes a claim, starves on it, and perhaps sells for 5*l.* what costs him tens, and months to establish. Still, 5*l.* will take him to where one of his chums tells him there is a "sure thing"; hope continues to buoy him up; and so on to the end.

The miner is not a "bad lot"; with all his rugged uncouthness, a sympathy, a charity, often a generosity, are shown by him to his fellow in distress, that would shame the boasted philanthropy of the East. He lives, as a rule, honestly and in a straightforward way; the pioneer of mineral science of his day and country; often the victim of misplaced confidence, the prey of the capitalist, the sport of fortune, buffeted severely by the mountain winds and snows, though perchance far

more gently than by the blows of fate, he lives a life of work, sport, speculation, and adventure, and leaves behind him, in nine cases out of ten, a clean record.

He is not a hero or a paragon of any special excellence ; his worst side is presented to the outer world in the large frontier towns, where he is compulsorily idle, and has more than enough money. See him in his mountain home, and Bret Harte's touching stories of him rush with all the force of irresistible conviction on the mind ; you cannot help thinking that, with all his wide-world and underground-gained knowledge, there is about him much of the good atmosphere of the days of his childhood, which has been and will be ineradicable.

I heard many tales of mountain life before I indited the above (for me, very unusually sentimental) paragraph, which I believe is strictly accurate. I met a miner who sold a claim which turned out valueless to a capitalist ; that capitalist had lent him money when he was needy long previously. The miner set to work to find another claim that was good, found it, and gave or sold two-thirds of it to his benefactor, whom he had first put in for a " bad thing." The second claim proved good, and the honest miner got 1400*l.* this month in Chicago for his one-third share, which, but for the capitalist's aid, would never have been worth anything. The miner's name is Walter Kelly ; he thinks he is a Scotchman, and that an hotel in Del Norte would pay, so he is going to try it, and no one looking up silver in the San Juan country could get a better guide. N.B. Guides here cost 1*l.* a day, and all found for them in addition. This is a mercenary remark, and has brought me down to a proper mundane level again. We are passing along the north bank of the Arkansas ; the mountain-peaks on the other side tower one above the other, the tallest in the rear, like the mountains of the world in a big school atlas on a vertical plane, but here they are in grand perspective. From the rapids just above, one of these Sangre

de Cristo mountains looks like one of the Egyptian pyramids in monolith magnified one thousand times, covered with green moss (pines) two-thirds of the way up, and with four golden-lined silver streaks winding from half-way down to the base. The views in this valley cannot be surpassed for loveliness, and it would be comparatively easy to irrigate it for hay crops, which here fetch 3*l.* to 4*l.* per ton. Eleven miles from the last, at Badger Station, we get six fresh spanking greys, and follow the Arkansas, closely rock-bound, and bordered with pines about 80ft. high. The Chalk Creek Mountains come suddenly in view, with some copper mines containing sixty per cent. of ore, but which are little worked, owing to the difficulty of getting the ore away. If the Santa Fé line runs up the river thus far, these would probably be more attractive than the silver mines. The country here is agriculturally useless; even were it otherwise, the labour of clearing the chiquo brush and irrigating would only enable the farmer to raise half food enough for the grasshoppers. Bale's Station appears, with a large trout tank, containing plenty of beauties from the Arkansas, which Mr. Bale accumulates when he has nothing else to do. Here we stayed for the night with the passengers of the eastward-bound coach, thirteen in all, in five rooms, at Langham Hotel prices.

At 4.30 a.m., the tocsin sounded, and we strengthened ourselves with a feast of delicious trout for our mountain drive. Wild geese had been flying over us all night, and a cold drive was before us; four days previously, it was 90° in Pueblo; now, 32° was the highest reading we could make as we reached the Puncho Pass and crossed the South Fork of the Arkansas, on which beaver are still tolerably numerous, and little grizzly bears are occasionally to be found in their nurseries, provided their immediate progenitors are first put out of harm's-way by a few rifle shots. I was offered a little grizzly for £30, tame as a dog, and very pretty; the brown and black bears sulk, and will not stand training or punishment for offences

nearly as well as a grizzly, which, considering their characteristics in a wild state, is a very remarkable fact. The best deer shooting in this part of the Rocky Mountains is at the head of this Puncho Pass, which is eight and a half miles long, and rises 2500 feet.

Our leaders this morning were quite intoxicated with the mountain breezes, and our whip crossed their inner traces to make them pull even. The device succeeded; but if one of them had started ahead and pulled the swinging bars across the haunches of both himself and his neighbour, we should probably all have finished our careers in a Rocky Mountain crevasse. At Round Mountain Station, fifteen miles further, we got another change of horses; another at Kirby Creek, thirteen miles on, and we were in the far-famed and much-written-on San Luis Valley.

This enormous plateau is 130 miles long, and over 80 wide. The lake in its centre is excelled at certain seasons by few in America for wildfowl shooting; but as for the valley—the San Luis Park as it is called—never was such an agricultural swindle. There is no grass on it, there is no soil in it, and a company will soon, and very probably in London, ask for subscriptions to irrigate this wonderful Eden by turning the Rio Grande over it. I declare most solemnly that six Rio Grandes would be for ever lost in its gravelly sand before they got half-way across it. Small portions of it along this river may easily be irrigated, and some Englishmen—Mr Dunne most notably—have done very well at the foot of the mountain range. The high prices given by miners tempt the farmer here, and the splendid climate causes loss to be borne lightly; but let no man, except a retired philanthropist, subscribe to irrigate the San Luis Valley as a speculation. Even as an American enterprise, it is the most astoundingly hopeless investment I have ever seen or heard of as suggested to the European capitalist. A fine road leads through both sides of the valley, and a little offshoot took us into Saguache (blue water), a pretty little

town of two hundred inhabitants. An Englishman keeps the hotel, where I would wish to have stayed a week, if it were only stone or brick, and if its tariff were more moderate, an inferior dinner costing 4s., and other things in proportion. So away again for Del Norte, a long dreary drive of about thirty miles, enlivened only by the anecdotes of Mr Chas. Adams, a U.S. post-office inspector, who had professionally been all over the States. The coachmen here are not in the Weller junior or senior style. They are, as a rule, uncommunicative, if not morose; the excuse given for them is that they carry so much gold and silver, and keep so little of it. This, however, is an old and worn-out apology, and has long since ceased to be received from an officer of the Bank of England who accepts an invitation to a picnic up the river, and fails to render himself agreeable thereat. Mr Adams told me that the San Luis Valley is altogether overstocked; Mr Dunne, an English settler, alone has 10,000 sheep on it at his station near Carmuro. The evening shades descended; the valley stretched away to the horizon, not like a rolling Kansas prairie, but as a calm sea of floating brown seaweed. We crossed the Rio Grande in the dark, and finished our drive of 145 miles in Del Norte, at an elevation of 7807ft.

Del Norte is quite a wonderful new town. Six years ago there was none of it; now it has at least one specimen of every sort of business establishment. There is a bank, which accommodates one at 20 per cent., and an hotel where 14s. per day makes the sojourner fairly comfortable—*i.e.*, he has not, as at Mr. Bale's, to go out of doors to perform his ablutions; and if ladies sleep in the room next his, their apartment has a separate door, and his sanctum need not, as at Mr. B.'s, be necessarily invaded at unearthly hours in the morning by early-rising Coloradian youth and beauty. For anyone in debt or difficulty, the State of Colorado is strongly to be recommended, the debtor's liberty, and even ancestry, being respected. Here is a bit of the State law,

exempting from sheriff's seizure "family pictures, books, wearing apparel, beds and bedsteads, stoves and household furniture, to amount of 20*l*.; provisions and fuel for six months; tools, and stock-in-trade to 40*l*.; working animals, one cow, one calf, ten sheep, and food for them for six months." When I discovered all this in Del Norte, I almost regretted I was not in debt. The town was laid out in 1873; it is on the west edge of the San Luis valley, at the mouth of the cañon of the Snowy Range of the Rocky Mountains, from whence flows the Rio Grande del Norte through this town eastward. It is the outfitting and supply centre of the San Juan mining country, lying from 60 to 160 miles W. and S.W. of it. The Rio Grande is one of the best trout-fishing rivers in the States; deer abound on the mountains; and the view from the Del Norte Mount is unique and charming. I got to this mount by accident. Strolling along after breakfast with my morning pipe at the back of the hotel, gradually rising, I looked round, and found I could see a little more by getting higher; at last I got so many hundred feet that going back to change my slippers seemed a folly. "Excelsior!" I exclaimed, and soon rose above the level of owls and prairie dogs. The mountain top was enveloped in a mist, so was the desert valley; but Sol was rapidly getting the upper hand, and unable to continue the climb in the rarefied mountain air—which makes one gasp in a most extraordinary manner, each inspiration and expiration taking much longer than one is accustomed to—I turned round, and sat down. The mists had risen; below me was the Rio Grande del Norte (great river of the north) softly flowing in an arc southward, a broad belt of the brightest of yellow cotton wood marking its course as far as the eye could follow; under my feet the town, divided into squares by mountain streams—three large brick and about a hundred wooden houses, a puff of steam from a little saw mill on the outskirts, twenty little cabins on the plain across the river,

and a few cattle dotted about them. To the east, forty miles away, the Sangre de Cristos, like mountain ptarmigan, have assumed their white winter plumage. To the west, an infinity of small valleys, branches of the great San Luis; a curl of blue smoke, and a green field in the distance among them, showing that the pushing rancher has penetrated this portion of the rocky vales. An eagle soars above me; one pine represents the timber of my mountain; fantastic-shaped cacti bloom all round. Granite rocks, stones, and pebbles brown-red, are all the mineral wealth I behold; but I must get to the summit to see if there is anything at the other side, through fifty to one there is only a higher mountain. At any rate, let it be said of me I was the first man who ever ascended here in carpet slippers. Thus I argued; and, gasping like a broken-winded horse, I reach—oh, joy!—an isolated peak. Again I see the Rio Grande, but this time tracing its course north, as well as south, for twenty miles; on its west shore the Saguache range, containing the Holy Cross Mountain; a few perfectly barren hills of bare granite-like mammoth sandhills; at their base an irrigated but not over-green valley, where families to the number of a dozen have settled, and planted regular rows of cottonwood trees. Turning to the eastward, away from the sheer precipice, I am over on the north side of the mountain; I scramble up a cairn, and see the hundred golden-timbered isles of the Rio Grande beneath my feet.

Descending, having no heels to hold me on, I was thrice nearly numbered amongst the fallen, and all but embraced a cactus in my attempt to save myself, which cure would have been worse than the disease. I maintained subsequently at the hotel, and still do so, that ascending this mountain in carpet slippers was a feat, not an eccentricity, which latter uncharitable view is always taken abroad of an Englishman's conduct.

The settler here has peace, unless he engage in the race

for the precious metals. He cannot hope to become very wealthy, as he may in Kansas; but the climate is exquisite, the sport and scenery beyond all comparison, and political and other strife dim and distant.

For the man tired of the world, or for one whose doctors are tired of him (for here, if you have two legs, one lung is quite enough), this is the place. I do not mean Del Norte especially; Cañon City, Pueblo, Colorado Springs, and Manitou, all can be reached by rail. And I have even met at these places pulmonary invalids from Montreal, who praised them highly.

I associated a good deal with the miners here; and after a three days' stay, started by another of Barlow and Sanderson's fine stage lines for La Veta, the road to which ran along the Rio Grande for forty miles to Fort Garland, and again through the Sangre de Cristos. This stage is a chesnut one, all the horses being of that colour, and all teams of six; distance to be run 95 miles. Two outside seats on the coach only were available, as our guard (or messenger, as he is termed on an American stage) took the box seat; but I told him I had a mission to accomplish, viz., to see the fatness of the land for a very big English newspaper, and my claim to an outside seat was forthwith admitted. I saw many Mexicans' log and mud-plastered huts, and their blue Indian corn (threshed by driving cattle and sheep over it), as we skirted the Rio Grande, and crossed it on a partially-smashed bridge of timber, where all the cross planks, as we passed over them, jumped about as though they had St. Vitus's dance or delirium tremens. The Sierra Blanca towered ahead of us, which our coachman insisted was higher than Pike's Peak, an opinion justified by the most recent table of heights published by the U.S. Survey under Professor Hayden. According to this, there are fourteen peaks in Colorado overtopping Pike, as follows: Blanca Peak 14,464ft.; Gray's Peak, 14,341ft. (according to Whitney

14,319ft.); Mount Rosalie, 14,340ft.; Torrey's Peak, Trout Range, 14,336ft.; La Plata, in the Sawatch range, 14,311ft.; Mount Yale, same range, 14,263ft.; Massive Mount, same range, 14,298ft.; Mount Lincoln, 14,297ft. (according to Whitney, 14,307ft.); Long's Peak, 14,271ft.; Quandary Peak, Park range, 14,269ft.; Mount Shavano, Sawatch range, 14,239ft.; Uncompahgre Peak, San Juan, 14,235ft.; an unnamed peak, in the same range, 14,195ft.; and Mount Sneffels, 14,158ft.; Pike's Peak, according to the Signal Service, is only 14,147ft., according to Parry, it is 14,216ft.

All these mountain valley roads are extremely good, but very crooked. The same engineer who laid out most of the Irish fences must surely have planned them; they run on a level for tens of miles, and there is no reason why they should not be straight. But, no! not a hundred yards of a true straight piece can one get. The truth is, they were originally cattle trails, and, the nucleus of a road being thus beaten hard, traffic adopted the cattle line, and many miles were thereby added to all routes in these valleys.

We stopped for dinner at the Modoc Rancho, kept by Mr. J. Venables, the only really nice clean place I had seen since leaving Pueblo. The fishing there is good, the attendance and meals excellent; and Mr. Venables modestly offers to take anglers by the week for 28s. From here cannot be more than sixteen or eighteen miles to the great San Luis lakes, with their unrivalled wildfowl shooting. This is a capital centre, in fact, for all sorts of sport; but I hope everyone will not go at the same time, for there is not much room in Mr. Venables's very nice little residence. Twenty pounds of trout is here considered a bad day's angling. Just beyond, Mr. Franklin, an English settler, has fenced in 2900 acres, and has a good deal of tree shelter on his estate, which is all riverside. Across the valley are the great sandhills. "Six Mexicans and a thousand sheep were buried

here in a sand storm some years since," said the messenger. "Pity it was not six sheep and a thousand Mexicans," replies a morose being in front of me. Moral: the Mexicans are not pets of the American people. For a long time it puzzled me how the flat roofs of the huts, plastered with mud, kept out the rain; but I here learned that they neither did so, nor were chiefly designed for that purpose, rain being very infrequent here, but the sun always present and powerful.

Sixteen miles further, through an amazing number of rabbits and mountain hares, and skirting the Rio Grande all the way, we reach Jackson's Station, and then the Rio Grande post-office—a lonely structure, where Mr. Adams frightened the postmistress almost to death by giving her the new rules and regulations of the U.S. post-office. The poor woman's salary was only 18*s.* for the past three months, being exclusively derived from the sale of stamps, 60 per cent. of the gross sales being retained by rural postmasters. As the town postmasters are paid by salary, one does good by purchasing stamps at these poor country offices. By the way, I should have added that this 18*s.* account had to be sworn to, at a cost of 2*s.*, and at a distance from the post-office of twenty-five miles.

The beautiful Sierra Madre towered over us as we put up for the night at the abominable station of Elkhorn—a dirty log hut, where I had a pitched battle with the extortionate proprietor to get a single bed. The food was miserable, and the accommodation for the night, including a perfectly uneatable supper and breakfast, cost 12*s.*

We passed through Fort Garland, and then stopped for dinner near one of the "pilgrim houses" built for the accommodation and free use of travellers by the road owners—these one often meets in the Rockies—then fourteen miles of very picturesque mountain scenery, of which I was unable to note much. We ran along a road where you could look

down into Middle Creek as far as 300 yards, and on the left up the mountain to a far greater height. The pine trees were certainly larger than on the northerly route to Del Norte, but in over fourteen hundred miles of wandering in the Rocky Mountains I never saw any very really large pine or big tree of any sort, such as we read of at home. La Veta was reached before dark. Next morning I found we had the Spanish Peaks in front, and Bald Mountain behind, and that the Denver and Rio Grande branch of the Atchison, Topeka, and Santa Fé was being pushed on to Fort Garland, as well as through the Grand Cañon for the mineral traffic of the rich San Juan country. I left for Pueblo on the Little Rio Grande road at 8.20 a.m., the country being well covered with stock and Mexican villages. The Cucharas (Spoon) river waters the district, and the deep sandy clay of all the Denver and Rio Grande route and its extension, the Denver Pacific, up to Cheyenne in Wyoming, only requires irrigation and some cure for grasshopper attacks to raise splendid crops, which in many instances are now actually raised.

The Mexican hovels are cleaner within than without, and their herds of nearly red goats and dark grey donkeys look very picturesque. The pretty new German town of Walsenberg, with fine fat cattle round it, was a sudden contrast; but before we had time to take it in, the country became Mexican again in both architecture and stock.

CHAPTER II.

DENVER—"OREGON BILL"—SPORT IN THE ROCKIES—ESTIMATE OF
OUTFIT—RETURN TO DENVER.

RETURNING to Pueblo when all the leaves were green, and none of the golden tints of the Indian summer existed, I, one of seven of the Internationals, left that city, with its big mid-street cottonwood tree of 23ft. in circumference, in the special train that General Palmer, chairman of the Rio Grande Railway, had sent for our transport to Denver. The hour was 8.30 a.m., so the sun was fortunately on our right, and the Rocky Mountains to our left. The little train ran swiftly and very smoothly. Though the thermometer stood over 80°, the delicious mountain breeze tempered the heat, and, being 6000ft. above the sea level, the air was rarefied and delicious. There were a few fair residences, a dry river and some Mexican dug-outs (a hole in the ground, with a plank roof over it, forms this cool native habitation). The little Fountain River on our right helped many a field of Indian corn to do something, and incited hay, melons, and cabbages on its banks to do the right thing well. Mountains appeared and disappeared as we wound along the valley; but Pike's Peak we never lost—its head was always reared aloft, and kept sight of us, no matter what queer places we dodged in and out of. There was then no snow on old Pike, and his bare brown summit, more than 2000ft. over the line timber will grow at, shone with a yellow glare in the morning sunlight. No one asked why the mountains were called "the Rocky;" they were indeed, appropriately named—no

verdure and but little timber. The effect, I must admit, was disappointing to us all, for no one could realise that Pike was over 14,000ft. high. The reason was, that we had been steadily rising since we left Kansas City, and that this mountain king was but 8000ft. over the plateau we were traversing; from Colorado Springs Station, it looked only a long rifle shot distant, though really at least eight miles. Being accustomed to judge distances at sea, I was less deceived than any of the others, but all strangers underestimate them in the peculiar atmosphere of Western Colorado.

We were now close enough to Pike's Peak to see the pine trees growing up its vast fissure-like valleys. The soil was often deep here, and a curious basiliated formation showed we were getting near Monument Park, where the fantastic and grotesque single rocks assume all shapes, both human and of the lower creation; the bears come here for wild cherries at night, but rarely ever damage the settler. A steep and long grade brought us to the Divide Station 7500ft. above sea level; here the scenery becomes very grand as we go onwards, and castellated rocks of apparently the most elaborate design crop up on all sides. The extraordinary perpendicular crests of the hills in the isolated valleys are quite palatial; and as dusk draws on, anyone not having seen the country by daylight would imagine that the haughty Spanish owners of the district in the 16th century had permanently impressed their lordly style of architecture on the territory. This line is by far the most picturesque in the west. Perhaps only the Colorado Central, which we were on next day, touches it in point of romantic scenery. Onward we went through the most artistic phantasies of rocky nature; the people we passed were stout and ruddy-looking, not sun-dried and withered as in the Eastern States. Denver was reached in six hours, including several long stoppages to let us see things well, the distance run having been 120 miles.

Chariot's Hotel here is all anyone could desire in the way of accommodation. The streets are very good, and sporting appliances of all sorts can be got for a consideration—sometimes rather a substantial one.

As I wished to visit the gold fields at Black Hawk, 38 miles distant, the chairman of the Colorado Central Railway very kindly gave me an order to travel on the locomotive, which mode of travelling, though rough, I adopted all through the Western States, the superintendents of the various lines never refusing me an order for the purpose. We crossed the South Platte, containing a good body of very clear water, and Clear Creek a few miles further on; then passing through a fertile irrigated valley, where the grasshoppers (which have since altogether disappeared) had eaten almost everything except the large melons, which in some places were as thick as strawberries in a strawberry bed, and the oats were eaten down to such an extent that they looked like poor hay. Seventeen miles brought us to Golden, where the train goes on to Georgetown, and we changed carriages to a narrow gauge line. Golden is a very pretty town, with 3000 inhabitants; it lies between the North and South Table Mountains, altogether surrounded by hills in the valley of the Vasquez Fork, which debouches from a weird and gloomy cañon, into which we sped up an incline, in some places 265ft. to the mile. Clear Creek or Vasquez Cañon affords the most marvellous scenery of colossal grandeur for a few miles that the railway traveller can see in any part of the world, until the Santa Fé line goes through the Grand Cañon of the Arkansas; and no language can give a fairly adequate idea of the amazing precipices that rose above and even overhung our road here. A roaring yellow flood dashed nearly under the carriages, and this cañon is so tortuous that no idea can be formed of where the train is going to. You appear to be rushing to headlong destruction against a granite boulder of titanic size; then into a watery grave; and the gorge gets so narrow here and there that the cliffs appear

to be inclined to meet overhead, a stupendous railway cutting done by nature exhibiting every variety of work that she can do with her enormous water and wind demons in the Rocky Mountains. Game is now too much persecuted here to stand a hunting band, but a single gun can still do a great deal with the mountain grouse, and there is a chance of black or cinnamon bear within an easy run from Denver. In the winter the mountain sheep come down here in numbers.

All up this creek were relics of the gold-sand washers, and a few of them were still there. The enterprise and capital required to turn this impetuous mountain stream aside at all points, and inspect or work its bed, have been very great, and hardly repaid the outlay. Now, little gold is left to be washed, and the gold quartz mines at Blackhawk monopolise the labour of the district. Nothing grates on the nerves of the spectator of this grand scenery but the placards or painted advertisements stuck on every commanding peak, slab, or table rock. Messrs. Vandal and Shameless of Denver, are to be read of everywhere on the face of nature forty miles to the mountains; and it takes several days to view their defacements of America's grandest scenery with calm contempt, a far more active feeling of disgust being at first awakened.

The gold-sand washing is not the pleasantest work in the world; men are often seen up to their knees in water stirring up the sand with shovels in the temporary tanks. The water is of course ice-cold from melted snow, and the workers did not look either warm or happy. The average earning of these men is about 5s. per day, as they can only work a few months in each year. The town of Blackhawk is a wonderful place; the mines are in the town, and everyone appears bent on undermining his neighbour's house or the road, which positively has one claim staked across it. Professor Hill's Reduction Works smelt nearly all the ore raised, and are a splendid commercial success. I failed on

this occasion to get into this establishment. A very handsome Roman Catholic University is the chief ornament of Blackhawk. Prices are not dear there: good beef, 5*d.* to 7½*d.* per pound, and at Bushes Hotel good accommodation for 12*s.* per day.

On our return to Denver, Count Steenbock and I were fortunate enough to meet with "Oregon Bill," the great hunter, trapper, and scout of the West. Few probably have seen, though probably everyone in Colorado has heard of him, as he is two months out of three in the mountain wilds, and has been quite crippled for the past two years. Our meeting was in this wise. General Steinberg, late of the U.S. army, was entertaining us to supper at a restaurant, and some one was narrating the sporting adventures of the Belgian Baron Arnold de Wolmont, the Hon. Louis Molesworth, Mr. J. M. Frost, Mr. Gerald Welman, and M. Gaston Soulard, who had just returned from a two month's shooting excursion under Bill's charge, when the redoubtable scout walked in—a splendid muscular-looking fellow, his hair Indian fashion, grown far down over his shoulders, and his head surmounted with a Mexican sombrero. In the American way, somebody introduced Bill to us; additional refreshments were called for, and amongst many thrilling narratives of incidents in his life, he spoke of his career as a soldier under General Price. "You were then in the rebel army," said General Steinberg, sternly. "The Confederate service, if you please, general," Bill replied with great dignity. We got over the difficulty by a shout of laughter, and before parting, Oregon Bill had accepted my offer to take us under his wing in the Rockies for ten days or less. The remainder of the Internationals had to go back to Philadelphia, which they did slowly by Manitou, Cañon City, and all the fashionable mountain resorts of invalid America that they could discover; in fact, though many special trains and free conveyances were placed at our disposal, the combined pecuniary resources of our

distinguished literary party had ebbed to an alarming degree, and, but for the timely and unexpected arrival of a beautiful little circular note just at this critical juncture, bearing the signature of the well-known colonial bankers, S. W. Silver and Co., of Cornhill, I should have inevitably studied the International journalistic bankruptcy laws of Colorado more closely than was at all desirable. The party had been a wonderfully successful one, and extremely pleasant. The interviewing, the deputations from the local benches and bars, the presentations to the governors of the various States we passed through, and the wonderful attention we met with during all our travel of 2800 miles up to Denver, made our excursion quite a state progress, and were a tribute to foreign literature that probably in no country would be paid so gracefully as in America. Were I a correspondent of the *Court Journal*, I could have written quite as much on pomps and ceremonies whilst our band held together for that valuable publication as I have done on sport, scenery, or agriculture.

After bidding farewell to our late companions, we started on our sporting tour: I mounted the box of Oregon Bill's mule waggon, Count Steenbock bestrode a diminutive pony; black darkness, such as the Rockies only can show, was around us; and, with our dog "Calamity" and our cook Jack, we drove to Morrison, at the foot of the mountains, which Bill thought it undesirable to enter by night. It was too dark to pitch our tent, and morning drew nigh, so we gained a publican's permission to sleep in his now-deserted bar room, and, rolling ourselves in rugs, soon slept on the bacchanalian floor as soundly as though on a bed of down, for our night drive had been a long, tiring, and uninteresting one. The sun was fairly high ere Jack presented us with our morning beefsteaks and the whitest bread we had ever seen, made from Colorado flour. It may be worth noting here that Colorado wheat is so wonderfully fine that New York corn merchants pay its 2000-mile railway

freight, and then give for it the wheat price current in that city.

Cultivation grew less and less as we ascended Turkey Creek Cañon, on the Fairplay and Breckenridge road; teams of oxen, guided only by the voice, drew heavy loads towards the Fairplay mines; and "chipmunks," the most graceful little squirrel of the mountains, danced in thousands over every log and tree, appearing to prefer the ground to anything more lofty. All that day we drove, getting quickly higher, until just over Junction we had to descend a tremendously steep mountain, and, seeing a nice new schoolhouse not quite finished a mile up the valley, marked our approval of the educational-plans of the community by camping in it for the night. A colonel, who keeps an hotel at Junction, sent us an invitation to stay with him, but we agreed it would be a most ignominious thing for bold hunters to do. Oregon Bill and Jack, during the ten days' campaign, invariably slept in a rug on the grass with their faces uncovered, though each night there were sharp frosts: the Colorado climate is the only one in which this could be always done with perfect impunity. Neither the Count nor I could feel cold, no matter how intense, the cruel roasting we had had at Philadelphia having thoroughly overheated our systems.

Colorado, in fact, has the perfection of climate; like every state east of the Rocky Mountains, it has extreme variations of the thermometer (28° to 74° in twenty-four hours, for instance, during our trip), but one does not feel them. The mountain air in Colorado makes even 90° not unpleasantly hot, and the cold is so dry that it also is not appreciated; but, unfortunately, the soil of Colorado is not good. Nowhere in this world can we have everything.

In the morning, one of our mules proved to be lost, and took a long time to recover, we spending the interval in casting bullets and rifle practice. The idea of roughing it proved nonsense. Bill had all sorts of dainties provided in

his big waggon box; Jack's cooking was superior to that found at half the hotels we had been at, and our tent was capacious and airy as a house. Camping on Regatta Island is the quintessence of discomfort compared with Bill's roving arrangements, and, finding that it was impossible to be uncomfortable, we abandoned ourselves with considerable resignation to our fate. I was so pleased with the arrangements that I made a provisional agreement with Bill to camp with him for November, December, and January on the San Luis Valley, and move gradually back to Del Norte for 200 miles to the Gunnison river. We had certainly come to the wrong place at this time of year for sport, but considering our engagements, it was the only route we had time to adopt; and, though to Count Steenbock, who wanted simply and purely a week's shooting, the expedition was a disappointment, I got so much information from Oregon Bill as to what might be done in the sporting line with plenty of time and not very much money, and from Mr. Jonathan Higginson, of Deer Mountain Valley—a successful English settler of several years' standing—so many valuable details of cattle ranche and agricultural *modus operandi* in the mountain valleys, that I considered myself quite repaid for the time and expense.

I now proceed to give Bill's estimate, which I made him carefully work out, for one of the most extended sporting tours it is possible to take in the U.S., with almost a certainty of very rough but good shooting for more than a thousand miles, viz., from Denver to San Francisco, across the Rocky Mountains, *viâ* Salt Lake City in Utah, and across the Sierra Nevada range into Nevada and California. This trip has been several times made, but with long intervals between; and, considering that three-fourths of the route teem with game, and the very moderate expense of going over it, I think all sportsmen will agree with me that in no part of the globe is such value offered for the money.

Such a party for safety should consist of, at least ten men. The required outfit would be :

One large mountain waggon to carry 35 cwt	£40
Four mules to draw it (with harness)	90
Wages of driver and cook (14 weeks)	70
Ten ponies and saddles	100
Guide	100
Two tents, 10 ft. by 10 ft.	8
Twenty pairs of camping blankets	50
Extra shoes for horses, and contingencies	20
Total	£478

Expense to each man 47*l.* 16*s.*, exclusive of ammunition. The sale of the outfit in Sacramento or San Francisco estimated to more than cover the expense of food and drink *en route*. Estimated duration of the trip, one hundred days. Estimated cost of prolonging the trip, 2*l.* per day, or 4*s.* per man per day. The expedition might do rather better if it started 106 miles north of Denver, at Cheyenne, and took in the Black Hills ; but the risk of Indians at that time was so very great in that district that Oregon Bill refused then to take a less party than sixty northwards.

The estimate I give here is not a general haphazard average of expenses ; it is what Bill or any trustworthy and reliable guide will guarantee to do for the money, expended through them, or under their directions. It may be considered superfluous, if not impertinent, for me to offer advice to the class of sportsmen who will probably come here. Knowing, however, the grievous errors that are made by men in America, who could teach me everything about hunting in other parts of the world, I venture to give my experience, as follows : 1. Get a precise specification of the bargain with your guide, signed before witnesses, prior to starting. 2. If you are not prepared to do everything but cooking for yourself, bring a servant from England—one would do for the entire party—for blacking and greasing boots, cleaning rifles,

&c. Neither guide, driver, nor cook will in any way go beyond their special provinces; and to ask one of them to carry your gun, or to do any one of the fifty little things you would as a matter of course request an attendant to do at home, leads not only to a repulse, but to subsequent feeling so unpleasant that many parties have in consequence returned home disgusted.

As to guns, everyone must consult his own taste; but the most important of all items for shooting comfort, good boots, are not to be had good at any price in the Western States, nor, as far as I have seen, anywhere in America. Two strong pairs of these it is absolutely necessary to bring from home, with a light pair for comfort in camp. For a summer's expedition, very few clothes are required.

If Cook would issue a ticket from London to San Francisco, *viâ* Niagara, St. Louis, Pueblo, Denver, and Cheyenne, and return *viâ* the Union Pacific, it would save the trouble of buying a lot of separate ones, without additional cost, as all railway tickets unused may be sold in the States. This route would give the party all the prairie-chicken shooting along the Atchison, Topeka, and Santa Fé line, should they come out for the first of August. As regards actual results, it may be observed that the annals of a sporting tour so invariably consist of a description of how a greater or less number of mammals, birds, or fishes met with sudden death, that anyone who has ever followed the historian of such a tour forthwith accuses the writer of having drawn a most misleadingly high-coloured picture. Nothing is easier than to give an account of what one does in the destructive line with implements of the chase; but when a day or two go by without adding to the weight of the game bag, the hiatus is usually passed over, not for the purpose of misleading, but simply because there is nothing to be described; and so, from the time Telescopic Sight, Esq., shoots his buffalo, in an entire column, on the

21st, to the next time he makes a successful shot at an elk on the 28th in a column and a half, only three or four lines intervene. The deduction drawn by the reader is that Mr. T. S. shot a fat elk immediately after the destruction of an enormous buffalo; and, forthwith starting for the region indicated, he finds that with a lot of hard work, a deer a day, and an elk a week, with a three hundred mile run to get near a buffalo range, is considered very good average sport in the summer in the Rockies, and straightway he denounces the writer as a disciple of Baron Munchausen, who has excelled his master. Really good shooting is only to be had in the Rocky Mountains from September outwards, and if the start is delayed to Nov. 1 so much the better, if one can put up with an occasional snowstorm.

I may here transcribe a few of my notes as to what sporting was to be had in Colorado in 1876; and anyone who reads further will see that Rocky Mountain sport has been a good deal exaggerated. It is very well worth coming for, especially to the taxidermist and naturalist; but no one who expects to get more than he eventually does, or can get, goes home contented, but blames guides and weather, guns and horses, dogs and correspondents of the sporting press most unreasonably and unfairly. Messrs. Louis and George Verbrugge, formerly of Havana, now of Paris, with Johnson as scout, spent two months camping out, and shot nothing for a week. They then engaged S. W. Vance as guide, and killed 212 trout one day, 23 ptarmigan and 4 grouse the next, and averaged 22 grouse and ptarmigan per day for the remainder of the time; also shooting a great many specimen birds and a few rabbits—their ground was along Kenosha Creek and on the Kenosha range.

Captain Edwards, 60th Rifles, and Princes Montenovio and Lichtenstein, of Austria, shot four deer in one day, and a mountain sheep another, but did not average more than one deer a day. This party also shot twenty-eight buffaloes at

Camp Supply, south of Fort Dodge, on the Atchison, Topeka, and Santa Fé line. I understood a week was consumed in the latter feat.

Prince (or Duke) Sterhenberg, killed one elk and two antelope in six hours, but did not average one deer a day, which average both Oregon Bill and Bob Craig (the latter a most honest, successful, and hard working scout) pronounce a good one. An expedition, such as I have sketched from Denver to Salt Lake, or beyond it, would, of course, strike previously uncharted ground, and do as well as in any part of the world; but a man who has only a month or six weeks to spare, cannot get much more than health, exercise, and enough to eat, with his gun in the mountains. The guides are the best judges of routes according to season; so, except saying that I believe North Park to be always the resort of sheep, elk, and deer, I can indicate no particular route.

I only know of one man in Denver that can preserve specimens artistically, namely, S. W. Vance, who is always to be heard of at Taylor's free museum: he is a professional taxidermist and uses only three parts salt, and one part alum, dispensing with mercurial preparations until the very last.

A few of the rare species I have seen in the Rockies, all of which are worth preserving, are the blue hares (white in winter); the grey-crowned finch, supposed to be the rarest bird in America, because he is always above timber line, where few go to look for him; Clarke's crow, or the noisy chatterer, also living only at great altitudes; the pine grosbeak, also found only at great elevations, red in summer, in winter grey, with yellow head; long-crested jay, black head and crest, blue and black transverse ribbed wings and tails; red-shafted woodpecker, rather rare, and a beauty, body cuckoo marked, with regular grey woodpecker head and breast, red under the wings. Great horned owls are, though handsome, very common, as is the towhee finch. The cross-

bred foxes, between red and grey, are large, abundant, and very pretty when stuffed.

A guide, who shall be nameless, and a party whom I will not particularise, were out here in 1876; and as the latter was of the class that shoot and cannot hit, although an unusual quantity of game was found, only mountain air filled the game bag. The sportsman thereupon got discontented and disagreeable, and talked of going back; but as it is as much as a scout's character is worth to bring his party home empty, when the next two bucks were found he pretended to select the smaller, and bid his employer shoot at the big one, at which he also fired surreptitiously; the thing was done three times. Nimrod came into Denver thinking he never missed, and his guide never hit; and the amateur was and is happy.

Returning to my own tour, let us now move onwards from Junction, our lost mule having been discovered in a private hay field, and the fear of demand for damages considerably accelerating our progress to Deer Creek.

Further up the valley was Hall's Gulch, an English mining settlement, presided over by Captain Jebb. We do not visit here, so still onward and upward the waggon carries us, Count Steenbock and I taking the little pony by turns for an hour's ride through rocks teeming with advertisements, pines, and chipmunks. Valley vistas surround us on all sides until we get to Pine Grove Ranche, turn down a lovely glen environed by rugged, snow-capped mountains, and reach Mr. Higginson's ranche, a nicely-cultivated, long, narrow strip of alluvial land on the South Platte River, or rather the north fork of it; towering mountains overshadowing the neat residence in front and rear. Mr. Higginson was not at home, so we pushed on to where Buffalo Creek runs into the South Platte, and camped for the night. We were now on ground sacred to the deer; and next morning, whilst Oregon Bill was wasting all his light tackle on the big trout, not one of which

we succeeded in landing that day, we unpacked our guns and got things generally in readiness. The Count had one of Evans of Maine's repeating rifles—a new, and, I believe, prize-taking patent at the Centennial Exhibition—and, of all the unserviceable weapons it has ever been my bad fortune to meet with it proved the worst. For the first shot, it was admirable and accurate; for the second, no cartridge would come up into the chamber; then we worked the lever frantically, and No. 3 would follow No. 2 cartridge so closely that the machine would not close, and we had to cut out No. 3 piecemeal with our knives. This occurred perpetually, and Bill was terribly disgusted with the prospect. "There is only one American gun," he said—"Well, one and a half—Sharp's, is the one, Remington's the half." Bill had both of these rifles, and knocked the heads off mountain grouse on the limbs of trees with their bullets both with accuracy and apparent ease. The Indians chiefly use Winchester's, and will give their most valuable horses for one of these guns, which cost 8*l.* here. The best shot Bill made was with his Sharp, upon which someone sat in the waggon, breaking the stock clean off. Holding it as a pistol, to prove how slight the recoil, he hit a small white stone two hundred yards away, and I nearly did the same feat, using the weapon in a similar manner, and then with my Chas. Lancaster elliptic smooth-bore rifle, which cost 80*l.* Only that I was able to shoot chipmunks, blue jays, squirrels, &c., for specimens with the shot cartridges of my rifle, I found it but slightly superior to Sharp's 8*l.* one, though we were perpetually testing them against each other. My power of firing shot, and carrying only one light gun, gave me, however, a very great advantage; for knocking off birds' heads with my own or any other rifle bullets was a "game I did not understand." Bill prognosticated rheumatic misfortunes of divers kinds for me as I took my usual bath in the cold mountain stream; and it really appears that these melted snow streams are rather dangerous to bathe in, especially in

hot weather ; but there was no other water to be had. I persisted in the practice and escaped scatheless. The heat was very great in this valley, and we set off on the 14th of September for another some eight miles further on, I in advance on foot, Bill to the right, also on foot, Jack driving the waggon, and the Count on pony-back bringing up the rear. There was quite a beaten road, and I walked meditatively along, presently hearing, as I thought, the Count's pony galloping up to me ; the timber was high, and I could see nothing on looking round, so pursued my way. In another moment six does and a magnificent stag rushed across the road in front of me. In my hurry I must have fired at least six feet behind the last deer as it plunged into the forest on the left. In no case could I have got more than a snap shot, and in no case do I ever intend to take another with a rifle at a deer crossing a narrow road. The animal's track was easily followed for some miles, and I pursued it over a burnt forest, where there was neither vegetation nor life, the long charred pines lying in a mouldering state of decay across each other in all directions. When I got out of this I was in a dense growth of Mexican burrs.

Now I do not believe anything will defy the penetrating power of these abominable prickles for any length of time, unless one is dressed in leather. Deer traces at once vanished in this miniature but disagreeable jungle, and I came to a halt, and to a simultaneous conclusion that I had no idea where the waggon or future camping ground were. I looked at the sun, which was plain enough, but gave me no hint. I sent a bullet through an eagle's tail as the bird poised over me, hoping the shot would attract attention, and bring down the bird ; but it did neither. I then shot a chipmunk with a charge of No. 9 ; but no response. Seeing there was no use in waiting or thinking, I struck for the highest hill near me, some three miles off, trusting to see something or somebody from there. I reached the hill, and could see nothing but isolated ranges of the Rocky Mountains on all sides ; no

Platte or other river, no house, no curl of smoke. I thought of the Australian "coo-ee," which my brother-in-law, a Victorian colonist, had taught me, and, standing up, sent a prolonged "co-oo-oo-ee" ringing through the mountains. I had climbed a little rocky pinnacle to do this, and, as the last note rang echoing in the distance, my seven lost deer got nervously up just beneath me from their afternoon snooze, and trotted merrily off. Was ever such bad luck? My rifle was at the foot of the pinnacle; I jumped down for it, and got a shot at my retreating game at about three hundred yards, hitting one with the left barrel in the back or flank. It wheeled once, and then pursued its companions, never again to appear to me. The "coo-ee" brought Bill up, and it appears I had spoilt a shot of his also by it. Evening was setting in, and we camped on the side of a little occasional creek. By the word "occasional" I mean one which in some places flowed as any respectable creek would, and at others underground through the sand (like our Surrey river, the Mole), all traces of it being lost for a mile or more at a time. Of this eccentricity of the mountain streams we were not aware, and both Count Steenbock and I got rather badly lost the next day, as we took this creek for a landmark and guide back to camp, and neither of us found it until after much fruitless wandering.

The whole of the next day we worked very hard, but got nothing better than fine views from the mountain tops we ascended. The Count saw literally nothing; I only one deer, out of range, and a lot of rabbits and squirrels, shooting a rare specimen of a black colour. We all went different ways, and agreed to meet six miles lower down the valley, at the stream, which was not there, and we reached camp late and tired, finding Bill had decapitated several grouse with his rifle, and that Jack had a most delicious mess of them ready cooked.

A lot of grasshoppers visited us early next morning, and

we started once more for an extensive solitary walk, and again had little success, one fawn and a dozen grouse and rabbit being all we could show at night. This day I deliberately threw up sport, and walked over to Mr. Higginson's to get information as to the settlers in these valleys, and what they were doing; evil luck still pursued me, as I found Mr. Higginson had gone another way to my camp. Mrs. Higginson, however, hospitably persuaded me to do a thing which I always about once a year, but not more often, perpetrate, viz., eat lunch; and returning at evening I found another blank day recorded at camp, but Mr. Higginson and a friend, who were driving in their joint cattle to brand agreed to remain the night with us. These gentlemen occupy all the ground between the north and south forks of the South Platte for several miles, and their cattle run together for the year, being only occasionally separated to brand. The Count retired early, and Mr. Higginson gave me a good many statistics of grazing and farming in Colorado, which were all the more valuable as Colorado had been but that year made a State of the Union. There is as yet no State board of agriculture here; everyone has his own self-interested list of figures; but the land laws are the same in Colorado as in Kansas—viz., a settler can take up one hundred and sixty acres free, and purchase as many more. The State of Colorado has a grant of one-fifth of the State land from Government, and it is believed this will shortly be put up for sale by auction at a reserve price of 5s. per acre. That not purchased will be put up after an interval at 4s., and so on as low as 1s. per acre. As there are large tracts of grounds in Colorado that can never be settled under the Homestead Acts, the soil being too barren and water too remote, settlers along river banks are almost certain eventually to get an option of purchasing the lands lying behind them, which, being cut off from the water, would be useless to anyone else, even at 1s. per acre.

The Indians living in the State are not of the warrior class ; they are Utes, all perfectly harmless, and long since tamed, injuring nothing, stealing nothing, and only desiring to remain unmolested. A few years ago they regularly camped in large numbers every winter near Mr. Higginson's house, and, though only his wife and one man were there, no apprehensions were excited, and after the redskins had hunted the district diligently they moved off. Civilisation has now driven them further west, and with the exception of one surveying party of the United States Government, who came to grief because their theodolites, compasses, and other scientific instruments shone so brightly that no savage could help stealing them, an outrage of any sort emanating from the Indians has been unheard of for years in this district. To acquire 160 acres free, a foreigner must naturalise.

The first thing I shot next morning was a coal-black squirrel, and, as these animals are extremely rare, Bill took the trouble to skin him scientifically for stuffing. I brought this little fellow down with only one pellet of shot at 80 yds. with my rifle. No more deer were seen, so we struck camp, and went back to the South Platte, occupying a rancher's deserted log house, about a mile to the east of it ; the day being breezy and good for trout fishing. Topping the hill over the river, we noticed a curious effect of the wind in these stilly heights ; the breeze being intermittent, we could hear it as though close at hand, rustling through the pine boughs many minutes before we felt it ; then it would sing musically away through the gorges for several minutes more, and our ears gave us timely notice of the next puff. Had we been on the surface of a large lake instead of on the mountain tops, sight could not have detected the approaching zephyr more quickly than the sense of sound here conveyed the same intelligence to the mind. The trout in the Platte were most aggravating and very numerous. Seven different casts of flies I tried in succession, but to no purpose. Count

Steenbock, with a mock grasshopper, got any number of rises and gentle nibbles, but he also did nothing. Bill then came on the scene, and, impaling a real hopper on his hook, landed a two-pounder almost immediately, and shortly afterwards a number of smaller fry, which we forthwith walked off to pack for culinary preparation. This day's work had been a short one, as our errant mule had got lost in a herd of almost wild horses, and had to be "cut out," which proceeding he resented, and for a long time baffled our most strenuous attempts to force him back to the ways of civilisation. We were attacked by a swarm of flies in our ranche, and had to leave it until darkness set in; these annoyances have followed population, first through the Kansas prairies, and then actually into the Rocky mountains. Hunters out west ten years ago never saw a fly.

We started on our back trail for Denver from the ranche as a black cloud rose to the westward, and Bill predicted a storm; but we cried "onward," and our mules, invigorated by the long rest, pulled us quickly up the mountain over the Platte. It was here very apparent to us that the impossibility of getting possession of over 320 acres in Colorado encourages a poor and shifting class of men, who neither improve the country nor are of any social advantage to those previously settled in the State. The extremely low taxation— $2\frac{1}{2}$ per cent., including everything—is a great inducement to them to come here from the heavily taxed Southern States, Texas alone excepted.

Whilst comparing notes on statistics, Count Steenbock and I were literally shaken by a terrific peal of thunder, and the rain descended immediately like a waterspout; the waggon was ahead of us, but we dare not face the tempest, and crept under a thick bushy scrub, which, for a while, kept off the downpour. We were nearly on the mountain summit, and had the full benefit of one of the most severe mountain storms that has occurred for the year, and could see down

into the valleys as the lightning rent the clouds in them. Finding that we were wet through, and regularly in for it, we ran after the waggon, and drove most of the day, despite the storm, to our old schoolhouse home, near "Junction."

We drove right through, day and night, to Denver, where we spent a few pleasant days, and met the late Mr. George Grant, of Victoria, and Dr. Everhardt, of the Kansas Pacific Railway. We were invited by the former gentleman to meet Judge Sayre to dinner at Charpiot's French Hotel, and agreed to go over the K. P. Railway, and become Mr. Grant's guests at Victoria for a few days.

A visit to the markets posted me in the following prices: Butter, 1s. 3d. per lb.; potatoes, 6s. per cwt.; cabbages, 1d. each; bacon, 6d. per lb.; chickens, 1s. 8d. each; beef steers, 5l. to 6l.; 3 years old, 2l. 8s. to 2l. 16s.; Mexican ewes, 9s. to 10s.; rifle powder, per keg, at 5s. per lb.; flour, 13s. per cwt.; beef, retail, per lb., 4d. to 7½d.; mutton, 4d.; lamb, 7½d.; ham, 7½d.; and tea, 2s. per lb.

I had the pleasure of being present at the first sittings of the first State Senate and House of Representatives in the then new State of Colorado. A few Mexican members of the latter House could neither read, write, nor speak English; the class of men and the oratory were precisely similar to those of a home corporation or board of guardians, though these Houses form a perfectly independent legislature in every matter but that of imperial policy, even the militia being solely under the governor's orders, and in no way an imperial force, in every State.

Next day Count Steenbock and I went on to Victoria with Dr. Everhardt and Mr. Grant; but before leaving Denver I will just say that on two lakes joined by a canal, two miles and a half on its westward side, near the Grand View Hotel (unfortunately closed, as, were it open, it would be by far the most picturesque and pleasant place to stop at), a very telling morning shot can often be had at wildfowl, which are both

abundant and easy of approach. I had some very good rifle practice at the duck and teal, and unless a bullet went within ten feet of a bird, it rarely flew off. Boats can be hired here for 4s. per day, and I have seen them laden with gunners driving the flocks across the western lake repeatedly, getting shots every fifteen minutes for hours before the canvas-backs came to the conclusion that they were in a disagreeable place, and received orders to quit from their leaders. A steam launch used to ply on these waters, but did not pay, and, fortunately for gunners, she is dismantled permanently. These lakes, named after a Mr. Sloan, are most difficult to find without a guide, as they are closely environed by rolling hills, and you usually see *over* them in all directions. If you strike due west from Denver, a lot of rifts or crevasses in the deep, sandy clay bar progress almost absolutely. A tramway runs to the Grand View Hotel, and the distance from there is very short to the water's edge of the eastern lake, which, however, holds usually but few birds.

The bridge crossing from Denver by the well-kept water-works is a good place to study advertisements: details of where you can get "square" meals, square dealing, and many other square things, may be read, as also where "Oysters cooked in every *stile*" are to be had. A German military band, which had, under the leadership of Carl Beck, been performing through the West since the Centennial Exhibition opened, rendered Denver very gay whilst I was in the city. Jem Mace, the then champion pugilist, also had engaged one of the theatres (which are small and quite unworthy of their surroundings); but, as Allen was advertised to oppose him in gloves, and that combative scientist was in Canada (a warrant for ungloved tilts and tournaments in sundry places in the U.S. having been issued against him) Mace's performances were very flat and unprofitable, as he had it altogether his own way, few having the temerity to encounter so doughty a hero in his special line of business.

Denver is an exceedingly clean and neat town, built upon an eminence facing the Rocky Mountains; the land rises behind the city, and shuts out all view of the desert plain lying to the back of it. One can only get an idea of how large, substantial, and pretty the city is, by driving to the Grand View Hotel or near it.

Mr. George L. Taylor's free museum is well worth a visit. All the curiosities and sporting products of Colorado may there be inspected or bought. Mr. Taylor is a naturalist both by taste and profession, most obliging and communicative. The public library has a fine gymnasium, and the English and New York papers can only be seen here. Any stranger sending up his card to the courteous librarian is usually granted admittance. A good racecourse and shooting ground, 880 yards square, inclosed by an eight-foot wall, complete the lions of Denver, unless the Government Assay Office, usually termed the Mint, is included.


The celebrated Capt. Bogardus shot a match in Denver whilst I was there, and anyone who saw the fashionably dressed swells of the place and period, and the nice way the carriages were turned out on the occasion, would like to punch the head of the man who described Denver as a place "where grizzly bears prowled round the street corners, and naked savages, intoxicated by benzine, perambulated the streets, potting passers-by with Colt's army revolvers." The matches shot by Bogardus, Cook, and others were very interesting; in one match I witnessed, the captain shot twenty birds out of twenty-three, right and left shots; considering the disadvantages under which he laboured of a crowd pressing unfairly on him, and a thermometer of 11° , with an icy wind, this was one of his best performances. Bogardus shot throughout with a Scott No. 10 central-fire, and used electro-plated cartridge cases; his opponents all used No. 10 by Parker, of Connecticut.

I left Denver for Cheyenne with regret, as nothing could

exceed the kindness I met with there from Mr. Dawson, the editor of the *Tribune*, and many others. The *Tribune* office and its foreign telegrams were always open to me, as well as its editorial columns; the latter compliment is very usually paid to foreign correspondents in the West, and I once wrote half a paper in a small town, to enable the editor to start on a tour of inspection more speedily with me.

CHAPTER III.

VISIT TO CHEYENNE—DENVER AT CHRISTMAS—VISIT TO MR. G. GRANT'S FARM—THE ROCKIES IN WINTER—BEAVERS—ENGLISH SETTLERS.

 WENT to Cheyenne from Denver on the Denver Pacific Railway, 106 miles, under the escort of Mr. Dill, editor of the *Denver Times*, as I was anxious to find some spot in Colorado where profitable agriculture or pasture can be carried on, the climate of the state being so delightful, and, so far, more agreeable to Europeans than that of any other I have been in. In January I had seen no rain, and the sun had not been obscured for over two months.

For pleasure or enjoyment of life, commend me to central or southern Colorado; for agriculture generally, send me to almost any other part of the world. I shall proceed to instance some exceptions to the rule; but to have to irrigate first, and then to supply the grasshoppers before the crop can be gathered in, cannot be said to constitute a farmer's idea of the fitness of things. Climatic conditions are considered so important by Englishmen, and so many of them do not live for gold, that, though I do not feel justified in entering to any length on the very doubtful agricultural advantages of Colorado, I shall sketch the places best adapted to suit those who, with small incomes, wish to live in one of the most splendid climates of which I have had experience—places not the result of idle fashion, or of this continent's invalids (for Colorado is the sanatorium of America). Let the wealthy invalid seek Manitou, Colorado Springs, or Cañon City, all on the Denver and Rio Grande Railway. I got more high

life than enough in the eastern States, and came to Colorado determined to study only sport and agriculture; the latter I take first, as the reader travels with me over the Denver Pacific. We run from end to end of it through silicated deep clay soil, following the South Platte river northwards for about half the way, viz., to near Greeley, where we enter upon an absolute desert.

Greeley, as a settlement, is the only successful agricultural one in Colorado, though many isolated ranches pay extremely well in other parts of the State; but I wish it to be clearly understood that for one paying ranch here there are five non-paying. Greeley was founded in 1870 in the *Tribune* office, New York, by the staff of that then leading journal of America, on a letter by the celebrated Horace Greeley appearing on Colorado. Mr. Meeker, then on the *Tribune* staff, now the proprietor of the *Greeley Tribune*, and the leading citizen in Greeley, took the initiative in the settlement of the colony, and two canals from the Cache de Poudre [river were first built to irrigate all the original land purchase, which was then inclosed by forty miles of wire fence. Greeley now has a population of 2000, and the irrigation, supplied by the fine tributary of the Platte, is so abundant and certain that the obnoxious grasshoppers, which up to 1876 were ruinously numerous, can be washed [away by it before they reach the perfect state. Greeley, therefore, is a decided success; but as it is the result of combined effort properly directed, which will succeed anywhere along a river in Colorado, but which, regarding the individual chances offered to Englishmen elsewhere, and especially in the British colonies, it would be absurd to recommend to home emigrants (who almost invariably become set against each other and disintegrated here; why, I cannot quite see, yet I know it), I pass over this very well-known and prospering community, and wind between interminable sand hills through Colorado into Wyoming, a state where the bare mention of agriculture

raises a laugh of derision. Arizona is a blooming garden as compared with it, for in Arizona an occasional grove consisting of three sage bushes and a cactus is said to be met with, but even a cactus is a rarity in Wyoming.

The night I arrived in Cheyenne we were favoured with a gravel storm, during the lulls in which only sand flew. How the window glass in the very fine hotel there stood the onslaught, I cannot imagine. Mr. Dill and I started after supper to find an editor to take us round: I thought Cheyenne was a good deal more witty and hospitable than wicked, and enjoyed its most extraordinary theatres very much, though the Black Hills miners wintering there in great numbers were a good deal more rough than their brothers of San Juan. Now that the *Times* has lauded Mr. John Morrissey, of New York, as a "really great man," I suppose English taste will permit me to give an account of a Cheyenne establishment of the celebrated Morrissey type, so just let us glance inside one of the numerous keno rooms of this western town: a long narrow apartment, brilliantly lighted at one end, at which are the tables, nearly dark at the other; fifty or more miners, two dozen of whom are playing this apparently intricate game. Just look closely at them—one man wears diamond studs, a most expensive French silk hat, and no shirt collar; the next is attired all in leather, wears large gold rings and chain, has taken off one boot for comfort, and put the unencumbered foot on the table. Several are armed to the teeth; most of these are Mexicans. A good many are under the influence of spirits, but all are very quiet; only a subdued murmur, chiefly of terrible oaths, reaches the ear. The play is never very high, a local gambling statistician assuring me that twelve dollars per night was his average loss on the worst month he had ever had. This, however, was not the sort of statistics of which I was in quest, nor did I find any in the great number of large liquor stores of which Cheyenne is chiefly com-

posed; indeed, except for its much greater magnitude, it recalled to my memory the village of Drimoleague, co. Cork, which in 1874 consisted of a post-office, nine public-houses, and a private residence (the latter, however, is also licensed now, on the ground that it was unfair to its occupant to be the only non-licensed vintner in the district). Being the point of supply for the Black Hills has made a large business for Cheyenne, and the U.S. fort close to it is also a source of prosperity to its traders. The gravel storm, politely termed a "Cheyenne zephyr," only subsided to give place to a tremendous snowstorm, which effectually barred my course further north; but I lost little, if anything, by this. The way the splendid express engines of the Union Pacific brought their trains for San Francisco or New York up to time sharp—sending the snow, which, an hour after the storm commenced, lay a foot deep on parts of the line, flying in all direction—was a most attractive sight. "Loafers and ticket scalpers" were forbidden by the company's notice to occupy the waiting room; but it was full of the former class, who possibly combined both professions. In Cheyenne I dare not display such gross ignorance as to inquire what a "ticket-scalper" is, and never since have I been able to find out.

Back again to Denver, through an Arctic-sea scene, rolling waves of snow extending to the horizon in all directions, only the tops of the sand hills bare, swept continually clear by the wind, and the valleys quickly filling up. These heavy gales that invariably accompany snowstorms in Wyoming and North Colorado are most beneficial, as they always keep the hills clear of snow, and give the cattle of the district such herbage as there is uncovered on them. Herds of half-wild young horses thus live here without shelter through the year; if the country were a plain, they would surely perish. A great many pretty picturesque ranches lie westward of this Denver Pacific line and of its southern continuation the

Denver and Rio Grande, between the lines and up to the foot of the Rocky Mountains; most of these residences and farms are very well adapted for sporting, and would be sold for what it cost to establish irrigation on them. This proves most conclusively that they are non-successes in an agricultural point of view, and the cattle on them are decidedly inferior to those in Kansas. At Lupton there are plenty of chances of this sort; and there are better along the Boulder Valley branch of the Denver Pacific, which starts from Hughes, south of Greeley, and runs to within a few miles of Estes Park, the charming and picturesque seat of Lord Dunraven, who, with a son of that well-known sportsman, Col. J. J. Whyte, has built a handsome hotel there, and made a large outlay in general improvements. The Denver Pacific has a land grant, and sells it at rates varying from 9s. to 2l. per acre, giving five years to extend the payment of purchase money over. I think that profit in farming is not the rule here, but that these ranches furnish only occupation and sport to the settler.

Denver on Christmas Day would form an admirable subject for an essay on Western life, manners, and customs; but this subject has been so overwritten, that every reading man at home knows rather more than all about the subject. The readers of "The Gentleman Emigrant" doubtless picture the Western States "as a German-Irish reserve, where the English labourer is not received with cordiality, but pitied as a being blighted by the cold shade of the British aristocracy; and the presence of an English gentleman has the same effect on the population as a red rag on the bull." I quote verbatim; and, whilst quite admitting the fact that the Irish American is always disagreeable and rude to the English settler when he is in the majority, I cannot help laughing at the impressment of German America into the Fenian army. As, however, it does not appear by the book referred to that the author was ever in Kansas or Colorado—

though his accounts of the places in which he *has* travelled are, I believe, both accurate and valuable—I subjoin extract from Government census of the “Irish German Reserve” :—“In 1875, Kansas had a population of 531,156; of these 12,744 were born in Germany, 10,940 in Ireland, and 9000 in Great Britain;” an English tourist would thus see seven times as many Irishmen in the city of Cork and sixty times as many in London as in all Kansas, and fifty-three anti-Hibernians to each Paddy in that state. As to Colorado, there are almost no Irishmen in it, and if it is a reserve at all, it is an English one, almost every third ranche there being English property. So Denver, the capital of the State, was the rendezvous of the British Lion on Christmas Eve; and from the Earl of Dunraven down to the sturdy Scottish shepherd, all who could get away from the care of cattle flocked into Denver, and made it very merry. Mr. Griffith, formerly of the Union Bank, London (who has now his capital invested in Denver at 10 to 15 per cent.—he considers perfectly safely), and Mr. R. Knight Bruce, of South Kensington, Mr. George Grant’s agent on his Colorado estate, called on me after Christmas Day, and I agreed to accept Mr. Bruce’s invitation to Haystack Farm at the immediate foot of the mountains near Larkspur; so on Dec. 27 I left many kind friends in Denver, carrying with me most pleasing recollections of that city, in Mr. Grant’s light, graceful, Eastern-built buggy, with an English-bred pair of horses, for a forty miles’ drive through deep snow under-foot and light driving snow showers aloft.

The frost had been extremely intense; for the past two days the thermometer had been as low as 4° Fahr. during the nights, yet the air was dry, clear, crisp, enjoyable. Everyone we met looked like old Father Christmas, and one wayfarer, who had travelled all the previous night, had enormous solid icicles dependent from his moustache and beard, being indeed quite an exaggerated type of the Yuletide

monarch. He inquired the way to the residence of Potato Clarke, once a very humble settler, who had attained monetary magnitude by growing the "murphies" required in Denver; and, though it never struck our ancestors to call the first importer of these valuable tubers Sir Potato Raleigh, Mr. Clarke lives in times when appreciative gratitude flourishes more widely, and his Christian name is Potato in Arapahoe County, Colorado, and the regions round-about. Mr. Van Wermer has a fine farm a little further on, and Judge J. H. Craig a ranche, with 300 horses on it, to the west of this. Then we took leave of the Denver and Rio Grande Railway line, parallel to and sometimes across which we had been driving, and turned up Plum Creek, where are fourteen ranches in line, the upper one, just at the base of the Rockies, being Mr. Grant's. Mr. Stewart's picturesque little house, with its tasty verandah and curtained windows—a rarity here—is very attractive-looking. Mrs. Stewart is the first English *lady* I had heard of living outside the town in Colorado, and even the outside of her house marks the pleasing exception to the general rule. Mr. Bloomfield's residence comes next but one to this. Mr. Ratcliffe, a Londoner, has invested his savings in a villa on the banks of the creek; passing this, a fine house of Mr. Perry's, under a hill to the right, and the little post-office of Glengrove, we reach Mr. Grant's 700-acre inclosure, and drive through it in fast-gathering darkness to the steward's house, reaching it at half-past five—seven and a half hours, without a halt, from Denver; perfectly wonderful travelling for horses through the deep snow. Mr. Bruce wanted me to take his room in the steward's house and move himself into the villa, which, to save the trouble of keeping it heated during the winter, he had abandoned. But my duck-shooting campaigns in the South of Ireland for the past seven winters rendered an unaired house terrorless to me, and I insisted on occupying it, though *solus*. So after a delicious supper of antelope

steak, admirably cooked by Clarke, one of Mr. Bruce's coloured attendants, I turned in. Beyond all question, it was a cold night, and at various intervals I roamed through the dwelling in search of more rugs and blankets. I stripped every bed of its coverings, and "yet I was not happy;" but at length, by popping a fine big hair mattress over the blankets, a due amount of caloric was generated, and Somnus descended on the scene.

"Get up and see the Aurora and sundogs," Bruce sang out to me, at a very early period of the morning, but I did not, as my description of these phenomena would not give anyone half as much pleasure as it would have given discomfort to me to see them. I never saw frost like it. Every drop of water in the ewers in my room was frozen solid; the towel on which I had dried my hands the previous evening was stiff as a sheet of tin, and the supply of water to the bath room, though direct from a mountain stream, was cut off by being frozen hard. I have heretofore despised folks who have fires in their bedrooms; but I retract and apologise to such, admitting I am the fool in the matter. When I did arise and looked about, a more lovely and picturesque scene could not have met my eye. I found the villa had been planted amongst mammoth red sandstone rocks of remarkable and fantastic forms, of which one was twice as high as the house—faces with eyes only, faces with nothing but noses, points like an alligator's mouth, flat rocks, round rocks, spires, and boulders, all brilliant red against a pure white background; the spruce-clad, and above that pine-clad, foot hills of the immortal Rockies round us everywhere, save the point of departure for the South Platte of Plum Creek, which had its source just above us; and in our snow-covered mountain-environed valley of about a thousand acres, baby firs and spruces lifted their little hoary heads, and English pigeons, with pretty and home-like confidence, fluttered round us as we entered the steward's house for breakfast. The villa is of

wood, but this was a solid, cosy, little red sandstone structure of three rooms, an enormous American cooking stove in the centre keeping all hot. Through the door we could see a slightly brownish vermilion, colossal natural monument rise to the sky from the plain, its deeply indented strata dipping at about 60° , filled with snow in regular streaks, and with two smaller stones like defaced sphinxes' heads, juveniles of the boulder family, at its foot. Between three narrow vistas of snowed heights, plentifully sprinkled with melancholy frostbitten-looking pines, appeared the winter sun, shining on all the white, red, and green with sparkling radiance, rendered even more brilliant and beautiful by the minute particles of frost floating everywhere through the air, lit up as they wavered, edge or flat side towards us, with the ever evanescent shades of the rainbow.

The Rockies in winter are indeed different from the same Rockies in summer, and not less beautiful, for the brown sandy gravel, with its weeds and burrs, is not now seen, and one can imagine, no matter how falsely, that the snowy mantle covers a green carpet. "But then the cattle, what do they do?" "Eat hay," said Bruce, "come and look at them." In sheds, covered first with pine boughs, then by snow, were one hundred head, some cows having come from Oxfordshire, shorthorns. Nature had bountifully given them an additional crop of hair, but otherwise they looked as if the mountain breeze, keen though it be, was not more disagreeable to them than the fogs of Smithfield, where they would possibly have been if then in Old England. Then the horses, all Virginians, two stallions, twelve mares; and lastly, two mules, nothing very much to look at, but, considering the absolute lack of oats in the State, wonderful for the season and place. Now then, we were to be off to cut ice for next summer, and after that, as no agricultural work could be done, the men were ordered to cart a lot of timber for sleepers to the railway, so as to make them pay for themselves.

Here straw and hay are abundant, but 2*l.* 8*s.* or thereabouts per ton. Yet five months' continued feeding of stock that are rather thinner in May than when turned in during December, does not look cheering. The life—the delightful, bracing mountain life—is the chief profit, and dozens of Englishmen think it sufficient, though they would naturally wish to do just a little more than pay expenses. Up to the timber drawers, through a romantic, densely-wooded, narrow, winding cañon—the little sulphur stream rippling musically under any amount of frozen snow; blue jays flitting from tree to tree; squirrels, rather subdued in their antics by thermometric depression, yet cheery, and twinkling their merry little eyes. Then the nice, gentle, patient horses shake the icicles off their nostrils occasionally.

Here they say horses and men are too much pampered in England. There is a great deal of truth in it. Where in England will you find an animal highly bred enough to trot a mile in from two and a half to three minutes, or gallop at a proportionate rate, that you can tie to a post or a door, and leave (even a pair of them) to take care of your carriage for an hour? Here it is done every day, and no carriage is ever kicked to pieces, as would most assuredly occur if an uninitiated Yankee purchased a pair at Tattersall's, and hitched them up in any London suburb. One sees wonderfully little wickedness or vice, in an equine sense, here. Kicking, biting, and plunging are all but unknown, and English highly-bred animals, that under English grooms are the most troublesome brutes alive, take much more kindly to the Americans than to their masters, and soon set an example of gentleness even to their American-bred brethren.

A pleasant evening's rabbit shooting wound up the proceedings of the day; rabbit and antelope make a capital stew, the juicy and game qualities of the latter imparting just the required properties to the former. The three

coloured men sat in the room and waited the conclusion of our repast to commence theirs. Clark, the cook; Charlie, his son, whose mother was a Comanche Indian (not by any means a bad mixture of races, though, as usual in such cases, one would fancy that the bad qualities of each would be combined; but Charlie bears the character of a bright, hard-working, honest little fellow); the third was a negro named Oscar, the horse and cattle man. Amusing souls are these western blacks, full of dignity and bad grammar, willing and anxious to discuss anything, from Darwinism to bean boiling, and singularly ignorant of everything. "Dat waggon wheel am broke, Oscar?" "Yes, Clarke, you take him to de smit." "Which smit?" "Ob course to Upton, for he not drink, and do de job quick, more den de oder; and tell him, Oscar, dat if he don't do him quick, and reasonable, dat me will no more patronise him." The word "patronise," evidently intended as a treat for me, was pronounced with great pride and distinctness.

Then the bi-weekly post came in from the little shanty post-office, and home news filled our thoughts for the evening. As severe a frost reigned this night as the last; next day was to be devoted to wood chopping and beaver seeing, so we retired early. The men and boy had gone to draw sleepers as before. Fire for the night had first to be provided, so, begging to be permitted to assist in chopping *sticks*—as quite large felled pines are slightly termed in the mountains—Mr. Bruce and I started for the back yard, and set to work. I can split logs or break up an old boat to perfection, but cutting faggots out of a pine tree is a different species of amusement. Bruce and I estimated that I could cut in this latter way about as much in a week, as in these snowed heights I should require to consume in twenty-four hours; my friend, though only six months in this country, had picked up the regular backwoodman's left-handed axe swing, and cube after cube fell before him

rapidly, only requiring a few strokes to split into serviceable faggots. This achieved, we wended our way to the beaver dams, which are carefully watched and preserved.

The destruction and approaching extermination of the bison or buffalo of Western America have been subjects for regretful comment both in this country and still more extensively in the daily and sporting press of the United States; but the poor hard-working little beavers have as yet elicited no such sympathy, although, for practical purposes, they are far more useful as aids to the irrigation which is always necessary in such partially watered districts as many in Colorado. If you help the beavers, they will help you here: just run a dam a short way across a stream, and forthwith the beavers finish it. If your engineering is bad, and the structure too low, or too weak, they will raise and strengthen it; so Mr. Bruce and his neighbours seeing this, and that the pretty harmless little animals were rapidly becoming annihilated in the State, combine to protect those on Plum Creek. On this ranche there are six beaver settlements, in a small lake caused by the expansion of the creek; the lake and creek alike were frozen hard, so Mr. Bruce selected a most auspicious occasion to introduce me to his pets in an afternoon call. The first dam visited was 102 yards long, extremely substantial. We walked all along the top of it on to the beaver house, also built unaided by themselves; this was 6ft. high, and 75ft. in circumference, opposite their hall door, which was under water. They kept a hole broken in the ice, so that every beaver before he took his walks abroad had to pass through his bath room and bath. These beavers, having a quiet life, get like most beings who exist under such circumstances—very fat; 40lb. is quite an ordinary weight for one. We walked *over* the house, and found it also very strongly constructed; then we departed across the thick ice to dam No. 2, a semi-circular one, arching up stream—not the main creek, but a little one, impregnated

with sulphate-of-iron. This stream, being chiefly fed by a hot sulphur spring, never freezes, and the lucky beavers who had "concluded to locate" here had only thirty-five yards of embankment to make. They had no need to tell-off sentries to keep their ice hole open, and they positively had hot and cold water laid on, hot above in the mineral stream, cold below in Plum Creek, for they had dammed the tributary part at its confluence with the stream. Anyone who believes in the transmigrati6n of souls, and gets the choice offered to Indur, the founder of the theory, had better wish to be a beaver in this particular dam; my description of its locality is sufficient to guide any mortal, much more any spirit, to the right place. Then there were four other dams, tiny ones, inhabited by but four, six, or eight, exclusive or excluded beavers—aristocrats or outcasts—of the tribe. To see these interesting, almost scientific, and constantly industrious animals, this is the place. Dam No. 1 is the largest I have seen in America, though, doubtless, in Canada many larger are to be found; I have been now from north to south of Colorado, from east to almost its western border, following the South Platte, Arkansas, and Rio Grande nearly to their sources, and have seen no beaver dam to be compared to this one on the Haystack Farm. Water exists in sufficient quantity for a little irrigation along this valley, but the grasshoppers had intimidated agriculturists, and most of the ranchers in the vicinity only raised hay on the land (usually from one-tenth to one-sixteenth of their entire farms) over which they get water.

Mr. Bruce most kindly determined to devote the first three days of the new year to show me what other English settlers were doing, and through deep snow we drove to the residence of Mr. Ralston-Bloomfield, late lieutenant R.N., who is about to sell his property here to his brother. Capt. Winslow, late 106th Regiment, and Mrs. Winslow were also here, and the ladies of the family, recently arrived from Brighton, made their mountain villa a true English home. Mr., Mrs., and

Miss Stewart, whose pretty residence I have previously noticed; Mr. Smith, of Guernsey; and Mr. Dennis, of Galway, made up our New Year's party, widely different from my Christmas one amongst the hardy western trappers. We had the English papers to hand by an unusually quick mail; and if those at home only knew half the pleasure that is afforded to those dear to them afar by the sight of a favourite home paper, addressed in the handwriting of some valued friend, the Transatlantic newspaper mail would be much more than double the size it is at present. Mr. Stewart, who insisted on my spending one day and a night, at least, with him, has been a very successful Victorian sheep farmer. He likes Australia; but maintains that one-fifth of the capital required to start there will suffice here, though there is every chance of making money there, and very little here. 1000*l.* is enough to buy a very comfortable home, which will support one; this really is saying a great deal for Colorado, and I do not think I can say as much of many of the other States I have been in. Mr. Griffiths, as I have said, has invested his money in house and other property in Denver, and most strongly recommends any small capitalist to do likewise; but he must stay and watch his men and his money.

I wish I could dwell upon the English settlers in Colorado, but the subject would lack novelty; here is no deterioration of home manners, culture, or ideas, for the settlers have brought home with them, and are exclusive, an easy matter in these beautiful solitudes.

"Oh, the lies we were told before we came here," said to me by so many settlers, rings in my ear. People who come from home on American representations deserve little sympathy, not that American representations are intentionally false, or in many cases false in fact, but the national tastes differ very much, and most especially does an American's idea of a "delightful climate" differ from ours.

Take the figures and facts from the State Boards of Agri-

culture Reports, but have nothing to say to their deductions, and, above all things, get an English version of the advantages of the State before you come. Get that version, if possible, out of a leading newspaper, for its correspondents are far less likely to be personally interested in what they describe than one who writes a book about any single district. This is my advice to those who contemplate emigration.

CHAPTER IV.

CLEAR CREEK VALLEY—ENGLISH MINING SPECULATIONS AND NATIVE
PECULATIONS—THE COLDSTREAM MINE—FISH BREEDING AT GREEN
LAKE—EMPIRE—IDAHO SPRINGS.

MR. CUSHMAN'S fish-breeding establishment near Georgetown, some fifty miles from Denver, is too remarkable an instance of successful pisciculture to pass over. On the way to it, one has to go over the romantic Colorado Central Railway for twenty miles through Clear Creek Valley, past Idaho Springs, rising from Denver—which is exactly a mile higher up in the world than London—2025ft., to Georgetown, which, though in a deep valley, is 8452ft. over sea level. The celebrated Terrible, Silver Plume, and Coldstream mines—the two former celebrated as much for their wealth as the poverty they have entailed on their English shareholders—are within three miles of Georgetown. To see an American mining camp within a few miles of Gray's Peak in the depths of a very severe winter, and everything else above mentioned, proved too strong a temptation to be resisted.

It was 12° under freezing point when I started on the morning of Jan. 26 on the Colorado Central. The town of Central looked even prettier than when I saw it in summer; but the smelting-house chimneys smudged a good deal of the purely white landscape with disagreeably-odorous smoke. Truckloads of silver ore, more or less rich, were shovelled out as though only sea sand were being handled. Again I ran up through Clear (or Vasquez) Cañon, the creek being only occasionally visible as it impetuously burst a hole in the

two-feet thick ice, and the pines bent under a heavy weight of snow. Mr. Reuter's four-horsed stage coach met the train at Floyd Hill, to which village the railway then only reached; and no road could be better than the one it ran over through South Clear Creek Valley. A most extraordinary set of crooked timber cranks, about four miles out from Floyd Hill, were worked for mineral reduction by a water wheel. Then we saw a poor fellow washing gold out of sand in a hole in the ice, and hoped he might some day enjoy the wealth he worked so hard to attain. We stopped at Idaho hot springs (soda and iron) to change horses and dine. This is a fashionable summer resort, where a number of valleys concentrate into the Clear Creek, and villas are dotted over the best timbered hills I had seen in Colorado. The town is well supplied with hotels, Beebe House being the best one, and its charges only 3*l.* per week, fricasseed chicken, roast beef, roast mutton, ham, vegetables, and sweets being our 4*s.* dinner there. The valley is so narrow that the scenery is almost gorge-like, Papoose Peak and the Old Chief facing the hotel. For miles beyond this, and from that onwards, the ascent is rapid, and gets steadily more and more picturesque up to the Douglas Mountain, where we branched off the road to Middle Park and Empire, and ran along the foots of Democrat and Republican Mountains to Georgetown, where the traveller falls into the hands of the enemy, in the form of hotel proprietors, both food and attendance being very indifferent at 16*s.* per day. I speak from my experience of the Barton House, which I am informed is the best hotel in Georgetown, a mining town of about 3000 inhabitants, and situated in a valley a mile wide, Leavenworth, Republican, and Sherman Mountains—each roughly 10,500 feet—towering above it. So much timber has been cut off these mountains for smelting and other purposes, that the immediate vicinity of the town is much disfigured; but as I drove out southwards and upwards next morning, in one of Mr.

Reuter's express waggons, through mountains which were dotted with almost countless silver mines, the district became very handsome, verging, indeed, on absolute grandeur passing Silver Plume (managed by Mr. Foster, a young Englishman). I walked from Brownsville to call on Mr. Henty, the manager of the notorious "Terrible," which was discovered in 1866, and produced very largely until sold to an English company in 1870, since which date, like every good mine in English hands in Colorado, it has been the subject of continued litigation. Nothing can possibly be more disgraceful to the country than the systematic manner in which all titles, and especially English mining titles, are questioned in this district. Lawyers in high official positions actually buy claims adjacent to English ones to raise a disputed boundary question; and the only court in America in or for which Englishmen have the slightest confidence or respect—the Supreme Court of the United States—has, until this year, been practically closed to them, owing to Colorado being a Territory only. The working miners in the San Juan district have had the good sense to avoid the farce of trials in the district courts, and there all disputes are settled by juries of miners. Mr. Henty, a leading man in the London School of Mines, and who has managed Spanish mines for Messrs. Smith, was arrested a few days after he had assumed the management of the Terrible, for disobeying an iniquitous injunction of the district court. I call it iniquitous from an English point of view, for he was never served with any notice to show cause against its being granted; but then his opponent was a senator of the United States, and a leading lawyer! A truly nice reception for an English scientific gentleman, who represented one of the wealthiest London mining corporations in America! If Mr. Henty had not allowed this, the most valuable mine in Colorado, to fill with water, he is certain it would have been forcibly taken from him. So far from thinking little of the wealth of Colorado's mines, I am

certain that they are wealthier than their most ardent English shareholder believes. I myself have seen three men paid a cheque for 150*l.*, their month's pay, being three-fourths of the value of the ore they raised in the Coldstream; and Bruce, a Scotchman, with two others, received the incredible sum of 3600*l.* for their three-fourths value of the last ten days' work on a new lode of a rather valueless mine—the Colorado Central. In the present miserable state of the mining laws in Colorado, any English capitalist is a downright fool to buy a mine in this district; for the moment he proves it a good one, all the swindling sharks for fifty miles round appear, and combine to oust him legally, or in a few instances even by force. It is not possible to believe that the American Government, or even that of the State of Colorado, will permit the suicidal policy that keeps foreign capital out of the country and renders that which is at present in it unproductive, to continue forever, or even for long; but, whilst everyone knows their own business best, I trust none of the English capitalists will encourage the black-mailing practised here by making any terms or compromise with a class of men who could not stand legally or morally for a moment before the thoroughly independent supreme court of their country were they taken straight there. Giving any statistics of this Terrible mine would be to touch a vital Stock Exchange point; and, as such is entirely outside my province, I shall ask the reader to ascend Mount Sherman and see an American private gentleman's mine—Col. Glenn's—named the Coldstream, in remembrance of the unremitting kindness and hospitality of that distinguished regiment to the colonel when he was a confederate fugitive from a federal military prison on a charge of rebellion, and escaped to London. A splendid young Englishman, also a Royal School of Mines' man, Mr. John J. Cooper, managed this mine; and, hiring horses at the livery stable, he and I rode up three miles of

corkscrew in a light but blinding snow storm, past the Baxter, Dunkirk, Dives, and Pelican mines—everyone of them I believe in litigation, and most of them a source of wailing and lamentation to English half-pay officers and widows in narrow circumstances at home. Then we reach the Coldstream, over which are a few wooden houses, and see above us the Phoenix and Scotia, and beyond us the Cashier and Terrible. The snowstorm had just cleared, and enabled me to get a most grand and impressive view, scarcely exceeded by any in this wonderful land of mountain and valley, colour and shade, stream, and glorious sky.

I stand on a mass of boulder which has become detached volcanically from Mount Sherman. Nearly 2000ft. below me are the little narrow gorge of South Clear Creek and the village of Silver Plume; Mount Leavenworth rises snow-capped just to above timber line—which is here 11,000ft.—opposite, its rugged pine-clad sides, deeply scored here and there by artificial torrents, created by the melted snow waters being embanked and held back in summer by the miners, and then let go in a body, thereby denuding the rock of its light covering of pebbly, sandy earth, and occasionally exposing some long-wished and waited-for lode or vein of silver, lead, or zinc. Silver Plume looks like a collection of children's toy houses, and the fleeting snow clouds alter its appearance perpetually by the blue shadows they throw from hill to hill across it. The broken ore around me is frozen and snowed together, and the silver particles, rendered doubly brilliant by their glacial covering, sparkle in the sunshine, which, January though it be, is more powerful than in the midst of summer at home, though it is freezing tremendously in the shade. Waggon loads of ore, $2\frac{1}{2}$ tons in each, are winding down the steep mountain side, their hinder wheels locked with chains; yet so steep is the descent, that the pole braces have to do a good deal of work from time to time. These pole braces are not anywhere in America attached to the

pole; a yoke or bar crosses the pole head, and to this the braces are buckled, so that the horses have a direct pull back, without having their collars pulled diagonally in towards each other—a proceeding that in this land of winter, snow, and ice, would certainly tend to make them fall. As this Coldstream mine never was, and probably never will be, in the market, a little of its statistics may interest, without doing harm. Twenty-five tons of ore had been sent down to the reduction works the previous day, and assayed on an average 200oz. of silver, 40 per cent. of lead, and 20 per cent. of zinc to the ton. Forty men are employed, all on a percentage of what they raise, and none of them average less than 12s. per day; whilst, as I have previously said, three of them earned 50*l.* each, or 1*l.* 13s. 4*d.* per day each, in one month of thirty days. The original price and outlay on this mine together were less than 20,000*l.* Its profits are 5000*l.* per annum, which, though not so good as those of many other mines, promise to increase, and have tempted the invariable action on the part of the covetous outsiders—viz., a question as to its title and boundaries being raised. Mr. F. W. Jones, the foreman, gave us a capital lunch in his log house, and told me he paid 1*l.* per ton to the waggoners for hauling his ore to Georgetown, only three miles distant.

With all these lawsuits, and as a consequence so many mines shut up, or nearly suspended, these mines about Georgetown exported 500,000*l.* worth of silver last year, and Mr. Cooper, who has managed for John Taylor and Sons, of London, the well-known mining proprietors and agents all over the world, assures me that he believes the lead here to be more abundant, and more easily got at than anywhere else he has ever been to, Spain included; but he agrees with me that to buy a lode here, except for the purposes of holding it until proprietary rights and laws are well established, is utter folly. A pleasant day on Sunday at Mr. Henty's, where everything, including Mrs. Henty, the fourth English lady I

have met in Colorado—was refreshingly English, and many home reminiscences, comparisons, and histories mingled with local adventures during the evening. Mrs. Henty had actually an English servant, a thing utterly unheard-of previously in Colorado; for in the first place it is next to impossible to get one to come out, and if she does, and you pay her passage, she forthwith wants to go back, and does, unless, as is usually the case, she marries a farmer or miner.

Mr. Henty had captured a mountain rat (the *Neotoma cinerea* of Baird) for me, a curious animal, as like a squirrel as a rat, with large wistful eyes, a bushy tail, and nervous, never resting, long whiskers like a cat. These animals frequent the deepest mines, and the miners will not allow them to be molested, though they are determined and systematic thieves. The reason why the miners like the rats is, that their nests are found to contain not only stolen but lost articles. One of Mr. Henty's men dropped his pet tobacco pipe down a shaft one day, and found it the next in a rat's nest. Higher up on this mountain, the Siberian squirrel (a form of *Tamias Asiaticus*, Allen), has been found; but the snow was at the time of my visit far too deep to make it safe to venture into the Middle Park. The more difficult it is to get into that place, the better the shooting is there; but ravines of snow nearly, if not quite, 100ft. deep were then between me and it; so I contented myself with seeing Mr. Cushman's fish-raising establishment. Knowing the impossibility of salmon reared in Colorado reaching the sea, I verily believed this establishment to be as absolute a myth as was ever narrated to a Saxon in search of the wonderful in these western regions; but seeing is believing—so, furnished with a letter of introduction to Mr. Francis Johnson, Mr. Cushman's manager, and declining the offer of my friend Cooper's horse to ride over a mountain road on which the snow lay so deeply that even the natives had not traversed it for four days preceding,

I started up a gentle ascent of 530ft. to the mile, to walk from Georgetown to Green Lake, three miles on the road to "the dome of the continent," Gray's Peak. The frozen mountain streams were being used to slide trees into the valleys; and to see pine after pine thunder downwards with ever-increasing velocity some 1100ft., sending from time to time showers of minute ice particles dancing into the brilliant sunlight, detained me on the road a good deal. Then I plunged knee-deep into snow, and, the path being quite undiscernible, the wonder was that I did not get head over ears into the ermine mantle of the old Rockies. However, I reached Mr. Johnson's house in safety, presented my order, and was shown round these wonderful fish-raising ponds and tanks. I had better first give a sketch of the locality, and then say what I saw therein.

Green Lake lies to the north of Independence Peak, which, though 11,500ft. high, does not rise very much above the lake, which is probably in a volcanic crater, and was once much larger, as the water-worn boulders around its shores testify. These masses of rock have evidently been deposited with so much violence, that the locality is termed the "Battle-field of the Gods." The lesser hills, which rise sharply over the lake, are very densely pine-clad, and the never-changing green of these trees, reflected in the lake, gives its name. Pine trees are said to stand as they grew (now probably petrified) in the bottom of this lake; but, as it was frozen over, I could not see any. Green Lake is a favourite summer resort for the Georgetowners, and on it are eight well-built boats, like yacht gigs, and three iron section boats, Bond's patent, all for hire; but when I saw the lake, boating was altogether out of the question, for the entire of its half-mile in length, and quarter-mile width, was frozen 18in. thick—the ice, by reflection, being green as grass. In the centre, was a regular hatchway left open in daytime, closed at night, for the purpose of feeding and breathing the fish. From this

lake a stream ran into a smaller one, 50ft. by 25ft., and from that a race into a third one, 85ft. by 40ft. and 8ft. deep; each of these lakes had a hatchway like the larger one. These lakes were, however, not the first scenes of the salmon's infancy; they first saw light in the fish house, 60ft. by 25ft., where I commenced my inspection of the establishment. On the 15th of October last, 300,000 salmon eggs arrived here from Oregon, sent by the U.S. Fishery Commissioners, and were placed in the hatching troughs, which number thirty-four, and are each 7ft. by 16in. The ova were covered with gravel, the troughs being brought into communication by tubes, and gauze wire cleverly arranged across them gave an incessant ripple. Only one per cent. of these fish was lost; but by the French system, the ova being placed on small glass rods arranged transversely, like a flight of stairs, the success was not nearly so great. The temperature of the water, which came direct from a mountain stream, varied from 42° to 48°; and the fish began to appear at the end of the sixth week, and were all hatched on the termination of the eighth. For six weeks they lived on their little red sacs. None of the fish died until these sacs were consumed, and then beef-liver ground fine was presented to them, as the most suitable food. Some of them declined this dainty and died, but the total loss was not quite 5 per cent.; after that, in no year does the mortality of the fish exceed 1 per cent. A good many abnormal monstrosities are hatched, the commonest form being fish with two heads; these are called "Siamese twins"—very beautiful little things, but they never live over the six weeks' sac-feeding. Mr. Johnson kindly caught several of them and put them into a phial of spirits for me to send home. The healthy little salmon were dark in colour, and rather ugly, the head being very large; but the poor little invalids were silvery and graceful. From this house, containing nearly 300,000 salmon, I was conducted to pond No. 1, where were the one-year-olds raised this time last

year. Not one of these would come to the hatchway in their pond to be either fed or looked at, so I had to take the existence of 200,000 of them there for granted, and pass on to the two-year-olds in the next pond, which 15,000 of them and 10,000 trout inhabit. These salmon are beauties, very lively, rising fearlessly to every crumb we offered them; handsomely marked, healthy and strong, much browner than any of their race who had seen salt water, but appearing to care little for the deprivation, and to be making the best of existing circumstances. These fish were all very much smaller than they ought to be at their age, and I rather doubt whether they would grow much more; the largest I saw was certainly not longer than eight or nine inches.

The main lake, containing only brook trout caught in the Rocky Mountain streams, was the next point of interest. There were 10,000 of these beauties, varying in age from two to five years; but no salmon in this lake. The five-year-old fish weigh 6lb.; and never have I seen such handsome, graceful fish anywhere. They are bold to the verge of actual audacity, and came up to be fed on a white plank placed a few inches under water, so as by contrast to show their shape and colour in the green waters of the lake. In 1878, these preserves were to be thrown open to those who liked fishing made easy, and the contemplated charge was 2s. per lb. of the fish caught—rather a stiff royalty; but the contents of the basket would sell for nearly that sum in the Georgetown market.

On my way back, I passed the mine where Bruce, a Scotch miner, who had been notoriously unfortunate all his life, made the discovery of ore before mentioned. That week, he again drew 1600*l.* for his three-fourth royalty. Of course, this rich silver ore is only what is called a "bunch" or pocket; but it is nevertheless a source of great gratification that this deserving Scot, who had toiled all his life and gained nothing, should so speedily realise a handsome competence to make his latter days easy and happy.

Of the scenery of Empire and of Empire Pass I had read a good deal; so next day I started again on foot to see for myself, and though I lost my way in the snow, and walked twelve miles instead of six, the extra exertion was very well repaid. Empire Pass is out of the run of tourists to Middle Park though they drive within one or two miles of it; but from the pass—instead of walking down into Empire—I walked up the mountain amidst light snow showers, and soon saw Parry's Peak, looking ghostlike in its shroud of drifting snow, almost too much in cloudland to pass for any part of the nearer and more real-looking range running from Empire towards it. Then I saw for the first time the little town I was in quest of, at the foot of Lincoln Mountain, on the edge of a valley that had been apparently irrigated and cultivated. I rested here, and looked down upon hundreds of thousands of acres of the beautiful State of Colorado, where every prospect pleases, but man is often most remarkably vile. Just where Nature seems so nearly to approach her God, is the very region where deeds of death and violence have been anything but uncommon, and the hand of justice both tardy and timid. The present district-judge here has been the first one to exhibit any pluck, and he has done a great deal to stop the "jumping" of mines, which acrobatic expression is locally used to imply that some gang of lawless desperadoes—whilst a mine is in litigation—evict by force the miner or company in possession, and tear the lodes to pieces in their haste to make hay whilst the sun shines, or, more accurately speaking, get all the silver they can before an order against them reaches the sheriff's hands, and a posse fearless enough to act against them can be raised. Empire, as well as Georgetown, has been the seat of this sort of thing, and a murderer in open day in Georgetown been allowed to walk unchallenged from the scene of his crime; but only mining disputes cause these excesses of barbaric brutality, and the rancher is as safe as the tourist in the district.

Over the crisp frozen snow I walked to Empire, which was once an important town during the gold fever, and which stands most picturesquely almost at the junction of two enormous gorges. These are connected by a long wooden bridge, protected by a snow shed as on the Union Pacific Railway. From here the valley east and west appears so narrow, and the mountains are so high and precipitous, that it looks as though a Titanic railway cutting had been made to carry those of the Arabian Nights Genii who were a thousand feet high, in a train drawn by a locomotive of a million horse-power. Lincoln, Covode, Douglas, and Columbia Mountains hem in the four sides of the little town, where the Peck Hotel puts one up for 10s. per day, or 2l. 8s. per week. The hotel may not be very good, but the locality is more romantic than Georgetown, where roughing it at 16s. per day, without extras, is not what would please most tourists. I, of course, did a very exceptional thing in coming here in the depths of winter, and had to stay at an hotel when not with any English friends, as camping out, so pleasant and healthful in summer, would be almost out of the question after October, or at any rate November. To see Colorado, a man should neither travel on a railway or sleep in an hotel, but then he should arrive at Pueblo on or about August 1. *A propos* of Pueblo, I omitted to say that one of the best trappers in the State, M. H. Morse, lives there, and will take a party in his spring waggon over the State for as small a sum per head as they would pay for living in an hotel, viz., from 3l. to 3l. 10s. per head per week; he finding all provisions, tents, and beds. I have heard Morse so highly spoken of, that I am certain he is a respectable and efficient guide, and in the little I saw of him I found his conversation most interesting. A very wonderful gold lode had been, I was told, struck at Empire, of which I was given specimens, though not permitted to see it—a fact which may be construed to mean that one hears a good deal of wonders in the West,

which, even when you get there, are not to be seen. Back to Georgetown and down the Everitt silver mine, a very pretty and promising shaft, with Mr. Henty; an introduction to and pleasant evening at Mr. Cooper's with Dr. Todd, an English resident and physician in Georgetown; and, with the most pleasant recollections of my countrymen and countrywomen in Georgetown, and indeed of the Georgetowners in general, I started for Central on one of Mr. Reuter's four-horse coaches, retracing the road by which I had come as far as Idaho Springs, by the side of a Jehu who, though twenty-four years in this country, retained his native Waterford brogue with undiminished richness. Wooden houses were all along the roadside; at length a stone one appeared; and I remarked that it was very creditable to the owner to have set an example of permanent architecture in the district. "Bedad, sir," responded my companion, "the divil a credit I see for him; sure, if a man can't build a stone house where stones is the only crop, I'd like to ax, in the name of St. Patrick, where he could build one." This reasoning was too direct for me to get in any way out of my untenable position.

I had time to visit Idaho Springs on this trip. I found them very warm and agreeable, three rather tatterdemalion-looking bathing houses receiving all the hot water that welled up. Then, dropping the stage coach, I went in Mr. Reuter's private drag with him over the mountain to Central, only seven miles, but over—in winter at any rate—a terribly picturesque road. Up Virginia Creek and Cañon for about half the distance, under Veto Hill and Mine, and Seaton Mountain; the heights behind us rising just above timber line on the north, though on their southern slopes, I heard from Mr. W. W. Rose, they were timbered to the very tops. Reaching the summit, we saw in the deep valley ahead mines without mills, and mills without mines—the way business was done here first, when machinery was chiefly erected for gold reduction, and the veins as a rule grew less auriferous

and more silvery, serving, as Mr. Samuel Cushman says in his "Mines of Clear Creek County," "the purpose of distributing cash where it was much needed, and showing how not to do it." Down into this valley we descended, the hinder wheels locked, but the road such a mass of ice and so steep that the locked wheels slid sideways ahead, and the body of the trap was sometimes advancing broadside on, and at right angles to its fore part. In this way we kept constantly "broaching to," if a nautical phrase may be permitted to elucidate Rocky Mountain travel. We passed some cows with horns so arranged as to protect their eyes from collisions; then through Russell Gulch and village, where all the surface had been turned upside down in search of gold; then another set of hair-breadth escapes down a semi-precipice into Central, a town 9000 feet over sea level, where I made direct for Bushe's very good hotel.

Next day, I met Mr. Richard Pearse, who has made such a success of, and is a partner in, Professor's Hill's works, and I was shown all over their most interesting and scientific portions. First the silver ore is roasted, when the worthless slag comes to the top, and the valuable portion—matte—sinks to the bottom, the fine ore being roasted in reverberatory furnaces to get rid of the sulphur; then the preparation is converted into sulphate of silver, which is soluble in hot water, and the sulphurous fumes here remind one of Dante's "Inferno" as illustrated by Gustave Doré. Then this sulphate of silver is put in tubs, and boiling water run through, which dissolves it, and by being passed over plates of copper the silver is precipitated in a spongy form, collected, melted down, and run into bricks of 1 cwt. each, and 99.9 fine. The gold process is a secret invented by Mr. Pearse, and carried out most privately; that it is successful the ceasing of export of all gold ore for treatment elsewhere evidences. About 500,000*l.* worth of bullion is sent away every year by these works. I had the pleasure of meeting

Professor and Mrs. Hill in Mrs. Pearce's nice English home that evening; and next day Mr. Gray, the state assayer, took me through the great Bobtail Gold Mine by an adit level of 1150ft., all of which was driven in the daily hope of striking gold; now they have got it, but before this many a poor miner engaged on speculation to work it

By the wayside fell and perish'd,
Weary of the march of life.

To epitomise, I saw half the mines and all the mills of Central, and then came along the Colorado Central past Golden, near the very promising Ralston coal mine, which has lime and alabaster round about. This Ralston had 3,000,000 tons of coal exposed, and the British Legation were owners. The British Legation was a sort of English club in Denver, of which Capt. Whiteford was chairman, and Mr. Arthur Husey, secretary; the leading members being Messrs. Franklin, Cornish, Morris, Smith, and Freeman, and they in knots combined in many business enterprises. A regular English club is badly needed in Denver, not only for the benefit of the very considerable number of home settlers scattered through the State, but as a place to which men from home could come with introductions, and get the combined ideas of Englishmen of experience. Any one English settler's ideas of Colorado are not often altogether correct. The State is very large, and few of them have seen much of it; indeed, only by getting more than a dozen experiences of home settlers, adding them all together, and dividing the sum by twelve, have I arrived at information fairly accurate on the State of Colorado.

CHAPTER V.

THE VETA PASS—MR. LIVESAY'S RANCHE "GOODNIGHT"—SUCCESSFUL INVESTMENT OF CAPITAL—WET MOUNTAIN VALLEY.



AS I left the exquisite maple and walnut panelled carriage of the Santa Fé Railway in Pueblo, from which I intended to go on next day to see the highest and most picturesque railway pass in the United States—the Veta, on the Denver and Rio Grande narrow-gauge line—a piece of singular good luck befel me in being addressed by Mr. T. J. Livesay, a fellow countryman, who has investigated our southern colonies, and deliberately returned here to invest over 30,000*l.*; so, seeing a rich harvest of comparative emigration statistics ready to be reaped, and the certainty of pleasant society before me, I at once accepted a seat in his spring waggon for the purpose of being driven to one of his ranches, five miles up the Arkansas river, alongside the Cañon City branch of the Denver and Rio Grande Railway. Mr. Livesay's ranche and the railway station are alike called "Goodnight," not because—as I thought last year when going up to see the Grand Cañon of the Arkansas—the train passed this point at sunset, but because its first landed proprietor was a Mr. Goodnight. Here is a sketch of the scenery as seen just above the ranche from a precipitous hill surmounted by the castellated top so distinctive of all southern rocky mountain views.

The hill is of lime and brownstone, cedars are thinly scattered over it, and in the ascent, in consequence of the round pebbles you walk over, you very often advance like

the Irish militia captain at Aldershot—several paces to the rear. The mountain when you get on it is, nautically speaking, almost an island, being only joined to the adjacent plateau by a narrow natural causeway or isthmus. To the north, the clear Arkansas winds through a very sparse belt of cottonwood; from the west and running usually parallel to the river to the eastward, is the little narrow-gauge line, whereon twenty-two heavily laden coal waggons follow a miniature Titan with six small coupled wheels. Two horse-men's voices ring musically through the mountain air as in the valley below they admonish their large charge of cattle to hasten to slake their thirst in the nearly ice-cold Arkansas. Below red-faced and red-cloaked damsels bowl along in their buggies towards a neighbour's ranche, for the neighbour gives a ball this evening, admittance with invitation 6s.

The grass is hay. Nothing but the cedars is green, for the cotton-woods have some time since turned to gold, and even begun to undress for the winter. Old Pike's summit is enveloped in a sullen, impenetrable greyish-white angry cloud; but the Spanish Peak ranges to the south are sharply defined against the evening sky; their edges and summits of white showing against the dark blue as distinctly outlined as a steel engraver could cut them—their grim, barren, inhospitable side ravines filled with deep snow.

The little scrub pines or cedars on the surrounding hills look like cattle in the waning light, and from over the great limitless plains to the east, blue, hazy, ill-defined snow clouds come up. Lights begin to twinkle in the distant town of Pueblo; a ruddy glare through the open door of the little ranche beneath in the valley tells of hissing, crackling pine logs, glowing warm and cheerful. What avails the finest scenery even of Colorado after dark? I reflect. So avoiding as much as possible ground which offers but round rolling pebbles to the feet and cactus to the hands of the pedestrian,

I shuffle down the precipitous descent, passing corrugated honeycombed masses of granite, and detached slabs of limestone cropping a few feet above the sward, like giants' tombstones, weighing, some of them, many hundreds of tons. Then I sniff—not the battle, but—the supper from afar, and shut my notebook for that day, on which my subsequent acts were purely gastronomic.

Returning to my start with Mr. Livesay from Pueblo by the Denver and Rio Grande line; after a few hours of plain scenery we reach Walsenberg, and from thence piñon and cedared hills stretch away to the grand Spanish Peaks—one 12,720ft., the other 13,620ft. high. These peaks in towering grandeur sentinel the little town of La Veta. A few golden clouds rest on the summits of the great mountains, and these clouds reflect brightly on the sheets of snow, which are not, however, so deep, but that sharp, razor-like edges push brownly through their would-be coverlet. Now a warm-tinted *Mesa* rises from our track and runs in an unbroken plain to the mountain foot. At five, we leave Veta for the pass ascent, the train consisting of only one passenger car, and a combined baggage and mail van. The line is beautifully laid, sleepers only a few inches apart, and the grade starts up directly; no twists or turns, business must be strictly attended to, and the little engine, so small that to see it at first you would think it a railway directors' plaything, puffs away vigorously, and gets us on upward steadily. Brute force will not do it all; so we toil round a curve now almost as sharp as a gradient, and only inferior to one of those on the Colorado Central in point of steepness; that, I think, is 230ft. to the mile, this is 217. A vast monument-like rock rises square from the top of a brown conical hill on the plain, the rock being at least one-third the size of the hill. Spanish Peaks do not appear so very much above us, as, after a little engine-breathing level, over which we dash at top speed, we again climb a grade so

steep that a coachman would think it unfair to trot his horses up it. Cloudy, driving snow now covers the mountain tops to the south, and one of Pike's range rears a high white plateau over a stone-strewed Stonehenge to the right. Steeper yet, another curve, and we head for a monster sugar-loaf—Veta Mountain, 11,512ft. above sea level. This giant is but sparsely pine grown, and is snowed for more than half way down its height, though a higher range behind it is not snowed at all; such are the very partial characters of storms in the mountain passes. A sort of moor stretches away from us on either side; it bears but little grass, but on it weeds, that look just like incipient heather, make me think, in a misty indistinct way, of grouse. Another curve, and now a snowy amphitheatre of broken-contoured pined hills, opens the view southwards. Over these the great Spanish Peaks watch; they rise, indeed, from them, and then descend abruptly on the other side into the great plain which stretches away eastward for 700 miles to the Missouri river.

Comparative absence from curves, and a bold attempt to directly scale the heights, have been the distinguishing features of the run up to this; but now, after cutting through a lot of high oak scrub, we wind interminably across bright, rapid, clear, mountain streams; the vast sugarloaf mountain frowns directly over us, and volumes of brilliant sparks from the lignite coal shimmer in relief against snow banks as the sun retires for the day, and stars, beautifully clear, and looking so far off in the blue vaulted arch of heaven, shed light enough on our path to see with considerable distinctness up to Ojo, pronounced musically "Oho"—a true mountain (and to the locality most appropriate) cry of the railway porter. Heavy pine sheds now close in, so suppose we spend the evening at Garland. Then let us turn round, very much pleased with the Garland Hotel, and come back to Ojo on a clear frosty morning in October, through brown, pine-dotted

hills, and along a winding mountain rill. The snowed Sangre de Christo range, crowned by the Sierra Blanca, glitters brilliantly in the morning sunny air; but we soon leave the monarch, and wind upwards round positive quadrants, often vainly thinking we are at the summit; going through woods of smooth-barked, quaking ash, and pine forests. The icy wind was so cold that no one but I had courage to stand outside on the platform; but when we did reach the neat stone station-house on the summit, and had heard of how many deer were weekly shot there, and how a carriage got loose and ran down into Veta in fourteen minutes, and some other agreeable incidents, I was fully recompensed for getting a chilling.

Down we went at five miles an hour; all brakes half on, and no steam used; along the side of Dump Mountain, our track sometimes close alongside of the rock, sometimes cut through it, but no woodwork, all solid earth and snow. A glorious valley opens below, at the end of which stand the Spanish Peaks. Round another hill we wound, seeing the rails over which we had come, parallel to those we were running on, and then went due north, charging Veta Mountain. Shut your eyes for a minute. Where is Veta Mountain now? Right behind: in that one minute we have come round half a circle. The lovely valley vista far below has again opened: white, rounded, steam-like clouds float over it, as though all the locomotives in the United States, combined into one, were puffing their way up to us.

The valley was hundreds of feet below us, and in the clear air appeared part of another world. We saw from time to time, as we went on, portions of the line we had to go over, and portions that we had passed, in isolated bits, which had apparently no sort of connection with the rails we then ran on; and how we should ever get into the valley to which we sometimes turned our backs, and sometimes ran at right

angles, and which we never directly approached, was a wonderful and pleasing puzzle, and unless you knew the line, an insoluble one. It might be round this mountain, or it might be round that; you could only wait and see. Looking up the long narrow carriage, you saw its head swing up round a curve, as quickly as that of a cutter with helm "hard a lee" in a good breeze. Far down below—in fact, directly under us—a little engine panted and snorted into a siding, to get out of our way, though then we were going directly away from it. At last we were in the valley. Dump Mountain towered over us, a broad red sash across its brown breast marking our road, but running in such a way that it appeared some other road, and anything rather than the one by which we had come.

Such is the Veta Pass, as engineered by Mr. M'Mutrie. An English engineer would have been knighted for half the achievement. An altitude of 9340ft. is reached at the Divide station; 4500ft. are ascended in a run of fourteen miles, and the rich mines of the San Juan country have a level road into Garland station.

Back from all the entrancing grandeur of the Veta Pass, we ran over the foot plains to Pueblo. From these westward lie two English undertakings in Colorado, viz., Messrs. Livesay's sheep farm and Dr. Bell's oat and hay ranche: these I now propose to describe, commencing with the former, which lies along the valleys westward from Pueblo along the rivers—valleys where snow rarely lies, and where storms never strongly strike. Messrs. Livesay's experiences of many portions of the world are very widespread, and I have no doubt that a summary will be found both instructive and interesting.

"People say I am a fool," Mr. T. J. Livesay remarked to me, "because I have invested so largely in land here; but I did not do so until I had investigated New Zealand, California, Oregon, and Washington territory, as well as portions

of British Columbia. I certainly was not impressed much by Colorado or by Texas when I first saw them in 1873; but, nevertheless, I purchased two thousand two-year-old steers at 2*l.* 2*s.* each in Colorado, and was about to take them on to the free ranges of the Panhandle in Texas, when a good profit on my purchase was offered to me. Prospects here did not then look bright enough to make me think it wise to refuse it; so my first venture in America resulted in a few weeks in profit enough to pay my brother's and my own expenses to New Zealand.

"I would now say to a man with 1000*l.*," said Mr. Livesay, "and Mr. Cresswell, who has been here at stock for twenty years, also says: Buy young steers, and go out into free range. You are there at all times liable to lose your horses, and are certain to lose a good deal of your stock. You have to pay 2*l.* a sack for flour, which you could get for 10*s.* in any Colorado town. The life is a hard one; but nevertheless you are far more likely to increase than diminish in substance." As against this advice, two talented Englishmen—Mr. G. W. E. Griffith, of Denver, and Mr. C. E. Wellesley, of Colorado Springs—decidedly say: "Lend your money at 10 per cent.; you can get 18 safely, as soon as you know the country a little, for new enterprises of every sort are rife in this new State, and money is excessively scarce." The reader here will please note that I deal with no theories. There are, no doubt, a hundred and fifty ways in which money *could* be made in Colorado; but I consider it almost absolutely useless, if not really mischievous, to write for the intending emigrant anything but a record of the few ways in which he can invest his money, so as to follow in the wake of existing proved successes here.

Returning to Mr. Livesay's experience. "In New Zealand," he said, "in 1874, I found labour very bad and unsatisfactory. Taxes were heavy, and no one knew how runs would be leased in 1880, when almost all Government

contracts for land to settlers expire. I viewed New Zealand from a sheepman's standpoint. It was then, and now is, a first-rate place for agriculturists, who were usually called 'Cockatoos'—and a terrible thorn in the sides of sheepmen they were. I found the little etiquette existing with respect to sheep runs in Australia almost non-existent in New Zealand; for there, the moment you turn your back, small men buy your leased run in bits; and then you try to worry them out, and they to worry you out, as much as possible. At that time some of the largest sheepmen in New Zealand said they were anxious to get to America, and, to the great loss of New Zealand, many of them did so; for instance, Mr. M'Kellar, of Tapanui, bought a 6000*l.* interest in the Nolan grant, and Mr. Pinkerton went heavily into other Spanish grants in California." These gentlemen lost sheep very heavily *en route* to New Mexico, whither they had endeavoured to drive 6000 sheep from California, and, not being fortunate in striking water, lost nearly 4000 on the way. Now, however, Mr. Livesay says they will do very well, *if* the U.S. Government confirm the grant, and *if* after that they can get the Mexicans off the land—very much the same sort of undertaking that Mr. Allan Pollok so successfully carried out on the Martin estate at Lismany, co. Galway, during which he ran such repeated and serious chances of losing his life. The only grant unquestionably confirmed in Colorado is another Nolan grant, the greater portion of which Messrs. Goodnight and Dodson sold to the Colorado Central Improvement Company. Mr. Livesay has a good deal of this land, to which he took a fancy the moment he saw it, but not until he had been half round the world, and tried sheep in Texas, near San Antonio, or rather Boerne, just after Mr. Kendall, of the New Orleans *Picayune*, had startled the western world with his success there. Mr. Chapman, of New York, and Mr. Reed—now at Durham Park, Kansas—were then the largest sheep owners in Texas; but they, with Mr. Livesay, aban-

done that State for others, selling out their Texan flocks at 1s. 7d. per head.

In Oregon, Mr. Livesay found land was too high-priced for paying sheep-raisers, and, he considered, the high, dry, Rocky-Mountain-like parts of Washington Territory splendid for cattle, but good only for them.

Then Mr. Livesay and his brother came to the conclusion to return to their first love—South Colorado—and to spend plenty of money in the purchase of river fronts and water holes within reasonable distances of each other, so as gradually to acquire the land between them, which they have been since rapidly doing along the valley of the Arkansas and St. Charles, and the water holes lying between these rivers. In these mild-climated, sheltered valleys—whilst everyone from Trinidad to Cheyenne lost, last winter, from 20 to 50 per cent. of sheep—only 150 of the Livesay flock of 3600 succumbed to the cold, though without artificial shelter; and these 150 were all old ewes, bought for a mere song, merely as an experiment.

The first 8000 acres cost the brothers Livesay 15,000*l.*, which was gradually expended in three years. This range comprises 2000 acres on the Arkansas, and 1000 acres on the St. Charles, all agricultural land, and all irrigated by little canals or “under ditch” (as is here said). The water holes purchased are dotted over an area of 20,000 acres, and all this area of some of the best sheep land, in this State of very poor grass land, is commanded by these water holes. This entire range is estimated to carry over 80,000, which are rapidly being purchased, and the intention is to eventually use it only as winter quarters, the flocks being driven each summer on to the plains, and even into northern New Mexico. The 1400 improved cattle now here are being sold off, for it is found that cattle will not control a tract of land. Sheep will eat all your borders, but cattle will not, and thus leave patches of good grass on your confines, which tempt

other ranging herds to invade you—the law of trespass in all western States, even when existent, being nothing better than a legal farce.

Just now, 7600 sheep range here, most of them good Mexicans which shear $2\frac{1}{2}$ lb.; these are valued at 7s. each, but their descendants fetch 12s., and shear 5lb. on an average, many of them having yielded 10lb. and 11lb. last season. No disease but dandriff, caused by dust and alkali (falsely called scab in Colorado), is known here; but serious depredations are from time to time committed by the wolves, which must and can be poisoned off. Mexican wool in Denver fetches $8\frac{1}{2}$ d., and improved wool 1s. 2d. per lb. Vermont Merino rams are found to be the best, as they are acclimatised to cold, and cost here 5l. each, two being allowed to each flock of 100.

The taxes in Pueblo county are unusually heavy, more so than in any other portion of Colorado, and average 2 per cent. of the valuation, which, however, is never the real value. The large amount of farming and irrigated land here on which hay and grain can be raised, and the broad low valleys to which, when the heights and plateaux are snowed, sheep can retreat, and where they can remain well fed for weeks at a time, place this on the top of the list of first-class enterprises in Colorado; and I have no doubt whatever that Mr. Livesay and his brother will draw from 5000l. to 8000l. a year from their 40,000l. investment at Goodnight. They work hard, late, and early; they sacrifice almost all comfort, and almost all society, to their very promising and extensive business, and they give freely advice and hospitality to all emigrant fellow-countrymen. With the exceptionally fortunate start they have made in a peculiarly favoured locality, they are naturally hopeful and cheerful; but they do not think any others could do nearly so well, and are certain that if they sold this place they could not get another like it in Colorado. It is true that the original owner, Mr. Goodnight, did not succeed here; but why? Because, hard-working as

he was, he could not afford to pay 24 per cent. per annum for his working capital. That he did so for many years, and was by no means ruined, says a great deal in favour of Messrs. Livesay's prospects, and for the prospects of persons who, like them, invest only in such valley lands in Colorado as they have first tested practically with Doctor Bell, the vice chairman of the Denver and Rio Grande Railway Company.

Let us now follow up the Cañon City branch of the narrow-gauge—"the baby line" of Colorado—winding along the river for thirty miles. We get to the coal banks on a coal train, with our horses in a loose-box van. These beds turn out 350 tons per day of splendid anthracite coal, which the miners are paid 3s. 8d. per ton for raising and loading on waggons. I wish I could see a prosperous future in store for Colorado ranches; but I must admit that I see much more chance of the prices of agricultural produce here going down than up. At present (1877) you can get three times as much for what you raise in Kansas; but facilities to bring Kansan and Nebraskan crops and beasts into Colorado increase with every mile of the rapid mountain railway extension, and must continue to do so. Dr. Lamborn, one of the originators of the Centennial Exhibition, and a director of the Denver and Rio Grande, disagrees with me as to this, maintaining that the rapidly increasing population of Colorado more than balances the additional facilities of transit. Time alone can say which of us is right. Even poverty basks joyous in the clear air, bright sunshine, and glorious scenery of Colorado. May Fortune, now that the grasshopper, the chief enemy* of rural Britishers here, has vanished, turn her wheel auspiciously, and enable them to turn their cents into dollars, and, towards the close of their days, those U.S. dollars into V.R. sovereigns.

* As a set-off against insect damages, it may be mentioned that insect-produce, in the shape of honey, forms a much larger industry here than is likely to be supposed. According to Uhler (Hayden's "Report," Vol. III.), the parts of Eastern Colorado within reach of irrigation are capable of being made the greatest honey-producing locality of the Continent.

Although not an agricultural subject, as I have seen so many men of very small capital buying shares in really good mines here, and being as a rule ruined thereby, I may devote a few lines to Colorado mines; and, as one of my oldest and most intimate friends is a member of the London Stock Exchange, in whose office I have wiled away many pleasant hours, my readers may rest assured that I know almost as much about the way American mines are manipulated in London as I do about their usually dishonest management here. In one recent instance, however, Englishmen here have been fortunate. The Hercules and Roe Mine—one of the most valuable in the State, having been for years the cynosure of every swindling eye, and having had its 2*l.* shares reduced in value even to 5*d.*, for the purpose of enabling a knot of bankers to buy it in for almost nothing at a sheriff's sale—has fallen into the hands of Mr. G. W. E. Griffith, formerly of the Union Bank of London, at less than one-fifteenth of its value, one of the banks that wanted to gobble it up having failed just as the sheriff's sale came on. It is altogether a pretty story, and the first instance I know of in which an Englishman has got the better of the mining sharks. Against this, however, the Terrible mine has, by its secretary not understanding the country, been allowed to fall under the management and control of the First National Bank in Denver. All I can say on this subject is, that I pity the unfortunate English shareholders, as nothing they can now possibly do will, in my opinion, save them. Even the English general manager, Mr. G. M. Henry, of the Royal School of Mines, will not risk his character for the fine salary the Terrible company pay him; and he, I understand and hope, will manage for Mr. Griffith, who will sell no shares and will prevent quotations of them on any stock exchange. These quiet, unadvertised speculations are indeed the only good ones in Colorado, and, as a rule, in Utah also.

Of course it is bad taste on my part to allude to these unpleasant features in Western speculation ; but, as I may safely say that no English paper has ever had a correspondent long enough in Colorado to learn any of the inner springs of financial life as generally practised towards English investors, I think it only right and fair to say this much to my fellow-countrymen : If you do not direct, manage, and control your enterprises here personally, you will regret that your money was not subscribed to the Indian Famine Relief Fund or some other patriotic object.

We tarry, however, over-long at the busy Cañon coal beds, and our steeds are impatient ; let us therefore ride along the foot hills into Cañon City. Here we passed a pleasant evening with some of the officers of that hospitable regiment, the 19th Cavalry ; and next day, borrowing a spring waggon and fine pair of mules from Mr. Legard—one of the Wet Mountain Valley settlers, who keeps a depôt for the sale of his produce in Cañon City—Dr. Bell, his excellent manager Mr. J. B. Caldwell, and I started for a thirty-two-mile drive to what is claimed to be the best agricultural valley in the state, the Wet Mountain one, which lies southward of Pueblo between the Greenhorn range of mountains, there distinctly visible, and the great and beautiful Sangre de Cristos. The road to this valley is as lovely and romantic as the mind can imagine. I fear I have already dwelt a little too much on scenery, and Manitou Park remains to be described ; so the reader must imagine me driving my plucky mules through gorgeous mountain passes ; the golden sunshine on the dazzling snow ; vast pines towering over roaring, babbling, singing brooks ; red and purple precipices, so high as to shut out the sun from their gloomy but grand cañons even at eleven o'clock in the day ; occasionally a broad open park, with dry gravelly soil and golden grass, varies the usual scenery of the pass. And through all this we move for eight hours. A sense of immensity and overwhelming force takes

precedence of the mere idea of beauty in such a place as this. The vast masses of detached rock on the mountain sides, the almost as vast boulders in the creek beds, all point to physical forces of which we can form no conception—forces volcanic and glacial—as well as the slower but even more mighty ones of denudation. Through all this grandeur, formed in Nature's most impressive mould, we came late at eve into the greatest exception to general Colorado scenery to be found in the State—the Wet Mountain Valley, which extends from N. to S. for twenty-five miles, the level bottom being in the centre six miles wide, and tapering off to nothing at each end. Through this valley runs Grape Creek, which we had all day followed up nearly from the Arkansas through its mountain cañons; and into this creek run many placid mountain rills, permeating nearly all the heavy rich soil, which in addition can of course be irrigated at very trifling expense.

The Sangre de Cristos rise abruptly from the west side of the valley, one hundred and twenty peaks deeply indented and sharply serrated, all snowed down to the valley level. From Dr. Bell's hay ranche—which I shall afterwards fully describe—these mountains looked not a mile to the westward; but both Rita Alto and Crestone's Peak, each over 14,000ft. high, must be at least fifteen to twenty miles off. This rock-ribbed range runs along the edge of the valley as far as the eye can reach to the south, where it apparently fades away into a sort of hummocky table land. To the north, Hunt's dumpy-looking mountain also rears its head to an altitude of 14,000ft.; and another mountain, which rises just north of Puncho Pass, is a stalwart companion of Hunt's in this direction. Turning round with the compass, the little shanty village of Ula appears under the rough fort-like foot hills, most of them sandy and bare, though a few are pine-covered; these extend all along the eastern horizon, and between two of the largest is seen old Pike's hoary head in the far distance. From this

side, Pike is quite a finished-looking and artistic mountain; its grand defiles, as well as its noble head, shine silvery and sharp; and it is pleasant to gaze on, for the greater distance softens its whiteness—too dazzling in the snowy range of the Sangre de Cristos, apparently close behind us. Then look we to the south—tiny curls of blue smoke indicate half a dozen ranches in this direction, and the valley plain, broken just at the horizon by three isolated brown hills like islands in a wintry sea, fades away into a wintry sky. There is little wild or romantic in this valley, apart from the surrounding mountains, which are too distant to look very large or grand. The immense, well-fenced, flat fields destroy all idea of wildness, and the colours are too sombre, at any rate at this time of the year, to be pleasing to the eye. The first thing known of the valley was, that it was flooded by beaver dams, and twenty years ago was, for this reason, avoided alike by Mexicans and Indians. At that time, there were willows all over this plain; but, as the dams flooded the vale to greater depths, even the willows got drowned out; then the beaver found he had been too clever, and had left himself nothing to eat; he therefore had to leave for more congenial spheres. Settlers came gradually in, and the place became drained, and every year more habitable. A few German stockmen first settled here in '68 and '69, and Mr. Elisha T. Thorn initiated agriculture. In the spring of '70, Carl Wulsten located a German colony from Chicago, but he selected a rocky, bad district at the upper end of the valley, and there the U.S. Government "deeded" them a township six miles square; the colonists were chiefly tradesmen and mechanics, and the entire enterprise, through Wulsten's weak management and unfortunate selection of land, ended so badly that now there is not one original colonist left. In 1870, Dr. Bell and General Palmer came into the valley; Dr. Bell brought out the only two American settlers that were living there, and started a large cheese factory on the broadest and best portion of the valley;

but his English manager either did not understand the business, or failed to work energetically, and it has been abandoned. Meanwhile the richness of the valley soil, its fine hay and natural grasses, and its very healthy though disagreeably moist and windy climate, had struck many Englishmen who had visited the cheese factory, and so gradually an English settlement sprang up. Messrs. Legard Brothers, Beaumont, Hunter Brothers, Ommanney, Bowling, Harrison Brothers, Heneage M. Griffin, and others, acquired farms and raised hay in large quantities: the professional squatters came here in large numbers, and the entire vale was soon taken up by them. These useful people get good Government titles—each 160 acres—and then sell them cheap to people who have some energy and capital. The only occupation of the original squatter is to look for a purchaser, and, but for the grasshopper of the past three years (now, happily, departed), this occupation in the Wet Mountain Valley would long since have ceased to exist; for naturally rich soil, composed of decayed vegetable matter and old beaver dams, drained by a heavy stratum of boulders, two to six feet under the surface, is only to be had here and along the northern branch of the Colorado Central in this State. Still, so long as grasshoppers ate the crops, even good soil was valueless, and no one bought it.

There are only two large farms in the Valley—one Dr. Bell's, of 1600; the other, about half that size, belonging to Messrs. Legard; but it is, in many parts of it, possible to acquire tolerably easily from 640 to 1000 acres, or even more, from the original squatters, in adjacent squares of 160 acres. Five years ago, such claims as these latter, well fenced-in and in a good part of the vale, cost 400*l.*, which also always bought some sort of a house or shanty on the land. But grasshoppers—which were particularly bad here, coming three years in succession—forced all land prices very low in Colorado, and in 1877 about 200*l.* for each fenced-in 160 acres

might be taken as an average market price. Hay is the chief and most valuable product of the land—valuable more for its extremely excellent quality than from its quantity, which does not average over three-quarters of a ton to the acre; but there does not appear to be any very great profit here during grasshopper years, even in hay, as subsequent figures even show a loss on such occasions; nevertheless, it is well to be able to point out a locality where some profit is to be made in Colorado. I cannot, however, by any means adopt the views of highly honourable but extremely over-sanguine men here, whose anxiety to get the State well settled has altogether got the better of their discretion and common sense—indeed, I had almost written, of their veracity; for one highly distinguished gentleman, who has a large interest in Colorado, but knows very little apparently about it, taking me, I presume, for a new arrival, commenced to talk about the exports that year of Colorado—grain and hay—and claimed that the State was really helping to support the Eastern States. Railway returns prove this; but, alas! they also prove that Colorado produce, being so very superior—raised without rain—is too good and too expensive to be used in the State; 100lb. of almost everything but mineral comes into Colorado for 1lb. that goes out of it; and, unless the population of the State very much diminishes, such a condition of things must continue to exist in any place where the proportion of arable to mountain or desert land is less than 1 to 1000.

The road into this valley that winds for thirty-two miles from the nearest railway station, through very lovely scenery, is so much better adapted as to gradients for tourist than freight transit, that the carriage of baled and pressed hay from the valley to Cañon City railway station costs 26s. per ton by bullock teams; whereas you can hire a spring buggy and pair of horses to drive four persons to the valley and back from a livery stable near the railway station for 2l., and no better value is to be had in Colorado for the money in the

way of grand and lovely scenery. The charms of a drive through these lofty, winding, massive cañons on a moonlight night, such as the one on which Dr. Bell drove me back, are not to be excelled, if equalled, in any portion of the Rocky Mountains.

The following figures, taken from Mr. J. B. Caldwell, Dr. Bell's manager, and from a few gentlemen in Colorado Springs, show that to embark at present in the hay business in Wet Mountain Valley would cost—

To purchase 320 acres fenced	£400	0	0
Two mowing machines	50	0	0
Two pair of horses	100	0	0
One hay press, about	200	0	0
	<hr/>		
Total	£750	0	0

A man therefore with 1000*l.* could come here and live until his crop came in. Now let us see what that would return him. Under ordinary circumstances, it would probably be not, at any rate, less than 200 tons—which to get in in good time, and to get pressed ready to sell, would cost 10*s.* per ton; to send into Cañon City, 1*l.* 6*s.* per ton; rail from thence to Denver, 14*s.* per ton—total cost per ton, 2*l.* 10*s.* Price of hay now in Denver per ton, 3*l.*; profit on each ton to raiser, 10*s.*—total, 100*l.*

Dr. Bell's profits were not exclusively derived from hay, nor were his losses hay losses, the latter resulting chiefly from the destruction by grasshoppers of a very large irrigated field of oats. The hoppers left a good deal of the grain upon the ground, which Mr. Caldwell ploughed in; and this curious scratch crop beat everything of the sort in the State, resulting in a harvest that would gladden any farmer's vision. Oats, before the grasshoppers disappeared, were much more risky than hay, but also, if successful, much more profitable; for the very expensive long road and rail haulage is in one case only for a small proportion of the

weight of the entire crop, whereas the entire bulk of the hay crop has to pay its 2*l.* per ton for its 200-mile transport to Denver. Grasshoppers, however, while they occasionally ate all the oat crop, never got away with half the hay, which was, therefore, much the safest commencement for the new settler. As to the wheat in this valley, a good deal is said, but what I saw of it was small-grained, smutted, and altogether a decidedly bad crop. Some of this valley land will not yield good hay, and it would appear profitable to put only those portions under cultivation for oats.

For this purpose, the most approved method of farming appears to be to break the ground in spring not deeper than two inches, so as to divide the grass roots, and kill them; then in autumn it should be ploughed deeper, ready for next spring's sowing. The first oat crop here yields, on an average, 35 bushels per acre, the second 50 to 60, the third 60 to 70; and even greater yields are not unusual. Oats here are never less than 1*d.* per lb., for there is a large demand for this grain at the Rosita and other local mines, worked chiefly by horse power. The hard-riding mountain stockmen also have to buy oats all the winter, for the Rocky Mountain grasses will not, as in Texas, keep their horses in good, or indeed in any, sort of condition for work. With respect to barley here, I have no specific data to give, except that, when previously to the grasshopper advent it was grown here, the Denver breweries picked it all up with avidity at 2*d.* per lb., its freight to its destination— $\frac{3}{4}$ *d.* to 1*d.*—being paid by the grower.

The valley being really at a great elevation, though deeply depressed amongst surrounding mountains, its grasses are naturally more of an upland hay than of a bottom-land character; gramma grasses, and a dozen sweet fine sorts, not as yet even named, cover the ground, and no coarse or noxious varieties have as yet been discovered. Most of the meadows are flooded twice during June—the growing season—and then

great care has to be taken that the water shall not lie too long upon the fields. On Dr. Bell's farm there were 1100 tons of hay in stacks, one of which I measured, and found it L-shaped, 128yds. long one way and 67 the other, 6yds. wide, and about 15ft. high. The 1100 tons were that year's crop, as well as a portion of that of the year before, and were being baled by two American improved hay presses, one fixed, the other moveable, both very fine and serviceable pieces of machinery, known as Dederick's: they form very tight rectangular bales, fastened by three encircling steel wires. The pressing is horizontal, the hay falling from above by very slightly assisted gravity, and then being forced forward without any intermission—one bale pushing the other out on the counter or platform. The stationary press in the barn is worked by two horses, which, whilst taking a few steps down an artificial descent, bring to bear the most powerful portion of a most powerful eccentric, as a finishing touch to each bale, reducing 250lb. of hay into a rectangle measuring 24in. by 28in. by 40in. But the portable press does better than this; being worked by four horses, it compresses 120lb. of hay into a body measuring only 14in. by 18in. by 30in.—a most conveniently sized parcel to take in your buggy for some days' driving over the passes. I give, of course, only the average size of the bale, which varies with both the character of the hay and the weather, the hay becoming more pliant, and more easily compressed during moist days.

I have scattered the drawbacks to this valley over my description of it, but Dr. Bell informed me that for Colorado it was an excessively stormy place. High winds with dry weather are followed often in summer by thunderstorms and heavy rain or hail, which, as crops approach maturity, cause great anxiety to the farmer, though only once since the valley was settled have the crops been totally destroyed from this cause. Prudence, therefore, will dictate hay as much the safest main crop here.

Both Dr. Bell and I got rather badly mired whilst trying to ride across country to see Mr. Beckworth, who has a fine herd of cattle, numbering 6000, in the valley ; indeed, for comfort in riding about, the valuable irrigation is carried rather too far here. Then we spent another night at Dr. Bell's most comfortable farm house, and Mr. Caldwell's management of the *cuisine* would do credit to any yachtsman—the forethought required to meet the difficulties of provisioning a mountain ranche being very much the same as doing so for a three weeks' ocean cruise. A good deal of very highly-bred stock was here, and the farm horses were unquestionably heavier, handsomer, and better fed than any I had seen since I left Kentucky. Although Dr. Bell took me to criticise his establishment, which is said to be worked with undue expense, I did not think there was an unnecessary man, horse, house, or fence upon the farm, and, had I the place to-morrow, I should be very sorry to deviate in any particular from Mr. J. B. Caldwell's admirable management. Dr. Bell is a successful theorist, and he is most fortunate in getting his theories put into practice—here by Mr. Caldwell, in his railway schemes by General Palmer, and at Manitou Park by Mr. Cholmondeley Thornton. Who will manage the San Luis valley lands when put on the emigration market, I know not ; but if these semi-deserts can be colonised successfully, my pen shall not claim any of the credit, for a more unpromising venture rarely falls to the unlucky lot of a writer to describe. My dislike to these lands may be merely a prejudice, a sort of reverse of love at first sight ; at any rate, every gentleman connected with the Denver and Rio Grande Railway is quite shocked at my want of appreciation of these land grants. I would willingly repay the courtesy with which the company has treated me ; but, in the words of Mr. Anthony Trollope, they must remember that I am “not as one bent on making a new career and a fortune for himself and his children, but as an agent who should

busy himself exclusively for others." So cruel is fate to me, that, just when I would write pleasantly, some angular fact presses against my pen point, and, however unseemly or inopportune its presence may be, demands recognition in a due amount of ink.

There is a fine school at Colorado Springs, and, as the tendency of education, much more here than at home, is to create a disinclination for work of any laborious description, the hard-working lower classes of Germany and England are very much prized here; almost, indeed, as much so as the better class of foreign settlers in Colorado, who so often come to involuntarily spend, not earn, an income.

CHAPTER VI.

THE GARDEN OF THE GODS—UTE PASS—MANITOU PARK—TROUT BREEDING—COLORADO SPRINGS—CAÑON CITY—WHO SHOULD AND WHO SHOULD NOT SETTLE IN COLORADO—CLIMATE—IRRIGATION—GENERAL CONCLUSIONS.



NORTHWARD my course now lies through Colorado to see for the first time Manitou and Manitou Park, stopping on the way at Colorado Springs, where there is some very nice English society, and where society in general claims to lead that of the State with no small degree of well-founded pretension. A very few miles westward lies the village of Manitou, which I reached at night, and Dr. Bell insisted upon his charming villa being my temporary home. Next morning we walked over the place, and drank the unusually agreeable mineral waters, of which several sorts bubble from the ground into artificial basins above Manitou—the Shoshone, a mild sulphur spring, always about 58° ; the Navajo, slightly alkaline, and highly charged with carbonic acid gas, a very curious combination, and much imbibed by rheumatic patients. If Dr. Bell had not told me of the combination of diluted alkali and acid gas, I should have imagined the arrangement chemically impossible. Then we went up towards the Ute Pass. The road through here cost, for a mile and a half, 6000*l.*; but the undertaking has been well done, and a capital highway to Fairplay and South Park now exists, which adds greatly to the rapid development of those districts into which a branch of the nice little “baby railroad” of Colorado will certainly run, by this route, in a few years.

The scenery about here is very like that of Silver Plume ; but here, in addition, are many deciduous trees, and the rocks are much more distinctly red and white. The Cliff Hotel, second only to the Manitou House, a very comfortable-looking one—the charge for accommodation at which is only 10s. per day—is passed, and up Ruxton Creek we reached the Iron or Ruxton Spring, the water of which is delicious and most invigorating. I have since heard this termed the Iron Ute. I take every pains to point it out, for I have never partaken of a more tonic and agreeable water, and I often go a good deal out of my way to drink what prove both bad and disagreeable mineral waters. This spring rises through granite close to the babbling, rushing, swift, clear Ruxton Creek. The only mineral baths here are those connected with the soda spring ; but I have no doubt that baths of this iron water, which is abundant and always 50°, would be much more serviceable than soda baths—of which everywhere I have my doubts—for invalids. All these mineral springs are free of access and to use—a company formed within the limits of the Denver and Rio Grande Company's lands being the landowners, and wishing to build up the town of Manitou by being as liberal as possible to visitors, some of whom, from time to time, settle in this pretty quiet mountain-foot retreat. The pines up the cañon of Ruxton Creek are very fine, and from it handsome mountains extend west and south-west into cloudland, whilst a long cañon valley vista of red rock, red earth, white snow, and green pines goes off to the north-east. Here also *Abies picea*, or Norway pine—which in America is extremely rare—grows naturally. I will now ask my readers to walk with Dr. Bell and myself into the "Garden of the Gods," near Manitou, only two miles from Dr. Bell's villa, over a hill, and, as first seen from that approach, looking extremely unimpressive, and evoking actual contempt for the tastes of the deities who made such a bad selection for their garden. You

look down upon a treeless, stone-strewn, and not very grassy valley; but as you draw nearer, purple, pink, red, and white, the thin, tall, isolated rocks rise in solitary magnificence three to four hundred feet above you. Beds of gypsum separate the white lime from the old red sandstone; but the said red sandstone runs by imperceptible degrees into the pink and purple. Dr. Bell and I tried to get upon a high white ledge, which rose like an Egyptian pyramid from the plain; but its top proved too narrow to stand on, being in fact in many places sharper than any American hotel dinner knife. Seen from it, Pike, snow-capped, and nearer Cameron, pine-clad, rose through a massive gateway made by the two red rocks. The stratum we were on is horizontal, but that of the red sandstone is perpendicular.

Glen Erie, General Palmer's residence, lies to the north, at the mouth of a ravine through which Camp Creek runs, and there all the "old red sandstone" is purple (one of nature's finest old original Irish bulls), a most intense volcanic heat having altered the colour of nearly every sort of mineral and stone in various parts of the Rocky Mountains. Some low small sandstone rocks are just here burnt quite like fire-tiles, whilst others near them are so soft that you can pick them to pieces with your fingers. A little beyond these I discovered that what I had taken to be the southern red and purple isolated rock, was in reality two rocks, each like a mammoth card with serrated border set on edge, and inclosing between them one of the most sheltered and lovely little valleys possible to conceive. The extent of this shady space may be about twenty acres; it has two groves in it, one of eight pines, and one of six cedars. The red and purple rock to the east is in many places more than perpendicular; its top is a perfect saw edge, yet one little tree manages to grow on it, and three cedars stick in a singularly awkward and out-of-place manner into its face. I say "stick in," for really you cannot imagine their growing out of it, any more than

you can a bouquet out of a drawing-room table vase. The western rock is more boulder-like, and rounder in contour; the few cedars on that do not, therefore, look so much out of place. The Garden of the Gods is not public property, though open in every direction to a public who have cut their marks upon every one of the few accessible trees—chiefly cedar—in it, with a vandalism unworthy of the American race. The consequence is that the Garden of the Gods would not at all be worth stopping to see, if Manitou Park, the Ute Pass, and South Park did not lie directly behind it; and even now, if one is in the least bound to time, it is not a place I would deviate from the road to Manitou Park to see. Indeed, we have all read so much about the easily accessible portions of the Rocky Mountains—which include only a very narrow fringe of their eastern base—that we are disposed to listen to the growls of the hundreds, and even thousands, who annually come to look at old Pike from his worst points of view, viz., those afforded from the railway-carriage windows, and generally from the eastern side. These people, if English, will tell you Pike is very inferior to Snowdon, to say nothing of the Alps; and Americans from New York or Pennsylvania will say, “Give me the White Mountains or the Alleghanies for real difficulty of ascent, and some sense of achievement when we get to the summit.” People of this sort, in a mad six-hour rush along the base of the Rocky Mountains, previously to a mad fourteen hours’ rush through them on the Union Pacific, forget that they have traversed only the flattest and easiest portions of the old Rockies, and not only go home knowing almost nothing of the magnificent scenery of these grand, massive, barren mountains, but with positively false and inverted notions of magnitudes that can only be seen and appreciated by long drives or runs over the mountain divisions of the Colorado Central from Denver, or from Pueblo over the Veta Pass in the mountain train of the Denver and Rio Grande. In fine, I have no

patience with persons who, having had only the opportunity to see the back of a picture, will undertake the criticising of the details of its execution.

Manitou Park has been purchased *in toto* by Dr. W. A. Bell; its timber has therefore been closely preserved, and its 8500 acres devoted successively to sheep, which were not a success there, and to cattle, which I believe will be. I shall leave until returning my comments on the scenery of the lovely Ute Pass, through which ere long will probably run a branch of the Denver and Rio Grande to South Park and Fair-play Mines; indeed, the weather was so bitterly cold when Dr. and Mrs. Bell drove me in their open carriage both up and down this pass that my fingers refused to chronicle ideas, and but a confused mass of towering rugged rocks, waterfalls, sunshine, snow, frosty starlight, and pines remains as my souvenir of an enjoyable visit to this most bold-contoured and romantic locality. Leaving Manitou in the afternoon, we ascended for fourteen miles to an elevation of 9000ft., winding interminably between great cliffs and mountains, following the Fountain River up a grade of about 150ft. to the mile—an easily practicable one for a narrow-gauge railway; and the chief things impressed on my memory here were the Fountain Cascade and the tallest pines I had yet seen in Colorado, though mere babies to those in Eastern Texas. Green Mountain House appeared a comfortable little hotel along this route. Heavy snow clouds cut off the tops of all the mountain summits at the head of the pass, and very stone-cold we were at 8.45 p.m. as we drew up at the particularly comfortable Manitou Park Hotel. A game supper came in most opportunely at this juncture, and the next morning revealed from the breakfast-room windows a long, well-stocked, fairly-grassed valley stretching away to the foot of Pike's Peak, which from this point of view shows seven handsome summits. More game for breakfast, which was admirably served, enabled us to face with fortitude

another very cold drive through the park, but we had a pair of good fresh horses, who footed it through the frozen snow as though they rather liked it than otherwise.

First we went to what are called "the farms," though nothing has been this year grown on one of them, and but little on the other. These irrigated tracts are under fence, with two canals in each, and contain in the aggregate 800 acres. Now that the grasshoppers have departed, no doubt the visitor to Manitou Park next year will see plenty of waving grain in these inclosures.

Some of the 700 head of improved cattle with which the doctor keeps his grass down now appeared; they were, though evidently well bred, very rough-looking, yet in good condition. Indeed, nothing but seeing cattle in these mountains will persuade a stranger that the bunchy and useless-looking grass can support and even fatten animals. The trees are stately and graceful in this park; and, as there are no precipices, or rivers, or ponds, or sharp stones, or berries, it is a place where nursery maids would have an easy life, as they could turn their charges loose without any sort of risk. In little over an hour, the fish ponds and the residence of Dr. Bell's manager, Mr. C. Thornton, were reached; and the doctor and I went over the former, which, though not so large or on so pretentious a scale as those of Mr. Cushman at Green Lake, have nevertheless been turned to much greater pecuniary advantage. The water from the spring here is of nearly a uniform temperature of 52°; the fish house is 15 yards long by 10 yards wide, and contains a number of breeding trays 18in. square, each of which holds 2000 eggs, and accommodation for hatching 200,000 exists. Through these trays, placed in rows each a little below the other, flows the well-regulated water supply, which, coming in at the bottom of the tanks, rises through perforated trays suspended therein. On each tray is a layer of eggs upon gravel; the flow is of course almost imperceptible, and, though the

spring which furnishes it is pure as crystal, it is obliged, for fear of accidents, to flow first through a layer of gravel and charcoal.

Salmon are not hatched here, as in Mr. Cushman's fish house, for only the Rocky Mountain trout, and, even better, *Salmo fontinalis* from the Eastern States, are found to grow and increase in paying quantities. Dr. Bell commenced very bravely at this undertaking, by setting 100,000 eggs of *S. fontinalis*, which he got from Mr. Seth Green; of these 88,000 successfully hatched, so that the loss was only twelve per cent. This beginning was made in the winter of '73 and '4.

The next summer, 50,000 mountain-trout eggs were hatched; the next winter another 100,000 of *fontinalis*; and since then there has been a regular increase of the numbers produced here. The Eastern or *fontinalis* trout spawns in December and January; the Rocky Mountain brook-trout in April, May, and June; so two hatchings take place here each season, and one of the two sorts of fish is always in good condition for the table, which, in a district cut off from all other fish supplies, is a most incalculable advantage.

Next we visited the ponds, cress-grown so densely that it was not easy to see the fishes. The first lot were three and four year old brook-trout, weighing from three quarters to one pound; these were marked by black spots all the way down to the tail. They were long, brown, and rather thin; and though no doubt they would reach five and six pounds here, as they do at Green Lake, Dr. Bell finds that they do not breed so well after exceeding one pound in weight. At that particular juncture, therefore, they are transferred from their mountain pond to the fishmongers' shop windows at Manitou and Colorado Springs. Of these, the native seniors of the settlement, there are 300, and at the head of their pond is a smart artificial race, which they scale to reach the spawning ground; the female goes up first.

The next pond contained descendants of the Eastern *fontinalis*, all three years old, and numbering five hundred; these are readily distinguished by their white fins, as well as by their being generally broader. They are a hardy, game fish, easy to handle and rear, grow faster, are of a better shape, and far better flavoured than the mountain-trout; besides which, they are in the best condition all the summer, when, Colorado being full, the tourist demand for them is at its height.

A large shoal of two-year-old *fontinalis*, which had been turned out of their pond into the stream, still lingered round the shut gate of their old home, around which cling many pleasing reminiscences of bread crumbs and other dainties. 30,000 yearlings, also *fontinalis*, very tiny, navigated the interstices between the stems of another cress-covered pond. This cress is not indigenous; a small sprig of it was brought from Denver three years ago, and since then it has spread everywhere.

The reason why so few large fish are seen here is, that Dr. Bell has a contract with Riggs, a fishmonger in Colorado Springs, to deliver to him all he wants of two-year-old *fontinalis*. 21,000 were to go from here to Mr. Riggs a few days after I left Manitou Park. Riggs, being also a butcher, fattens these two-year-olds very rapidly on refuse meat, and sells them for 2s. per lb. Half of this price he gives Dr. Bell for breeding and keeping these fish for two years, which—as the business is conducted in conjunction with the grazing of Manitou Park, and consequently costs the doctor little—is very remunerative.

Then we walk down Trout Creek, well stocked from the aforesaid ponds; the fishing here will be rented to rods by the day or week. Plenty of shade and plenty of rippling currents diversify this stream; the neighbouring mountains are not very precipitous, though high enough for all purposes of view-climbing; and to the American public, who do not

believe in working for amusement, this portion of the park is commending itself rapidly. Now Trout Creek runs into a rock basin, which again opens into a narrow ten-mile creek running into the Cañon of the Platte; this last named outlet Dr. Bell has dammed at its head so substantially, that the mountain basin now forms a lovely deep lake of fourteen acres—a regular reserve of trout, 21,000 *fontinalis*, which will be three years old next May, inhabiting it. The dam is 100ft. long, 15ft. high, 30ft. wide at the base; it is built of stone and pines, forming a neat quay for the fishing boats.

Passing some deer tracts in eight inches of snow, we ascended a steep hill for the sake of views, and half-way up, pausing for breath, looked down on the lake dam. A white-snowed hill was in front; a red sandstone hill at the opposite side of the lake; a semi-castellated, red and brown stratified series of horizontal rocks to the right; and behind were all sorts and shapes of rounded granite. No cactus grew here, but all the branches of the pines were dotted with lumps of snow, which in the bright sunshine gave them the appearance of mammoth cottoned plants. Then we turned round a boulder, lost sight of the lake, frightened a few of that most frisky and graceful little squirrel, the chipmunk, and looked down a cañon of 800ft. The opposite side is not very far from being perpendicular, and from the bottom of this rocky cleft grow pines over a hundred feet high. To look right down at the top of one of these monsters of the forest imparts quite a novel and curious sensation, as if things generally were turned upside down. To the left is a well-wooded steep hill, with a broken battlemented top. Nature does not consider the glittering heaps of frozen snow here and there brilliant enough, for millions of mica particles glisten and sparkle—more than did ever jewels in a crown—from their massive granite settings; these granite settings often taking the forms of extraordinary-shaped boulders, that seem to be miraculously held to the mountain sides. Opposite is

a precipice, on the top of which pines, growing, stand in sharp relief against the clear blue, summer-like Colorado winter sky. I can conceive no more pleasant week's or month's amusement than to roam about these parks—North, South, or Middle, Este's or Manitou—even if one never saw sign of game; fish are to be had in all of them, I believe, in abundance. Of Este's Park, I know only by hearsay; but I can quite picture it as being almost, if not quite, equal to Manitou Park. The reader will note that Manitou and Manitou Park are entirely different places, the Ute Pass and twenty-five miles separating them.

The Douglas spruce, which grows twice as fast as pine, and is much more valuable, grows around Manitou Park Lake, on which there were, greatly to my surprise, no ducks. Back to Mr. Thornton's house and Mrs. Bell's carriage, the doctor and I wended our way by the stream, which contained a good many beaver dams. Here, as elsewhere, the beavers always keep on the move, staying one, two, or three years at one place, till all the willows—their favourite food—are eaten. They also make long nocturnal rambles in quest of the quaking aspen, of which they are passionately fond; this they cut into lengths of about two and a half feet, and pull down to their dam, which is always built of peeled twig, not for ornament or neatness, but because the twigs, when cut down and their bark eaten for breakfast, come in most readily as material for the day's building. Beavers are very rarely seen working in the day time; but when heavy mountain floods come down, the instinct to save his home proves too strong for the little animal's natural bashfulness, and Dr. Bell, on one of these occasions, witnessed a band of workers shovelling up the mud, and slapping it with their flat tails between the crevices of the edifice, smoothing it all over so that the rushing water should not have anything to take hold of and tear away. To the right-hand side of this stream can be seen a very handsome formation of sedimentary rock over red

granite ; all these horizontal layers, some eighteen in number, vary in shade, the whole forming a most brilliant cliff of over two hundred feet high. Now we are back at Mr. Thornton's little villa, which stands in front of ricks of sweet hay : a red and white rock-battlemented hill, wherein are caves, guards the dwelling from the north wind, and a low-pined highland breaks the gentler south-wester. We pull a few speckled beauties out of the ponds for dinner, and then drive back to the hotel—thinking, I fear, to the full as much about dinner as of the scenery. We pass pine trees barked by the harmless Ute Indians ; this at first looks like wanton mischief, but it is not so, for the Utes make soup of this pine bark. A splendid glimpse of old Pike is now had as he rises at the end of a flat snow-covered vale, the monotony of which is only broken by tall isolated pines. Old Pike's rounded outlines—rounded even to his summit—contrast strikingly with the sharp-edged tops of the aristocratic courtiers who crowd round their hoary king, they being clear of snow, but pine clad, each to the very apex. Old Pike is covered with the snowy mantle, which is so seldom lifted from his massive shoulders that the boldest and hardiest conifers dare not approach them. The blue primrose, the white and blue gentian, and a very beautiful little forget-me-not, are, with a few delicate lichens, alone permitted to adorn the head of the mountain monarch, and even they but during the last few weeks of waning summer. To thus summarise my sensations of the view here took me all the time occupied by the eight-mile drive to the hotel, and the dinner, of which I much regret I did not take a specific note, was simply exquisite ; it was of course a special one, but I have no doubt that all the dinners at the Manitou Park Hotel are very good.

Evening had already begun to set in ere we started for our return twenty-five-mile drive to Manitou. It was still and frosty, and, as the sun went down, the points of Pike's Peak changed from dead white to living, burning gold. We

descended a valley, and, though the doctor drove very quickly, when we got in a few minutes to the top of the next hill a glowing purple had replaced the golden splendour of the mountain top; another valley and another rise showed it pale silver as we got out of the park; and then a dull whitey-grey settled on the giant peak during the remainder of our starlit mountain-pass drive. I fancy when I commenced I might be able to give some idea of this pass scenery, but I find I cannot. Before finally taking leave of Manitou Park, I must allude to the wonderful discoveries made this year at Florissant—one day's drive west of the Ute pass—just above and west of Manitou Park, on the edge of South Park, and but 30 miles from Colorado Springs. There is found a fine siliceous sandstone, its grain so minute as to be almost impalpable, the stone resembling that of Solenhofen; but in the stone at Florissant, petrified insects, very much more numerous than exist in that of Solenhofen, are found, as well as beautiful petrified birds. Trees, maple leaves, leaves of elm and willow, ferns and flowers, all are here petrified, as are many grasshoppers, spiders, and several fish, their scales perfect and their tails split like pike. One butterfly is so clearly imbedded that the scales on its wings are seen, and of the beetles the articulations and clubs of their antennæ can be distinguished, like the finest pencil drawing on lithographic stone. This district is now 8500ft. above sea level. These animals must have lived a million or more years ago, in tertiary times, and, as a petrified palmetto leaf here testifies, when Colorado was tropical before being submarine.

Professor Scudder, of Cambridge, Massachusetts, has published in Vol. IV. of the Bulletin of Hayden's Geological Survey (Washington, 1878, pp. 519—543) a full description of these wonderful discoveries, extending so numerously over such a large area that fine specimens sell for 3½d. on the ground, and two or three people there are growing comparatively wealthy by their sale at even this low rate.

One mile north of Florissant is Judge Costello's house, and above a cliff, with remains of ancient Indian dwellings. Here are a number of holes 4ft. deep in porphyritic rock; these were used to boil water, the needful temperature being produced by throwing in red-hot stones. Dr. Lamborn, at Colorado Springs, also kindly showed me a green porphyry hammer head, used in a sling for mining by the former inhabitants of Arizona, sold to him for a shilling in the town.

I did not remain long in Colorado Springs. The hotels there are very inferior to those at Manitou, and 23,000 miles of travel during the past twenty months had made me too rough for the *élite* of Colorado Springs, where one is expected to dress rather better than in London, and always to have plenty of time to do nothing in. I was, however, most kindly received, and found the El Paso Club a very nice and friendly one, but I had to move onward through the State amongst my English friends, whose prospects were materially brightening, owing to the absence of the detestable grasshopper. I reached Denver by the mountain division of the Colorado Central, without going over which no one should leave Colorado. In Denver, I met some gentlemen who had vainly been looking for sport in Northern Colorado, and along the line of the Kansas Pacific; these I sent down to my friend Potter, of Lakin, on the Arkansas, whither I concluded the early heavy snowstorms of this year had driven the game, and I am glad to say the event proved that I had rightly judged. The great advantage of Lakin as a late shooting ground is, that there is no occasion to camp out—always a disagreeable thing to do in snow. Antelope abound there at all seasons of the year; there is up to December a good chance of seeing a few buffaloes, and even later on an occasional one pays the place a visit—for, save Potter's comfortable little hotel, and the telegraph operator's house, there are no human innovations on the Lakin plains,

and the wild animals are not much disturbed; indeed, the wild geese and ducks are almost too tame for continued sport there in cold weather.

I shall close my scenic descriptions of Colorado with a sketch of a run I had in the summer of 1878 with the editors of the leading American German papers. The places I have previously introduced to the reader were then nearly all revisited by me with this party of sixteen gentlemen and four ladies as guests of the Atchison, Topeka, and Santa Fé Railroad.

First, then, let us drive from Manitou to Glen Eyrie, General Palmer's residence; this I have merely named before, so let me sketch it. You leave Manitou and drive through the Garden of the Gods. Rock pillars and cliffs soon close in the prospect; then you have to leave the carriages after an hour's delightful drive, and are opposite the artistic and very comfortable wooden residence of the gallant general, which you leave on the left hand, turning up the stream through a long winding cañon. Rocks, cypresses, and cedar shrubs, clear sparkling waterfalls, and picturesque vistas on all sides, beset and delightfully diversify the walk—or rather scramble—up the rock-bound banks or walls of this precipitous mountain stream. At length further ascent becomes impossible, in consequence of a large basin, called the Devil's Punchbowl, being formed by a cascade of considerable height, which has cut and filled the bowl, a deep reservoir from side to side of the rock cleft. Round this bowl are several admirable vantage stand-points, from which the most charming views can be had, and a heavy flood existing when we were there caused so much difficulty in getting to the Punchbowl, that we appreciated it all the more when at last we stood on its brink.

Next our run was to Cañon City, and thence on to the Grand Cañon of the Arkansas. I do not imagine anyone will differ in opinion with me when I say that this will be by

far the most magnificent railway pass in the world when the railroad is completed through it; so let me proceed to give just two sketches of its scenery, as we saw in June the silvery Arkansas winding like a thread under the lofty walls of the Rocky Mountains. This silver thread is imbedded in purple, white, and red rocks, amid which grow all sizes of little green shrubs. Such at least they appeared to us from the top, as we adventurously crept out to the outer boulders of the vast two-thousand-foot-high precipice; but these little shrubs are lofty pines. Look behind them and back eastward; there you see a vista of the vast unbroken plain that for seven hundred miles stretches away to the Missouri River. Unbroken? Well, it is indeed getting very much broken by South Kansas settlers, chiefly most industrious Germans; but the plain of which we catch a glimpse here has only been broken by art. Nature intended it possibly for a bowling green or a billiard table for the Rocky Mountain gods, who have their garden so near Dr. Bell's at Manitou. Look westward; a hundred snowy peaks rise in grand relief against the clear cloudless blue sky, which looks so high that, despite our elevation of nearly ten thousand feet, heaven appears further off than ever. We stand in a green little valley; but on all sides rises rugged nature, arid, sandy, stony, and rocky.

“Was für eine Unternehmung für eine Eisenbahn!” exclaimed one, and echoed many, of our German editors; and then they shook hands in a congratulatory way with the cheery foreign agent of the Atchison, Topeka, and Santa Fé Railway, and we all drank success to the enterprise in many glasses of lager beer, as we sat round our rug tablecloth on the walls of the amazing bed of the Arkansas. Now we go to another point. A few little dot-like specks far down the cañon are pointed out to us as the tents of the engineering staff. South, tower the magnificent summits of the Sangre de Cristo range, and an occasional giant of the same family

further removed appears S.W., between the nearer 10,500 peaks. A point of rock jutting out over the cañon is our last objective point, and thither we drive; but the storm king, who, in conjunction with Pluvius, very constantly asserts his right over Colorado in June, here intervened, and until the said Boreas and Pluvius had asserted their prerogative we had only to huddle together in our carriages and make the best of the inevitable. At length the still spirit of windless mountain Colorado reigned once more, and down to the point of rocks, all glittering and dripping in the level evening rays of the sun, we scrambled and stumbled. The cañon walls were here more than perpendicular, grand and rugged; and from here one could see how very often the railway will have to cross from side to side of the mighty chasm in order to remind the travelling public that straight lines have not altogether ceased to exist.

I heard a tourist here say that the Grand Cañon was a sight that no one would care to see more than once, and the remark brought Cowper's lines at once into my mind—

How much a dunce that has been sent to roam
Excels a dunce who has been kept at home.

In my opinion, anyone who has once seen the Grand Cañon would never wish to lose another opportunity of seeing it, and would find new, fresh, and grander beauties in it each time he gazed down the fearful abyss, or looked upwards from the bottom on those grand walls, compared with which all the most massive fortifications reared by man fade into contemptible insignificance. .

Describing such scenery as is here, is utterly beyond the power of any pen. Such writers as have, in their own opinion, fully portrayed all, or even most, of its features upon paper, show conclusively that they have never appreciated or understood them. To my readers, then, I commend the Grand Cañon, as soon as they hear that a railway runs through it; even in the railway course, the speed must necessarily be slow, so none

of the views will be lost, and to a masterpiece of nature will be superadded a grand display of engineering art. Let us now drive back to Cañon City, twelve miles through the waning twilight, and then ascertain at the Sanderson Hotel that our train—the only passenger one out of Cañon City—leaves at three o'clock in the morning. This extraordinary arrangement is disgraceful in the extreme to the leading tourist line of Colorado, and should not be maintained for a day longer. In the opinion of every tourist whom I have ever met in Colorado, such blundering management is not, however, likely to be continued now that the Atchison, Topeka, and Santa Fé railroad has leased the Denver and Rio Grande.

I will conclude this account of my Colorado experiences with some advice as regards emigration to that State. Without a question, life is far more enjoyable there, and nearly everything said of its charms is true; but who is making money in the State? and where is it being made? Does any English settler there ever expect to be able to do more than live comfortably? To live comfortably in a climate so exquisite that you would scarcely wish the character of a single day changed*; to live a good deal in English society,

* As to the weather in Colorado, no one need change his standard ideas of excellent climate. Colorado suits everyone—the Chinaman, the negro, the Indian, and every European race, thrive and improve in it. You seldom see people very thin or very stout there; you see many invalids, but they are all sojourners from other States and countries. Rains in Colorado come only in their due seasons, when they descend smartly and have done with it; and, mountainous as is all the State east of Denver, it is singularly windless. I have seldom had any difficulty in lighting my pipe out of doors with a lucifer match in Colorado—a very difficult feat to perform in Kansas or Nebraska. Another advantage in Colorado is that for the farmer no such event as a drought can ever possibly occur, for all farming is there done by irrigation; the hotter the summer, the more the snow melts, and snow is a crop that has never been exhausted, and never will be, on the mountain walls of the birthplaces of the Arkansas and the Platte.

and to feast your eyes daily—aye, and often nightly—on scenery which cannot be surpassed for magnificence and variety in the world : that of course has its attractions, and very great they are. Had a recent writer in *The Field* been correctly informed, and could you make 36 per cent. of money—viz., 18 per cent interest to the banks, and 18 per cent. profit in Colorado, then it would indeed be Utopia, and almost Paradise. My visit to Colorado extended altogether over six months, and I have been in correspondence for fourteen months with English gentlemen in that State. In 1877, I found almost every settler down the favoured valley of Plum Creek, willing, if not anxious, to sell his ranche ; similarly minded were the ranchers along the Boulder valley district. Splendid farms were offered to me in the valley west of Saguache for 1000*l.*, and the only Englishmen that I could hear of really making money in the State were Dr. Bell, who commands a great deal of English capital, and has at least a dozen railway and other irons in the fire, besides his agricultural and pastoral pursuits, and Messrs. T. J. and James Livesay, who have invested more than 30,000*l.* in land and sheep. Mr. Barclay, M.P., for Aberdeen, in lending money from 10 to 12 per cent., benefits both his company and the State of Colorado ; but all these enterprises are nearly altogether outside of emigration proper. Of Colorado this at least can be said, that you can live with the maximum of comfort on a minimum income, which, with light, pleasant, healthful labour, you can to some extent increase. You can start in Colorado on a ranche with 1000*l.* and live in moderate plenty, but with little chance of ever being worth 5000*l.* In South Kansas, with the same capital, you live not nearly so comfortably or enjoyably, but it is certainly very healthy, and there is nothing to prevent your becoming actually wealthy, by enlarging your operations year after year—the thing that it is so very hard to do in Colorado, where you cannot extend the size of valleys, except by putting soil on

the adjacent rocks. To him who says, "I have three or four hundred a year. I cannot afford to live in England. I do not want to suffer any privations, social, or otherwise. I want a little shooting, and a little fishing, and, as long as my capital is not broken in upon, I rather like something to do in the way of farming or stock raising; in fact, I want to get to some healthy place where I can get all my amusements for nothing, and spend my income exclusively upon necessities of life and for my children's education at home;" to him (and he represents a large class of people), I say "go to Colorado." To the celibate, the young dashing fellow full of energy and life, or to the man who says, "I will work hard for ten or fifteen years, and then I *must* get home to enjoy the last half of my life with plenty of money; meanwhile I don't care how I live or how I rough it," I say "go to North-west or West Texas sheep farming on free ranges, or, to be quite secure, farm and fatten cattle in South Kansas."

To actual capitalists—to men with 10,000*l.* and upwards—probably every western State offers nearly equal advantages, but none nearly so great *for residence* as Colorado. Money makes money with amazing rapidity in Western America; few local bankers in either Texas, Kansas, or Colorado now draw less than 50 per cent. on the capital they originally invested, and so great is their political influence that they may be said to govern the country. Those at home who say that money governs England, know little of the way in which the *vox populi* in America is drowned in the coffers of the National Banks. There are few large schemes, however legitimate, in Colorado, that have not had to pay what cannot be considered other than black mail to the National Bank in Denver, to be permitted to either enter on existence, or to continue in it. Peep inside the melancholy history of the Maxwell grant, the Sangre de Christo, or St. Luis Valley grant, and the misfortunes of the Terrible, and shoals of

splendid mines in which for ever have been millions of English and Dutch money lost, and the English capitalist can see that all is not gold that glitters towards the setting sun. Nevertheless there are in Colorado enterprises that do not glitter very much, but still are good, though they may be like the notorious Kansas Pacific, which even with all the advantages of the rising States through which it runs, will, unless honestly managed, never pay any appreciable dividends to people who are fools enough to invest in enterprises over which they can exercise no control.

In Colorado, many unusual conditions novel to the English farmer exist, which I wish to state in reference to a very large (chiefly English) undertaking which has been several times attempted to be floated in London, and which would irrigate over 700,000 acres round and to the north of Denver. This speculation deserves more than a passing notice; and nothing but bad or dishonest management is likely to mar its success. But of both bad and dishonest management there has been so much in Colorado, that I sincerely trust, not only for the sake of the shareholders, but for that of the most enjoyable state of the Union, this irrigation business will not fall among thieves. One real success of any farming sort would make Colorado almost an English colony, and interest would rapidly then recede from 18 to 5 per cent. One of the promoters of this business, I presume, knows my judgment of him too well to wish me to express any opinion on it; but out of evil good may come, as he is, though a promoter, only one shareholder, and the management is to be English, whereas the design and engineering have wisely been left in able Colorado hands. The greater portion of the land has been agreed for at a moderate price, viz., 7s. per acre, from the Denver Pacific, the Kansas Pacific, and Government. The ditch will be taken from the Platte, and run through the foot hills in a tunnel. This seventy odd miles of canal will be 30ft. wide at the bottom and 6ft. deep, and will irrigate

fifteen times as much land as is at present under ditch in Colorado. When it is remembered that no irrigation scheme in that State has ever failed; that irrigated Greeley has been the only settlement there that has weathered the grasshopper storm; and that the average wheat yield of irrigated ground in Colorado has been thirty bushels, and its average price 3s. 6d. per bushel, everything looks bright for the new canal prospects. The cereals of Colorado have no equals in America; but they have been so out of all proportion heretofore to the wants of the State, that but few emigrational enthusiasts have talked at all to me about crops, or held out any hope of profit to the settler other than what he could derive from stock, horse raising, and hay. The idea, of course, is to sell the irrigated lands to emigrants from the east for about 1l. per acre, and charge them besides a moderate water rent. Big fish will eat little fish to the end of time, and the opinions of settlers on this new property are rather in favour of high taxation to enable the company to pay a profit; but no doubt, if good management is practised, English shareholders and English settlers will alike be benefited, no less than the promoters and the State of Colorado. What a blessed consummation I have drawn! Let us hope that the dream may come true, and that the future stream of American water there, induced by English capital to leave its native golden sands, may nourish waving grain where since the Flood only cactus and burrs have grown, and drown in countless myriads the next generation of grasshoppers, which past experience has shown may again, sooner or later, come southward on a tour of inspection and devastation. The bare mention of the word "irrigation" quite frightens farmers at home, but here it is wonderful how soon they invert their ideas of drainage; for irrigation is merely the converse of draining, one carrying off the water in ditches, the other putting it on by exactly similar means. Nevertheless, irrigation is nice work, and requires to be done with the greatest care and judgment to an exact degree, else

your crop will be drowned out, or partially burned up. The Mexicans and some Mexican Indians are the most successful irrigators in this continent, and appear to know to a drop what amount of moisture will best develop corn, wheat, or onions. Independently of this large agricultural scheme, a great quantity of the best land in Colorado, along the Colorado Central main line between Boulder and Fort Collins, can be easily and rather cheaply irrigated. This land is the plain that runs from the base of the Rocky Mountains along the Platte river, and may roughly be said to be twenty miles wide, the good part of it being over thirty miles from north to south. As the Colorado Central Railway was only opened last year to Cheyenne, this land, costing 17. per acre, is not very extensively taken up yet.

The wealthy men of England, who sit at home at ease, may, however, so far as I am concerned, take care of their own interests here if they can; my business is with the emigrant, and it is only with his capital and with himself here to look after it that I wish to deal. I have now summed up all the experiences of Colorado which I have up to this time gained by continual travel,—in a comparatively limited area, it is true. It is up-hill, and sometimes dry and tedious, work for a stranger to put up with the almost universal rudeness of subordinate railwaymen, and to master details of western life and practice; and no one who has undergone the discomforts and climatic annoyances of travel in the region lying between the Union Pacific and the Gulf of Mexico, in the widely ramified interests of home emigration, can feel insensible to words of commendation, no matter how little merited.* If I have saved even one poor fellow seeking a home in a foreign land from being swindled; or being induced to settle in some place where

* This is an allusion to a complimentary letter which appeared in *The Field* respecting the author's writings to that paper.

he could do nothing but live with a broken constitution, and die of hope indefinitely deferred; if I have been instrumental in helping materially even one emigrant; then my one and only object in American travel will have been attained.

INDEX.

- ARKANSAS river, 2, 4, 9, 76
Atchison, Topeka, and Santa Fé
Railway, 5
- BALE'S STATION, 14
Bark soup, 108
Barley, price of, 94
Battlefield of the Gods, 68
Beaver settlements, 57, 90, 107
Bell, Dr., 88, 91, 96
Blackhawk, 26
Black Hill miners, 48
Bogardus, Capt., 44
- CAMPING out, 29
Cañon Bridge, 6
Central, 61, 74
Cheyenne, 48
Clear Creek, 25, 61
Climate, 7, 9, 19, 29, 46, 51, 53, 95,
114
Coal banks at Cañon, 86
Coal mine, Ralston, 75
Cold, extreme, 51, 53
Coldstream mine, 64, 66
Colorado Springs, 110
Copper Gulch, 7
- DEER shooting locality, 15
Del Norte, 16
Denver, 24, 42, 44, 50
Denver and Rio Grande Railway, 4
Denver Pacific land grant, 50
Devil's Gate Pass, 6
Devil's Punchbowl, 111
Divide Station, 24, 81
Dry air, 9
Dump Mountain, 80
- EDUCATION, 97
Eight Mile Park, 6
Elkhorn, 21
- Emigrants, advice to, 59, 60, 82,
114
Empire, 71, 72
Empire Pass, 71
English settlers, 8, 15, 16, 20, 52,
58, 59, 66, 73, 75, 76, 81
Exemption of goods from seizure, 17
- FARMING operations, 94
Flies, plague of, 41
Fossils at Florissant, 109
- GALES, 49
Gambling den at Cheyenne, 48
Garden of the Gods, 99
Garland, 79
Georgetown, 62
Glen Erie, 111
Golden, 25
Gold lode, 72
Gold mine, Bobtail, 75
Gold-washing, 26
Goodnight, 76
Granada, 2
Grand Cañon of the Arkansas, 4,
111, 113
Grant's farm, visit to Mr., 51
Grasses, 94
Gravel storms, 48
Greeley, 47
Green lake, 68
Guns, 36
- HAY business, cost of, 93; good
quality of, 92; presses, 95
Haystack farm, 52
Height of peaks, 19
Hercules and Roe Mine, 87
Honey-producing industry, 86
Horses, want of vice in, 55
- IDAHO SPRINGS, 62, 73

- Indian antiquities, 110
 Indians, 40
 International Press party, 1
 Irrigation, 15, 84; scheme, 117
- KANSAS PACIFIC RAILWAY, 3**
- LAKIN** as a shooting ground, 110
 Las Animas, 3
 Livesay, Messrs., 76, 81, 84, 85
- MANITOU, 98**
 Manitou Park, 102
 Mexican camp, 5
 Mine "jumping," 71
 Mineral waters, 58, 62, 98, 99
 Miner's life, 10, 12, 13
 Mines dishonestly managed, 87;
 richness of, 64, 66, 70
 Mining titles systematically ques-
 tioned, 63
 Modoc Rancho, 20
 Mountain-rat thieving, 67
- NEGRO** loquacity, 56
 New Zealand for sheep, 83
 Nolan grant, 83
 Norway Pine, 99
- OAT** crop, 93, 94
 Ojo, 79
 "Oregon Bill," 27
- PEAKS**, heights of, 19
 Pike's Peak, 3, 20, 23, 89, 108
 Pleasant Valley, 8
 Poison weed, 8
 Pole-braces for hill work, 65
 Post-office salaries, 21
 Prairie waggons, 3
 Press, courtesy to representatives
 of the, 28, 45
 Prices at Denver, 42
 Pueblo, 3
 Puncho Pass, 14
- RARE** birds, &c., 34
 Rio Grande del Norte, 17
 River front lots, 84
 Rockyford, 3
- Rocky Mountains, sport in the, 33
 35; in winter, 54
 Ruxton Creek, 99
- SAGUACHE, 15**
Salmo fontinalis reared, 104
 Salmon monstrosities, 69
 Salmon rearing, 67, 69
 Sangre de Cristos range, 89
 San Luis lakes, 20
 San Luis Valley, 15; unpromising
 lands of, 96
 Servants, English, 67
 Sheep ranges, 84, 85
 Shooting excursion, 28, 37
 Siberian squirrel, 67
 Sierra Blanca, 19
 Silver and gold working, 74
 Silver mines, 10, 11, 63
 Silver Plume, 63, 65
 Spanish Peaks, 78
 Sport, estimate for outfit, 31
 Sportsmen, advice to, 31
 Squatters, professional, 91
 Stage coaches, 4, 5, 6, 19
 State lands, 39
 Stock-feeding, 54
- TAXES** in Pueblo County, 85
 Taylor's Museum, Denver, 44
 Terrible mine, 61
 Texas Creek, 8
 Tourist's erroneous views, 101
 Trapper, a good, 72
 Trout in the South Platte, 40;
 rearing, 70, 104
- UTE** PASS, 107
- VERMONT MERINOS, 85**
 Veta, 78; Mountain, 79, 80; Pass,
 80, 81
- WASHINGTON TERRITORY** for cattle,
 84
 Water-hole lots, 84
 Western States, Germans and Irish
 in the, 51
 Wet Mountain Valley, 88
 Wildfowl at Denver, 42
 Wool, price of, 85

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