

in dipping his cup for this purpose, the yielding weeds under him gave way, and he sank into the basin, from which he was drawn out after a good "*ducking*," by one of those present. The next morning this basin was sounded to the depth of thirty-five feet, and no bottom found. We named this spring "Buchanan's well." We lighted no fires to-night, and prepared no evening meal. Worn down by the hard day's travel, after relieving our thirst we spread our blankets upon the ground, and laying our bodies upon them, slept soundly in the bright moonshine. Several of our party had been on the road upwards of seventeen hours, without water or refreshment of any kind, except a small draught of cold coffee from our powder-keg, made of the salt sulphur-water at our last encampment, and had travelled the distance of seventy-five miles. The Salt Plain has never at this place, so far as I could understand, been crossed but twice previously by civilized men, and in these instances two days were occupied in performing the journey. Distance 75 miles.

CHAPTER XIV.

The oasis—Anxiety respecting our animals—Prodigious tall grass—Deserted Indian huts—Old trail of lost wagons—Desert valley—Extinct volcanoes—Mountain spring—Elevated camp—Vast extent of the Salt Plain—Sublimity of scenery—Moonlight view—Sunrise—Indian picket or game-trap—Another oasis—Altercation—Extreme heat of the sun—Wells in the desert—More desert valleys—Stream of running water—View of Mary's River, and valley—Indian signal-fires.

AUGUST 4.—We did not rise from our grassy couches this morning until the sun shone broadly and bright upon us, above the distant mountain ridges to the east. The scene around, with the exception of the small but highly fertile oasis encircling our encampment, is a mixture of brown and hoary barrenness, aridity, and desolation, of which no adequate conception

can be conveyed by language. The fires in the *cañada* of the mountain were still smoking, but no blaze was discernible. Last night they appeared as if not more than half a mile or a mile distant; but considerably to our surprise this morning, by a daylight observation, we saw that the *cañada*, from whence the smoke was curling upwards in graceful wreaths, was some four or five miles from us.

Our first care was to look after and collect together the animals, which, upon our arrival last night, we had let loose to refresh themselves in the manner most agreeable to them. We found them busily employed in cropping the tall seeded grass of the oasis. The anxieties respecting the health, strength, and safety of our animals, constitute one of the most considerable drawbacks upon the pleasures of our trip,—pleasures, as the reader may suppose, derived almost exclusively from the sublime and singular novelties presented to the vision. The significance of the word is in no other respect applicable to this stage of our journey. To fathom the motives of an all-wise Providence, in creating so vast a field of desolation; to determine in our minds whether the little oases we meet with are the beginnings of a system or process of fertilization which is to ramify and extend, and to render this hitherto abandoned and uninhabitable waste a garden of flowers, teeming with its millions of life; or whether they are evidences of the last expiring struggles of nature to sustain animal and vegetable existence, which will leave this expansive region impenetrable to the curiosity of man, furnish a study for the thoughts, fruitful of interest and provocative of investigation.

For the purpose of resting and recruiting our over-labored mules, we had predetermined to remain encamped to-day. We cleared away with our hands and willow sticks the thickly-matted grass and weeds around "Buchanan's well," making a handsome basin, some five or six feet in diameter. The water is very cold and pure, and tasted to us more delicious than any of the invented beverages of the epicure to him. While engaged in this work, Brown brought forward a remarkable blade of grass which he had pulled up a short distance from us, to which

he called my attention, and desired its measurement. It was measured, and found to be thirty-five feet in length. The diameter of the stalk was about half of an inch, and the distance between the joints about eighteen inches. It was heavily seeded at the top. With this prodigiously tall vegetable production, we endeavored to sound the depth of the spring; but after thrusting it down to its full length we could discover no bottom.

In the afternoon we saw two antelopes above us. Col. Russell and Miller saddled their mules and rode further up the slope of the mountain, for the purpose of hunting and to make other discoveries. During their absence a very dark cloud rose from the west, accompanied by distant thunder and a strong wind. The indications, judging as we would of the signs on the Atlantic side of the continent, were that we should have a heavy shower of rain; but our experience in this dry region had been such, that we felt but little dread of all the waters in the clouds. A few sprinkling drops of rain fell; just enough to leave a scarcely perceptible moisture upon the grass. Col. R. and M. returning, reported that they had killed no game. They found a small running stream of water from the *cañada* where the fires were burning, which sank in the sands and debris of the mountain before it reached the valley; and they also saw three Indian huts, constructed of cedars and grass, but unoccupied. The occupants of these huts, doubtless, after making their signal-fires upon discovering us, had all fled. Their probable motive for inhabiting temporarily this dismal region, was to trap for the few animals which roam in the neighborhood of the spring, and are compelled to approach it for water and grass.

During the course of our journey, nothing has contributed so largely to the depression of the spirits of our small party as inaction. I found to-day that the absence of our usual active employments, added to the desolate aspect of the scenery surrounding us, had produced much despondency in the minds of several of our company; and I felt a strong desire myself to be moving forward, to throw off those formidable mental incubi, ennui and melancholy.

August 5.—A most delightful, clear morning, with a light, soft breeze from the south fanning the parched and arid desert, playing over the waving grass, and sporting with the silvery leaves of the willows of the oasis.

Our mules, notwithstanding the day's rest we had allowed them after the long and laborious ride over the Salt Plain, evinced much stiffness and exhaustion. We took a southwest course along the slope of the range of mountains under which we had encamped. This slope is covered with a debris of gravel and sharp fragments of dark volcanic rock, and is furrowed from the base of the mountains down to the verge of the plain with deep and almost impassable ravines. The hoary and utterly desolate plain of salt on our left expands in breadth, and stretches, interminably to the eye, away to the southeast and the southwest. The brisk breeze having cleared the atmosphere of the smoke, our view is much more extensive than it was yesterday.

After travelling about ten miles we struck a wagon-trail, which evidently had been made several years. From the indentations of the wheels, where the earth was soft, five or six wagons had passed here. The appearance of this trail in this desolate region was at first inexplicable; but I soon recollected that some five or six years ago an emigrating expedition to California was fitted out by Colonel Bartlettson, Mr. J. Chiles, and others, of Missouri, who, under the guidance of Captain Walker, attempted to enter California by passing round the southern terminus of the Sierra Nevada; and that they were finally compelled to abandon their wagons and every thing they had, and did not reach their destination until they had suffered incredible hardships and privations. This, it appeared to me, was evidently their trail; and old as it was, and scarcely perceptible, it was nevertheless some gratification to us that civilized human beings had passed here before, and left their mark upon the barren earth behind them. My conjectures, above stated, have been subsequently confirmed by a conversation with Mr. Chiles.

Following this old trail some two or three miles, we left it on

the right, and crossed some low and totally barren hills, which appear to have been thrown up by the action of volcanic fires at no very remote period of geological history. They are composed of a white, imponderous earth, resembling ashes, intermingled with fragments of scoria, resembling the cinders from an iron-foundry, or a blacksmith's furnace. A vitreous gravel, or glass, was also thickly strewn over the surface, and glittered brightly in the sunbeams.

From these hills, changing our course more to the west, we descended into a spacious and level valley, about fifteen miles in width, and stretching north and south as far as the vision could penetrate. A continuous range of high mountains bounds this valley on the west, and a broken and irregular range on the east. The only vegetation consists of patches of wild sage, and a shrub ornamented with a yellow flower, resembling the Scotch broom of our gardens. A considerable portion of the plain is covered with salt, or composed of a white, barren clay, so compact that our horses' hoofs scarcely left an impression upon it. Crossing this valley, we entered the range of mountains on the west of it by a narrow gorge, and following its windings, we reached the foot of the steep dividing ridge about six o'clock, P. M. Here we had expected to find water, but the ravine was entirely dry, and the grass bordering it was brown and dead. An elevated *butte* of red sandstone towered upwards on our right, like the dome of some Cyclopean cathedral. On our left was a high but more sloping mountain; and in front, the steep and apparently impassable crest of the Sierra.

After a fruitless search for water at the bottom of the gorge, among the rocks and crevices of the ravine, I accidentally discovered, near the top of the mountain on our left, a few straggling and stunted cedars, and immediately beneath them a small patch of green shrubs, which I conjectured were willows, a most welcome indication of water, after a ride of eleven hours without rest or refreshment of any kind. Dismounting from my mule, and accompanied by McClary, I ascended the mountain as far up as the little green oasis, in the centre of which, much to our joy, we found a small spring. No water flowed

from its basin, although the ground immediately around was damp, and the grass green and luxuriant. Our party was soon apprized of the discovery, and following us up the mountain, we made our camp near the spring, which the mules soon completely exhausted of its scant supply of water, without obtaining sufficient to quench their thirst.

Ascending to the summit of the mountain, just as the sun was setting, I had a more extended view of the great Salt Plain than at any time previously. Far to the southeast, apparently from one hundred to one hundred and fifty miles, a solitary mountain of immense height rises from the white surface of the desert, and lifts its hoary summit so as almost to pierce the blue ceiling of the skies, reflecting back from its frozen pinnacle, and making frigid to the eye the warm and mellow rays of the evening sun. No words can describe the awfulness and grandeur of this sublime desolation. The only living object I saw to-day, and the only sign of animal existence separate from our party, was a small lizard.

About three o'clock, P. M., while we were on the march, a violent storm of wind, with some rain, raged in the valley to the south of us, raising a dense cloud of dust, which swept furiously up the eastern side of the valley in drifting masses that would have suffocated us, had we been travelling within its range. Fortunately, we were beyond the more disagreeable effects of the storm, although where we were the wind blew so violently as almost to dismount us from our horses.

We grazed our mules on the dry grass along the ravine below us, until nine o'clock, when they were brought up and picketed around the camp, as usual. The basin of the spring was enlarged so as to hold water enough, when filled, to satisfy the wants of our mules in the morning. These matters all being attended to, we bivouacked on the side of the mountain. Distance 30 miles.

August 6.—The knowledge that our mules had fared badly, and were in a position, on the steep side of the mountain, where they could neither obtain good rest nor food, kept me more wakeful than usual. The heaviest calamity that could befall us,

at this time, would be the loss, by exhaustion or otherwise, of our animals. Our condition in such an event would be deplorable. I rose at two o'clock, and having first filled all our buckets and vessels with water from the spring, let the mules loose to satisfy their thirst. One of them I found tangled in its rope, thrown down, and strangled nearly to suffocation.

The night was perfectly serene. Not a cloud, or the slightest film of vapor, appeared on the face of the deep blue canopy of the heavens. The moon and the countless starry host of the firmament exhibited their lustrous splendor in a perfection of brilliancy unknown to the night-watchers in the humid regions of the Atlantic; illuminating the numberless mountain peaks rising, one behind the other, to the east, and the illimitable desert of salt that spread its wintry drapery before me, far beyond the reach of the vision, like the vast winding-sheet of a dead world! The night was cold, and kindling a fire of the small, dead willows around the spring, I watched until the rich, red hues of the morning displayed themselves above the eastern horizon, tinging slightly at first, and then deepening in color, the plain of salt, until it appeared like a measureless ocean of vermillion, with here and there a dark speck, the shadow of some solitary *buttes*, representing islands, rising from its glowing bosom. The sublime splendors of these scenes cannot be conveyed to the reader by language.

As soon as it was light, I saddled my mule, and ascended to the crest of the ridge to observe the features of the country, and determine our route for the day. I returned just as our morning meal was prepared, and at seven o'clock we were all in our saddles and on the march. We passed around the side of the mountain on which we had encamped, and rose gradually to the summit of the range. Here we were delayed for some time in finding a way to descend. There are several gorges or ravines leading down, but they appeared to be choked up with rocks and brush so as to render them nearly impassable.

In searching to find a passage presenting the fewest difficulties, I discovered, at the entrance of one of these gorges, a remarkable picketing or fence, constructed of the dwarf cedars of

the mountain, interlocked and bound together in some places by willow withes. It was about half a mile in length, extending along the ridge, and I supposed it at the time to have been constructed for defensive purposes, by some of the Indian tribes of this region, against the invasion of their enemies. At the foot of the mountain there was another picketing of much greater extent, being some four or five miles in length, made of the wild sage; and I have since learned from trappers that these are erected by the Indians for the purpose of intercepting the hares, and other small game of these regions, and assisting in their capture.

We descended the mountain through a very narrow gorge, the rocky walls of which, in many places, are perpendicular, leaving us barely room to pass. Emerging from this winding but not difficult passage, (compared with our former experience,) another spacious and level valley or plain spread itself before us. The breadth of this valley is about twenty miles, and its length, judging from the apparent distance of the mountains which exhibit their summits at either end, is about one hundred and fifty miles. The plain appears to be an almost perfect level, and is walled in by ranges of mountains on both sides, running nearly north and south. Wild sage, grease-wood, and a few shrubs of a smaller size, for the most part leafless, and apparently dead or dying, are the only vegetation of this valley. The earth is composed of the same white and light composition, heretofore described as resembling ashes, imbedded in and mixed with which is a scoriaceous gravel. In some places it is so soft that the feet of our animals sink several inches; in others it is baked, and presents a smooth and sometimes a polished surface, so hard that the hoofs of our mules leave but a faint impression upon it. The snowy whiteness of the ground, reflecting back the bright and almost scorching rays of the sun, is extremely painful to the eyes, producing in some instances temporary blindness.

About two o'clock, P. M., after travelling three-fourths the distance across the valley, we struck an oasis of about fifty acres of green grass, reeds, and other herbage, surrounding a number

of springs, some of cool fresh water, others of warm sulphur water. These waters rise here, and immediately sink in the sands. Our information at Fort Bridger led us to expect a spring and grass at this point, and in order to make sure of it, we extended the flanks of our small party some three or four miles from the right to the left. The grass immediately around the springs, although not of the best quality, is very luxuriant, and on the whole, it being a favorable place for grazing our mules,—no apprehensions being entertained of their straying, or of Indian depredations,—we determined to encamp for the day.

In the course of our march to-day, we saw three hares, and near the spring, Miller saw an antelope. McClary and Brookey each killed a duck in one of the basins of the spring soon after our arrival, and later in the afternoon Brown killed a hawk. The signs of animals around the springs are numerous, and the wolves were howling near our camp until a late hour of the night. Distance 18 miles.

August 7.—A disagreeable altercation took place between two members of our party about a very trivial matter in dispute, but threatening fatal consequences. Under the excitement of angry emotions, rifles were levelled and the click of the locks, preparatory to discharging the death-dealing contents of the barrels, was heard. I rushed between the parties and ordered them to hold up their pieces, and cease their causeless hostility towards each other. I told them that the life of every individual of the party was, under the circumstances in which we were placed, the property of the whole party, and that he who raised a gun to take away a life, was, perhaps inconsiderately, worse than a common enemy or a traitor to all of us, and must be so considered in all future controversies of this nature, and be denied all further intercourse with us. It was truly a startling spectacle, to witness two men, in this remote desert, surrounded by innumerable dangers, to guard against which they were mutually dependent, so excited by their passions as to seek each other's destruction. The ebullition of insane anger was soon allayed, and we commenced our day's march about the usual hour of the morning.

Our course was due west, and after travelling some four or five miles, we commenced the ascent of the range of mountains in our front. We ascended and descended this range through winding *cañadas* such as I have previously described. Another spacious valley or plain opened to our view from the western side of this sierra, nearly as large in dimensions as that which we entered upon and partly crossed yesterday, and varying but little from it in its general characteristics. Crossing this valley, the sun pouring its scorching rays down upon us with such fervor as nearly to parch our bridle reins into a crisp, we found on the slope of the western side, near the foot of the mountain, another small oasis, of an acre or two of green vegetation, near the centre of which were one or two small springs or wells of cool fresh water. The waters of these springs rise to the surface and sink immediately, moistening only the small patch of fertile ground which I have described.

Refreshing ourselves and our animals with the most grateful beverage of this fountain of the desert, we pursued our wearisome journey over the next sierra, through a narrow gap, which brought us into another broad valley of an oval shape, walled in on all sides, apparently, by an elliptical circle of elevated mountains. The hue of the wild sage and grease-wood of this valley, is a shade greener than in the other valleys we have crossed since we entered the Desert Basin. The composition of the earth is nearly the same. A fine white sand, impalpable almost as ashes, mingled with which is a scoriaceous gravel, in some places soft and yielding to the hoofs of our mules, in others baked and compact almost to the hardness of brick, are the leading characteristics of the *soil*, if soil it can be called.

Fifteen miles brought us to the slope of the mountain on the western side of this valley, where we found a bold spring gushing forth a volume of water sufficient to turn the most powerful mill-wheel, but like all the other springs of this desert which we have seen, after running a short distance, the water sinks and disappears in the thirsting sands. Around this spring there are a few small willows and a luxuriant growth of grass, with some handsome yellow flowers. Here we encamped at six

o'clock, after a march of eleven hours, without rest to ourselves or our animals, which begin to manifest much fatigue and exhaustion.

The signs of game around our encampment are numerous, but nothing in the shape of bird or beast shows itself. In the course of our day's journey we started three hares, which are all of animal life that has been seen.

Nothing can exceed the grandeur and sublimity of these magnificent valleys, walled in by the tall and spiral mountains, when lighted as they now are, by the brilliant and powerful rays of the moon, and the sparkling radiance of the starry host, suspended as it were, like chandeliers from the deep, soft, blue canopy of the heavens. Their desolation is mellowed, and there is a purity, a holiness about them, which leads the imagination to picture them as vast saloons of nature, fashioned by the hand of the Almighty for the residence of uncontaminating and un-sinful essences, and not for the doomed children of passion, want, sorrow, and care! Should the economy of Providence, in the course of centuries, fertilize and adapt them to the residence of man, the fabled glories of Elysium would scarcely exceed their attractions. Distance 35 miles.

August 8.—The morning was clear and cool. A slight dew was perceptible on the grass and on our blankets. Our course to-day was nearly the same as yesterday. We passed over the range of mountains under which we had encamped, by ascending one of its most elevated peaks. When we reached the summit of this peak, after repeatedly stopping on the side of the mountain to breathe our mules, they seemed nearly exhausted and scarcely able to proceed on the journey. The descent on the western side was so steep and difficult, that our animals and ourselves (dismounted of course) slid or jumped down rather than walked. At the foot, we entered a small valley, with comparatively strong signs of fertility. A faint stream of water runs through it, from north to south, the margin of which is fringed with green grass; and a few stunted cotton-wood trees and other shrubbery relieve the everlasting monotony of sage. The sight of these trees and of a stream of

running fresh water, was more agreeable to us than can be conceived by those who have never been deprived of such scenic objects.

Crossing this stream and the bottom opposite, we passed through a low gap of a range of hills, on the western side of which we struck another small stream of water, which flows through a fertile, grassy valley, in a northwestern course. After descending this valley some five or six miles, the stream *cañons* between high and precipitous hills, along the sides and over the tops of which we were compelled to select our way to the best advantage, until we emerged into the spacious valley of Mary's river, the sight of which gladdened our eyes about three o'clock, P. M.

At this point the valley is some twenty or thirty miles in breadth, and the lines of willows indicating the existence of streams of running water are so numerous and diverse, that we found it difficult to determine which was the main river and its exact course. After wandering about for some time, in compliance with the various opinions of the party, I determined to pursue a course due west, until we struck the river; and at sunset we encamped in the valley of the stream down which we had descended, in a bottom covered with most luxuriant and nutritious grass. Our mules fared most sumptuously both for food and water.

After dark, fires lighted by Indians were visible on the mountains through which we had passed, and in several places in the valley a few miles distant. Our watch, with which we had dispensed in crossing the desert, was set to-night, and it was fortunate for us that we were thus cautious, as an attempt was made by the Indians to steal our mules, which was frustrated by the man on duty at the time.

The mountains on either side of the valley of Mary's river, at this point, tower upwards to a great elevation, and are composed of dark basalt. I noticed near the summits of some of the peaks, small patches of snow. Distance 23 miles.