

JOHN WESLEY POWELL.

IV. THE EXPLORER.

BY MRS. M. D. LINCOLN (BESSIE BEECH.)

[CONTINUED.]

PROFESSOR Powell saw in the parks and canyons of Colorado more than a mere training-school for students. Vast unexplored regions, hitherto represented on all maps by an utter blank, astonished and attracted him. He knew that through this unexplored territory must flow that great river, the Colorado of the West, unknown for much of its course to civilised man.

He had heard many wonderful stories from the Indians concerning the stupendous canyon. The Indians warned him not to enter this dreadful gorge; they considered it disobedience to the gods, and contempt for their authority, and declared that it would surely bring wrath and ruin on any who attempted it. The mysteries of the canyon were woven into the strange myths of their religion.

After finding that he understood their language and was a good friend to them, they persisted in their warning, and with much solemnity told him the following legend of a Numa chief:

“Long ago there was a great and wise chief who mourned the death of his wife, and would not be comforted until Ta-vwoats, one of the Indian gods, came to him and told him she was in a happier land, and offered to take him there that he might see for himself, if upon his return he would cease to mourn. The great chief promised. Then Ta-vwoats made a trail through the mountains that intervene between that beautiful land, the balmy region in the great West, and this the desert home of the poor Numa. The trail was the gorge of the Colorado. Through it he led him, and when they returned the deity exacted from the chief a promise that he would tell no one of the joys of that land, lest through discontent with the circumstances of this world, they should desire to go to

heaven. Then he rolled a river into the gorge, a mad raging stream that should engulf any who might attempt to enter thereby."

Despite all the warnings of the red men, on the 24th of May, 1869, the party of explorers launched their boats in the Green River, one of the largest tributaries of the Colorado. The boats were four in number; three were built of oak, staunch and firm, double-ribbed, with double stem- and stern-posts, and further strengthened by bulk-heads, dividing each into three compartments. Two of these were decked fore and aft, forming water-tight cabins which it was expected would buoy the boats should the waves roll over them in rough water. The little vessels were twenty-one feet long, and without cargo each could be carried by four men. The fourth boat was made of pine, very light, sixteen feet in length, with a sharp cut-water; this was built for fast rowing, and was divided into compartments like the others. They were fitted out with rations for ten months, all kinds of implements needed on a voyage, plenty of ammunition, and many scientific instruments.

Of that memorable expedition of four months in the canyons of the Colorado I can only give a glimpse.

The hero was never daunted. He had a fixed purpose, and was willing, if need be, to face death to accomplish something for science. Let us follow him and hear in his own words how the expedition was manned.

"J. C. Sumner and William H. Dunn are my boatmen in the 'Emma Dean'; then follows 'Kitty Clyde's Sister,' manned by W. H. Powell and G. T. Bradley; next the 'No Name,' with O. G. Howland, Seneca Howland, and Frank Goodman; and last comes the 'Maid of the Canyon' with W. R. Hawkins and Andrew Hall."¹

The general course of the river is southward, and to the south is a great upland, the Uinta Mountains, lying athwart its course. Through this upland the river burrows in a series of deep canyons; and in these canyons the excitement and danger of the voyage begin.

"*May 30.*—This morning we are ready to enter the mysterious canyon, and start with some anxiety. The old mountaineers tell us that it cannot be run; the Indians say, 'Water heap catch 'em,' but all are eager for the trial, and off we go.

"Entering Flaming Gorge, we quickly run through it on a

¹ The full narrative of the voyage through the Colorado Canyons, from which these passages are extracted, is contained in *Exploration of the Colorado River of the West*, by J. W. Powell, Washington, 1875. A popular account of the voyage, likewise by Powell, appeared in *Scribner's Monthly* for January, February and March, 1875.

swift current and emerge into a little park. Half a mile below, the river wheels sharply to the left, and we turned into another canyon cut into the mountain. We enter the narrow passage. On either side the walls rapidly increase in altitude. On the left are overhanging ledges and cliffs five hundred—a thousand—fifteen hundred feet high.

“On the right, the rocks are broken and ragged, and the water fills the channel from cliff to cliff. Now the river turns abruptly around a point to the right, and the waters plunge swiftly down among great rocks; and here we have our first experience with canyon rapids. I stand up on the deck of my boat to seek a way among the wave-beaten rocks. All untried as we are with such waters, the moments are filled with intense anxiety. Soon our boats reach the swift current; a stroke or two, now on this side, now on that, and we thread the narrow passage with exhilarating velocity, mounting the high waves, whose foaming crests dash over us, and plunging into the troughs, until we reach the quiet water below; and then comes a feeling of great relief. Our first rapid is run. Another mile, and we come into the valley again.

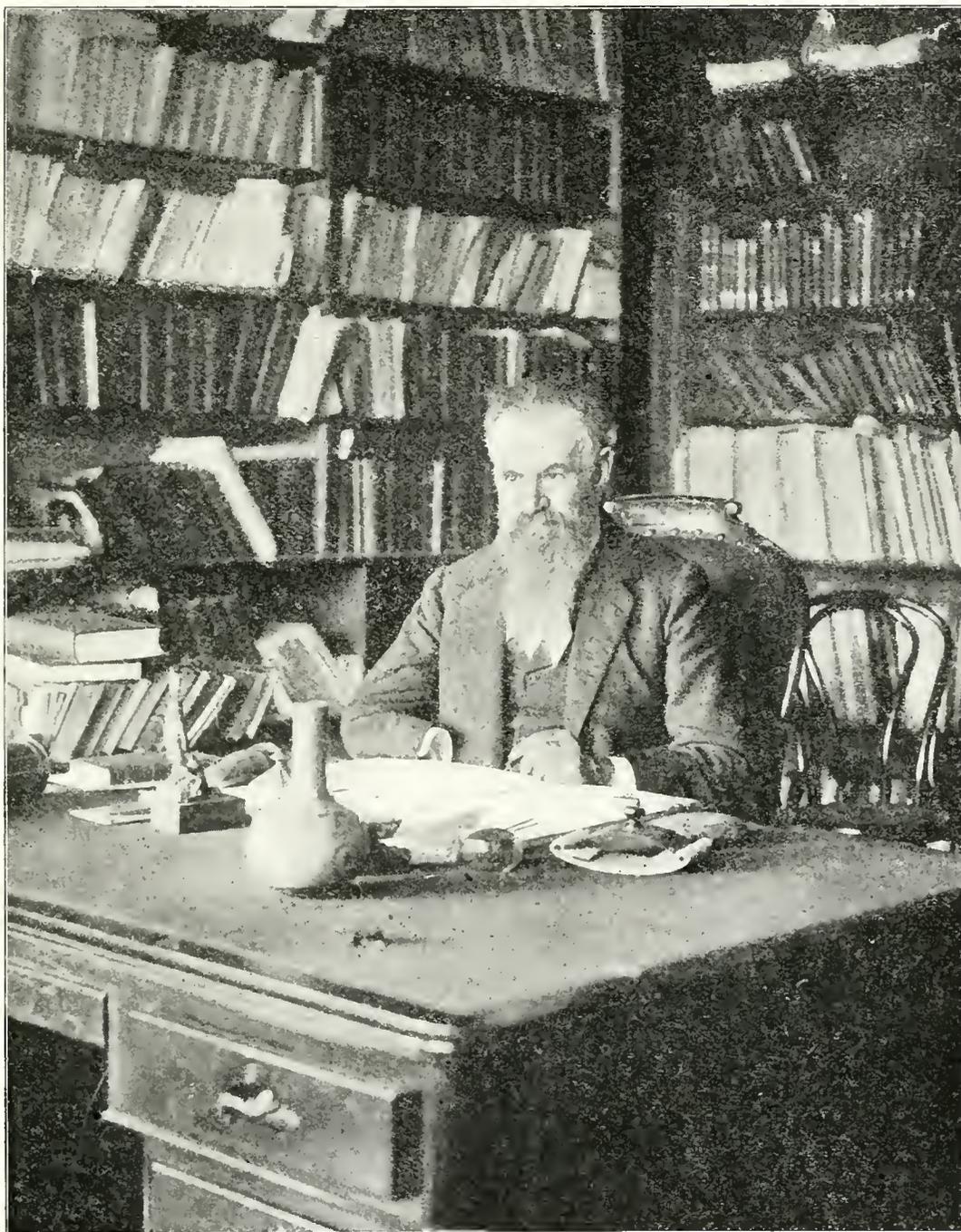
“Let me explain this canyon. Where the river turns to the left above, it takes a course directly into the mountain, penetrating to its very heart, then wheels back upon itself, and runs out into the valley from which it started only half a mile below the point at which it entered; so the canyon is in the form of an elongated letter U, with the apex in the center of the mountain. We name it Horseshoe Canyon.”

For a week their course winds among foothills, with minor gorges and minor rapids, which prepare and train them for the grandeur and the danger that await them. At last they enter the heart of the mountain through the “Gate of Lodore.”

“*June 8.*—We enter the canyon, and, until noon, find a succession of rapids, over which our boats have to be taken.

“Here I must explain our method of proceeding at such places. The ‘Emma Dean’ goes in advance; the other boats follow, in obedience to signals. When we approach a rapid, or what on other rivers would often be called a fall, I stand on deck to examine it, while the oarsmen back water, and we drift on as slowly as possible. If I can see a clear chute between the rocks, away we go; but if the channel is beset entirely across, we signal the other boats, pull to land, and I walk along the shore for closer examination. If this reveals no clear channel, hard work begins. We drop the boats to the very head of the dangerous place, and let them

over by lines, or make a portage, frequently carrying both boats and cargoes over the rocks, or, perhaps, only the cargoes, if it is safe to let the boats down.



MAJOR POWELL IN HIS OFFICE AT THE SMITHSONIAN INSTITUTION.¹

“The waves caused by such falls in a river differ much from the waves of the sea. The water of an ocean wave merely rises and falls; the form only passes on, and form chases form unceasingly. A body floating on such waves merely rises and sinks—does

¹ After a photograph by Mr. De Lancey Gill.

not progress unless impelled by wind or some other power. But here, the water of the wave passes on, while the form remains. The waters plunge down ten or twenty feet, to the foot of a fall; spring up again in a great wave; then down and up, in a series of billows, that gradually disappear in the more quiet waters below; but these waves are always there, and you can stand above and count them.

“A boat riding such, leaps and plunges along with great velocity. Now, the difficulty in riding over these falls, when the rocks are out of the way, is in the first wave at the foot. This will sometimes gather for a moment, heaping up higher and higher, until it breaks back. If the boat strikes it the instant after it breaks, she cuts through, and the mad breaker dashes its spray over the boat, and would wash us overboard did we not cling tight. If the boat, in going over the falls, chances to get caught in some side current, and is turned from its course, so as to strike the wave ‘broadside on,’ and the wave breaks at the same instant, the boat is capsised. Still, we must cling to her, for, the water-tight compartments acting as buoys, she cannot sink; and so we go, dragged through the waves, until still waters are reached. We then right the boat, and climb aboard. We have several such experiences to-day.

“At night, we camp on the right bank, on a little shelving rock, between the river and the foot of the cliff; and with night comes gloom into these great depths.

“After supper, we sit by our camp fire, made of driftwood caught by the rocks, and tell stories of wild life; for the men have seen such in the mountains, or on the plains, and on the battle-fields of the South. It is late before we spread our blankets on the beach.”

In another rapid the ‘No Name’ is wrecked, much of her cargo is lost, and her crew for a time are in great peril.

“During the afternoon [June 15] we run down, three-quarters of a mile, on quiet water, and land at the head of another fall. On examination, we find that there is an abrupt plunge of a few feet, and then the river tumbles, for half a mile, with a descent of a hundred feet, in a channel beset with great numbers of huge boulders. This stretch of the river is named Hell’s Half-Mile.

“The remaining portion of the day is occupied in making a trail among the rocks to the foot of the rapid.

“*June 16.*—Our first work this morning is to carry our cargoes to the foot of the falls. Then we commence letting down the boats. We take two of them down in safety, but not without great

difficulty; for, where such a vast body of water, rolling down an inclined plane, is broken into eddies and cross currents by rocks projecting from the cliffs and piles of boulders in the channel, it requires excessive labor and much care to prevent their being dashed against the rocks or breaking away. Sometimes we are



MAJOR POWELL WITH HIS HORSE ON AN OUTING IN THE SURROUNDINGS OF WASHINGTON, D. C.

compelled to hold the boat against a rock, above a chute, until a second line, attached to the stem, is carried to some point below, and, when all is ready, the first line is detached, and the boat given to the current, when she shoots down, and the men below swing her into some eddy.

“At such a place, we are letting down the last boat, and, as she is set free, a wave turns her broadside down the stream, with the stem, to which the line is attached, from shore and a little up. They haul on the line to bring the boat in, but the power of the current, striking obliquely against her, shoots her out into the middle of the river. The men have their hands burned with the friction of the passing line; the boat breaks away, and speeds, with great velocity, down the stream.

“The ‘Maid of the Canyon’ is lost, so it seems; but she drifts some distance and swings into an eddy, in which she spins about, until we arrive with the small boat and rescue her.”

Ten days of hard work bring them to the south base of the Uinta Mountains, but they are still among canyons, and the river is still swift and difficult. They are in the Plateau Province, where the uplands are tables, flat or sloping, bounded by cliffs, and adorned by buttresses and pinnacles. Among these the Green River is joined by the Grand, to make the Colorado. The whole narrative is a tale of adventure; each successive canyon gives a new type of scenery; each climbing of a canyon wall reveals a new wonderland; each roaring rapid yields a new problem in navigation. At last, near the middle of August, the Grand Canyon is reached, and all phases of the journey—the labor and peril, the beauty and grandeur, and the scientific interest—find their superlative expression.

“About eleven o’clock [August 14] we hear a great roar ahead, and approach it very cautiously. The sound grows louder and louder as we run, and at last we find ourselves above a long, broken fall, with ledges and pinnacles of rock obstructing the river. There is a descent of, perhaps, seventy-five or eighty feet in a third of a mile, and the rushing waters break into great waves on the rocks, and lash themselves into a mad, white foam. We can land just above, but there is no foot-hold on either side by which we can make a portage. It is nearly a thousand feet to the top of the granite, so it will be impossible to carry our boats around, though we can climb to the summit up a side gulch, and, passing along a mile or two, can descend to the river. This we find on examination; but such a portage would be impracticable for us, and we must run the rapid, or abandon the river. There is no hesitation. We step into our boats, push off and away we go, first on smooth but swift water, then we strike a glassy wave, and ride to its top, down again into the trough, up again on a higher wave, and down and up on waves higher and still higher, until we strike one just as it curls

back, and a breaker rolls over our little boat. Still, on we speed, shooting past projecting rocks, till the little boat is caught in a whirlpool, and spun around several times. At last we pull out again into the stream, and now the other boats have passed us. The open compartment of the 'Emma Dean' is filled with water, and every breaker rolls over us. Hurling back from a rock, now on this side, now on that, we are carried into an eddy, in which we struggle for a few minutes, and are then out again, the breakers still rolling over us. Our boat is unmanageable, but she cannot sink, and we drift down another hundred yards, through breakers; how, we scarcely know. We find the other boats have turned into an eddy at the foot of the fall, and are waiting to catch us as we come, for the men have seen that our boat is swamped. They push out as we come near, and pull us in against the wall. We bail our boat, and on we go again.

"The walls, now, are more than a mile in height—a vertical distance difficult to appreciate. Stand on the south steps of the Treasury building, in Washington, and look down Pennsylvania Avenue to the Capitol Park, and measure this distance overhead, and imagine cliffs to extend to that altitude, and you will understand what I mean; or, stand at Canal street, in New York, and look up Broadway to Grace Church, and you have about the distance; or, stand at Lake street bridge, in Chicago, and look down to the Central Depot, and you have it again.

"A thousand feet of this is up through granite crags, then steep slopes and perpendicular cliffs rise, one above another, to the summit. The gorge is black and narrow below, red and gray and flaring above, with crags and angular projections on the walls, which, cut in many places by side canyons, seem to be a vast wilderness of rocks. Down in these grand, gloomy depths we glide, ever listening, for the mad waters keep up their roar; ever watching, ever peering ahead, for the narrow canyon is winding, and the river is closed in so that we can see but a few hundred yards, and what there may be below we know not; but we listen for falls, and watch for rocks, or stop now and then, in the bay of a recess, to admire the gigantic scenery. And ever, as we go, there is some new pinnacle or tower, some crag or peak, some distant view of the upper plateau, some strange shaped rock, or some deep, narrow side canyon."

After some days a rapid is reached of such formidable character that nearly a day is spent in climbing the walls to study it.

"I decide that it is possible to let down over the first fall, then

run near the right cliff to a point just above the second, where we can pull out into a little chute, and, having run over that in safety, we must pull with all our power across the stream, to avoid the



THE LATE MAJOR POWELL.¹

great rock below. On my return to the boat, I announce to the men that we are to run it in the morning.

“After supper Captain Howland asks to have a talk with me.

¹A recent portrait taken by Mr. De Lancey Gill, the Art Photographer of the Smithsonian Institution.

We walk up the little creek a short distance, and I soon find that his object is to remonstrate against my determination to proceed. He thinks that we had better abandon the river here. Talking with him, I learn that his brother, William Dunn, and himself have determined to go no farther in the boats. So we return to camp. Nothing is said to the other men.

“For the last two days, our course has not been plotted. I sit down and do this now, for the purpose of finding where we are by dead reckoning. It is a clear night, and I take out the sextant to make observation for latitude, and find that the astronomic determination agrees very nearly with that of the plot—quite as closely as might be expected, from a meridian observation on a planet. In a direct line, we must be about forty-five miles from the mouth of the Rio Virgen. If we can reach that point, we know that there are settlements up that river about twenty miles. This forty-five miles, in a direct line, will probably be eighty or ninety in the meandering line of the river. But then we know that there is comparatively open country for many miles above the mouth of the Virgen, which is our point of destination.

“As soon as I determine all this, I spread my plot on the sand, and wake Howland, who is sleeping down by the river, and show him where I suppose we are, and where several Mormon settlements are situated.

“We have another short talk about the morrow, and he lies down again; but for me there is no sleep. All night long, I pace up and down a little path, on a few yards of sand beach, along by the river. Is it wise to go on? I go to the boats again, to look at our rations. I feel satisfied that we can get over the danger immediately before us; what there may be below I know not. From our outlook yesterday, on the cliffs, the canyon seemed to make another great bend to the south, and this, from our experience heretofore, means more and higher granite walls. I am not sure that we can climb out of the canyon here, and, when at the top of the wall, I know enough of the country to be certain that it is a desert of rock and sand, between this and the nearest Mormon town, which, on the most direct line, must be seventy-five miles away. True, the late rains have been favorable to us, should we go out, for the probabilities are that we shall find water still standing in holes, and, at one time, I almost conclude to leave the river. But for years I have been contemplating this trip. To leave the exploration unfinished, to say that there is a part of the canyon

which I cannot explore, having already almost accomplished it, is more than I am willing to acknowledge, and I determine to go on.

“I wake my brother, and tell him of Howland’s determination, and he promises to stay with me; then I call up Hawkins, the cook, and he makes a like promise; then Sumner, and Bradley, and Hall, and they all agree to go on.

“*August 28.*—At last daylight comes, and we have breakfast, without a word being said about the future. The meal is as solemn as a funeral. After breakfast, I ask the three men if they still think it best to leave us. The elder Howland thinks it is, and Dunn agrees with him. The younger Howland tries to persuade them to go with the party, failing in which, he decides to go with his brother.”

So the party is divided. Powell leaves a boat behind, for use of the three men if they fail to scale the cliff, and then successfully runs the rapid. Fortunately no other serious difficulty is encountered, and in the forenoon of the following day the two boats glide at last from between the gloomy walls into the broad daylight of an open valley. The weary river, as though sharing the joy and relief of the explorers, spreads out its unhampered waters, to bask and loiter in the sun.

The adventurous voyage is ended.

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The three men who climbed the canyon wall and thus escaped the dangers of the river, ran unwittingly into still greater peril and never reached the settlements. Their story was not fully known until the autumn of the following year, when Professor Powell encamped with a band of Plateau Indians, the Kai'-vav-its, was visited by Indians of another band, the Shi'-vwitz.

“This evening, the Shi'-vwitz, for whom we have sent, come in, and, after supper, we hold a long council. A blazing fire is built, and around this we sit—the Indians living here, the Shi'-vwits, Jacob Hamblin, and myself. Hamblin speaks their language well, and has a great influence over all the Indians in the region round about. He is a silent, reserved man, and when he speaks it is in a low, quiet way that inspires great awe. His talk is so low that they must listen attentively to hear, and they sit around him in deathlike silence. When he finishes a measured sentence, the chief repeats it, and they all give a solemn grunt. But, first, I fill my pipe, light it, and take a few whiffs, then pass it to Hamblin; he smokes, and gives it to the man next, and so it goes around. When it has passed the chief, he takes out his own pipe,

fills, and lights it, and passes it around after mine. I can smoke my own pipe in turn, but when the Indian pipe comes around I am nonplussed. It has a large stem, which has, at some time, been broken, and now there is a buckskin rag wound around it, and tied with sinew, so that the end of the stem is a huge mouthful, and looks like the burying ground of old dead spittle, venerable for a century. To gain time, I refill it, then engage in very earnest conversation, and, all unawares, I pass it to my neighbor unlighted.

“I tell the Indians that I wish to spend some months in their country during the coming year, and that I would like them to treat me as a friend. I do not wish to trade; do not want their lands. Heretofore I have found it very difficult to make the natives understand my object, but the gravity of the Mormon missionary helps me much. I tell them that all the great and good white men are anxious to know very many things; that they spend much time in learning, and that the greatest man is he who knows the most. They want to know all about the mountains and the valleys, the rivers and the canyons, the beasts, and birds, and snakes. Then I tell them of many Indian tribes, and where they live; of the European nations; of the Chinese, of Africans, and all the strange things about them that come to my mind. I tell them of the ocean, of great rivers and high mountains, of strange beasts and birds. At last I tell them I wish to learn about their canyons and mountains, and about themselves, to tell other men at home; and that I want to take pictures of everything, and show them to my friends. All this occupied much time, and the matter and manner made a deep impression.

“Then their chief replies: ‘Your talk is good, and we believe what you say. We believe in Jacob, and look upon you as a father. When you are hungry, you may have our game. You may gather our sweet fruits. We will give you food when you come to our land. We will show you the springs, and you may drink; the water is good. We will be friends, and when you come we will be glad. We will tell the Indians who live on the other side of the great river that we have seen you, and you are the Indians’ friend. We will tell them you are Jacob’s friend. We are very poor. Look at our women and children; they are naked. We have no horses; we climb the rocks, and our feet are sore. We live among rocks, and they yield little food and many thorns. When the cold moons come, our children are hungry. We have not much to give; you must not think us mean. You are wise; we have heard you tell strange things. We are ignorant. Last year we killed three white

men. Bad men said they were our enemies. They told great lies. We thought them true. We were mad; it made us big fools. We are very sorry. Do not think of them, it is done; let us be friends. We are ignorant—like little children in understanding compared with you. When we do wrong, do not get mad, and be like children too.

“ ‘When white men kill our people, we kill them. Then they kill more of us. It is not good. We hear that the white men are a great number. When they stop killing us, there will be no Indian left to bury the dead. We love our country; we know not other lands. We hear that other lands are better; we do not know. The pines sing, and we are glad. Our children play in the warm sand; we hear them sing, and are glad. The seeds ripen, and we have to eat, and we are glad. We do not want their good lands; we want our rocks, and the great mountains where our fathers lived. We are very poor; we are very ignorant; but we are very honest. You have horses and many things. You are very wise; you have a good heart. We will be friends. Nothing more have I to say.’

“ Mr. Hamblin fell into conversation with one of them, and held him until the others had left, and then learned more of the particulars of the death of the three men. They came upon the Indian village almost starved and exhausted with fatigue. They were supplied with food, and put on their way to the settlements. Shortly after they had left, an Indian from the east side of the Colorado arrived at their village, and told them about a number of miners having killed a squaw in a drunken brawl, and no doubt these were the men. No person had ever come down the canyon; that was impossible; they were trying to hide their guilt. In this way he worked them into a great rage. They followed, surrounded the men in ambush, and filled them full of arrows.”

(TO BE CONTINUED.)