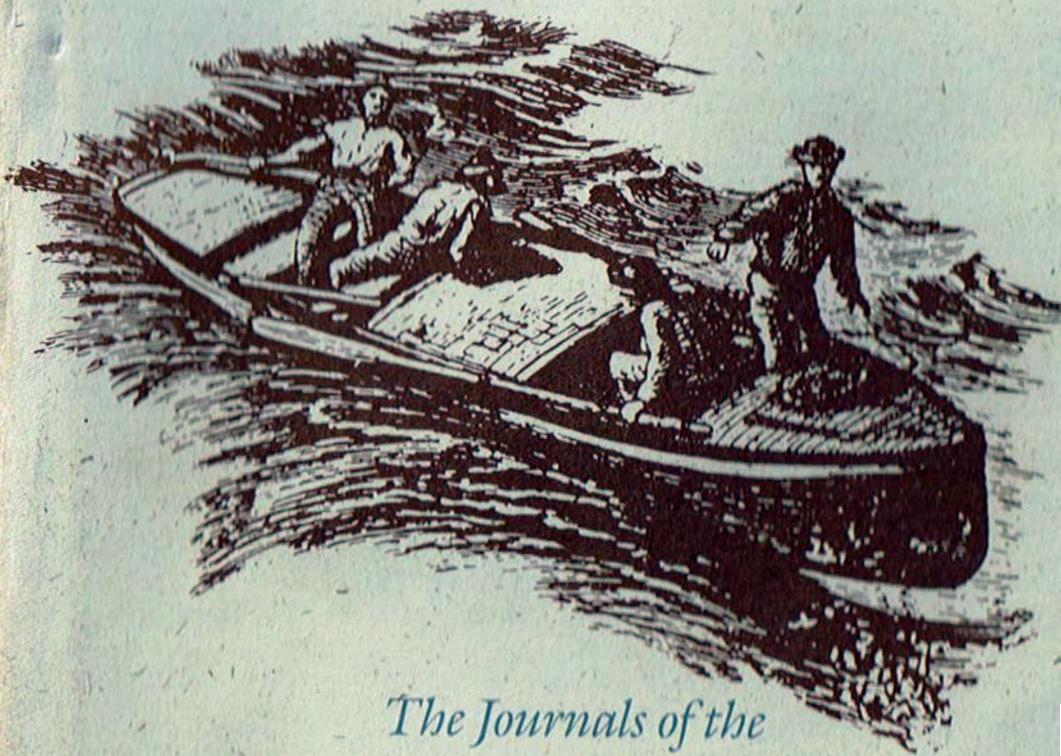


The Great Unknown



*The Journals of the
Historic First Expedition
Down the Colorado River*

The
Great Unknown

COOLEY

have let down with ropes. Rapids get worse as we advance and the walls get higher and nearly perpendicular. We camp tonight above a succession of furious cataracts. There are at least five in the next mile around which we shall have to make portages. Let it come. We know that we have got about 2500 ft. to fall yet before we reach Ft. Mohavie and if it comes all in the first hundred miles we shan't be dreading rapids afterwards for if it should continue at this rate much more than a hundred miles we should have to go the rest of the *way up hill* which is *not often the case with rivers*. Major estimates that we shall fall fifty feet on the next mile and he always underestimates. The heat is quite oppressive during the day. The thermometer indicates above 100 degrees most of the time and that heats the canon like an oven which lasts nearly all night, but usually gets quite cool by morning. The tide-mark* indicates that the water is sometimes 15 to 20 ft. higher than now and there must be fun here when it is at that height.

Powell, 23 July Difficult rapids. 3 portages. Ran 5½ miles. West wall of canon vertical except ½ or ⅓ of height from base which has a steep talus. Camp on left bank. No. 13.

Sumner, 23 July Ran 4 miles of good current, then rapids. Ran 5 bad ones and made 4 portages in ½ mile. Average width of river 80 yards; height of walls, 1800 ft.; north wall nearly all perpendicular. Camped on the south side on a sandbar.

Powell Account of 23 July On starting, we come at once to difficult rapids and falls, that, in many places are more abrupt than in any of the canyons through which we have passed, and we decide to name this Cataract Canyon.

... From morning until noon, the course of the river is to the west; the scenery is grand, with rapids and falls below, and walls above, beset with crags and pinnacles. Just at noon we wheel again to the south, and go into camp for dinner.

While the cook is preparing it, Bradley, Captain Powell, and myself go up into a side canyon, that comes in at this point. We enter through a very narrow passage, having to wade along the course of a little stream until a cascade interrupts our progress. Then we climb to the right, for a hundred feet, until we reach a little shelf, along which we pass, walking with a great ease, for it is narrow, until we pass around the fall. Here the gorge widens into a spacious,

*"Tide," or flood, marks as high as 35 to 40 feet above the river were observed elsewhere along the route. In 1872, the second party encountered water about 8 to 10 feet higher than the 1869 levels, and contended with much greater danger in the rapids.

sky-roofed chamber. In the farther end is a beautiful grove of cottonwoods, and between us and the cottonwoods the little stream widens out into three clear lakelets, with bottoms of smooth rock. Beyond the cottonwoods, the brook tumbles, in a series of white, shining cascades, from heights that seem immeasurable. Turning around, we can look through the cleft through which we came, and see the river, with towering walls beyond. What a chamber for a resting place is this! hewn from the solid rock; the heavens for a ceiling; cascade fountains within; a grove in the conservatory, clear lakelets for a refreshing bath, and an outlook through the doorway on a raging river, with cliffs and mountains beyond. . . .

We arrive, early in the afternoon, at the head of more rapids and falls, but, wearied with past work, we determine to rest, so go into camp, and the afternoon and evening are spent by the men in discussing the probabilities of successfully navigating the river below. The barometric records are examined, to see what descent we have made since we left the mouth of the Grand, and what descent since we left the Pacific Railroad, and what fall there yet must be to the river, ere we reach the end of the great canyons. The conclusion to which the men arrive seems to be about this: that there are great descents yet to be made, but, if they are distributed in rapids and short falls, as they have been heretofore, we will be able to overcome them. But, may be, we shall come to a fall in these canyons which we cannot pass, where the walls rise from the water's edge, so that we cannot land, and where the water is so swift that we cannot return. Such places have been found, except that the falls were not so great but that we could run them with safety. How will it be in the future! So they speculate over the serious probabilities in jesting mood, and I hear Sumner remark, "My idea is, we had better go slow, and learn to peddle."

Bradley, 24 July Well, we got over or around three out of the five rapids. Had to take everything around by hand and around the second we had to carry our boats over the huge boulders which is very hard work as two of them are very heavy, being made of oak. We had to slide them out on the rocks at the third rapid but not so far or so hard work as at the second. Have made only $\frac{3}{4}$ mile today and camp at another rapid which they tell me is not so bad as the others but I haven't been to look at it yet. They don't interest me much unless we can run them. That I like but portage don't agree with my constitution. We found part of the bones of what Major pronounces an alligator* tonight. He

*Despite Bradley's humor over the prospect of an alligator exploring the Colorado, we can assume Major Powell was referring to fossil remains.

must be on an independent exploring expedition, probably to discover the junction of Grand and Green and failed as many do for want of breath. All I have to say is he was sensible to die before he attempted to ascend the next rapid for it has an almost direct fall of from 15 to 20 feet. We have met nothing to compare with it before. Weather is not quite so hot today. We are in good spirits. We are glad to get down our altitude before the canon gets narrower and higher as it will do when we come to hard rocks. In these rapid places the river narrows up unaccountably. Andy has been throwing stones across for amusement tonight.

Powell, 24 July Only made $\frac{3}{4}$ mile today. 3 long portages where the river fell by estimate 42 ft. Huge rocks across the river. We camp among large rocks. I saw for an hour watching the waves—ridges at all angles to the direction of the river, mounds, and even cones with crests of foam that fall back. No. 14.

Sumner, 24 July Hard at work early making a portage in the worst rapids we have seen so far. Made 4 portages in $\frac{3}{4}$ of a mile. "Kitty's Sister" had another narrow escape today. While crossing between rapids Howland broke an oar in a very bad place and came very near being drawn into a rapid that would smash any boat to pieces. Saw the tracks of an otter and mountain sheep on the sand. Walls. . . ? ft., $\frac{3}{4}$ blue marble, the remainder grey sandstone, lightly touched with red by a thin bed of red shale on the top, Driftwood 30 ft. high on the rocks. God help the poor wretch that is caught in the canon during high water. Camped on the south side among the rocks, 3 small hackberry bushes in sight of camp.

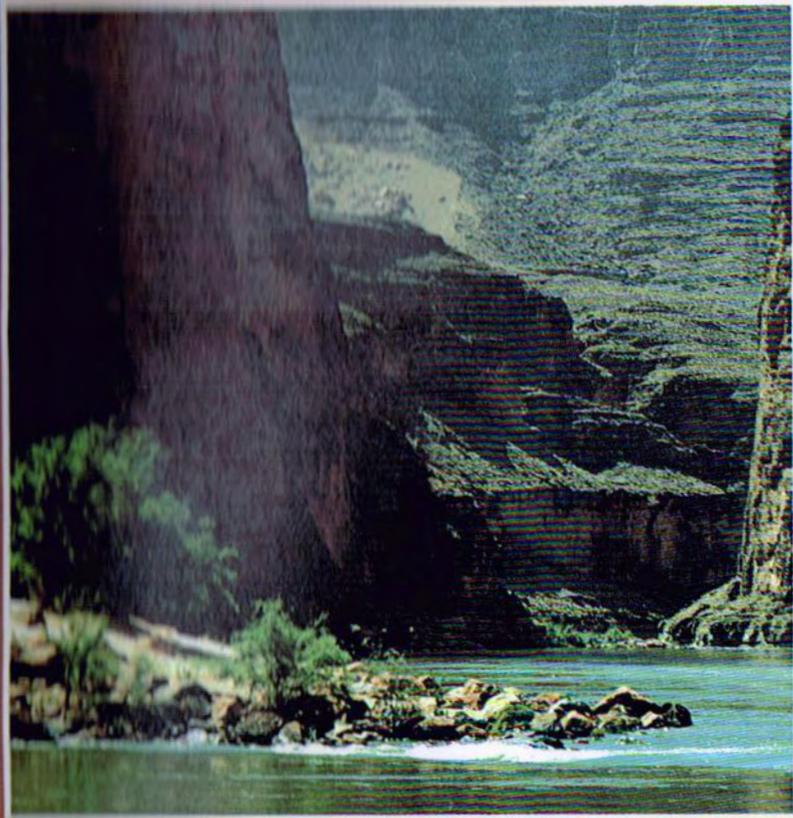
Powell Account of 24 July We examine the rapids below. Large rocks have fallen from the walls—great, angular blocks, which have rolled down the talus, and are strewn along the channel. We are compelled to make three portages in succession, the distance being less than three-fourths of a mile, with a fall of seventy-five feet. Among these rocks, in chutes, whirlpools, and great waves, with rushing breakers and foam, the water finds its way, still tumbling down. We stop for the night, only three-fourths of a mile below the last camp. A very hard day's work has been done, and at evening I sit on a rock by the edge of the river, to look at the water, and listen to its roar. Hours ago, deep shadows had settled into the canyon as the sun passed behind the cliffs. Now, doubtless, the sun has gone down, for we can see no glint of light on the crags above. Darkness is coming on. The waves are rolling, with crests of foam so white they seem almost to give a light of their own. Nearby, a chute of water strikes the foot of a great block of limestone, fifty feet high, and the waters pile up against it, and roll back. Where there are sunken rocks, the water heaps up in mounds,

DELLENBAUGH

A Canyon Voyage

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THE NARRATIVE OF THE
SECOND POWELL EXPEDITION



FREDERICK S. DELLENBAUGH



ARIZONA

in a similar battle with another of the same nature, and below it we stopped for dinner, amidst some huge boulders under a hackberry tree, near another roarer. One of these cataracts had a fall of not less than twenty feet in six hundred, which gave the water terrific force and violence. The canyon walls closed in more and more and ran up to two thousand feet, apparently nearly vertical as one looked up at them, but there was always plenty of space for landings and camps. Opposite the noon camp we could see to a height beyond of at least three thousand feet. We were in the heart of another great plateau. After noon we attacked the very bad rapid beside whose head we had eaten, and it was half-past three when we had finished it. The boats had been considerably pounded and there was a hole in the *Dean*, and a plank sprung in the *Nell* so that her middle cabin was half full of water. The iron strip on the *Dean's* keel was breaking off. Repairs were imperative, and on the right, near the beginning of one of the worst falls we had yet seen, we went into camp for the rest of the day. With false ribs made from oars we strengthened the boats and put them in condition for another day's hammering. It seemed as if we must have gone this day quite a long distance, but on footing up it was found to be no more than a mile and a quarter. Darkness now fell early and big driftwood fires made the evenings cheerful. There was a vast amount of driftwood in tremendous piles, trees, limbs, boughs, railroad ties; a great mixture of all kinds, some of it lying full fifty feet above the present level of the river. There were large and small tree-trunks battered and limbless, the ends pounded to a spongy mass of splinters. Our bright fires enabled us to read, or to write up notes and diaries. I think each one but the Major and Andy kept a diary and faithfully wrote it up. Jack occasionally gave us a song or two from the repertory already described, and Steward did not forget the mouth-organ, but through the hardest part of Cataract Canyon we were usually tired enough to take to our blankets early.

In the morning we began the day by running a little rapid between our camp and the big one that we saw from there, and then we had to exert some careful engineering to pass below

by means of the lines. This accomplished we found a repetition of the same kind of work necessary almost immediately, at the next rapid. In places we had to lift the boats out and slide them along on driftwood skids. These rapids were largely formed by enormous rocks which had fallen from the cliffs, and over, around, and between these it was necessary to manœuvre the boats by lines to avoid the furious waters of the outer river. After dinner we arrived at a descent which at first glance seemed as bad as anything we had met in the morning but an examination showed a prospect of a successful run through it. The fall was nearly twenty feet in about as many yards. The Major and Prof. examined it long and carefully. A successful run would take two minutes, while a let-down would occupy us for at least two hours and it had some difficult points. They hesitated about running the place, for they would not take a risk that was not necessary, but finally they concluded it could be safely accomplished, and we pulled the *Dean* as quickly as possible into the middle of the river and swung down into it. On both sides the water was hammered to foam amidst great boulders and the roar as usual was deafening. Just through the centre was a clean, clear chute followed by a long tail of waves breaking and snapping like some demon's jaws. As we struck into them they swept over us like combers on the beach in a great storm. It seemed to me here and at other similar places that we went through some of the waves like a needle and jumped to the top of others, to balance half-length out of water for an instant before diving to another trough. Being in the very bow the waves, it appeared to me, sometimes completely submerged me and almost took my breath away with the sudden impact. At any rate it was lively work, with a current of fifteen or eighteen miles an hour. Beaman had stationed himself where he could get a negative of us ploughing through these breakers, but his wet-plates were too slow and he had no success. After this came a place which permitted no such jaunty treatment. It was in fact three or four rapids following each other so closely that, though some might be successfully run, the last was not safe, and no landing could be made at its head, so a very long let-down was obligatory; but it was an