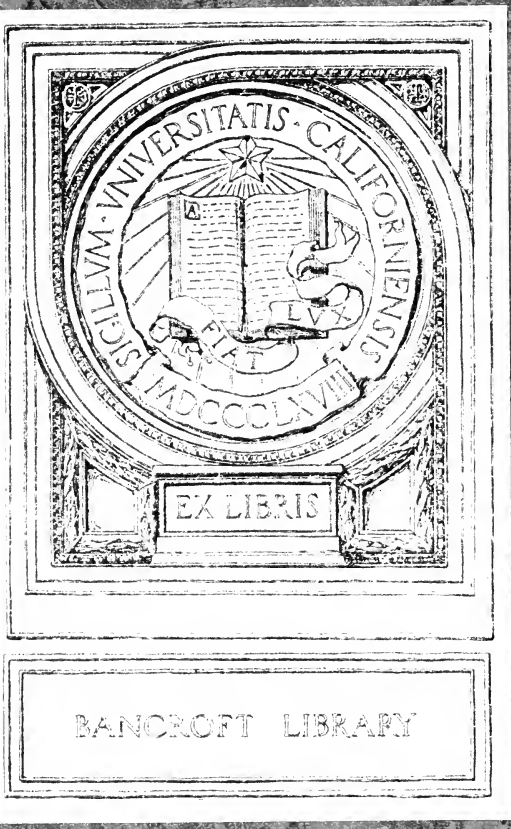


65TH CONGRESS
1st Session

SENATE

DOCUMENT
No. 42

THE GRAND CANYON

AN ARTICLE

GIVING THE CREDIT OF FIRST TRAVERSING THE GRAND CANYON OF THE COLORADO TO JAMES WHITE, A COLORADO GOLD PROSPECTOR, WHO IT IS CLAIMED MADE THE VOYAGE TWO YEARS PREVIOUS TO THE EXPEDITION UNDER THE DIRECTION OF MAJ. J. W. POWELL IN 1869

By

THOMAS F. DAWSON

PRESENTED BY MR. SHAFROTH
MAY 25, 1917.—Referred to the Committee on Printing

WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

SENATE RESOLUTION No. 79.

Reported by Mr. SMITH of Arizona.

IN THE SENATE OF THE UNITED STATES,

June 4, 1917.

Resolved, That the manuscript submitted by the Senator from Colorado [Mr. Shafroth] on May 25, 1917, entitled "First Through the Grand Canyon," by Thomas F. Dawson, be printed as a Senate document, with illustration.

Attest:

JAMES M. BAKER, *Secretary.*

WHEREFORE.

The erection by the National Government of a monument to the memory of Maj. John W. Powell, as "the first explorer" of the Grand Canyon of the Colorado, has had the effect of raising a question among pioneers of the West as to whether the honor conferred upon Maj. Powell in connection with the early navigation of the Canyon should not be shared with another. Mr. Powell's friends claim for him the distinction of being not only the first to "explore" the canyon but also that of being the first to pass through it under any circumstances. This claim is challenged in behalf of one James White, a mining prospector, who, they contend, went through the canyon two years previous to the time of the Powell expedition. Powell made his voyage in 1869; White claims to have made his in 1867.

So persistent has been the contention that White was the first to traverse the Canyon that the writer set himself the task of investigating the subject, which he has done as thoroughly as possible consistent with other duties, with the result that he has succeeded at least in convincing himself that White's claim is not unfounded. The undertaking has not been easy; for, while much literature has grown up around Maj. Powell's expedition, comparatively little has been written about White, and that little of the distant past, and now to be found only in publications long since out of print. It is believed that enough of this material has been revived to make a case for White; but if not, it is hoped that at least it may aid the future investigator in arriving at a just conclusion.

In entering into the merits of the controversy it will be well for the reader to bear in mind that the Colorado River is formed in southeastern Utah, by the union of the Grand and the Green Rivers, the former rising in northern Colorado and the latter in the adjoining State of Wyoming, and that the stream thus created flows in a general southwestern course into the Gulf of of California. Roughly speaking, from the junction to the gulf

is a distance of 1,000 miles, the upper half flowing through canyons varying in depth from 1,000 to over 6,000 feet. The name of "Grand Canyon" has been bestowed upon the 217 miles of the great gorge lying between the mouth of the Little Colorado and the Grand Wash; but there could be little mistake in extending the designation to the entire upper half of the stream, and that course is followed here for the sake of convenience. From the upper to the lower end of this vast stretch of hemmed-in water there are few crossings, and those difficult and not easily discernible.

The first white men to look into the great gorge were members of the Spanish exploring expedition sent out in 1539 under Coronado; but their investigation was made only from the rim, thousands of feet above the stream. After their casual inspection more than three centuries were permitted to come and go without an exploration of the canyon's depths, and this exploration, like many other things, did not come until after the control of the region had passed from Spain and her heirs into the hands of Americans. Indeed, the canyon plateau was so distant from centers of population, so inhospitable and desolate, and, withal, so inaccessible, before the comparatively recent day of the railroad that it was visited but rarely by any except a few wild Indians. Apparently even the savages saw very little if anything of the cavernous depths, for they had a superstitious dread of them, which added much to the actual dangers in keeping them away from the water's edge. The little knowledge actually existing among white men was confined almost entirely to prospectors, trappers, and a few Government scientists, who had looked into the canyon from one end or the other or had shudderingly peered over the far-away rim into the abyss below. The adventurous frontiersmen were equal to any ordinary task of exploration, but the canyon was too awesome for the vast majority of even this hardy class. True, it was currently reported that at different times some of them had entered the vast inclosure, but none of the reports brought back any of these adventurers. Indeed, of these 500 miles of chasm there were vast stretches of which nothing was known. What wonder, then, that the great fissure was regarded as a stupendous mystery and that legend and imagination filled it with untold dangers?

In the face of this universal awe it would have been a brave man indeed who should undertake voluntarily the exploration of the canyon by following the river. Much more probable is it that the first voyage should have been due to accident, as it was if the contention made in behalf of White be correct.

Powell made two expeditions to and through the great canyon, the first in 1869 and the second in 1872; but with the latter this article is in nowise concerned. Needless to say that he was well equipped with boats and provisions and that he was accompanied by a carefully selected body of assistants. He began his first voyage at Green River Station, Wyo., where the Union Pacific Railroad crosses Green River. The start was made on the 24th day of May, 1869, and the end of the journey was reached on the 30th of August following. His party suffered so much hardship and experienced so many narrow escapes from utter destruction that the achievement has been universally and justly exploited as one of the greatest of all feats of daring, skill, endurance, and good fortune. Consequently several books have been written and many stories told about the one-armed ex-Army officer's exploit. And now Congress has decreed that the record which so far has enlivened only the destructible printed page shall be perpetuated in enduring bronze. Very well, so long as the claims in Powell's behalf are confined to his work as a scientific investigator and explorer. But if he is to continue to be heralded forth as the first navigator of the canyoned river, objection probably will continue to be interposed by White's friends in his behalf.

White's trip was the farthest possible from a premeditated proceeding. He had not heard of the canyon, except in general terms, before he found himself locked within its walls, and he continued to the end because he discovered no means of escape from its compelling embrace. Gold was the lure that led him to the Colorado, and pursuit by murderous savages the force which drove him to embark upon its waters. T. F. D.

THE FIRST THROUGH THE GRAND CANYON OF THE COLORADO.

WHITE'S ADVENTURE.

No claim is made that a complete compilation has been accomplished of all that was written about the White exploit at the time it occurred; but it is believed that the principal accounts, at least the principal accounts based directly on the man's own verbal narrative, have been unearthed, and they are reproduced herewith as the best possible authority on the subject. For reasons which will be apparent, their presentation has been deferred, but a brief outline of the adventure would seem to be desirable at this point.

In company with two other men, White was engaged in the summer of 1867 in prospecting for the precious metals in western Colorado, his companions being one Capt. Charles Baker, who a few years before had led the first organized prospecting expedition into the San Juan country in southwestern Colorado, and one George Stroll,[1] said to have been an old Mississippi steamboat man turned gold hunter. Baker, the leader, was killed by the Ute Indians near the head of the Colorado River, and the other two men were forced to take to the river to avoid a like fate. Hastily constructing a raft before the savages could run them down, they pushed out into the stream and soon were embarked on a voyage the end of which they could not foresee—to which, indeed, they gave little thought.

At first there were long stretches of quiet water and travel was comparatively comfortable. But the newly launched voyagers had not proceeded far when they began to encounter sharp descents and swift currents. Steep falls and fierce eddies succeeded each other in threatening contiguity, and while plunging into one of the whirlpools on the fourth day out Stroll was

[1] Dr. Parry and Maj. Calhoun give White's fellow voyager the name of Henry Strole. White makes the name George Stroll, and his style will be followed in this narrative except in the quotations from Parry and Calhoun, where the first name as given by them will be used.

washed off the raft and drowned. Being unable to move in any direction, except down stream, White tied himself to the raft and continued his course. He left himself considerable freedom of action, but the rope prevented his being entirely separated from his rude craft, and doubtless saved his life on more occasions than one.

For 10 days after the loss of his partner White journeyed onward alone, proceeding always with the current—now dashing forward with mill-race speed, now drifting leisurely, now plunging over an aqueous precipice, now whirled about in some relentless eddy. Alternately baked in the semitropical sun and submerged beneath the turbulent waters, he scarcely knew whether he was fish, flesh, or salamander. During most of the time food was unobtainable, and at night he could find a resting place only on some narrow rock ledge or on an uncertain sand island amid stream. What wonder, then, that at the end of 14 days he was rescued, a bleeding, blistered, shriveled creature, almost dead from hunger and privation, half demented, and a very Lazarus in emaciation and sores! When he arrived at Callville, the old-time Mormon outpost at the head of navigation, his condition was such that he did not realize that he had emerged from the canyon, and he would have floated on downstream if he had not been hailed from the shore. From all contemporaneous accounts the rescue came none too soon to save the man's life; but it was saved, and he still lives to tell his own story. After some 10 years of wandering through the West he settled at Trinidad, Colo., where (July 1, 1917) he now resides.

White's appearance below the mouth of the canyon must have been regarded somewhat in the nature of the arrival of a visitor from Mars. There was no telegraph at Callville to flash the news to the outside world. Yet, notwithstanding this limitation, it was inevitable that the main features of the perilous voyage should find their way into the newspapers, as they soon began to do. Ultimately the country at large was made acquainted with the fact that the great terra incognita of the Big Canyon had at last been penetrated and some of its mysteries revealed. Later more formal accounts appeared, and in at least one instance the achievement received official recognition from an organized body of scientific men.

WHITE'S STORY ATTACKED.

These later accounts were circumstantial and explicit, and, so far as has been discovered, there was no serious effort to controvert them for a generation; but, beginning about the end of the last century, at least four formidable books and numerous minor publications have appeared, in which direct attack is made upon the validity of the White story. Necessarily this criticism is based largely on the ground of improbability; but it is none the less positive and aggressive on that account.

The charges may be summarized as follows:

That, because of the rapids, falls, eddies, etc., it would be out of the question for anyone to traverse the Canyon on a mere raft.

That, in any event, the trip could not be made in two weeks' time.

That White's report on the character of the stream and Canyon walls is inaccurate.

That distances are incorrectly stated by White.

That certain adventures attributed to White could not have taken place at the points named.

That, conceding (as White's critics do) that he did appear in the river at Callville in a wretched condition, his experiences were confined to the lower portion of the Canyon waters.

And who the accusers?

Some are inclined to include the National Government in this category, because in the inscription on the Powell monument the honor of being "the first explorer" of the Canyon is awarded to Powell. The monument stands at Sentinel Point, at the location in northern Arizona at which the Atchison, Topeka & Santa Fe Railway approaches the Canyon, and the inscription reads:

> Erected by the Congress of the United States to Major John Wesley Powell, first explorer of the Grand Canyon, who descended the river in row boats, traversing the gorge beneath this point August 17, 1869, and again September 1, 1872.

Plainly an "explorer" must be an investigator. That Powell was and White was not. White was fleeing to save his life, while Powell was engaged in making a scientific survey of the canyon. So the monument is right in purpose and claim. Powell was the first explorer; White the first traverser.

With the Government absolved, the principal critics are:

Frederick S. Dellenbaugh, Robert B. Stanton, George Wharton James, and, inferentially, the Outing Co. of New York, and the Kolb brothers, of Arizona. Dellenbaugh, Stanton, and the Kolbs have passed through the canyon—Dellenbaugh as a member of the second Powell expedition in 1872, Stanton as the chief engineer of a railroad surveying party in 1888, and the Kolb brothers in the prosecution of a photographing enterprise of their own in 1911. Mr. James does not claim to have explored the great gorge, but he is familiar with the canyon region. The Outing Co. has issued in book form a transcript of Maj. Powell's diary of his first voyage, and if White's claims are well founded, injustice is done to him in the title. The book is called First Through the Grand Canyon. The Kolb brothers have published a work giving a thrilling account of the adventures of Ellsworth L. and Emery A. Kolb in exploring the canyon. White's friends could take no exception to this story if the authors did not omit White's name from their list of those who have navigated the canyon. If White made the trip, certainly Powell was not "the first through," as the Outing record would have us believe. And if he actually performed the feat he deserves a place among those to whom this honor is awarded by the Kolbs.

A more positive and a very conspicuous faultfinder is Mr. James. This splendid writer has done so much to throw light on the dark spots in the history and geography of the Southwest that one similarly interested must hesitate to differ from him in any matter. Here he would seem to have been misled. In his otherwise excellent work, In and Around the Grand Canyon, Mr. James says:

> Dr. Parry, the distinguished botanist of the Mexican Boundary Commission, once was led into writing an account of a trip supposedly made through the canyon by James White, a Wisconsin miner. This man was afterwards employed by Maj. Powell, and it was then found that the published account of his trip was erroneous. He had some adventures in the Canyon, but they were small and unimportant compared with the stories circulated about them.

Most unfortunate is it that Mr. James does not impart more information concerning Mr. White's employment by Maj. Powell and about the consequent discovery that the published accounts of White's voyage were erroneous. White tells the present writer that not only was he never employed by Powell, but that he never even saw that gentleman. Moreover, the writer has been quite unable to find in Mr. Powell's writings any reference to such employment. May it not be that it is Mr. James's statement and not Mr. White's that is erroneous?

In one of his Grand Canyon books Mr. Dellenbaugh says that Mr. Stanton has definitely disproved White's claim to distinction as a voyager through the canyon. Mr. Stanton has contributed a readable magazine account of his survey, and in addition has written an elaborate report for the American Society of Civil Engineers, which was published by that society in 1892. In the magazine article he does not refer to White, but he does allude to him in the other paper. In the latter article he makes no specific attempt to refute the White story, but he devotes some pointed criticism to the illustrations accompanying one of the accounts of the White adventure. Here is the Stanton paragraph entire:

> The exploration by Maj. Powell was undoubtedly the first journey ever made through those canyons. Some wild stories are told of two men having gone through the Grand Canyon on a raft of small cottonwood logs. This story was first published in Gen. Palmer's report on the Pacific Railway surveys and afterwards republished with many embellishments by the author and illustrated with some outlandish pictures in Dr. Bell's New Tracks in North America.

It must be confessed that the illustrations are somewhat "raw," and one must concede that if White was responsible for them he would deserve some of the censure that has been directed toward him. Still, even these illustrations are insufficient to "dispose" of the White claim.

Speaking seriously, it should be said that doubtless Mr. Dellenbaugh had reference to investigations made by Mr. Stanton since the appearance of his paper. It is known to many of Mr. Stanton's friends, and probably was known to Mr. Dellenbaugh, that Mr. Stanton has extended his research since the appearance of the publications. Unfortunately the results of his inquiry have not been given to the public; but it is no secret that Mr. Stanton adheres to his contention that

White did not make the trip as represented. It is most sincerely to be hoped that Mr. Stanton's observations will be given publicity at an early day, as his experience and general information will insure attention for anything he may have to say about the Colorado River.

Of the criticisms which have found their way into print those of Mr. Dellenbaugh are the most formidable. This gentleman has written two valuable books on the Grand Canyon, the first of which, The Romance of the Colorado River, is in the main a splendid compendium of information concerning the exploration of the Canyon and the Canyon region. He, however, rejects White's story and even goes to the extent of attacking White. In this work we are told that the White account is a "masterful fabrication" and "one of the best pieces of fiction I have ever read," while White himself is denounced as a "champion prevaricator," who is "nothing if not dramatic." These are mere characterizations, and they would seem to indicate a degree of impatience on the part of the writer incompatible with impartial judgment.

Outlining White's story, Dellenbaugh quotes White as saying that at the junction of Grand and Green Rivers the walls of the canyon are 4,000 feet high, whereas they are not more than 1,300 feet at that exact spot and not more than 3,000 at any place in Cataract Canyon, that portion of the chasm nearest the junction. White is also represented as describing the canyon walls as of "grayish sandstone," while only portions of the walls are of sandstone, and the major portion red in color. In like manner, White is credited with placing the mouth of the San Juan tributary at only 40 miles below the junction, whereas the distance is much greater; with saying that the canyons of the San Juan and the Little Colorado are much alike, when, as a matter of fact, they are quite dissimilar; with detailing a harrowing experience in a whirlpool at the mouth of the Little Colorado, when there is no whirlpool there; with saying that below the mouth of the Little Colorado, the entrance to the Grand Canyon proper, the sailing was much smoother than above, when in reality this is the roughest part of the voyage; with implying that he continued on down the river because he could not escape in any other direction, whereas there are places at which he might have scaled the canyon walls.

On account of these and other flaws, Mr. Dellenbaugh concludes that White's story "reveals an absolute ignorance of the river and its walls," and he asserts that the man's experiences were confined to the lower portion of the canyon. "Had he really entered the Grand Canyon his raft would have been speedily reduced to toothpicks, and he would not have had the choice of remaining on it," says this writing voyager concerning his more prosaic fellow.

WHITE'S WITNESSES.

In the face of this formidable array of what may be called expert testimony, because of the knowledge of the Canyon possessed by the writers, what reason can there be for accepting the reports of White's exploit? To make reply to this question is the main purpose of this paper, and in the effort considerable material bearing on the subject has been collected. In the main, this consists of records prepared by men who saw and conversed with White very soon after the conclusion of his trip, and they are quoted here on the theory that a compilation of such papers will be of value to the future investigator even though there be some reiteration. It is believed also that the mere cumulation of such testimony may aid in establishing White's claim.

There also is presented an original account of the trip by White himself, and in addition a supplementary statement concerning a certain phase of the controversy. The writer considers himself fortunate in procuring the contributions from Mr. White at this time, for, from all accounts, the man whose vitality was sufficient in his youth to enable him to undergo as great a strain as ever fell to the lot of mortal is gradually yielding to the feebleness of old age, which may soon render him incapable of telling his story.

The record is not one with which the modern reader is familiar. But little has been done to keep it to the front since the first startling announcement was made, now almost half a century ago. Probably the principal reason for this obscurity is to be found in White's retiring disposition and the correlative fact that others who have covered the same field of adventure were more fortunate in possessing avenues for reaching the public. White has not sought notoriety in connection with his marvelous exploit; but, on the contrary, after narrating the facts soon after its occurrence, settled down to a humdrum life, seeming quite content to let the world forget that he had done anything beyond the ordinary. He has held no official position and has

lived the live of a humble toiler for his daily bread. He has not had access to the press. He has enjoyed none of the aids to fame which have been supplied so abundantly to his more fortunate rivals.

It is not to be contended that there are no difficulties in the way of sustaining the White story, for, if the criticisms are based on the ground of improbability, it must be admitted in fairness that White is the only direct witness as to the actuality of his achievement. While circumstantial accounts were published following the trip, all were based necessarily on White's own pesonal narration. He was alone on the voyage, and actual, positive corroboration is out of the question. Still, the accounts are sufficient in number and circumstantiality to demand attention, and it is believed they will go far toward convincing the unbiased investigator.

So far as it has been here collected the direct testimony in White's favor is:

A detailed statement by two members of the Engineering Corps engaged in 1867 in making a survey along the thirty-second and thirty-fifth parallels for the Union Pacific Railway.

A virtual indorsement of the report of these engineers by Gen. William J. Palmer, head of the survey, and by Dr. William A. Bell, a conspicuous member of it.

A detailed article in the Rocky Mountain Herald of Denver, Colo.

An account written by White himself in 1916 for this article.

The two statements by members of the railroad survey are those of Maj. A. R. Calhoun and Dr. C. C. Parry, and as they are the principal contemporaneous accounts of the White voyage, it is deemed desirable to quote both in detail, even at the expense of covering much ground twice.

DR. PARRY'S PAPER.

Dr. Parry's report, dated January 8, 1868, was made largely in duplicate to Gen. Palmer and to Mr. J. D. Perry, president of the Union Pacific Railway, eastern division,[1] with residence in St. Louis. Both copies were published soon afterwards, Gen. Palmer's in his official report and Mr. Perry's in the Transactions of the St. Louis Academy of Science. It is to be given immediately below, and it will be found that while differing from Mr. Calhoun's statement, which it immediately precedes, it still is confirmatory of the main features of that gentleman's story, which, probably originally written for newspaper use, is more florid than is to be expected from a man whose life was given entirely to science, as was that of Dr. Parry.

Following is the full text of Dr. Parry's report as printed in the Transactions of the St. Louis Academy of Natural Sciences, Volume II:

The railroad survey now in progress under your direction has afforded many opportunities for acquiring valuable additions to our geographical knowledge of the unexplored regions of the far West from original sources not accessible to ordinary map compilers. Mining prospectors within the last 20 years, more adventurous than the noted trappers of the Rocky Mountains, have scarcely left a mountain slope unvisited or a water course unexamined over the wide expanse extending from the Mississippi River to the Pacific Ocean. Could the varied and adventurous experience of these mountain men be brought into an accessible form we should know nearly as much of these western wilds as we now do of the settled portions of our country.

Among the geographical problems remaining for the longest time unsolved was the actual character of the stupendous chasms or canyons through which the Colorado of the West cleaves its way from its snowy source to its exit into the California Gulf. Within the last 10 years public attention has been frequently directed to this subject, and various Government expeditions have imparted reliable information in reference to the upper and lower course of this remarkable river. Lieut. Ives in 1857-58 made a satisfactory exploration of the navigable portion of the Colorado extending from its mouth to the Great Canyon, and since then a regular line of light-draft

[1] The eastern division of the Pacific Railroad system was the part lying between Kansas City and Denver. It was known afterwards as the Kansas Pacific, but is now a part of the Union Pacific.

boats have been successfully traversing these inland waters. Still the Great Canyon remained a myth; its actual length, the character of the stream, the nature of its banks, and the depth of its vertical walls were subjects for speculation, and afforded a fine field for exaggerated description, in which natural bridges, cavernous tunnels, and fearful cataracts formed a prominent feature.

Now, at last, we have a perfectly authentic account from an individual who actually traversed its formidable depths, and who, fortunately for science, still lives to detail his trustworthy observations of this most remarkable voyage.

Happening to fall in with this man during my recent stay of a few days at Hardyville, on the Colorado, I drew from him the following connected statement in answer to direct questions noted down at the time:

NARRATIVE.

James White, now living at Callville, on the Colorado River, formerly a resident of Kenosha, Wis., was induced to join a small party for the San Juan region, west of the Rocky Mountains, in search of placer gold diggings. The original party was composed of four men, under the command of a Capt. Baker.

The party left Fort Dodge on the 13th of last April, and after crossing the Plains completed their outfit for the San Juan country in Colorado City, leaving that place on the 20th of May. Proceeding by way of South Park and the upper Arkansas, they crossed the Rocky Mountains, passing round the headwaters of the Rio Grande, till they reached the Animas Branch of the San Juan River. Here their prospecting for gold commenced, and being only partially successful, they continued still farther to the west, passing the Dolores, and reaching the Mancos, which latter stream was followed down to the main valley of the San Juan. Crossing the San Juan at this point they continued down the valley in a westerly direction for about 200 miles, when the river entered a canyon. Here they again crossed to the north bank, and, leaving the river, passed across a mountain ridge, aiming to reach the Colorado River. In a distance of 50 miles over a very rugged country they reached this latter stream, or, rather, its main eastern tributary, Grand River. At the point where they first struck the river it was inaccessible on account of its steep, rocky banks; they accordingly followed up the stream in search of a place where water could be procured. At an estimated distance of 12 miles they came upon a side canyon, down which they succeeded in descending with their animals, and procuring a supply of water. They camped at the bottom of this ravine on the night of the 23d of August and on the morning of the 24th started to ascend the right bank to the table-land. In making this ascent they were attacked by Indians, and Capt. Baker, being in advance, was killed at the first fire. The two remaining men, James White and Henry Stroll, after ascertaining the fate of their comrade, fought their way back into the canyon, and, getting beyond the reach of the Indians, hastily unpacked their animals, securing their arms and a small supply of provisions, and proceeded on foot down to the banks of Grand River. Here they constructed a raft of dry cottonwood, composed of three sticks 10 feet in length

and 8 inches in diameter, securely tied together by lariat ropes, and, having stored away their arms and provisions, they embarked at midnight on their adventurous voyage.

The following morning, being on the 25th of August, they made a landing, repaired their raft by some additional pieces of dry cedar, and continued on their course. The river here was about 200 yards wide, flowing regularly at a rate of 2½ or 3 miles per hour. According to their estimate, they reached the mouth of Green River and entered the main Colorado 30 miles from the point of starting. Below the junction the stream narrows and is confined between perpendicular rocky walls, gradually increasing in elevation. At an estimated distance of 40 miles from Green River they passed the mouth of the San Juan, both streams being here hemmed in by perpendicular walls. From this point the canyon was continued, with only occasional breaks formed by small side canyons equally inaccessible with the main chasm. Still they experienced no difficulty in continuing their voyage and were elated with the prospect of soon reaching the settlements on the Colorado below the Grand Canyon.

On the 28th, being the fourth day of their journey, they encountered the first severe rapids, in passing one of which Henry Stroll was washed off and sank in a whirlpool below. The small stock of provisions was also lost, and when White emerged from the foaming rapids he found himself alone, without food, and with gloomy prospects before him for continuing his adventurous journey. His course now led through the sullen depths of the Great Canyon, which was a succession of fearful rapids, blocked up with masses of rock, over which his frail raft thumped and whirled, so that he had to adopt the precaution of tying himself fast to the rocking timbers. In passing one of these rapids his raft parted and he was forced to hold on to the fragments by main strength until he effected a landing below in a shallow eddy where he succeeded, standing waist deep in water, in making necessary repairs, and started again. One can hardly imagine the gloomy feelings of this lone traveler, with no human voice to cheer his solitude, hungry, yet hopeful and resolute, closed in on every side by the beetling cliffs that shut out sunlight for the greater part of the long summer day, drenched to the skin, sweeping down the resistless current, shooting over foaming rapids, and whirling below in tumultuous whirlpools, ignorant of what fearful cataracts might yet be on his unswerving track, down which he must plunge to almost certain destruction; still, day after day, buoyed up with the hope of finally emerging from his prison walls and feasting his eyes on an open country with shaded groves, green fields, and human habitations.

The mouth of the Colorado Chiquito was passed on the fourth day in the evening, the general appearance of which was particularly noted, as he was here entangled in an eddy for two hours, until rescued, as he says, "by the direct interposition of Providence." The general course of the river was noted as very crooked, with numerous sharp turns, the river on every side being shut in by precipitous walls of "white sand rock." These walls present a smooth, perpendicular, and occasionally overhanging surface, extending upward to a variable height and showing a distinct line of high-water mark 30 to 40 feet above the then water level.

His estimate of the average height of the canyon was 3,000 feet, the upper edge of which flared out about halfway from the bottom, thus presenting a rugged crest. The last two days in the canyon dark-colored igneous rocks took the place of the white "sandstone," which finally showed distinct breaks on either side, till he reached a more open country, containing small patches of bottom land and inhabited by bands of Indians. Here he succeeded in procuring a scanty supply of mesquite bread, barely sufficient to sustain life till he reached Callville on the 8th of September, just 14 days from the time of starting, during 7 of which he had no food of any description.

When finally rescued this man presented a pitiable object, emaciated and haggard from abstinence, his bare feet literally flayed from constant exposure to drenching water, aggravated by occasional scorchings of a vertical sun; his mental faculties, though still sound, liable to wander and verging close on the brink of insanity. Being, however, of a naturally strong constitution, he soon recovered his usual health and is now a stout, hearty, thick-set man. His narrative throughout bears all the evidence of entire reliability and is sustained by collateral evidence, so that there is not the least reason to doubt that he actually accomplished the journey in the manner and in the time mentioned by him.

CONCLUSIONS.

The following may be summed up as some of the new facts to be derived from this remarkable voyage as additions to our present geographical knowledge of the hydrography of the Colorado River:

First. The actual location of the mouth of the San Juan, 40 miles below Green River junction, and its entrance by a canyon continuous with that of the Colorado.

Second. From the mouth of the San Juan to the Colorado Chiquito, three days' travel in the swiftest portion of the current, allowing a rate of 4 miles per hour for 15 hours, or 60 miles per day, would give an estimated distance of 180 miles, including the most inaccessible portion of the Great Canyon.

Third. From Colorado Chiquito to Callville 10 days' travel was expended. As this portion of the route was more open and probably comprised long stretches of still water, it would not be safe to allow a distance of more than 30 miles per day, or 300 miles for this interval. Thus the whole distance traveled would amount to 550 miles, or something over 500 miles from Grand River junction to head of steamboat navigation at Callville.

Fourth. The absence of any distinct cataract or perpendicular falls would seem to warrant the conclusion that in time of high water by proper appliances in the way of boats, good, resolute oarsmen, and provisions secured in waterproof bags the same passage might be safely made and the actual course of the river, with its peculiar geological features, properly determined.

Fifth. The construction of bridges by a single span would be rendered difficult of execution on account of the usual flaring shape of the upper summits; possibly, however, points might be found where the high mesas come near together.

Sixth. The estimated average elevation of the canyon at 3,000 feet is less than that given on the authority of Ives and Newberry, but may be nearer the actual truth as the result of more continuous observation.

Seventh. The width of the river at its narrowest points was estimated at 100 feet and the line of high-water mark 30 to 40 feet above the average stage in August.

Eighth. The long-continued uniformity of the geological formation termed "white sandstone" (probably Cretaceous), is remarkable, but under this term may have been comprised some of the lower stratified formations. The contrast on reaching the dark, igneous rocks was so marked that it could not fail to be noticed.

Ninth. Any prospect for useful navigation up or down the canyon during the season of high water, or transportation of lumber from the upper pine regions of Green or Grand Rivers could not be regarded as feasible, considering the long distance and the inaccessible character of the river margin for the greater part of its course.

Tenth. No other satisfactory method of exploration, except along the course of the river, could be adopted to determine its actual course and peculiar natural features, and James White, as the pioneer of this enterprise, will probably retain the honor of being the only man who has traversed through its whole course the Great Canyon of the Colorado and lived to recount his observations on this perilous voyage.

CALHOUN'S STATEMENT.

In many respects Maj. Calhoun's account of White's experience is the same as the narrative published in Dr. Bell's book, New Tracks in North America. The latter report is generally attributed to Dr. Parry, and Dr. Bell himself says it was prepared by Maj. Calhoun from notes taken by Dr. Parry; but, as will be seen in perusing Calhoun's own story, that gentleman takes full credit for the article and says explicitly that he obtained his facts from White himself. The account herewith reproduced is taken from the pages of a small book entitled "Wonderful Adventures," which was published soon after White's trip by William B. Evans & Co., of Philadelphia, of which city Calhoun was a resident. It is the first of a series of adventures of which the work is composed and bears the title "Passage of the Grand Canyon of the Colorado," by A. R. Calhoun. The first portion of the article is a general description of the Colorado River region, and is omitted here.

Following is the story in so far as it deals with White's journey:

Twenty years ago the trapper and the hunter were the romantic characters of the far West. They still figure in fiction, and there is a fascination about their daring deeds which is scarcely undeserved. They have trapped on every stream and hunted on every mountain side despite the opposition of the Indian and the barrier of winter snows. They have formed the skirmish line of the great army of occupation which is daily pushing westward, and they have taught the savage to respect the white man's courage and to fear the white man's power.

While the field for the trapper and hunter has been gradually growing less another class of adventurers has come into existence—the prospectors in search of precious metals. Within the last quarter of a century these men have traversed every mountain slope from the rugged peaks of British Columbia to the rich plateaus of Old Mexico and have searched the sands of every stream from the Mississippi to the shores of the Pacific, stimulated by the same hope of reward that led the early Spaniards to explore inhospitable wilds in their search for an Eldorado. Could the varied and adventurous experiences of these searchers for gold be written we should have a record of daring that no fiction could approach, and the very sight of gold would suggest to our minds some story of hairbreadth escapes.

It has fallen to the lot of one of these prospectors to be the hero of an adventure more thrilling than any heretofore recorded, while at the same

time he has solved a geographical problem which has long attracted the attention of the learned at home and abroad, who could but theorize before his journey as to the length and nature of the stupendous chasms or canyons through which the Colorado cleaves its central course. While on the survey before referred to and while stopping for a few days at Fort Mojave, Dr. W. A. Bell, Dr. C. C. Parry, and myself met this man, whose name is James White, and from his lips, the only living man who had actually traversed its formidable depths, we learned the story of the Great Canyon.

James White now lives at Callville, Arizona Territory, the present head of navigation on the Colorado River. He is 32 years of age, and in person is a good type of the Saxon, being of medium height and heavy build, with light hair and blue eyes. He is a man of average intelligence, simple and unassuming in his manner and address, and without any of the swagger or bravado peculiar to the majority of frontier men. Like thousands of our young men, well enough off at home, he grew weary of the slow but certain methods of earning his bread by regular employment at a stated salary. He had heard of men leaping into wealth at a single bound in the western gold fields, and for years he yearned to go to the land where fortune was so lavish of her favors. Accordingly, he readily consented to be one of a party from his neighborhood which, in the spring of 1867, started for the plains and the gold fields beyond. When they left Fort Dodge, on the Arkansas River, April 13, 1867, the party consisted of four men, of whom Capt. Baker, an old miner and an ex-officer of the Confederate Army, was the acknowledged leader. The destination of this little party was the San Juan Valley, west of the Rocky Mountains, about the gold fields of which prospectors spoke in the most extravagant terms, stating that they were deterred from working the rich placers of the San Juan only by fear of the Indians.

Baker and his companions reached Colorado City, at the foot of Pikes Peak, in safety. This place was and still is the depot for supplying the miners who work the diggings scattered through the South Park and is the more important from being situated at the entrance to the Ute Pass, through which there is a wagon road crossing the Rocky Mountains and descending to the plateau beyond. The people of Colorado City tried to dissuade Baker from what they considered a rash project, but he was determined to carry out his original plan. These representations, however, affected one of the party so much that he left; but the others, Capt. Baker, James White, and Henry Stroll, completed their outfit for the prospecting tour.

The journey was undertaken on foot, with two pack mules to carry the provisions, mining tools, and the blankets they considered necessary for the expedition. On the 25th of May they left Colorado City and, crossing the Rocky Mountains through the Ute Pass, entered South Park, being still on the Atlantic slope of the continent. After traveling 90 miles across the park they reached the Upper Arkansas, near the Twin Lakes. They then crossed the Snowy Range, or Sierra Madre, and descended toward the west. Turning southerly they passed around the headwaters of the Rio Grande del Norte, and after a journey of 400 miles from Colorado City they reached the Animas Branch of the San Juan River, which flows into the Great Colorado from the east.

They were now in the land where their hopes centered, and to reach which they had crossed plains and mountains and forded rapid streams, leaving the nearest abodes of the white man hundreds of miles to the east. Their work of prospecting for gold began in the Animas, and though they were partially successful, the result did not by any means answer their expectations. They therefore moved still farther to the west, crossing the Dolores Branch of Grand River to the Mancos Branch of the San Juan. Following the Mancos to its mouth, they crossed to the left bank of the San Juan and began their search in the sands. There was gold there, but not in the quantity they expected; so they gradually moved west along the beautiful valley for 200 miles, when they found the San Juan disappeared between the lofty walls of a deep and gloomy canyon. To avoid this they again forded the river to the right bank and struck across rough, timbered country, directing their course toward the great Colorado. Having traveled through this rough country for a distance estimated at 50 miles they reached Grand River, being still above the junction of Green River, the united waters of which two streams form the Colorado proper. At the point where they struck the river the banks were masses of perpendicular rock, down which they could gaze at the coveted water, dashing and foaming like an agitated white band, 200 feet below. Men and animals were now suffering for water, so they pushed up the stream along the uneven edge of the chasm, hoping to find a place where they could descend to the river. After a day spent in clambering over and around the huge rocks that impeded their advance, they came to a side canyon, where a tributary joined the main stream, to which they succeeded in descending with their animals and thus obtained the water of which all stood so much in need.

The night of the 23d of August they encamped at the bottom of the Canyon where they found plenty of fuel and grass in abundance for their animals. So they sat around the camp fire lamenting their failure in the San Juan country, and Stroll began to regret that they had undertaken the expedition. But Baker, who was a brave, sanguine fellow, spoke of placers up the river, about which he had heard, and promised his companions that all their hopes should be realized and that they should return to their homes to enjoy their gains and to laugh at the trials of the trip. So glowingly did he picture the future that his companions even speculated as to how they should spend their princely fortunes when they returned to the "States." Baker sang songs of home and hope, and the others lent their voices to the chorus till far in the night, when, unguarded, they sank to sleep to dream of coming opulence and to rise refreshed for the morrow's journey.

Early next morning they breakfasted and began the ascent of the side canyon up the bank opposite to that by which they had entered it. Baker was in advance, with his rifle slung at his back, gayly springing up the rocks toward the table-land above. Behind him came White and Stroll, with the mules brought up the rear. Nothing disturbed the stillness of the beautiful summer morning but the tramping of the mules and the short, heavy breathing of the climbers. They had ascended about half the distance to the top when, stopping a moment to rest, suddenly the war whoop of a band of savages rang out, sounding as if every rock had a demon's voice. Simultaneously with the first whoop a shower of arrows and bullets was poured into

the little party. With the first fire Baker fell against a rock; but, rallying for a moment, he unslung his rifle and fired at the Indians, who began to show themselves in large numbers, and then, with blood flowing from his mouth, he fell to the ground. White, firing at the Indians as he advanced, and followed by Stroll, hurried to the aid of his wounded leader. Baker with an effort turned to his comrades and in a voice still strong, said: "Back, boys; back; save yourselves; I am dying." To the credit of White and Stroll be it said they faced the savages and fought till the last tremor of the powerful frame told that the gallant Baker was dead. Then slowly they began to retreat, followed by the exultant Indians, who, stopping to strip and mutilate the dead body in their path, gave the white men a chance to secure their animals and retrace their steps into the side canyon beyond the immediate reach of the Indians' arrows.

Here they held a hurried conversation as to the best course they could pursue. To the east for 300 miles stretched an uninhabited country, over which if they attempted escape in that direction the Indians, like bloodhounds, would follow their track. North, south, and west was the Colorado with its tributaries, all flowing at the bottom of deep chasms, across which it would be impossible for men or animals to travel. Their deliberations were necessarily short, and resulted in their deciding to abandon their animals, first securing their arms and a small stock of provisions and the ropes of the mules. Through the side canyon they traveled due west for four hours and emerged at last on a low strip of bottom land on Grand River, above which for 2,000 feet on either bank the cold gray walls rose to block their path, leaving to them but one avenue of escape, the foaming current of the river flowing along the dark channel through unknown dangers.

They found considerable quantities of driftwood along the banks, from which they collected enough to enable them to construct a raft capable of floating themselves, with their arms and provisions. The raft when finished consisted of three sticks of cottonwood about 10 feet in length and 8 inches in diameter, lashed firmly together with the mule ropes. Procuring two stout poles with which to guide the raft and fastening the bag of provisions to the logs, they waited for midnight and the waning moon so as to drift off unnoticed by the Indians. They did not consider that even the sun looked down into that chasm for but one short hour out of the twenty-four, leaving it for the rest of the day to the angry waters and blackening shadows, and that the faint moonlight reaching the bottom of the canyon would hardly serve to reveal the horror of their situation. Midnight came, according to their calculation of the dark, dreary hours, and then, seizing the poles, they untied the rope that held the raft, which, tossed about by the current, rushed through the yawning canyon on the adventurous voyage to an unknown landing. Through the long night they clung to the raft as it dashed against half-concealed rocks or whirled about like a plaything in some eddy, whose white foam was perceptible even in the intense darkness.

They prayed for the daylight, which came at last, and with it a smoother current and less rugged banks, though the canyon walls appeared to have increased in height. Early in the morning (Aug. 25) they found a spot

where they could make a landing, and went ashore. After eating a little of their water-soaked provisions they returned and strengthened their raft by the addition of some light pieces of cedar which had been lodged in clefts of the rock by recent floods. White estimates the width of the river where they landed at 200 yards and the current at 3 miles per hour. After a short stay at this place they again embarked, and during the rest of the day they had no small difficulty in avoiding the rocks and whirlpools that met them at every bend of the river.

In the afternoon, and after having floated over a distance estimated at 30 miles from the point of starting, they reached the mouth of Green River, or, rather, where the Green and the Grand unite to form the Colorado proper. Here the canyons of both streams combined into one of but little greater width, but far surpassing either in the height and grandeur of its walls. At the junction the walls were estimated at 4,000 feet in height, but detached pinnacles rose 1,000 feet higher from amidst huge masses of detached rock confusedly piled, like grand monuments, to commemorate this meeting of the waters. The fugitives felt the sublimity of the scene, and in contemplating its stupendous and unearthly grandeur they forgot for the time their own sorrows.

The night of the day upon which they entered the Great Canyon, and, indeed, upon nearly all the subsequent nights of the voyage, the raft was fastened to a loose rock or hauled up on some narrow strip of beach, where they rested until daylight next morning.

As they floated down the Canyon the gray sandstone walls increased in height, the lower section being smooth from the action of floods and the rugged perpendicular walls rising toward the far-off sky, which seemed to rest on the glistening summits. Here and there a stunted cedar clung to the cliffside 2,000 feet overhead, where far beyond which the narrow blue streak of sky was perceptible. No living thing was in sight, for even the wing of bird which could pass the chasms above never fanned the dark air in those subterranean depths—naught to gaze on but their own pale faces and the cold, gray walls that hemmed them in and mocked their escape. Here and there the raft shot past side canyons, black and forbidding, like cells set in the walls of a mighty prison. Baker had informed his comrades as to the geography of the country, and while floating down they remembered that Callville was at the mouth of the Canyon, which could not be far off—"such wonderful walls could not continue much farther." Then hope came with the prospect of deliverance from their frightful position. A few days would take them to Callville. Their provisions could be made to last five days. So these two men, thus shut in from the world—buried, as it were, in the very bowels of the earth, in the midst of great unknown deserts, began to console themselves and even to jest at their situation.

Forty miles below their entrance into the Great Canyon they reached the mouth of the San Juan River. They attempted to enter it, but its swift current cast them back. The perpendicular walls, high as those of the Colorado, with the water flowing from bank to bank, forbade their abandoning their raft to attempt to escape in that direction. So they floated away. At every bend of the river it seemed as if they were de-

scending deeper into the earth; the walls came closer together above them, thickening the black shadows and redoubling the echoes that went up from the foaming waters.

Four days had elapsed since they embarked on the frail raft; it was now August 28. So far they had been constantly wet, but the water was comparatively warm and the current more regular than they could have expected. Stroll had taken upon himself to steer the raft, and, against the advice of White, he often set one end of the pole against the bank or some opposing rock and then leaned with the other end against his shoulder to push the raft away. As yet they had seen no natural bridge spanning the chasm, nor had fall or cataract prevented their safe advance. But about 3 o'clock on the afternoon of the 28th they heard the deep roar of a waterfall in front. They felt the raft agitated, then whirled along with frightful rapidity toward a wall that seemed to bar all further progress. As they approached the cliff the river made a sharp bend, around which the raft swept, disclosing to them in a long vista the water lashed into foam as it poured through a narrow, precipitous gorge caused by huge masses of rock detached from the main wall. There was no time to think. The logs strained as if they would break their fastenings. The waves dashed around the men, and the raft was buried in the seething waters. White clung to the logs with the grip of death. His comrade stood up for an instant with the pole in his hands as if to guide the raft from the rocks against which it was plunging; but he had scarcely straightened himself before the raft seemed to leap down a chasm, and amid horrible sounds White heard a shriek that thrilled him. Turning his head, he saw through the mist and spray the form of his comrade tossed for an instant on the water, then sinking out of sight in the whirlpool.

White still clung to the logs, and it was only when the raft seemed to be floating smoothly and the sound of the rapids was behind that he dared to look up; then it was to find himself alone, the provisions lost, and the shadows of the black Canyon warning him of the approaching night. A feeling of despair seized him, and, clasping his hands, he prayed for the death he was fleeing from. He was made cognizant of more immediate danger by the shaking of his raft—the logs were separating. Then he worked and succeeded in effecting a landing near some flat rocks, where he made his raft fast for the night. After this he sat down to spend the long, gloomy hours in contemplating the horror of his situation and the small chance of completing the adventurous voyage he had undertaken. He blamed himself for not having fought the Indians till he had fallen by the side of Baker. He might have escaped through the San Juan Valley and the mountains beyond to the settlements. Had he done so he would have returned to his home and rested satisfied with his experience as a prospector. But when he thought of home it called up the strongest inducements for life and he resolved "to die hard and like a man."

Gradually the dawn, long perceptible in the upper world, began to creep down into the depths of the chasm and gave him light to strengthen his raft and launch it again on the treacherous river. As he floated down he remembered the sad fate of Stroll, and took the precaution to lash himself firmly to the raft so as to preclude the possibility of his being separated

from it. This forethought subsequently saved his life. His course through the canyon was now down a succession of rapids blocked up by masses of rock over which his frail raft thumped and whirled, at times wholly submerged by the foaming water.

At one of these rapids, in the distance of about a hundred yards, he thinks the river must have fallen between 30 and 40 feet. In going over this place the logs composing the raft became separated at the upper end, spreading out like a fan, and White was thrown into the water. He struggled to the side by means of his rope, and with a desperate strength held the logs together till they floated into calmer water, when he succeeded in refastening them.

White's trials were not yet at an end, and in relating the following incident he showed the only sign of emotion exhibited during his long narrative.

About 4 miles below where the raft separated he reached the mouth of a large stream, which he has since learned was the Colorado Chiquito. The canyon through which it enters the main river is very much like that of the San Juan, and though it does not discharge so large a body of water the current is much more rapid and sweeps across the great Colorado, causing, in a deep indentation in the opposite bank, a large and dangerous whirlpool. White saw this and tried to avoid it, but he was too weak for the task. His raft, borne by the current of the Colorado proper, rushed down with such force that, aided by his paddle, he hoped to pass the waters that appeared to sweep at right angles across his course from the Chiquito. When he reached the mouth of the latter stream the raft suddenly stopped, and, swinging around for an instant as if balanced on a point, it yielded to the current of the Chiquito and was swept into the whirlpool.

White felt now that all further exertions was useless, and, dropping his paddle, he clasped his hands and fell upon the raft. He heard the gurgling waters around him, and every moment he felt that he must be plunged into the boiling vortex. He waited, he thinks, for some minutes, when, feeling a strange, swimming sensation, he looked up to find that he was circling around the whirlpool, sometimes close to the vortex and again thrown back by some invisible cause to the outer edge, only to whirl again to the center.

Thus borne by the circling waters, he looked up, up, up through the mighty chasm that seemed bending over him as if about to fall in. He saw in the blue belt of sky that hung above him like an ethereal river the red tinged clouds floating, and he knew the sun was setting in the upper world. Still around the whirlpool the raft swung like a circular pendulum, measuring the long moments before expected death. He felt a dizzy sensation and thinks he must have fainted; he knows he was unconscious for a time, for, when again he looked up, the walls, whose ragged summits towered 3,000 feet above him, the red clouds had changed to black, and the heavy shadows of night had crept down the canyon.

Then, for the first time, he remembered that there was a Strength greater than that of man, a Power that "holds the ocean in the hollow of His hand." "I fell on my knees," he said, "and as the raft swept around in the current I asked God to aid me. I spoke as if from my very soul and said, 'O God, if there is a way out of this fearful place guide me to it.'"

Here White's voice became husky as he narrated the circumstances, and his somewhat heavy features quivered as he related that he presently felt a different movement in the raft, and, turning to look at the whirlpool, saw it was some distance behind, and that he was floating down the smoothest current he had yet seen in the Canyon.

Below the mouth of the Colorado Chiquito the current was very slow, and White felt what he subsequently found to be the case, viz, that the rapids were past, though he was not equally fortunate in guessing his proximity to Callville.

The course of the river below this he describes as exceedingly "crooked, with short, sharp turns," the view on every side being shut in by flat precipitous walls of "white sand rock." These walls presented smooth perpendicular surfaces as far as the high-water level, which left a distinct mark about 40 feet above the stage of the month of August.

The highest part of the Canyon, White thinks, is between the San Juan and the Colorado Chiquito, where he thinks the wall is more than 5,000 feet in perpendicular height, and at a few points far exceeding this.

Dr. Newberry, the geologist of Lieut. Ives's expedition, thinks that for a long distance the altitude is near 7,000 feet. Correct altitudes, however, can only be ascertained by careful instrumental examination.

The current bore White from the Colorado Chiquito slowly down the main river. One, two, three, four days had slowly passed since he tasted food, and still the current bore him through the towering walls of the canyon. Hunger maddened him. His thoughts were of food, food, food; and his sleeping moments were filled with Tantalus-like dreams. Once he raised his arm to open some vein and draw nutriment from his own blood, but its shriveled, blistered condition frightened him. For hours as he floated down he would sit looking into the water, yet lacking the courage to make the contemplated plunge that would rid him of all earthly pain.

The morning of the fifth day since he had tasted food he saw a flat strip of shore with bushes growing on it, and by a superhuman effort he succeeded in reaching it with his raft. He devoured the few green pods and the leaves of the bushes, but they only increased his desire for more. The journey was resumed, and he remembers two days more of unbroken canyon wall.

On the afternoon of the eleventh day of this extraordinary voyage he was roused by hearing the sound of human voices, and, looking toward the shore, he saw men beckoning to him. A momentary strength came to his arms, and, grasping the paddle, he urged the raft to the bank. On reaching it he found himself surrounded by a band of Yampais Indians, who for many years have lived on a low strip of alluvial land along the bottom of the Canyon, the trail to which from the summit of the plateau is known only to themselves.

One of the Indians made fast the raft while another seized White roughly and dragged him up the bank. He could not remonstrate; his tongue refused to give a sound, so he pointed to his mouth and made signs for food. The fiend that pulled him up the bank tore from his blistered shoulders the shreds that had once been a shirt, and was proceeding to strip him entirely when one of the Indians interfered, and, to the credit of the savage be it said, pushed back his companion. He gave White some meat and roasted

mesquite beans to eat, which the famished man devoured, and after a little rest he made signs that he wanted to go to the nearest dwellings of the white men. The Indians told him he could reach them in "two suns" on his raft.

Early the next morning he tottered to the bank and pushed into the current. Three more long days of hope and dread passed slowly by, and still no signs of friends. Reason tottered and White stretched himself on the raft, all his energies exhausted; life and death were to him alike indifferent.

Late in the evening of the third day after leaving the Indians, and 14 days from the time of starting on his perilous voyage, White again heard voices, accompanied by the rapid dash of oars. He understood the words, but could make no reply. He felt a strong arm thrown around him, and he was lifted into a boat, to see manly bearded faces looking down on him with pity.

In short, Callville was reached at last.

The people of this Mormon settlement had warm, generous hearts, and, like good Samaritans, lavishly bestowed every care on the unfortunate man so miraculously thrown into their midst from the bowels of the unknown Canyon. His constitution, naturally strong, soon recovered from the terrible shock, and he told his new friends his wonderful story, the first recital of which led them to doubt his sanity.

ADDITIONS TO PARRY AND CALHOUN.

A number of paragraphs are included in Maj. Calhoun's contribution to Dr. Bell's book which do not appear in either of the above articles. One of these additions follows the account of White's experience in the whirlpool, and is as follows:

This statement is the only information White volunteered; all the rest was obtained by close questioning. One of his friends who was present during the examination smiled when White repeated his prayer. He noticed it, and said with some feeling: "It's true, Bob, and I'm sure God took me out."

In another added paragraph reference is made to testimony in support of White's own statement, which may be the "collateral evidence" referred to in Parry's article. This paragraph is most important to White's case. It follows:

Charles McAllister, at present an assistant in the store of Mr. Todd at Fort Mojave, was one of the three men who went in the boat to White's assistance. He said that he never saw so wretched a looking man as White when he first met him; his feet, legs, and body were literally flayed from exposure to drenching from water and the scorching rays of the sun. His reason was almost gone, his form stooped, and his eyes were so hollow and dreary that he looked like an old and imbecile man.

Mr. W. H. Hardy, of Hardyville, near Fort Mojave, brought White thither that he might see and talk with him. Mr. Hardy corroborates the statements of McAllister, and from his knowledge of the country above Callville says it would be impossible for White to have come for any distance by the river without traveling through the whole length of the Great Canyon of the Colorado. Mr. Ballard, a mail contractor, in whose employment White is now earning money to take him home, says he believes him to be a sober, truthful man; but apart from White's statement Ballard is confident he must have traversed, and in the manner stated, that hitherto unexplored chasm which completes the missing link between the upper and lower courses of the Great Colorado.

The reader is requested to bear in mind especially the last of these quotations, as it is believed to have an important bearing on the issue and will be referred to later.

ROCKY MOUNTAIN HERALD STORY.

The Herald's account of the White voyage appears in the issue of that paper for January 8, 1869, about five months before Maj. Powell began his exploration. It was dated from an obscure place in New Mexico, and the writer appears to have been under the impression that Powell already had started upon his work. The name of the author has not been preserved, but the account differs in so many respects from the other narratives that it has been decided to include a large portion of it because it is calculated to throw additional light on the subject. It bears evidence of having been compiled from original sources.

Referring to the prospective Powell expedition, the writer says:

> I trust Mr. Powell's expedition is progressing favorably and that he will be able to furnish a satisfactory report to an expectant public, for I can assure you that should he be entirely successful he will accomplish a work the magnitude of which—leaving its danger entirely out of consideration—will far surpass that of any former exploration on the American Continent.

Speaking of White's journey of two years previous our anonymous Herald historian said the canyon never had been traversed before, and in this connection added: "None of the Indian tribes on the river have either remembrance or tradition that the voyage had ever previously been made."

Taking up the White adventure after White and Stroll had entered upon their turbulent float down the river, the Herald tells us that the two men had little knowledge of the section of country they were in, and says that although they had heard of the Grand Canyon they had no definite idea either of its locality or its extent. There was comparatively little rough water at first, and all went well for a time. They were able to land at night, but they had no means of making a fire, and therefore went hungry to sleep if not to bed. The second day the water was smooth until noon. Then they encountered rapids, "swift and rocky," in descending which they lost their carbines and their little store of flour—their only provisions—while their revolvers were left too wet for use. Below these

rapids they found an island on which to spend the second night, and there they assuaged their hunger by eating screw beans.

The article proceeds:

Having passed the night on the island, our voyagers set out in the morning with their raft in better condition than before and with renewed hope of soon getting to the end of their journey or at least of reaching a port. From the size and depth of the stream they argued that Callville must be near. After they had floated for a few hours, however, the sound of falling water was borne to their ears, becoming more and more distinct as they proceeded until they became satisfied that they were approaching a cataract. Meanwhile they had gradually and almost unconsciously drifted into a canyon with high precipitous walls which confined the river within a narrower channel than that in which it had coursed above. A hasty reconnoissance convinced them that they could not escape from the gorge by climbing the walls, while the current was now so swift that it was useless to think of turning back. White took the precaution to lash himself to the raft, but Stroll refused to take this precaution.

"I am an old Mississippi boatman and can stick to the raft wherever she goes," Stroll said. "It isn't much of a fall, and there is no danger in running it. We had better tie our revolvers, however; they are a little wet now, and a little more won't hurt them."

On swept the raft with rapidly increasing speed; the voyagers silent, with stern, compressed lips and tense nerves boldly facing the peril which they were now powerless to avoid. One moment they were balanced on the brink of the cataract, the next they were plunged sheer 12 feet into the seething waters beneath.

Emerging at length, White found himself alone upon the raft, which an eddy had caught in the rim of its vortex and was whirling around. White had been seriously disturbed by the shock of the fall, but when he recovered his self-possession he looked around for his companion and quickly descried him in mid-channel some 20 feet distant buffeting the current with feeble and uncertain stroke. Shouting to him some words of encouragement and hastily freeing himself from his lashings, White prepared to make such efforts as he could to assist and save his comrade. But almost immediately, poor Stroll, half strangled, doubtless, and bewildered by his frightful plunge over the cataract, without a cry or a groan, sank and rose no more.

The fate of either of his comrades would have been a merciful one to White in comparison to what befell him. Poor fellow, his troubles had hardly yet begun while theirs were ended, at least for this world. The death of Stroll fell upon him with crushing weight. Sinking upon the raft, which floated slowly around with the eddy until it stranded upon the head of a small island, he abandoned himself for a brief period to all the misery of despair. But his rugged and energetic nature would not long succumb to such a feeling. Recovering himself, he began to survey as best he might his situation.

White no longer doubted that he was in the Grand Canyon. He could neither scale the walls nor return. There was nothing left but to proceed down the stream, and in that direction there seemed not the shadow of a

chance that he might succeed and live. He only dared to hope that by carefully tying himself to the raft his body might float through with some portion of it and be identified by means of a pocket memorandum book which he endeavored to secure to his person, so that his fate might become known to his relatives and friends.

Having considered these things with the desperate calmness of a man who regards himself as doomed to speedy and inevitable death, he nevertheless omitted nothing which might tend to the preservation of his life. First, he overhauled his raft and tightened its lashings. Next he stripped the mesquite bushes which grew on the bank of their scanty crop, with which he partially appeased his hunger. Then, with a fervent appeal to the great Father of all, he launched his raft and floated away to encounter unknown dangers and terrors.

It is hardly necessary to say that White kept no "log" of his voyage, and it would therefore be impossible to give from this point the details of his daily progress. Never before did mortal man perform such a journey. For nearly 500 miles he floated over a succession of cascades and cataracts varying from 4 to 20 feet, with patches of smooth water between. Frequently on plunging over a fall the raft was overturned, and it was with much difficulty that he saved himself from drowning. Once he was so long under water that he became insensible; but on that occasion the raft providentially emerged right side up, and when he revived he found himself floating along as if nothing had happened.

Below each fall there was an island formed by the land thrown up by the eddying waters, affording him an opportunity of hauling up his raft for repairs—a very necessary operation, as the ropes by which it was bound were frequently cut upon the edges of the rocks at the head of the falls—and as a place of rest during the nights. At first the mesquite growing upon the islands supplied him with a scanty allowance of food, but after the sixth day he found the islands barren. A rawhide knife scabbard then afforded him some slight sustenance and a good deal of chewing for a couple of days, after which he was without food until he passed the Rio Virgen. One day he saw some lizards, but was too feeble to catch them. To add to his misery, he was stripped by the rocks and water of his hat, pants, drawers, boots, and socks; his head, feet, and legs became blistered and raw by the sun's rays.

Day by day and hour by hour he grew weaker by exposure to the heat and because of want of food. And all the time the dark walls of the canyon towered above him nowhere less than a thousand feet, and in some places a mile and a half in height, to the best of his judgment. Anxiously he watched for some avenue of escape, some crevice or fissure in the adamantine walls which confined him, but there was none. The consoling reflection remained that it was perhaps better to be dashed to pieces or perish of simple starvation in the canyon than to scramble out of it and add the torment of thirst to those which he already endured. So he voyaged on, now helplessly broiling in the merciless rays of the sun as he floated calmly and yet swiftly along the expanse of the comparatively smooth water, then tumbling over a cascade or rushing through a rapid at the imminent peril of shipwreck upon the rocks which bumped and thumped his frail craft until its light

timbers rattled; and now shuddering and with bated breath plunging over a fall, for aught he knew, into eternity. Day by day and hour by hour he grew weaker for the want of food, while from sitting in a cramped position and from exposure to the sun, his legs were so stiff and sore as to be almost entirely disabled. Still, with dogged resolution he persevered, improving every moment of daylight, and making, as he believed, at a moderate estimate of 40 or 50 miles every day.

At length, on the evening of September 6 the raft, with our bruised, battered, and starving voyager, more dead than alive, and yet retaining a great deal of the wonderful vitality which thus far had sustained him, still clinging to it, emerged from the canyon. Again the broadening river flowed between low, green banks.

White felt that the worst of the voyage was over. If he could but hold out a day or two longer he would be saved. But though his spirit was undaunted, his physical strength was nearly gone.

Soon after passing the mouth of a considerable stream, the Rio Virgen, he heard voices shouting to him. He could hardly convince himself that the sounds were real, and he gazed in wondering surprise toward the bank. A number of Indians leaped into the water, swam out to him, and pushed the raft ashore. He was roughly treated by the Indians, who tore off his coat tails and seized one of his revolvers. One of the Indians who spoke English told him they were Pah-Utes. They seemed to comprehend the fearful trip White had made and to express some astonishment among themselves that he should have survived it, but his condition excited not the smallest spark of sympathy in their dusky bosoms.

White asked for food, and the Indians agreed to give him a small dog for the remaining pistol. But on securing the weapon, they let the dog escape. He was finally compelled to give them his vest for catching and killing the animal, and even then the Indians appropriated the fore quarters. White ate a hind quarter of the dog raw and without salt for his supper, and then lay down and slept soundly. In the morning he ate the other hind quarter and resumed his voyage to Callville.

It chanced that at this time the barge *Colorado*, of Fort Mojave, in charge of Capt. Wilburn, with a crew of four or five men, was at Callville receiving a cargo of lime and salt. Standing on the bank, the captain saw the strange craft passing by on the other side and hailed it.

"My God, is this Callville?" responded White in feeble tones.

"Yes," replied Capt. Wilburn; "come ashore."

"I'll try to," replied the voyager, "but I don't know whether I can or not."

Fastening his raft about 200 feet below, White, a strange-looking object, made his appearance on the crest of a hill near the landing.

"My God, Capt. Wilburn, that man's a hundred years old," exclaimed one of the crew.

He looked older, for his long hair and flowing beard were white. His eyes were sunken, his cheeks thin and emaciated, his shrunken legs a mass of black and loathsome scabs from his loins to his toes. As he crawled slowly and painfully toward them, the men, with exclamations of astonish-

ment and pity, went to meet and assist him. They brought him to their camp, gave him food, washed and anointed his sores, and clothed him. White became delirious; but toward evening his wandering senses returned, and he was able to give an account of himself.

James Ferry, United States quartermaster at Callville, made the Pah-Utes return White's possessions and took care of him until he recovered.

When I last heard of White he was carrying the mail between Callville and Mojave. At the latter place Gen. W. J. Palmer saw and conversed with him, and from his statements was satisfied that the length of the Grand Canyon is not less than 500 miles, and that its thorough scientific exploration, while not absolutely impossible, will present difficulties which will not soon be surmounted.

CORRECTIONS BY WHITE.

Copies of the Parry, Calhoun, and Herald reports of the voyage were sent to White during the month of November, 1916, and were returned soon afterward by his daughter. While in his possession many alterations were made, which have the effect of bringing the various accounts into closer accord with White's own story. All of the corrections can not be indicated but it is believed that enough of them may be given to avoid injustice, especially if they are read in connection with White's narrative, as they should be.

In a private letter accompanying the returned manuscript Mr. White's daughter says that neither her father not any of the members of the family had ever seen any of the articles before, a fact which will account for their failure to make earlier correction of the errors. It should be stated also that White's own report was written before these accounts were sent to him. The writer takes the liberty of quoting a paragraph from Miss White's letter as calculated to throw light on the general subject, as follows:

> Owing to father's age he does not remember distances nor names very well. He is failing rapidly and his memory is not the best, but it seems to us that he remembers the important events of his journey. In fact he never paid much attention to distances and names at the time of his perilous voyage. And it must be remembered that when he was going through the canyon, all he was thinking of was how to get out, and not of the distances between streams and the names thereof. But while he does not remember the distances, he does remember the whirlpool at the mouth of the Little Colorado River. He is positive about that. He always told us about the whirlpool at the mouth of the Little Colorado.

In these changes, as well as in White's own narrative, the starting point of the water journey is definitely fixed at or below the junction of the Green and the Grand, the head of the Colorado proper, and not, as stated by Parry and Calhoun, on the Grand, 30 miles above the junction. This is the only material correction in the Parry article

The Calhoun story is liberally slashed, the principal changes being as follows:

The reference to desertions at Colorado City is stricken out, and this is in accordance with the fact brought out elsewhere, that the original party of four held together until the headwaters of the Arkansas River were reached. The live stock as given by White consists of four riding horses, four pack horses, and one pack mule, which also corresponds with other information to the effect that the party carried an unusual number of animals. Referring to Calhoun's account of the Indian attack in which Baker lost his life, White eliminates much of the detail, including the statement that the Indians used bows and arrows as well as guns. He says Baker uttered only one sentence after he was shot, saying, "I am killed."

Coming to the voyage down the river, White says that the first raft made by him and Stroll was composed of five instead of three cottonwood logs, as stated by both Calhoun and Parry. He strikes out the statement that there was difficulty in keeping the raft from striking the rocks during the first day out; says that it was the mouth of the San Juan and not the mouth of the Green that was reached after the first float; eliminates the clauses in the whirlpool narrative which represent him as dropping his paddle, falling on his knees, clasping his hands, and losing consciousness.

The portions of the Herald article censored out of existence are the following:

Much of the detail regarding the plunge which resulted in the drowning of Stroll.

The statement that one of his submergences resulted in unconsciousness.

The version of his rescue at Callville, including the dramatic conversation.

White says he was pulled out of the river at Callville. He also says that instead of having the second of the hind quarters of the Indian dog for his breakfast the morning following his landing at the Indian village he dropped the precious morsel in the river and lost it.

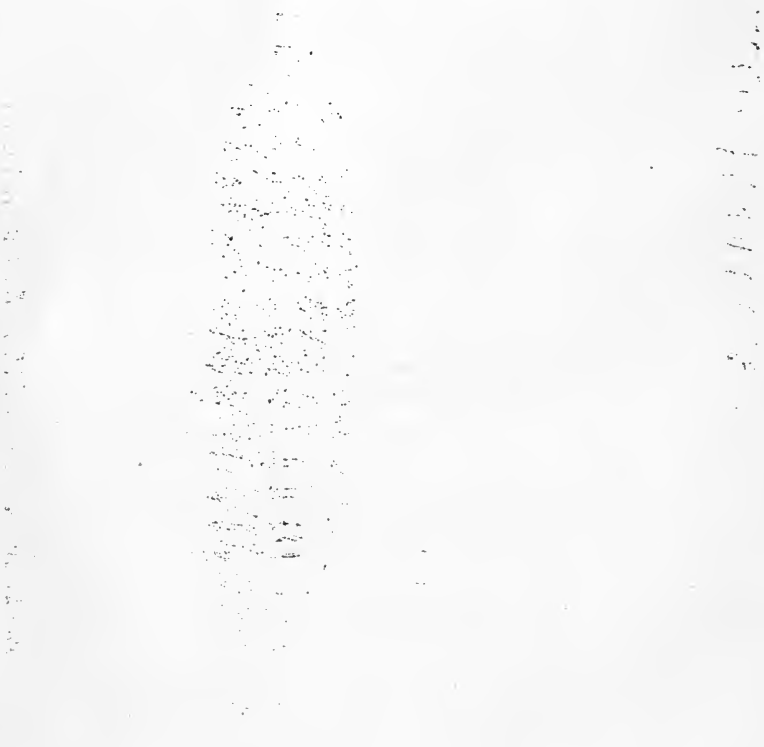
The reader will not fail to observe that even after White's corrections there are discrepancies in the accounts, but to the writer they do not present insuperable objections to the acceptance of the story in its essentials. The impartial investigator will surely make due allowance for the variety of concept on the part of the various reporters of the event. The fact that White himself

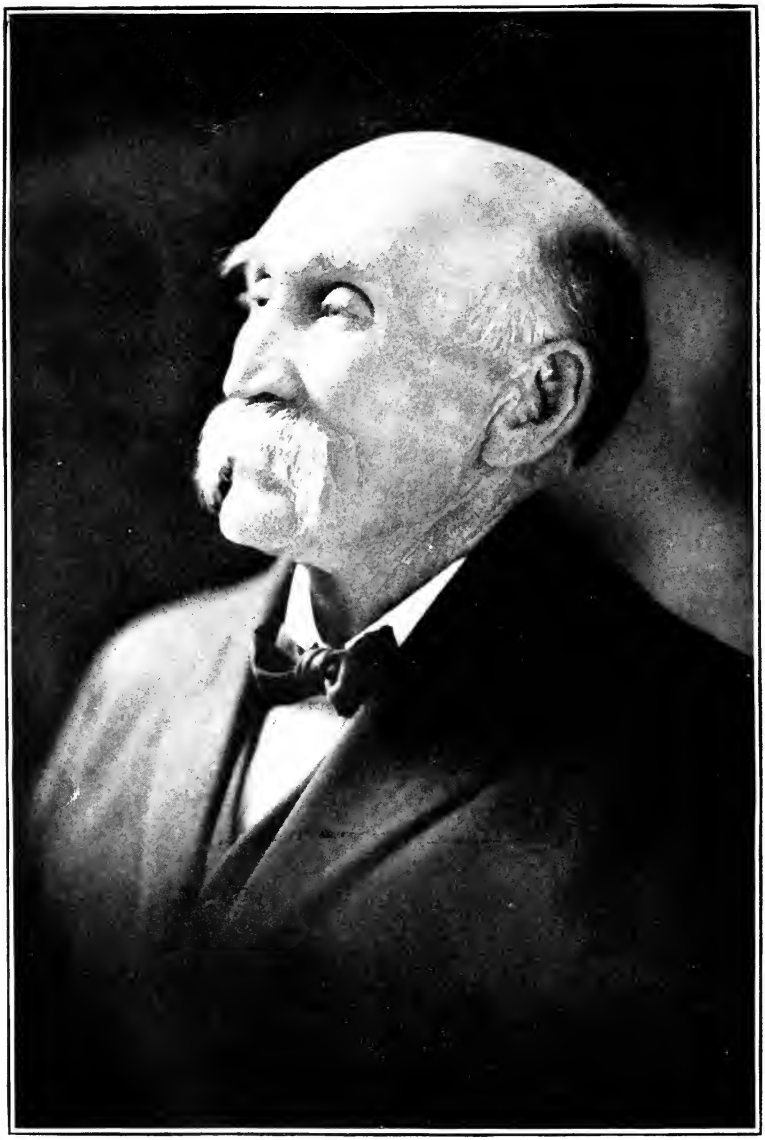
wrote none of these accounts, but instead related the circumstances to others, each of whom might naturally get a different view from that conceived by his fellows, must be taken into account in reaching a conclusion. All know how difficult it is to obtain the same version of any given occurrence from two or more actual witnesses. How much greater the obstacles in the way of getting identical accounts of a proceeding which has not been witnessed by the narrators—of which they only had heard at second hand. White is a man of few words, and it is not probable that in recounting his experiences to interviewers he elaborated to any great extent upon the character of the country he passed through, nor even upon his own thrilling trials. Many details might easily be left untouched.

One of the principal points of attack is the account of White's escape from a whirlpool said to have been located at the mouth of the Little Colorado River. White adheres to his version, and Maj. Calhoun and Dr. Parry both refer to it, the major, with true journalistic instinct, enlarging upon it as a dramatic episode. Having heard it mentioned, what real reporter could have failed to "play it up"?

A genuine puzzle is found in the differing statements regarding interviews with White. Dr. Bell tells us that of the party only Dr. Parry saw the man, and he states explicitly that Maj. Calhoun did not see him. Dr. Parry claims no such exclusiveness for his interview, but he fails to mention the presence of others when it took place. He does say, however, that Mr. White was brought to Mojave "that *we* might see and talk to him"; "we"—not "I." Maj. Calhoun says that he and Dr. Bell were with Parry at the time. The Rocky Mountain Herald writer gives the name of Gen. Palmer as that of the only person who heard White's story from his own lips. White himself mentions only Gen. Palmer. It is known that Dr. Bell was not at the meeting place, and it would seem probable that Gen. Palmer, Dr. Parry, and Maj. Calhoun, all of whom were together at Fort Mojave, should have met White, either collectively or singly. In writing of the occurrence subsequently it would have been possible for Calhoun to make the mistake of using Bell's name instead of Palmer's, and if Calhoun saw the man in Dr. Bell's absence, as he did if he saw him at all, the doctor might have been led into the error of asserting Calhoun's absence. Such things have happened.

Comparatively little attention need be given to the circumstance that some of the accounts locate the meeting at Fort Mojave, while others place it at Hardyville. The two places were near each other on the Colorado, and it may well be that there were meetings at both. This possibility may explain the variations in relation to the interviews. It is known that the Palmer party—Palmer, Parry, and Calhoun—spent most of Christmas week of 1867 in this vicinity, and that they visited both points.





JAMES WHITE.

In his 80th year.

WHITE'S OWN STORY.

After remaining for a few months on the lower Colorado and after revisiting his old home in Wisconsin, Mr. White returned to Colorado and ultimately located in that State. There he has lived ever since 1878, and there in 1916 he prepared this account of his voyage. He has become an old man, and necessarily the passage of time has had the effect of clouding his memory as to details; but the account is still valuable, because, so far as known, it is the only printed statement signed by him, with the exception of a brief account which appeared in a Wisconsin paper soon after the conclusion of the voyage.

Mr. White writes:

I was born in Rome, N. Y., November 19, 1837, but was reared in Kenosha, Wis. At the age of 23 I left for Denver, Colo., later drifting to California, and there enlisted in the Army at Camp Union, Sacramento, in Company H, California Infantry, Gen. Carleton (some doubt as to the correct spelling of his name) being general of the regiment, and the company being under Capt. Stratton. I served in the Army three and one-half years, being honorably discharged at Franklin, Tex., on May 31, 1865. From there I went to Santa Fe, N. Mex., and then to Denver. In the fall of that year I went from Denver to Atchison, Kans., with Capt. Turnley (some doubt as to the correct spelling of this name) and his family, and from Atchison I went to Fort Dodge, Kans., where I drove stage for Barlow & Sanderson, and there I got acquainted with Capt. Baker, also George Stroll and Goodfellow. This was in the spring of 1867, and the circumstances under which I met them were as follows: Capt. Baker was a trapper at the time I met him there, and the Indians had stolen his horses, and he asked me to go with him to get his horses, and I went with him, George Stroll, and Goodfellow. We could not get his horses, so we took 14 head of horses from the Indians. The Indians followed us all night and all day, and we crossed the river at a place called Cimarron in Kansas, and we traveled across the prairies to Colorado City, Colo.

Before going further with my story I would like to relate here what I know of Capt. Baker's history. He had been in the San Juan country in 1860 and was driven out by the Indians. He showed me lumber that he had sawed by hand to make sluice boxes. I was only with him about three months, and he spoke very little of his personal affairs. When we were together in Colorado City he met several of his former friends that he had been prospecting with in the early sixties. I can not remember their names.

The only thing I know is that he mentioned coming from St. Louis, but never spoke of himself as being a soldier, and I thought "Captain" was just a nickname for him. He was a man that spoke little of his past or personal affairs, but I remember of him keeping a memorandum book of his travels from the time we left Colorado City.

After reaching Colorado City, Colo., Baker proposed a prospecting trip to the San Juan. There we got our outfit, and that spring the four of us started on the trip and went over to the Rio Grande. At the Rio Grande, Goodfellow was shot in the foot, and we left him at a farmhouse, and the three of us proceeded on our trip. From the Rio Grande we went over to the head of it, down on the Animas, up the Eureka Gulch. There we prospected one month. We dug a ditch 150 feet long and 15 feet deep. We did not find anything, so we went down the Animas about 5 miles, crossed over into the Mancos. At the head of the Mancos we saw a large lookout house about 100 feet high, which was built out of cobblesotnes. Farther down the canyon we saw houses built of cobblestones, and also noticed small houses about 2 feet square that were built up about 50 feet on the side of the canyon and seemed to be houses of some kind of a bird that was worshiped. We followed the Mancos down until we struck the San Juan. Then we followed the San Juan down as far as we could and then swam our horses across and started over to the Grand River, but before we got to the Grand River we struck a canyon; so we went down that canyon and camped there three days. We could not get out of the canyon on the opposite side; so we had to go out of the canyon the same way we went down. There we were attacked by Indians and Baker was killed. We did not know there were any Indians about until Baker was shot. Baker, falling to the ground, said, "I am killed." The Indians were hiding behind the rocks overlooking the canyon. Baker expired shortly after the fatal shot, and, much to our grief, we had to leave his remains, as the Indians were close upon us; and George Stroll and I had to make our escape as soon as possible, going back down in the canyon. We left our horses in the brush and we took our overcoats, lariats, guns, ammunition, and 1 quart of flour, and I also had a knife scabbard made out of rawhide, and I also had a knife, and we started afoot down the canyon.

We traveled all day until about 5 o'clock, when we struck the head of the Grand Canyon of the Colorado River. There we picked up some logs and built us a raft. We had 200 feet of rope when we first built the raft, which was about 6 feet wide and 8 feet long, just big enough to hold us up. The logs were securely tied together with the ropes. We got on our raft at night, working it with a pole. We traveled all night, and the next day, at 10 o'clock, we passed the mouth of the San Juan River. We had smooth floating for three days. The third day, about 5 o'clock, we went over a rapid, and George was washed off, but I caught hold of him and got him on the raft again.

From the time we started the walls of the Canyon were from two to three thousand feet high, as far as I could estimate at the time, and some days we could not see the sun for an hour, possibly two hours. Each day we would mix a little of the flour in a cup and drink it. The third day the flour got wet, so we scraped it off of the sack and ate it. That was the last of the flour and all we had to eat.

On the fourth day we rebuilt our raft, finding cedar logs along the bank from 12 to 14 feet long and about 8 or 10 inches through. We made it larger than the first one. The second raft was about 8 feet wide and 12 feet long. We started down the river again, and about 8 o'clock in the morning (as to our time, we were going by the sun) we got into a whirlpool and George was washed off. I hollered to him to swim ashore, but he went down and I never saw him again.

After George was drowned I removed my trousers, tying them to the raft, so I would be able to swim in case I was washed off. I then tied a long rope to my waist, which was fastened to the raft, and I kept the rope around my waist until the twelfth day.

About noon I passed the mouth of the Little Colorado River, where the water came into the canyon as red as could be, and just below that I struck a large whirlpool, and I was in the whirlpool about two hours or more before I got out.

I floated on all that day, going over several rapids, and when night came I tied my raft to the rocks and climbed upon the rocks of the walls of the canyon to rest. I had nothing to eat on the fourth day.

On the fifth day I started down the river again, going over four or five rapids, and when night came I rested on the walls again and still nothing to eat.

On the sixth day I started down the river again, and I came to a little island in the middle of the river. There was a bush of mesquite beans on this island, and I got a handful of these beans and ate them. When night came I rested on the walls again.

The seventh, eighth, ninth, and tenth days were uneventful, but still going continuously over rapids, and still nothing to eat. So I cut my knife scabbard into small pieces and swallowed them. During the entire trip I saw no fish or game of any kind.

On the eleventh day I went over the big rapid. I saw it before I came to it, and laid down on my stomach and hung to the raft and let the raft go over the rapid, and after getting about 200 yards below the rapid I stopped and looked at a stream of water about as large as my body that was running through the solid rocks of the canyon about 75 feet above my head, and the clinging moss to the rocks made a beautiful sight. The beauty of it can not be described.

On the twelfth day my raft got on some rocks and I could not get it off; so I waded onto a small island in the middle of the river. On this island there was an immense tree that had been lodged there. The sun was so hot I could not work, so I dug the earth out from under this tree and laid under it until the sun disappeared behind the cliffs. This was about noon. After resting there I got up and found five sticks about as big as my leg and took them down to the edge of the island below my raft. I then untied the rope from my raft and took the loose rope I had around my waist and tied these sticks together. I slept on this island all night.

On the thirteenth day I started out again on my newly made raft (leaving the old raft on the rocks), thinking it was daylight; but it was moonlight, and I continued down the river until daylight. While floating in the

moonlight I saw a pole sticking up between two large rocks, which I afterwards learned the Government had placed there some years before as the end of its journey.

When daylight came I heard some one talking, and I hollered "hello," and they hollered "hello" back. I discovered then that they were Indians. Some of them came out to the raft and pulled me ashore. There were a lot on the bank, and I asked them if they were friendly, and they said they were, and I then asked them to give me something to eat, when they gave me a piece of mesquite bread. While I was talking to some of the Indians the others stole my half-ax and one of my revolvers, which were roped to the raft. They also tore my coat trying to take it from me.

After eating the bread I got on my raft and floated until about 3 o'clock in the afternoon, when I came upon another band of Indians, and I went ashore and went into their camp. They did not have anything for me to eat, so I traded my other revolver and vest for a dog. They skinned the dog and gave me the two hind quarters and I ate one for supper, roasting it on the coals. The Indians being afraid of me, drove me out of their camp, and I rested on the bank of the river that night, and the next morning, the fourteenth day after I got on my raft, I started to eat the other quarter, but I dropped it in the water. I floated that day until 3 o'clock and landed at Callville, and a man came out and pulled me ashore.

Jim Ferry or Perry (not sure as to the first letter of this name) was a mail agent at that place. He was also a correspondent for some newspaper in San Francisco. He took me in and fed me. When I landed all the clothing I had on my body was a coat and a shirt, and my flesh was all lacerated on my legs from my terrible experience and of getting on and off the raft and climbing on the rocks. My beard and hair were long and faded from the sun. I was so pale that even the Indians were afraid of me. I was nothing but skin and bones and so weak that I could hardly walk. Jim Ferry or Perry cared for me for three days, and the soldiers around there gave me clothing enough to cover my body.

I was at Callville about four weeks, and a boat was there getting a load of salt, and I got on that boat and went to Fort Mojave. There I met Gen. Palmer and told him my story.

From Fort Mojave I went to Callville again and there worked for Jim Ferry (or Perry), carrying the mail for three months between Callville and Fort Mojave. Then he sold out to Jim Hinton, and I carried mail for him for a month. He sold out, and we each bought a horse and pack animal and we started from Callville, going to Salt Lake in the spring of 1868. From Salt Lake City we went to Bear River. There we took a contract of getting out ties. Then I hired out as wagon boss. Then I quit and run a saloon. I sold out and then went to Omaha, Nebr. From there I went to Chicago, and from there to Kenosha, Wis., to visit my old home. That was in 1869. From Kenosha I went to Chicago, and from there to Leavenworth, Kans., and later to Kansas City, Kans. From there I went to Junction City, Kans., and then to Goose Creek. I drove stage in and out of Goose Creek for Barlow and Sanderson, for whom I had worked in Fort Dodge. I was transferred from Goose Creek to Fort Lyon or Five Mile Point. From there I

went to Bent Canyon, Colo., and kept home station. From there I went to Las Animas, Colo., and minor places, later drifting to Trinidad, where I have lived since 1878.

These are the plain facts. There are many minor points that could be mentioned, but did not think it would be necessary to mention here. I have never been through that country since my experience, but have had a great desire to go over the same country again, but have never been financially able to take the trip.

(Signed) JAMES WHITE.

CORROBORATIVE TESTIMONY.

In addition to the statement by White and the accounts by men who, avowedly or probably, had talked with him concerning the voyage soon after its conclusion, there were many publications concerning the trip; but most, if not all, of these were based upon second-hand information, and it has not been thought worth while to include them or to refer to them except as corroborative proof. Many writers of the time found the White narrative worthy of attention, even though the story was not received directly from him. Not only did the newspapers print accounts of the voyage, but it was exploited in writings of more permanent value, showing that at that time the narrative was regarded as authentic. Among those who took cognizance of it was Bancroft, the historian of the western coast, who includes the White story in his history of Arizona. Samuel Bowles, the famous editor of the Springfield Republican, and Albert D. Richardson, both of them early and frequent visitors to the West, accept the record without question, and both make mention of White's adventure in books written by themselves. It would be worth while to quote from all these notable publicists, but an extract from Mr. Richardson must suffice as a sample of the thought and expression of all. He went to the extent of giving the full story of the Grand Canyon exploit in the 1869 edition of his great book, "Beyond the Mississippi," regarded everywhere in its day as the last word on all things western. The following excerpt affords a fair idea of his estimate of White's story:

> Indians and trappers have always believed that no man could tread the stupendous gorge, hundreds of miles long, with its unknown cataracts and its frowning rock walls a mile high, and come out alive. But one has done it and lives to tell the tale. * * * What a romance his adventures would make. Let Charles Reade or Victor Hugo take James White for a hero and give us a new novel to hold children from play and old men from the chimney corner.

In another connection in the same article Mr. Richardson characterizes White's feat "as perhaps without parallel in authentic human history."

There also is much to be found in the narratives already quoted as direct testimony which will bear closer scrutiny because of its value as supporting proof. In this category first consideration should be given to the sentence in Dr. Parry's report, in which he stated that there was "corroborative testimony" in support of White's story; nor will the searcher for facts fail to regret that the doctor did not incorporate this testimony in this paper. Doubtless he would have done so if he had had the faintest suspicion that the next generation would make such effort to discredit his narrative as has been made.

It would seem probable that Dr. Parry had in mind the indorsements of Messrs. Hardy, McAllister, and Ballard, as given by Maj. Calhoun in Dr. Bell's "New Tracks" and quoted elsewhere in this paper. There one finds three contemporaneous affirmative witnesses, all intimately acquainted with the Colorado River as known at that time, all of whom agree that White's experience must necessarily have been as he described it to be They speak as one man in saying that White could not have done otherwise than go through the Canyon. Where could be found more positive affirmative evidence as to the possibilities? Certainly not in the 40-year-after opinions of anyone.

It is very fortunate for Mr. White, and, if his claim is correct, fortunate for history also, that the Palmer surveying party reached the Colorado River in time to meet White soon after he concluded his momentous voyage and while his story was fresh; and, enlightening as are the Parry and Calhoun statements, they are scarcely more important than is the acceptance of the White account by Gen. Palmer and Dr. Bell. After completing their excellent work in behalf of the Union Pacific, these two last-mentioned gentlemen entered upon a railroad enterprise of their own and became known the world over in connection with the Denver & Rio Grande, of which they were the guiding spirits for a generation. To a very large circle their judgment was supreme and their word as the law on any subject. In matters of fact they were implicitly relied on far and near. They give substantial support to White.

The Herald writer says that Gen. Palmer talked with White and that "he was satisfied that the length of the Grand Canyon is not less than 500 miles and that its scientific exploration, while not absolutely impossible, will present difficulties which

will not soon be surmounted." We already have seen that Palmer thought well enough of the achievement to incorporate an account of it in his official report of the operations of his party, and here we have him drawing conclusions, the accuracy of which has been abundantly demonstrated since. Is not the fact that White supplied information on which to base such calculations an item in his favor?

Introducing Maj. Calhoun's account of the White exploit in his book—long since, unfortunately, out of print—Dr. Bell uses the following language:

> Whilst Gen. Palmer, Dr. Parry, and Maj. Calhoun were examining the natural productions of the country and the surveyors were trying to find a level route across the regions which lie about 100 miles south of the Great Canyon of the Colorado an unfortunate prospector was actually floating through that stupendous chasm on a simple raft of cottonwood. Dr. Parry had the good fortune to meet this man after his perilous trip, at Hardyville, on the Rio Colorado, and to hear from his own lips the story of his adventure. The doctor carefully noted all the particulars of the story and closely cross-questioned the hero of it, who, although a simple and illiterate man, was brave, straightforward, and one to be thoroughly believed.

It will be found profitable to return briefly to the consideration of the statements of Dr. Parry and Maj. Calhoun. They were leading members of the survey, which was semi-governmental in character. Both of them take pains to give assurance of the genuineness of their narratives and of the trustworthiness of White. Such testimony should count for much. Maj. Calhoun had earned his title in the Civil War, and he was highly regarded as a journalist before he turned engineer. Dr. Parry's standing as a man and as a scientist was such that afterward he was appointed chief botanist to the American-Mexican Boundary Commission, in which capacity he gained fresh laurels. Samuel Bowles says "he was the most scientific explorer of the higher mountains." No one could question the impartiality of such men, and the positions they held ought to be sufficient guaranty that in their day their intelligence and judgment were generally accepted as equal to the standards of the times. They were not men who could be easily deceived by a "prevaricator," however "masterful." Let us therefore invite attention to a brief extract from each of their papers.

Says Maj. Calhoun:

> While on the survey and while stopping for a few days at Fort Mojave, Dr. W. A. Bell, Dr. C. C. Parry, and myself met this man, whose name is

James White, and from his lips, the only living man who had actually traversed its formidable depths, we learned the story of the canyon. * * * He is a man of average intelligence, simple, and unassuming in his manner and address, and without any of the swagger and braggadocio peculiar to frontier men.

The excerpt selected from Parry follows:

Now at last we have a perfectly authentic account from an individual who actually traversed the formidable canyon's depths, and who, fortunately for science, still lives to detail his trustworthy observations of this most remarkable voyage. * * * His narrative throughout bears all the evidence of reliability and is sustained by collateral evidence, so that there is not the least reason to doubt that he actually accomplished the journey in the manner and at the time mentioned.

Surely little in the way of emphasis could be added.

Let us remember also that this report by Parry was not only accepted by Gen. Palmer, himself a man of scientific attainments, but that it was incorporated in his accounting to his railroad company and through President Perry found its way into the Transactions of the St. Louis Academy of Science, by which organization it was published as an important addition to the world's knowledge.

There is one other authority to be quoted in this connection, and that is none other than Mr. Frederick S. Dellenbaugh, who has not allowed his friendship for Maj. Powell to entirely obscure his sense of fair play. In his praiseworthy effort to make complete his history of canyon exploration he has given us a brief statement of his experience in obtaining information from Mr. Hardy, who with others is credited with rescuing White from the waters of the lower Colorado. After detailing his reasons for doubting White's story, Mr. Dellenbaugh says:

Hardy, whom I met in Arizona a good many years ago, told me he believed the man White told the truth, but his belief was apparently based on the condition White was in when he was rescued. That he was nearly dead is true, but that is about all of his yarn that is.

To be sure this is a very grudging admission, but it is a good deal for one so partial to Maj. Powell, and it brings out the important fact that Hardy accepted the White adventure as an actuality. Hardy was the leading man of the Colorado River country. He was at the head of important enterprises and had taken such rank that the town of Hardyville was named for him. He was among the very first to see White after he landed. He accepted White's story, and this testimony is important even

though coupled with Mr. Dellenbaugh's own interpretation. That Mr. Hardy's opinion that White had made the voyage through the canyon was based on the latter's condition when picked up, and "nothing else," as Mr. Dellenbaugh surmises, is scarcely borne out by the Calhoun-Parry statement reading:

From his knowledge of the country above Callville Mr. Hardy says that it would be impossible for White to have come from any distance by the river without traveling through the length of the Great Canyon of the Colorado.

Here we find complete substantiation of Dellenbaugh's admission that Hardy believed that White had told the truth and just as complete refutation of the surmise that the opinion was based *only on White's physical condition.* It was because of Hardy's own knowledge of the upper Colorado that he was convinced that White had come through the canyon, and not alone because of White's condition, as Dellenbaugh concludes. White could scarcely have found stronger rebutting testimony if he had made especial search for it. It is the next thing to having an eyewitness with him all the way through.

To Mr. Dellenbaugh we also are indebted for the admission that the United States military authorities accepted White as the only authority concerning the character of the river inside the canyon.

ON THE WAY.

The fact having been established by so many witnesses that White actually made his appearance below the canyon, the case would be complete if it could be shown that he went into the canyon at its head; but obviously such proof is impossible, as there were no white men's habitations within hundreds of miles on the day that White and Stroll pulled out into the stream to escape the savages who had so unceremoniously deprived them of their leader.

All that can be done to substantiate White's story regarding the entrance upon his perilous enterprise is to adduce as much testimony as possible indicating the probability of truthfulness in that connection. Necessarily, in view of the lapse of time and the remoteness of the locality, such proof is scarce. Still it is not entirely lacking. We have at least three witnesses whose testimony shows that White and Baker, with others, were moving toward the head of the canyon in the spring of 1867, and fortunately one of these still lives. He is no other than Hon. T. J. Ehrhart, the present highly regarded chairman of the Colorado State Highway Commission. The other two are S. B. Kellogg and Mrs. Thomas Pollock, both formerly of Lake City, Colo., whom we find quoted in the Rocky Mountain News, of Denver, in its issue of November 14, 1877.

The statement in the News was a contribution from a correspondent, and the reference to White was incidental to an effort to clear up the fate of Baker, who as the leader of the first expedition into the San Juan region was a historical character in Colorado. Kellogg had aided in fitting out the original Baker expedition when it left California Gulch in 1860 and had become a member of the Baker party while it was operating in San Juan during the fall of that year, while Mrs. Pollock had joined the party as the wife of another of its members. When seen by the representative of the Denver paper both resided in Lake City, and Kellogg held office as a justice of the peace.

The News correspondent bases his whole article on information supplied by these two former associates of Baker, and, after detailing the facts regarding the venture of 1860, says:

In the summer of 1867 Charles Baker returned to Colorado and camped for a short time on Chalk Creek. With several other men he started south from there and wandered through the mountains prospecting. Their number dwindled down until only Baker, a man named White, and another whose name is forgotten, remained together.

The particulars of the futile prospecting tour through the San Juan, the journey to the mouth of the Grand River, the murder of Baker, and White's voyage down the river are then recounted, after which recital the News writer adds:

In May last White was in Lake City, and it is believed that he is now in the southern part of the State. He is about 35 years of age, a plain, matter-of-fact, practical, adventurous man. There is not a shadow of doubt about his wonderful adventures and his marvelous escape through the Canyon of the Colorado.

The writer does not say in explicit words that Kellogg and Mrs. Pollock met Baker while engaged in his new prospecting enterprise, but he gives the impression that they were relating facts of which they were personally cognizant. As a matter of fact, however, Baker's presence in that region would have been the subject of common knowledge, as he was known as few other men there because of his identification with the history of the country; so that there can be no doubt that Mr. Kellogg and Mrs. Pollock knew just what they were talking about. Hence their testimony goes far toward corroborating White's story of the party's visit to the San Juan prior to the adventure on the Rio Colorado. Incidentally it is worth while to point out that this publication was made eight years after Powell's voyage. More significant still is the fact that it appeared in the Rocky Mountain News, whose editor was a close personal friend of Maj. Powell's.

Ehrhart's testimony deals with the Baker-White party at a somewhat earlier stage of their journey, when they were camped on the upper waters of the Arkansas River. In response to a request he supplies the facts, as follows:

STATE HIGHWAY COMMISSION,
STATE OF COLORADO,
Denver, November 22, 1916.

In the month of May, 1866, my father, Jacob G. Ehrhart, and my mother moved from Denver to a placer mining camp known as Cache Creek in Lake County. In the fall of that year, after the placer mining season ended, my father moved down the Arkansas River to Browns Creek, occupying a one-

room log house on the banks of the stream. At that time there were about 12 families living in that vicinity, scattered over a territory 6 or 8 miles square.

Very soon after we moved into the neighborhood the male population got together and built a log schoolhouse within about 250 yards of the cabin occupied by my father. This building had no floor and a dirt roof, and there was a very large fireplace in one end. At that time there was no lumber whatever available in that section, and benches were hewn out of logs with legs inserted in holes bored in the underside with an ordinary auger. Desks were made of hewn lumber and rested on pegs driven into auger holes in logs on the side of the building. They employed a teacher, and school was taught in this building during that winter.

Whether it was the spring of 1867 or the following spring of 1868 I am not sure, there was a party consisting of a number of men, which I now believe to have been four, camped in this log schoolhouse. The night they moved in a storm came up and there was a very heavy fall of snow, and they remained encamped in the schoolhouse for several days.

I accompanied my father on a visit to the camp and remember that a Capt. Baker evidently was the leader of the party and that they were on their way to the San Juan section of the State, or the southwestern part of Colorado.

On the morning after the weather had settled, the party was packing up to move, and I, as a boy, was very anxious to go from the cabin we occupied over to witness the breaking of the camp, but my mother objected to me going over, and I stood at some distance from our cabin watching operations and heard a number of revolver shots and saw that there was considerable excitement and activity among the men at the schoolhouse and the pack animals. Very soon afterwards some one from the camp—I believe Capt. Baker—came to our cabin and stated that one of the men had been wounded in the foot, and wanted to leave the wounded man somewhere where he could have care and attention, and we having but one room, he was directed to a neighbor's farther up the stream by the name of Sprague, where he went and made arrangements to leave the injured man, whose name was Joe Goodfellow. The remainder of the party then proceeded on their way.

Afterwards I remember hearing a conversation regarding this party on several occasions, and it seems to me little of a definite nature was heard from them, but there were rumors that they had been killed by Indians.

Some time, perhaps a year, later I remember of reading in—I am not quite sure—the St. Louis Republic an account of a member of this party having made the trip on a raft through the Grand Canyon of the Colorado and landing at some point at the lower end.

In January, 1916, I noticed an article in some paper—I think written by Congressman Keating—stating that Mr. James White, the only surviving member of this party who had gone through the Grand Canyon, was living at Trinidad; and I wrote Mr. White something about my impressions concerning the party while camped in the old schoolhouse on Browns Creek, to which Mr. White replied, proving to me, without question of doubt, that Mr. White was a member of this party.

(Signed) T. J. EHRHART,
State Highway Commissioner.

The writer has talked personally with Mr. Ehrhart, and in this interview he not only confirmed the above statements, but elaborated them. He said that the shooting affair was so thrilling that it made a lasting impression on his boyish mind, which was deepened by the fact that the crippled Goodfellow remained indefinitely in the Brown Creek neighborhood. Nothing was heard of the party after their departure until the spring of 1868, when news of the Baker tragedy and the White adventure was brought to his father's home in the columns of the St. Louis paper. When the newspaper was received the people of the vicinity immediately recognized White and Baker as members of the camping party of the year previous. Mr. Ehrhart remarked especially upon the number of horses belonging to the party, and now comes White's statement explaining their possession.

WHITE'S CHARACTER.

It is believed that a pretty strong case has been made for White. It has been made plain that he was heading toward the canyon in the spring of 1867; his critics admit that late in the season of that year he was taken out of the water below the canyon; numerous contemporaries bear testimony to the fact that from the time he emerged from the river he asserted that he had come through the canyon, and there is no little testimony in substantiation of the latter part of the story, the essential part. If he did not make the voyage, he must have deliberately fabricated the greatest romance of the century, and he should have gone into literature as a rival of Jules Verne. To have originated from the whole cloth such a yarn as this he must have been as mentally strong as some of his critics would have us believe he is morally weak, even the "champion prevaricator" that Dellenbaugh asserts him to be. But what are the facts regarding the man's mental accomplishments and moral qualities?

While a man of common sense and ordinary discernment, White still is of commonplace education and is possessed of no especial powers of imagination. He knew little or nothing of the Grand Canyon, of its mysteries or dangers, until Baker told him they were nearing it. He then was, as he always has been, a matter-of-fact man, as indifferent to notoriety as he was incapable of weaving an intricate romance. Moreover, and above all, if we are to believe his neighbors, he is morally above mere deception for any purpose. He has resided in Trinidad for 40 years, and from that city come many testimonials as to his character for integrity. Among the documents received bearing on this point are letters from the mayor of the city, the senator representing the Trinidad district in the Colorado Legislature, and the governor of the State of Colorado, all neighbors and long-time acquaintances.

Hon. D. L. Taylor, mayor of the city, a still older man and older resident than White, has known the latter ever since he

located in Trinidad.[1] In a letter written in the office of the mayor, under date of November 29, 1916, Mr. Taylor says:

I have known Mr. James White for many years, possibly 40 or more. He has lived here all this time—I have lived here since 1862—and I can honestly say that there is no braggadocio about him. He is not gifted in telling big stories about himself or about what he has done at any time of his life. The same story that he tells now about his trip through the Canyon he told me when I first knew him. He has a grown-up family, and they can tell the story the same as he does, because, as I suppose, he has told it to them so often. I do not know what the Powell people have told; but if they have said that James White never went through the Canyon, they surely are mistaken or they have some object in view.

Hon. S. W. De Busk, State senator from the Trinidad district, writes:

I have known James White, of Trinidad, Colo., since 1872. He was in 1872 engaged in general labor with a team and wagon, and so continued for a long while. Later, when age began to show on him, he reduced his labor to light hauling with a small spring wagon and one horse. By lighter labor he earned a livelihood for some years.

Since I first met White he has occupied his own residence in Trinidad; has paid his taxes like any other good citizen; has discharged his obligations to society; has been careful to educate his children; and has many friends. I think he has no enemies.

In 1887 to 1895 White's children and my children attended the same school or schools in Trinidad. All the time we have been fast friends and neighbors.

For 20 years we have had an Early Settlers' Society, of which I happen now to be the secretary and local historian. This position has caused me to seek information from White concerning the pioneer times. For more than a decade past White has given me information as to various matters. Subjecting his statements to the usual tests, I have found them to be truthful. He is not a "prevaricator" or "romancer." He has not the mental character or mental habit of the romancer—in other words, of the common liar. White does not launch out readily and naturally into long-spun yarns, talk of fiction, or the like. To get from him what the average writer or reporter wants it is necessary to inject questions frequently—to go back a little now and then. White is incapable both morally and intellectually of putting forth fictitious narrative. He lives and has lived the commonplace, matter-of-fact life of the plain workingman. He does not dream. He has always been a man of work. He engaged in prospecting, in driving cattle, in herding on the plains, in building houses, etc. He has always stood well with his fellows, and does now. His children grew to be useful and respected citizens.

How do Mr. Powell's friends know that White prevaricates? They have no such knowledge. The plain, truth-loving people of this section

[1] Mr. Taylor has passed to his reward since the above was written. He remained a friend of White's to the end and was ready at all times to champion his cause.

accept White's version of his terrible journey in the shadow of death as being substantially and circumstantially true. Some heroes have their historians and are accorded greatness of endeavor. The majority are never exploited and pass out unknown. May we not give to John Wesley Powell his due without assailing a single hero whose only misfortune was to have had no aid or equipment from a great Government and no historian to tell of his adventure?

With the following letter from Hon. Julius Gunter, present governor of Colorado, added, there is a pretty good showing for the man:

I have known James White, of Trinidad, Colo., for more than thirty years last past, and during twenty years of that time both White and myself were residents of the city of Trinidad. During the first years that I knew him he owned a transfer outfit and did more or less work in and about the city of Trinidad. Since that time he has struggled along in a quiet, industrious way and out of very limited means has reared and educated a worthy family. White has at all times during the years that I have known him been a worthy, industrious, law-abiding citizen, respected by the community in which he lived. I would trust White and would believe any statement that he made. During these years I have frequently in the community heard admiring mention made of his passage through the Grand Canyon, and I have at no time heard it disputed.

Gov. Gunter's letter was written at the office of the governor in the statehouse at Denver, and is dated January 19, 1917.

The following letter from Eli Jeffryes, cashier of the First National Bank of Trinidad, is selected from a number which have been tendered by private citizens of that city:

I have known Mr. James White, of this city, for the past thirty-three years. In all that time I have known him to be a man of first-class reputation. He is the father of a very splendid family of children, all of whom are a credit to this community. We consider him entirely honest, and he is of good credit locally.

It is not believed that more is necessary to establish the man's reliability.

BUT DID HE GO OVERLAND?

It remains to consider the contention that White really made the greater portion of his trip by land and not on the river. This, indeed, is the only alternative of the critics when it is admitted that he was on the lower Colorado. They contend that he did not enter upon his voyage until after the stream emerged from the canyon.

This refuge goes far to show the poverty of resource on the part of the faultfinders. From the vicinity of Grand River, high up in the mountains of Utah, to Callville, is a distance of five or six hundred miles, and the intervening country is most inhospitable indeed. Even to the present day much of it is practically uninhabited, and in the main it is without roads. Part of it is a desert waste, and for long stretches the surface of the land is an alternation of deep canyons and waterless plateaus, affording no foothold for game or edible vegetables. To the traveler it would have been alike dangerous on account of thirst, starvation, fatigue, and accident, and if he had escaped all these he would have been almost sure to fall into the hands of some of the savage Indians who were to be found in places. If he had succeeded in making this arduous journey, why should White have concealed the fact? But did he make it without knowing the fact? It does not seem credible that he should have been so deceived, and if he had been prompted only by the desire to tell a big tale the story of the overland journey would have been almost as good as the account of the canyon voyage.

But the critics go to the extent of asserting that White did not start from the vicinity of Grand River at all—that, instead of going toward that stream from the San Juan, the Baker party really turned in the other direction, proceeding southward instead of northward. Thus, they argue, it transpired that when Baker was killed the prospectors were near the lower instead of the upper end of the Great Canyon—that White and Stroll launched their craft below all but one or two of the dangerous rapids. In support of this view they say that

White's description of both river and canyon fits the portion below the gorge, but not that within it. Those who advance this view are charitable enough to concede White's honesty of purpose; they contend that he was lost, and simply knew not where he was, contradicting Dellenbaugh's charge that he was a willful deceiver. Immediately following is given Mr. White's own refutation of this theory, and it is convincing. It certainly is beyond belief that any man of the most commonplace intelligence should wander for weeks through any region without knowing the direction in which he was traveling. He had only to glance over his shoulder at any time between sunrise and sunset to determine the point of the compass toward which his face was turned.

Following is Mr. White's letter:[1]

TRINIDAD, COLO., *April 20, 1917.*

Mr. THOMAS F. DAWSON,
Washington, D. C.

DEAR SIR: I have come into knowledge of the fact that a charge has been made that I did not reach the Colorado River above the San Juan, but below it. You will notice from the account that I sent you of my trip that when our party started on our prospecting trip we were headed for the Grand River, as Baker said there was gold in that part of the country; but Baker was killed before reaching the Grand River in a canyon between the San Juan and the Grand. I knew nothing of the country, but Baker did, and he kept a memorandum; but we did not think of it after the Indians attacked us, as we had to make our escape as quickly as possible. Mr. Baker also carried a compass and kept us informed as to the directions we were traveling, and he told us that we were going north to the Grand River; that the Grand River and the Green River formed the Colorado River.

Baker was killed after we crossed the San Juan River in a canyon between the San Juan and the Grand, being *north* of the San Juan. We camped in the canyon that night, and the next morning we had to go out the way we went in, and that is where the Indians attacked us and Baker was killed.

[1] These letters from White raise a new question as to where he and Stroll entered upon their voyage down the Colorado. They are explicit in declaring that they were above the San Juan at the time, but it is shown that the Baker party had not reached Grand River when Baker was killed. All accounts written by others than White himself have represented that Baker met his fate while emerging from a canyon of the Grand and that the survivors found their way to the Colorado down that stream. In his own main story, printed herewith, White states that the Baker tragedy occurred before Grand River was reached, but in that article he was not so emphatic as in this last letter. The italics used here are White's own, and evidently it is his purpose to make it most clear that while he and Stroll reached the Colorado near the confluence of the Grand and the Green, they did not follow down the Grand either by raft or on foot. The fact would seem to be that while the party was headed for the Grand it was prevented by the Indians from going so far north or west, and it would appear probable that the mistake of early writers may have been due to an inference that the party really reached this destination. May it not be possible that White and Stroll came to the Colorado farther below the junction than they supposed? If so, the short distance to the mouth of the San Juan, as estimated by White, would be explained.

George Stroll and I went down the canyon, traveling all that day, reaching the Colorado River just below where the Grand River and the Green River meet, forming the Colorado River, and there we made our raft and began our descent down the Colorado.

We did not travel down any small stream before reaching the Colorado River.

Mr. Baker was a man who had prospected a good deal in the San Juan country, and surely he knew where he was and in which direction he was going.

I guess the story will be attacked when printed, but I am willing to talk to anyone and convince them that I entered the Colorado River *above* the San Juan and *not below it.*

I do not like to bother you so much, but I thought it best to let you know of this charge and to try and explain fully to you why I know that we entered the Colorado River *north* of the San Juan River.

Thanking you for your kindness, and hoping that some day I will have the pleasure of meeting you, I am,

Very truly, yours,

(Signed) JAMES WHITE.

THE PROBABILITIES.

The writer believes himself to be absolutely unprejudiced in this matter. Before he began his investigation he stood with the vast majority in awarding the "first" honors to Maj. Powell. He is willing to concede the great—the almost insurmountable—obstacles in White's way; but he has found so much, both in fact and reason, in support of the White story that he has concluded by accepting it. It is not enough to say that it is improbable—not enough to merely say that it is impossible. There is an eastern proverb to the effect that "the impossible is seen when it happens." It would seem to the unprejudiced to be incumbent upon Mr. White's critics to show more conclusively than they have shown how the man got from the mouth of Grand River to the mouth of the Virgen, and this they can not do by mere theorizing, much less by calling names.

Since the problem resolves itself into a question of probabilities, let us consider it briefly from that point of view.

If a boat can survive a trip through the canyon under human direction, why can not a log or a raft (a collection of logs) do likewise? Doubtless in the course of time, even without the guiding hand of man, many a piece of timber has found its way from the upper to the lower end of the canyon without being smashed into "toothpicks." It will be conceded that the chances for a raft coming out intact are fewer than that a single log should go through unscathed. But it should be remembered that we are discussing possibilities. It may well be that White's rafts were exceptionally strong ones. They were made of drift logs, probably well seasoned in both sunshine and water, and tied together with lariats. Did you ever test the strength of the frontiersman's lariat or the security of a knot tied by one of them? It will be remembered, too, that White confesses to the necessity of frequent repairs and that he tells of being compelled to abandon one of his rafts and to construct another. Doubtless he experienced more difficulty in keeping the crude craft intact than he remembered to tell about. He also confesses to frequent submergings. His life would have been lost early in the voyage but for his foresight in tying himself to the timber. One thing a log will surely do is to float; and so long as White was securely fastened there was no danger of being separated from the raft,

wherever the current might carry it, whether under the water or on the surface. He was fortunate in keeping on the right side most of the time—fortunate also in possessing a constitution rendering him capable of undergoing more hardships than most men.

A most important point is that he made his journey late in the summer, when the water was low, for at that season the the dangers attending the navigation of the stream are minimized. When on his second survey Mr. Stanton discovered to be comparatively harmless the Marble Canyon rapids, in which President Brown had found a liquid grave when the river was much higher only a few months before.

Objection has been made that the time of two weeks in which White claims to have made the voyage is inadequate for that purpose under the most favorable circumstances. True, all the purposeful expeditions—those of Powell, Stanton, and the Kolbs—have consumed much more time. But is not that fact principally due to the circumstance that they had work to do on the way? Moreover, they were provided with food, with strong boats, with clothes, and sleeping accommodations, with, indeed, all possible facilities for comfort. Naturally they were not in so great a hurry as the naked, starving, frightened miner fleeing for his life from a band of bloodthirsty savages and seeing no hope except in emergence at the lower end of his rock-ribbed prison.

The bare facts, however, will show that his rate of travel was not unreasonably rapid. As we have seen, the distance through the canyon is about 500 miles. White was on the water for 14 days. He therefore traveled at an average rate of about 36 miles a day. It was summer, and the days were long, admitting of perhaps 15 hours of daylight travel, so that the average speed was less than 2½ miles per hour. Considering that the mean fall of the river throughout the canyon is a little over 6 feet per mile, this rate is not unreasonable even for a raft. Without any aid of propulsion it would surely cover the distance at that rate if lodgment was prevented, as it was in this case.

Moreover, it is to be remembered that others than Powell, Stanton, and the Kolbs have traversed the canyon. One does not hear so much of the exploits of the Mormon trapper, Nathan Galloway, who has made the voyage of the canyon no fewer than three times, more frequently than any other person. All

these trips were made in frail boats of Galloway's own construction, and one of them, beginning higher up stream than White's, was accomplished in 21 days. Doubtless Galloway could have expedited his journey if he had so desired; but he, too, was provided with the ordinary comforts, and he must have felt at liberty to stop when he so desired and to remain in any given camp as long as suited his convenience. It would seem, then, that the record time made by White does not necessarily count against him.

But, it is asked, are the criticisms of Dellenbaugh, James, and Stanton, to say nothing of those of the Kolbs, to be ignored? They could not be and should not be. Without exception their authors are men of high character. In the main, their criticisms are based on the alleged inaccuracies regarding topography which are to be found in the statements attributed to White. Doubtless these departures from the facts seem far more glaring to those who have been over the course than to those who have not, and objections are to be expected from men who know the difficulties and dangers of the trip from personal experience.

But are they really valid? White was there neither as a topographical engineer nor as a summer tourist. He carried no surveyor's chain, and he was not making an especial study of scenery. Is it to be held as vitally against him if he characterized the canyon walls as "grayish sandstone," when as a matter of fact red is the prevailing color and they are gray only in spots and sandstone only in layers? Or if he said the walls were 4,000 feet at such and such a place when they ranged from 1,300 to 3,000 feet? If he did represent that there was a whirlpool at or near the mouth of the Little Colorado, when there were whirlpools at almost every other place? If he did not carry a tapeline with which to measure the miles between the San Juan and the Little Colorado? If he really went through, he knew well enough that there were high walls and cataracts and maelstroms a-plenty; and it was not unnatural that under the unusual circumstances of his voyage he should get mixed on some of these facts. Can these faults of detail, even if he is to be held responsible for all of them, be made to count against the direct testimony of the dozen or more witnesses called in White's behalf, or against his own straightforward story? In the nature of things, not one of the faultfinders speaks from actual knowledge of White's achievement.

WHY THE CRITIC?

Why, then, the position the critics so tenaciously hold with respect to the White exploit? To this writer they seem quite unexplainable except upon the theory already hinted at, that the harrowing experiences of most of them rendered it impossible for them to accept the White story. To the man who had been over the ground, who had experienced the untold hardships of the trip under the most favorable circumstances, whose comrades had been snatched from their very hands, and who had seen the strongest boats writhe and grind in the turbulent waters, the possibility of making the same journey on a log raft must naturally seem quite out of the question; and believing it so, they have denounced White as an impostor and prevaricator, as a victim as well as the author of deceit. They could not have entered upon the discussion of this performance with other than prejudiced minds, and thus the very circumstance which it would seem should make them most competent as judges renders them least capable of all to pass upon the subject fairly. They pronounce White's success impossible because they do not believe they could duplicate it under similar circumstances. How, for instance, could Stanton reconcile White's story of a successful voyage throughout the whole length of the fearful chasm after practically seeing his friend and associate, Brown, snatched from his strong boat and engulfed in descending one of the first of the great cataracts which characterize the canyon? It is not probable that any of them could have duplicated the White experience, or, indeed, that he himself could have done so. But circumstances and a kind Providence were with him, and it would seem reasonable to believe that in time the fact that he actually made the voyage will come to be generally acknowledged.

While, however, it is believed to be true that White was the first person to penetrate the mysteries of the great chasm, there is no contention that he "explored" it. If Maj. Powell's friends would content themselves with claiming for him the honor of being the "first explorer" of the canyon, as is set forth on the Government monument, Mr. White should take

no exception. An exploration is necessarily an investigation, and an investigation requires premeditation and deliberation. Neither of these characterized White's adventure. His trip was due to the emergency of a serious predicament, and he had no time for any but the most casual observation, if, indeed, he had been trained for any more advanced work. When Baker was killed White was compelled either to take to the water or to face an unknown number of savages bent upon taking his life, and he chose the former course without any thought of investigating the mysteries of the canyon, probably with comparatively little appreciation of the dangers ahead of him. Once in the vast inclosure, he did not see any way out but to continue to the end, wherever that might be.

On the other hand, Maj. Powell went into the canyon deliberately and with well-defined purpose in the interest of science. Too much can not be said in praise of his pluck and endurance, and he accomplished important results. His achievement astonished the world, and the world has freely made its acknowledgment.

If we understand their attitude, White's friends would not rob Powell of one jot or tittle of the fame thus earned. Their complaint is against the effort to appropriate laurels to which they contend Powell is not entitled.

It, however, is not to be conceded that White's observations, however casual and undirected, were not of value to the world. We have seen that Gen. Palmer was able to draw important conclusions regarding the length of the gorge and the difficulties of navigating it, and that Dr. Parry formulated a formidable array of conclusions of a semi-scientific character as a result of the White trip.

Without entering upon a discussion of Parry's outline, it must be admitted that if White traveled on the water from one end of the canyon to the other he accomplished the one essential result of demonstrating that such a voyage was a possibility. Previous to 1867 no one knew this fact. No one had been over the road, and, as Maj. Powell himself tells us, the best information obtainable was that it was beset with insurmountable difficulties. Many a trapper was believed to have been drawn into the gorge never to return. The Indians peopled it with hobgoblins. Some asserted that there were underground passages of great extent, into which no one dared enter, and waterfalls of such height that none could hope to survive their passage. In view of the general opinion as to the danger, vague though it may have been, few would have been sufficiently courageous to undertake the exploration of the canyon voluntarily, even in the interest of that most exacting mistress, Science. No one is likely voluntarily to enter into an unknown Mammoth Cave with a liquid bottom or to plunge heedlessly over a Niagara. As this writer views the question, it would have been foolhardy in the extreme to intentionally undertake such a voyage with the information at hand, and he accordingly thinks that, in addition to deserving laudation for what he did, Maj. Powell is entitled to commendation for not entering upon his venture without knowing that the river was free from unsurmountable obstacles. That fact had been demonstrated by White.

Of course, this argument proceeds upon the theory that Maj. Powell was aware of White's achievement. To adopt the opposite view would be to raise a question as to the major's general intelligence and up-to-dateness, and no one who knew him would accuse him in either direction.

At the time that White made his trip Powell was professor of geology in the Illinois State Normal University and curator of the Illinois State Natural History Society. As we have seen, Dr. Parry's report was published in the Transactions of the Academy of Sciences of the adjacent city of St. Louis. What more natural than to conclude that Powell obtained information of White's work from the society itself? Organizations of the character of the St. Louis society do not seek to conceal their proceedings, and generally scientific men are afforded every opportunity to familiarize themselves with any developments made by one of them. They make free exchange of publications. If the Parry report came under his observation he obtained from it the following suggestions:

> The absence of any distinct cataract or perpendicular falls would seem to warrant the conclusion that in time of high water by proper appliances in the form of india-rubber boats and provisions secured in waterproof bags, with good, resolute oarsmen, the same passage might be safely made and the actual course of the river mapped out and its peculiar geological features properly examined.

Two years later Maj. Powell entered upon his exploration, starting in the spring, when the water is generally highest, with waterproof bags, with strong, though not rubber, boats manned by "good and resolute oarsmen" for the purpose of "mapping the course of the river and examining and reporting upon the peculiar geological features of the canyon," all in the line of Parry's suggestions, which were based on White's report. Is this merely another illustration of the adage that great minds run in the same channel?

But if Maj. Powell did not procure his information regarding White's work from Parry or the St. Louis society, he could scarcely have failed to read of it in the public press, from which it received no little attention. He had opportunity as early as the fall of 1867 to get the full story in the newspapers. There is additional reason for supposing that if he did not get it then he did get it in the winter of 1868–69. He spent much of his time on the Grand in 1867 and 1868 and the early part of 1869. He and William N. Byers, proprietor of the Rocky Mountain News, were intimate friends and were much together. The Parry article was published in the News in January, 1869, several months before Powell began his voyage. It would seem scarcely

possible that he and Byers did not discuss the White exploit either before or after the appearance of the account in Byers' paper.

But even if Powell did not read the story in the newspapers or get it through Parry, he could not well have failed to hear it from the people of Colorado. Every frontiersman knew something about the Grand Canyon. All had heard discussed its mysteries and the difficulties of traversing its depths. It was a popular belief that it concealed many a Golconda, and the frontier miner's hope was to have it made accessible for prospecting. Hence, however little attention the White exploit may have received in other localities, there can be no doubt that it attracted wide notice in Colorado, and especially among the dwellers along the course of the Grand, the main Colorado tributary of the Colorado River. And if they had the information Powell would have had it also.[1]

[1] Some time after the writing out of this theory that Powell had been aware of the White voyage before beginning his own, the writer most unexpectedly came upon what he believes to be almost convincing proof of the correctness of the hypothesis. This was found in a little book by Samuel Bowles of the Springfield (Mass.) Republican, giving an account of a camping tour through Colorado, made during the summer of 1868, and entitled Colorado; its Parks and Mountains. As has been stated elsewhere, Maj. Powell, then frequently referred to as Prof. Powell, spent much time in the years 1867 and 1868 in Middle Park, on the headwaters of the Grand River, the Colorado tributary of the Colorado. He was accompanied by a number of students who were engaged in exploring that then largely unknown region. There they were met by Bowles and his party, in which was included Vice President Colfax and Gov. Bross, of Illinois. Mr. Bowles devotes considerable space to the work of the Powell party, as a basis for which he says:

"We made familiar and friendly acquaintance with Prof. Powell's scientific and exploring party, from Illinois, while in Middle Park. They were in camp there for some time, and made it the end of their summer and the beginning of their winter campaign." (In another connection Mr. Bowles speaks of intimate association with Powell while in the park.)

After describing the work of the party in that vicinity, Mr. Bowles outlines the plans of Maj. Powell for the exploration of the Colorado during the next season. Dwelling at some length upon the general ignorance relative to the Grand Canyon and the popular belief that any effort to explore it meant certain death, Mr. Bowles continues:

"But we have an authentic account this season of a man who made the trip last year and lives to tell the tale. He and a companion, prospecting for gold in southwestern Colorado, and driven by Indians, took to the Grand River just before its union with the Green, made a raft, and committed themselves to the waters. Foaming rapids and a whirlpool swept the companion and all the provisions off, and they were lost, while White, the surviving hero's name, without food passed seven days more, a second seven days, upon these strange waters, between frowning walls, over dangerous rapids, through delaying eddies, before he reached Callville in Arizona, the first settlement and the head of navigation on the river."

This account of the meeting with Powell and the narrative of the White exploit were embraced in one letter, which was written by Bowles on his way out of the park, and only a few days after leaving Powell. Why the juxtaposition if not because of the Powell meeting? And where in that wilderness could Bowles have gotten his information but from Powell? Or, if, on the other hand, we assume that Bowles possessed this information rather than Powell, may we not most reasonably assume that he would have imparted it to the man who was about to head an expedition of his own down the river? In either event, Powell would have known the facts before beginning his voyage. It is quite evident that either through Powell or some other channel Bowles had become familiar with the Parry report, for his account is a mere paraphrase of that document.

Knowing, then, that the canyon had been navigated from end to end; knowing that it no longer was entirely untraveled, and knowing especially that it was without high waterfalls, Powell might well enter upon his survey, appreciating the danger of the undertaking, but still willing to take the risk for the further advancement of the world's welfare and the promotion of his own fame. He accomplished both of these worthy purposes. But in his great achievement he had a way shower in the person of James White. And to James White belongs whatever glory there is to be awarded to the First Through the Grand Canyon—one of the most marvelous adventures of all time.

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