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## The Men With Whom I've Smiled\*

By Judge George Q. Richmond, Denver, Colorado

You must not take the title of my address in its common acceptation, else you will wonder I am alive, unless you shall conclude I am a man well preserved in "spirits."

In the 28th, 31st, and 32nd volumes of the Supreme Court Records of Colorado will be found a list of all attorneys who have been admitted to practice law in Colorado, with the dates of their admission, up to 1905. With probably two-thirds of that number I have smiled; by that I mean I knew many of them intimately, and had a casual acquaintance with the others.

Emerging from the Union Army in 1865, with the same rank as when I entered the service, that of High Private, I resumed my studies in the Columbian College of Washington, D. C., now known as the George Washington University. In 1868 I graduated, and on motion was admitted to practice in the Supreme Court of the District of Columbia.

In 1870 I migrated to Colorado, and, in March, 1871, was admitted to practice in the then Territory of Colorado. During my time in the District of Columbia, not being actively engaged in practice, owing to lack thereof, I listened to the address of Dan Voorhies in the Mary Harris murder case; I heard Benjamin F. Butler in the case of the Farragut heirs against the United States Treasury; I attended the impeachment trial of Andrew Johnson in the Senate of the United States, when Bingham of Ohio, Butler of Massachusetts, Evarts of New York, Stansbury of Ohio, and many others appeared, all giants of that day. I attended the trial of John H. Surratt for conspiracy to kill and murder Abraham Lincoln; I listened to the Hon. Matt Carpenter argue a cause before the Supreme Court of the United States involving the construction of Federal Laws; I attended the Senate

\*Address delivered at the special Denver Bar Association "Old Timers Day" dinner in honor of the attorneys who had practiced law for fifty years or more in Colorado, Monday, April 7, 1924.

sessions and listened to Reverdy Johnson, of Maryland, argue the question of the constitutionality of the then pending reconstruction legislation. I became inoculated with a reverence for the Constitution of the United States, and have lived long enough to read, in the memoirs of Blaine, Schurtz and others, the admission of the invalidity of that legislation; the contention being that if a State could not break the Union compact, Congress could not dissolve the relation by reducing the states to territorial organizations, subject to its future legislation. I listened to Jeremiah Black, on Jackson, and many other distinguished men.

Before coming to Colorado I was led to believe that the "Western Bar" had become a distinctive title, universally used to designate that class of lawyers who were supposed to know more about the practices of Colonel Bowie than those of Chancellor Chitty, and better versed in "Colt on Revolvers" than Coke on Common Law. All the peculiar eloquence in conception and bombast in style was credited to the Western Bar, but I learned at once to accept it in a more cosmopolitan and catholic sense. Locating in Pueblo, in the Third Judicial District, where Hon. Moses Hallett presided as Judge of the Territorial District Court, and where court was held in an old adobe building with a dirt floor, I attended the session on the first day of the April term, and then and there beheld on entrance to the building an orderly crowd, a few lawyers, sitting where they are supposed to sit, here and hereafter, nearest the fire, awaiting the arrival of the Honorable Judge. As he entered the building every one arose, standing in silence until he assumed his chair and the Sheriff had opened Court. A more orderly crowd, a more dignified judge, a more respectful attention, a more respectable appearing lot of attorneys, I have never seen than was there collected. Among the number were Calvin J. Thatcher, the first Chief Justice of the State of Colorado; W. F. Stone, George A. Hinsdale, Lieutenant Governor of Colorado; Hon. Bela M. Hughes, General Sam Brown, United States Attorney; Allen A. Bradford, first territorial representative to Congress; District Attorney Ripley, John W. Henry, afterwards District Judge of the Third Judicial District of the State of Colorado; George W. Chamberlain, formerly United States Attorney, and some others whose names and presence I do not recall, but they were all gentlemen, ripe scholars and well grounded lawyers. Some few of them were from Denver.

The Third Judicial District then comprised all counties south of the Divide (except Douglas)—El Paso, Pueblo, Bent, Fremont, Las Animas, Costilla, Conejos and Huerfano. Terms of court were held in Pueblo, El Paso, Bent, and Fremont, twice a

year, and in the other counties but once. The facilities for holding court in each of the counties was similar in all respects to Pueblo, primitive to the last degree, and attorneys were compelled to travel by buckboard, stage, and horseback.

In 1871 the number of attorneys admitted to practice in Colorado was 143. The number gradually increased during the year and in the 80's and 90's went by leaps and bounds. Today those who are in the swim are beckoning to the outs, exclaiming "Come on in, the water's fine," and this, too, notwithstanding there have been licensed to practice, up to the year 1905, 3,432 attorneys.

In the 70's the Bar of the Third Judicial District was augmented by the admission of John M. Waldron, Caldwell Yeaman, Charles E. Gast, and others, all of whom achieved distinction as lawyers, and one of whom is alive today and recognized as one of the best equipped and forceful attorneys of the Bar of Denver. He was early elected District Attorney of the Third Judicial District and proved to be as able, efficient, and vigorous a prosecutor of crime as any attorney holding the same office in the State of Colorado before or after him, bar none.

The Supreme Court of Colorado in 1871 consisted of Judge Ebenezer T. Wells, Moses Hallett, and James B. Belford, and, literally speaking, with all of these I have smiled. Judge Wells compiled the first reliable publication of the Statutes of Colorado. Judge Moses Hallett prepared and published at his own expense the first and second volumes of Colorado Reports, and Judge Belford represented the State later in Congress for two terms; and, without detracting from the merits of their successors as judges of the Supreme Court, I feel warranted in saying the opinions rendered by these three judges during their term on the Supreme Court Bench have stood the test of time and will compare favorably with any since handed down.

With every Justice of our Supreme Court since that day I have been personally acquainted and have appeared before. I have won and lost cases, and, when I have lost out, I have never allowed myself severely to criticise the conclusions of the Court, but I must say I have felt somewhat like a certain District Judge of Colorado, whose judgment in a certain case was reversed. On being told of it, and also advised that his reputation had not suffered, he remarked: "Oh, of my reputation I am not concerned, it's the reputation of the Supreme Court Judges with which I am most concerned."

Of the Judges of our Supreme Court up to the present time, I cannot refrain from saying that, from the day of their elevation to their high positions, they gradually grew in the public esteem

and confidence and that no tribunal can be mentioned in any part of the republic where the administration of perfect justice could and may be more confidently expected, and where a more patient and courteous hearing may be looked for on the part of counsel, however humble in standing or inexperienced in practice.

Of the Judges of the local tribunals of Colorado, they have been and are for the most part men of ability and learning, and have in general been fortunate enough to escape all suspicion of partiality or corruption, and some of these gentlemen at the present moment officiating in the District Courts might be mentioned in terms of the warmest commendation without at all transcending the bounds of truth and justice.

Of the Second Judicial District Bar I can speak with confidence and from personal acquaintance and observation. Among its ablest members as I then concluded, and have no reason to change my mind since, were Bela M. Hughes, Robert S. Morrison, Vincent D. Markham, Alfred Sayre, Hugh Butler, Bright Smith, Mitchell Benedict, George W. Miller, J. Q. Charles, Andrew Brazee, Ed. Smith, Victor A. Elliott, John F. Bostwick, W. S. Decker, L. B. France, E. P. Jacobson, H. E. Luthe, Alvin Marsh, D. V. Graham, afterwards District Judge; L. C. Rockwell, Gilbert B. Reed, Amos Steck, H. M. Teller, Willard Teller, Hon. Charles S. Thomas, Hon. E. O. Wolcott, Harper Orahood, and Hon. Thomas M. Patterson; and I ask you, who remember any of these, if you can suggest an abler array of men? Does your present Bar comprise their superiors? Are there as many of whom you can speak in higher terms of praise? Remember, they were all-around lawyers, they did not specialize, and the profession had not been so thoroughly commercialized as at present.

Of George W. Miller, afterwards County Judge of Denver, several times nominated for Congress, I can speak with praise. He was a tall, angular and rather homely man, but with powers above mediocrity and possessed of astuteness and skilfulness in the management of cases universally recognized. He was a man with a durable stomach and a good appetite. General Wright, who was somewhat of a wag and rather a delicate eater, at the time of which I am speaking, on entering a German restaurant on Larimer Street saw Mr. Miller sitting at a table with a soup plate filled with what was called a Dutch stew, composed of hunks of meat, various vegetables, seasoned with onions and garlic and swimming in a pool of greasy gravy. Wright accosted him: "Hello Miller, I was going to sit down with you, but guess I won't." "Why?" says Miller. "Well, George, have you eaten

that or are you going to? In either event I will enjoy myself alone."

In this connection I am reminded of a colloquy between George W. Chamberlain and Judge Hallett. In the midst of an argument Judge Hallett interrupted Chamberlain, asking him if he was really sincere in claiming the law to be as he stated. With slight embarrassment Chamberlain said: "No sir, I am not, but your Honor has disagreed with my contention of the law in three cases at this term, so, not desiring to appear totally ignorant of all law, I have taken the view of the law in this case contrary to my convictions of what it really is, hoping your Honor would agree with me, thereby saving my reputation."

Anyone who knew General Bela M. Hughes and Alfred Sayre well knows that they were both rather dignified and reserved in their manner. Jokes were about the last thing either of them thought of, but General Sam Brown was always indulging in jokes and sometimes of a too practical nature. One day Sayre and Hughes were talking together in the court room waiting for Court to open, when Brown walked in front of General Hughes, holding a long hair between his thumb and finger. Hughes immediately responded, "Well, Brown, you don't deny a man has a right to have his wife's hair on his shoulder, do you?" "Indeed not," said Brown, "but I just picked this off of Alfred Sayre's shoulder."

Judge Gilbert B. Reed, for several years a member of the Court of Appeals, was as a lawyer one of the keenest of cross-examiners. A man of sterling integrity, of lofty patriotism, of genteel urbanity and refinement. His judicial learning has never been disputed. He was endowed with a clearness of conception and subtle astuteness of discrimination which completely set at defiance all the arts of sophistical deception. As a lawyer and a judge he ranked high, but occasionally could become sarcastic and denunciatory. On one occasion, in writing a dissenting opinion to one written by myself, and concurred in by Judge Bissell, he concluded his opinion by saying:

"No authority, save one, can be found anywhere outside the opinion in this case sustaining it, and that one was written by a blacksmith."

His opinion in *Bueno v. People*, Colo. Apps., page 232, will be found entertaining reading along this line.

Robert S. Morrison is a name which is destined to be favorably recollected for many generations yet to come. He was a lawyer of great industry and skilful in mining practice in particular, the author of Morrison's Mining Laws and Rights, Morrison's Mining Reports, and Morrison's Code of Civil Procedure.

Of benignant temper, genteel, unobtrusive, and conciliatory manner, his uniformly moral and upright conduct surrounded him with clients and ardent personal friends and admirers.

Vincent D. Markham possessed few of the graces of oratory, but he always displayed in his argument soundness and vigor of intellect, a thorough knowledge of his case, an adequate fund of legal erudition and the utmost serenity of temper and courtesy of manner. I acknowledge myself indebted to him for advice in personal habits. One time he said to me, "If you are drinking, never let your clients smell your breath."

Bela M. Hughes was the leader of the Colorado Bar. He possessed in a marked degree the genius of reaching juries by other means than eloquence. Kentuckian by birth, a typical southern gentleman. He grew wealthy in heavy cases in all branches of legal practice. Sturdy sense, courtly bearing and natural astuteness for legal discussions were the forces employed to carry his arguments. He was a giant in law by reason of his commanding qualities and admirable character, and stood at last as a venerated monument in the courts of Colorado.

Mitchell Benedict: Honesty, integrity, candor and clearness in speaking were the chief characteristics of this wise, shrewd, far-seeing man. He was utterly wanting in low cunning, yet crafty by his candor.

Franklin C. Goudy: Admitted to practice in the year 1879, he early acquired fame. He was a man of fine presence, educated in books and men; thorough in law, and equally so as a real student of human nature. He had a wonderful memory, a fund of rare humor, a keen incisive way of cutting legal knots, and happy surprises in his conduct of trials. His art was in his human nature style of reason. His passing away has left a place in his profession it will not be easy to fill and deprives the state of a man whose influence was ever exerted in behalf of all that tends to good citizenship. Domestic in his tastes, modest by nature, it was in his home life, surrounded by his family and congenial friends, that the wide range of his intellect, the fullness of his knowledge and his catholic interests were revealed. The world was better because he lived in it.

Time will not permit of further comments on the individual members of the Bar that I have mentioned, but I may be permitted to say that I learned to admire all of them as gentlemen as well as lawyers, and have retained a vivid recollection up to the present time of every one of them. They were an honor to the profession, which cannot be said of all lawyers.

I have confined my remarks in a measure to attorneys who figured in the practice during the early 70's. They have lived in

Colorado, and, while they have all gone, their memory remains, and so in the history of many lives, what shadows they are and what shadows they pursue; the memory of the deeds they did lives on. Their lives go out like sentinels relieved, to sleep; lives grown brave and useful in their state, that would make others better by their reading.

The glory of a lawyer is his strength of character. His knowledge and acumen must be forever respected. It is his last-  
ing capital. Fires never burn it, slanders cannot kill it, distance cannot destroy it, for what he owns in knowledge is his, is valuable, and is lasting.

To the younger members of the profession I would say, for generations past in all countries where lawyers are known, their example and influence as a class have been in general favorable to sound morals, as well as to the advance of civil and religious liberty. Let the world be able to look to you for the avoidance of all those wretched arts of chicane and knavery. Keep vividly in mind that by you are the hidden villainies of the world to be brought to light, profligacy, however plausible, to be unmasked, and the betrayers of the cause of freedom to be consigned to undying infamy. Recollect that it is your high and inestimable privilege, by judicious counsel, to rescue your clients from merciless cupidity and unmerited ruin; to defend character from calumnious accusations. Be brave as the defenders and upholders of such civil institutions as the world has never seen but once, fearless and indefatigable champions and promoters of social reform and progress. Defend the constitutions of the Federal and State governments and maintain the republican form of government, preserving to each branch, executive, judicial, and legislative, its allotted powers from enemies within and without.

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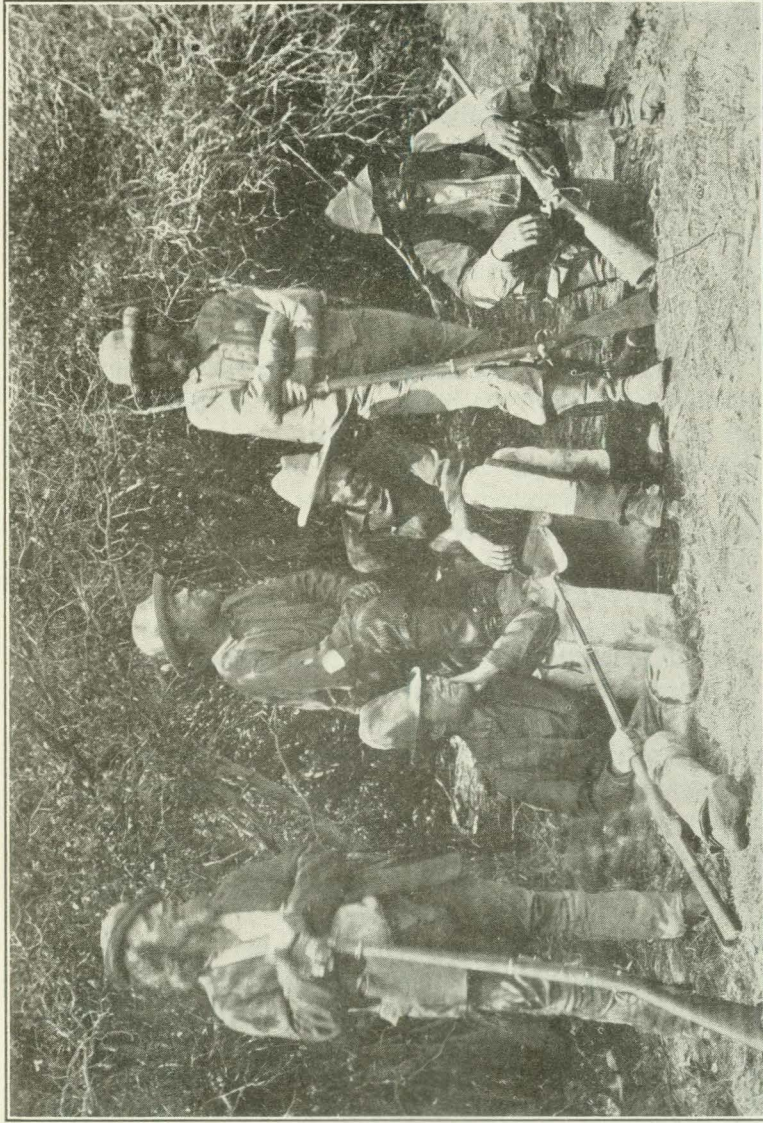
## First Official Visit to the Cliff Dwellings

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(Narrative written for the State Historical and Natural History Society of Colorado, by W. H. Jackson, Photographer of the U. S. Geological Survey, Detroit, Michigan.)

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The Photographic Division was outfitted as a separate unit of the U. S. Geological Survey of 1874, the same as the year before, and, in starting out from Denver the 21st of July, was instructed by Dr. Hayden to proceed first to Middle Park via Berthoud Pass and then to work south, crossing the head of the Arkansas to the San Luis Valley and thence to the San Juan Mountain region. Our itinerary had been talked over and



Harry Lee, Guide; Bob Mitchell, Packer; W. H. Jackson, E. A. Barber, Bill Whan, Packer; Wm. Shaw, Cook. Photographic Division, U. S. Geological Survey, 1875. Taken on Arrival at Moss, Camp on La Plata, September 7.

changed many times before our plans took definite shape, the underlying purpose being that we should traverse some portion of the territory of the other divisions of the Survey. Wilson had been assigned the southern or San Juan region and, on account of its reputed wonderful mountain scenery, I was expected to co-operate more fully with him and make this the main objective of my season's work. The near half century that has passed since then has obscured my memory as to some details, but I am very certain there was no intention to go south of Baker's Park into the San Juan basin until we met Cooper and his outfit near the head of the Rio Grande on his way into that country.

Having worked over most of the territory assigned to us we finally reached the Rio Grande on our way into the heart of the "San Juan" via Cunningham Pass. On the 27th of August we camped early in the day at Jennison's (Chemiso) Ranch, as it was too late to make the Pass that day, and also to do some photographing in the neighborhood. Another and equally potent inducement to stop was the opportunity to get a good square meal served by the rather attractive young hostess of the ranch, as we were almost out of "grub" and no more to be had until we reached Howardsville.

While we were unpacking, a burro pack train came along and went into camp near by. As they passed us there was much hilarity over the very comical appearance of one of the party, who was astride a very small burro, with another one of the party following behind with a club with which he was belaboring the little jack to keep him up with the train. On our return to camp from our photographing later in the day this same man had come over to visit us. A mutual recognition followed our meeting as I remembered him as a fellow townsman in Omaha when I was in business there a few years previously. With all of us grouped around a rousing big fire after supper we talked long into the night, Tom Cooper explaining that he was one of a small party of miners working some placers over on the La Plata, that he had been out of supplies and was now on his return to their camp. As he appeared to be well acquainted with this part of the country, we "pumped" him for all the information he could impart. As he was naturally a loquacious individual, he had a great deal to say, and, understanding in a general way the object of our expedition, urged us by all means to come over to the La Plata and he would undertake to show us something worth while.

It was generally known that many old ruins were scattered all over the southwest, from the Rio Grande to the Colorado, but Cooper maintained that around the Mesa Verde, only a short

distance from their camp, were cliff dwellings and other ruins more remarkable than any yet discovered. All this interested us so much that, before we "turned in" that night, we had decided to follow him over to his camp as soon as we could outfit for the trip.

Cooper had not traveled over the country where the most important of these ruins were to be found but had his information largely from John Moss and his associates. Moss, he explained, was the high "muck-a-muck" or "hi-yas-ti-yee" of the La Plata region, who, through his personal influence with the Indians, had secured immunity from trouble not only for his own operations but also for others traveling through the country.

A few days later, after dividing our party in Baker's Park and traveling light, just Mr. Ingersoll and myself with the two packers, we were on our way to the La Plata. Soon after leaving Animas Park we overtook and passed Cooper's outfit and a few miles farther on were very much surprised by the appearance of Moss himself coming up from behind on a jog trot with the evident purpose of overtaking us. Riding along together until we reached camp, cordial relations were established very soon, and, with a good deal of preliminary information, he promised us his co-operation, and possibly his company, in our further operations.

Moss at this time appeared to be about 35, of slender, wiry figure, rather good looking, with long dark hair falling over his shoulders, and as careless in his dress as any prospector or miner. Quiet and reserved in speech and manner generally, he warmed up to good natured cordiality on closer acquaintance, and, as we found out later, was a very agreeable camp companion. Jogging along together over the trail, he described in a general way what we might find, the natural features of the country and the difficulties to be met with. He also had a good deal to say about a recent treaty with the Southern Utes, by which new boundary lines had been established excluding them from the mountain regions, very much to their dissatisfaction, not only on account of the loss of their hunting grounds, but also because of the failure of the government so far to make some promised awards. As one of the consequences they were frequently ordering all white men off their former reservation, and, while there was but little actual hostility, there was a good deal of uncertainty and apprehension. Moss explained that when he first came into this country he had made a treaty of his own with the principal chiefs, and, by the payment of a liberal annuity in sheep and some other things, had secured their good will and freedom from molestation in their mining operations.

The camp was located on the La Plata where it emerged from Babcock Mountain, and was, in truth, a camp only; a few small tents and some brush "wickiups" afforded all the protection they had provided for themselves up to this time. Their mining operations consisted of a ditch line, partially completed, running out on a bench extending down the La Plata some two or three miles and supposed to contain enough free gold to pay for working it. I believe this was afterwards found unprofitable and the work abandoned. Both Ingersoll and myself were donated generous shares on the "bar," but it didn't mean anything to us in dividends. They were a jolly lot of old timers, mostly from California and the Southwest generally. Their operations were financed by San Francisco capitalists and engineered by Moss as their representative. Just at this time, however, they were all very much worked up over an election that was about to come off. A new county, or township, perhaps, had been formed from the newly acquired territory and officers were to be elected. I do not remember any of the details as to who or what was to be voted for, except that Moss was one of the candidates, and that he had promised to go with us as guide and counsellor as soon as this election was over. To help matters along all our party voted with the miners, there being no residence requirements, and as soon as this formality was over we started off the packers on the first stage of our journey. The rest of us waited until Moss closed the polls and then, with Cooper as the sixth member of our party, we made a rapid ride over to Merrit's Ranch on the Mancos, where we all put up for the night. Merrit was one of Moss' outfit who had taken up a claim on the Mancos, built a log house and was experimenting in gardening. Just now he was bewailing the loss of some of his vegetables by an early frost; his hardier crops had turned out very well, however.

So far, I have drawn largely upon memory in relating the incidents that directed my attention to archaeological, instead of scenic, photography on this San Juan expedition. I intended leaving the story at this point, but, in looking over my old notes again in an effort to revive recollection of almost forgotten details, I find some descriptions of personal experiences that, I think, will bear repeating.

"Sept. 9th to 15th, inclusive, was occupied with the investigation of the Cliff ruins, all of which is set forth fully in the Bulletin of the U. S. Geological Surveys, Vol. 1, 1874-5. The following notes will omit the details of these investigations, and will mention only a few incidents in the day to day happenings of, to us, a very eventful week.

"I have already mentioned, in my daily notes, the composi-

tion of our party up to the time we reached the La Plata camp, but I will bring the different members together again, at Merritt's Ranch, as made up for this occasion, all eagerly expectant as to possible discoveries, and alert with the spice of adventure because of the uncertain temper of the more unruly Indians who frequent these remote canyons. When we started out this bright and bracing September morning we had as guide and mentor Capt. John Moss, a small wiry man of about 35, as hardy and tough as an Indian, quiet, reserved and even tempered, helpful and resourceful in all that pertains to life in the open—his knowledge of the country and of its little bands of aborigines was of great service in many ways. Cooper came with us, not that he will be of much help, but because of former friendship and that he was the means of bringing us to the La Plata camp and the acquaintance of John Moss. He was an easy going chap, somewhat indolent and content to follow along with the packs—very loquacious and full of wonderful stories concerning himself—supplying most of the amusement in the banter around the camp fire after the day's work was over. Ingersoll and myself with the two packers, represented the Survey. We had three pack mules, 'Mexico' carrying the photographic outfit—a little rat of a mule but a good climber, and could jog along at a lively pace without unduly shaking up the bottles and plates. 'Muggins' and 'Kitty' carried the 'grub' and blankets, and as both were reduced to bare necessities, their packs were light and they could be pushed along as fast as we cared to ride. Steve and Bob with their packs kept close to the trail most of the time, while the rest of us were roaming all over, investigating every indication of possible ruins that came to our notice; and when photographing was decided upon, 'Mexico' would be dropped out, unpacked, tent set up, and the views made while the others jogged along until we overtook them again.

"Our first discovery of a Cliff House that came up to our expectations was made late in the evening of the first day out from Merritt's. We had finished our evening meal of bacon, fresh baked bread and coffee and were standing around the sage brush fire enjoying its genial warmth, with the contented and good natured mood that usually follows a good supper after a day of hard work, and were in a humor to be merry. Looking up at the walls of the canyon that towered above us some 800 to 1,000 feet we commenced bantering Steve, who was a big heavy fellow, about the possibility of having to help carry the boxes up to the top to photograph some ruins up there—with no thought that any were in sight. He asked Moss to point out the particular ruin we had in view; the Captain indicated the highest part of

the wall at random. 'Yes,' said Steve, 'I can see it,' and sure enough, on closer observation, there was something that looked like a house sandwiched between the strata of the sandstones very near the top. Forgetting the fatigue of the day's work, all hands started out at once to investigate. The first part of the ascent was easy enough, but the upper portion was a perpendicular wall of some 200 feet, and half way up, the cave-like shelf, on which was the little house. Before we had reached the foot of this last cliff only Ingersoll and I remained, the others having seen all they cared for, realizing they would have to do it all over in the morning. It was growing dark, but I wanted to see all there was of it, in order to plan my work for the next day, and Ingersoll remained with me. We were 'stumped' for a while in making that last hundred feet, but with the aid of an old dead tree and the remains of some ancient foot holds, we finally reached the bench or platform on which was perched, like a swallow's nest, the 'Two Story House' of our first photograph. From this height we had a glorious view over the surrounding canyon walls, while far below our camp fire glimmered in the deepening shadows like a far away little red star.

"As everyone took a hand in the camp work we were generally off on the trail quite early, not later than sun up, each morning, and were able to make fast time and good distances, despite the many diversions to investigate and photograph, but on the fourth morning out, on the head of the McElmo, we got a late start, with a long ride ahead, where it would have been much better to have made the greater part of it in the cooler hours of early morning. It was all owing to the wanderings of our animals. Generally they were tired enough to remain near camp when there was water or any kind of feed. If likely to wander, we hobbled, or staked out, the one or more that were leaders. Whenever we could trust them, however, we preferred to do so, for it was but a scanty picking they got at the best, and we liked to give them all freedom possible. So this morning at Pegasus Spring, with the prospect before us of a long ride under a hot desert sun, we had breakfast dispatched before sunrise, and while the rest of us packed up, Steve went out to bring up the stock which was supposed to be following the strip of moisture and scanty grass in the bed of the wash below us. Our work was soon done, but no mules appeared. Finally after an hour's impatient waiting, we saw Steve coming up in the far distance, accompanied by an Indian but without the animals. Cap. and I ran down to meet them; Steve reported that he had been unable to find any of the band, but the Indian, who said he was the father of the 'Captain of the Weemenuches,' was of the opinion



that our man did not know how to follow trail, and that our animals had left this valley and gone up a left-hand branch leading back to the mountains. Moss understood Ute well enough to get all the information we wanted, and also, that there was a small band of Indians camped below. Perhaps they had something to do with the disappearance of the stock in the hope that some stragglers might be picked up later, but we accepted his protestations of good faith and sent him up to our camp, while Cap. and I struck out at once to pick up the trail. A mile below we found where it turned off to the right. High up on the top of the mesas we heard Indians calling, or signalling one another, in the long drawn out highly pitched key peculiar to them, but what it all meant we did not know. Keeping up a jog trot, or run, as fast as our wind and endurance permitted, we finally came out on a low divide where we met a couple of young bucks mounted and loaded down with skins. They were on their way to the Navaho country and intended stopping at the spring where we were camped. If we did not succeed in finding our stock they would assist us after they had had a rest. We trotted on, however, keeping up a stiff pace, passing the five mile spring, and then coming to a big bend in the trail, I followed around while Capt. cut across, and there, where we met, at the foot of the last hill leading up the Mancos divide, we found the animals all grouped together under a tree, whisking their tails in contented indolence. Mounting bare back, with lariat ropes for bridles, we took a bee line for camp, and pushing them along at a stiff pace, were back to the spring by ten o'clock. Found the camp full of Indians, all mounted, the Captain himself among them, a venerable, gray headed, old man. Most of the others, with the exception of the one we met with Steve, were young bucks bound for the Navaho country. Were all quietly good natured and did but little begging. The old Captain wanted to know what we were doing down here, and when our business was explained to him by Moss, all of them laughed most hilariously, not comprehending what there could be in these old stone heaps to be of such interest.

"It was intended to reach the western limit of our explorations this day, on the banks of the Hovenweep, so we had a long drive before us, under an exceedingly hot sun blazing down into the dry and barren wash of the McElmo. We pushed right through on the double quick, deferring all photographic work until our return, but investigating and noting everything of interest as we traveled along. We made only one stop, and that for water, late in the afternoon, at a point where we left the McElmo to cut across the mesas to the Hovenweep. Water was expected to be found here, but the bed of the wash seemed perfectly dry,

as it had been all day since leaving the spring. Water we must have, so we got busy and with a shovel that we had with us, dug down in the sand to about four feet, when water began to trickle slowly through, but the sand caved in so fast we could not get much of a pool. - After a drink around ourselves, we filled our hats, a cup full at a time, and gave our animals a taste at least. They stood around whimpering in eager expectancy, and apparently appreciated our efforts to help them.

"On the return trip from the Hovenweep, we were three days getting back to the La Plata. It was a busy time with a good deal of photographing and some digging about the ruins. On the way from Pegasus Spring to the Mancos, Ingersoll got interested in some fossils and fell behind some distance. When he came out on the broad open divide between the Dolores and the San Juan, he failed to pick up our trail and went off on another that led over into Lost Canyon. He was lost for good nearly all night, but by taking the back track managed to rejoin us at Merrit's soon after sun rise.

"Remained long enough at the Mancos to make some negatives of the ranch house and then 'lit out' for the La Plata at top speed, getting there just in time for dinner before dark. The miners have all moved down from the upper camp, and are just starting a new one for the winter, the ditch having been brought down to this point.

"Sept. 16th, off for Baker's Park again, after a very cordial leave-taking all around. Made many plans for the continuation of our work next year. Found Animas Park almost entirely deserted and farms abandoned because of the 'Indian scare.' Took this opportunity to load up with fruit and vegetables, as our supplies were at the vanishing point."

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## **“Red Snow” in Colorado**

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By Ellsworth Bethel, Denver, Colorado

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No specimen in the exhibit cases at the museum attracts more attention than the beautiful exhibit of red snow collected on Arapahoe Glacier, August, 1914. It was discovered by the writer when taking a class of university students to the top of Arapahoe Peak. He noticed it as red or carmine stains in the footprints of the students along the trail and at first thought that someone had been injured and that these were blood stains. Soon it was discovered that the color of the snow was due to a small organism, and a microscopic examination later showed it to be the so-called “red snow.”

"Red snow" is a low form of plant life—a one-celled plant belonging to the Green Algae. The latest scientific name as given in Collins' Green Algae of North America is **Chlamydomonas nivalis** (Bauer) Wille. It has previously been referred to various genera such as *Sphaerella*, *Uredo*, *Protococcus*, *Haematococcus*, and several others.

So far as the writer knows, the first reported occurrence of this interesting plant in Colorado was made by Mr. Romyn Hitchcock of the National Museum in an address to the Washington Biological Society. He spoke of having received a specimen from Mr. Alexander Mac Dougal collected in Poverty Gulch, Colorado, January, 1885. There is a Poverty Gulch in Teller, Gunnison, and San Miguel Counties, and it is not known which one is referred to, though probably the one in Teller County.

Mr. Montross, a member of this Society, recently informed the writer that "red snow" was very abundant on the range from Hoosier Pass to Buena Vista, a distance of forty miles, during the winter of 1884-5.

"Red snow" is found only on the snows of boreal regions, that is, at high latitudes and in high mountains—seldom below 10,000 feet in Colorado. It is seen on Arapahoe Glacier only in warm summers when the upper deposits of snow have melted.

Ford Carpenter of the U. S. Weather Bureau reports it from Oregon and Washington and has written a most luminous description of its occurrence on Lambert Dome near the Yosemite. He gives a reproduction in colors of a photograph taken by the Lumiere process. (See "Photographing 'Red Snow' in Natural Colors," Trans. San Diego Society Natural History, Vol. 1, No. 3, 1911, pages 109-111.) This California record is the southern-most known for North America.

Carpenter remarks: "In the third century before Christ, Aristotle mentions 'red snow' in his 'Meteorologics'; Saussure in the eighteenth century hinted at its true cause." Sir John Ross, Parry, and other Arctic explorers have written extensively of its great abundance in the Arctic regions. And a good deal has been written of its occurrence in the Alps.

The specimen at the museum was obtained by melting a large quantity of snow and thus obtaining a concentrated solution. The pinkish or carmine color is still very evident though the specimen has been on exhibit for ten years.

#### Other Algae of Colorado

Another Green Alga of a reddish color common in Colorado is **Haematococcus pluvialis** Flotow (***Sphaerella lacustris*** Hazen). Unlike "red snow" it is not limited to boreal regions

and though exceedingly common in the cold subalpine swamps is not infrequent in the potholes of sand rocks, and lime rocks of the plains, after rains. It may be seen as a brick red deposit in these potholes even after the water has evaporated. Worms, Rotifers, *Calandrina*, larvae of insects, and other aquatic life which feed on this alga as well as on "red snow," become red in color, but lose this color when taken from this diet.

Another green alga of a red color found in great abundance on muddy flats is **Protosiphon botryoides**, sometimes associated with **Botrydium granulatum**. Both are common at Denver and Boulder.

The lakes, irrigating ditches, and swampy land of the plains, as well as the mountain streams, are rich in the common forms of algae.

This article is intended merely to call attention to the abundance of the common genera of algae available for students of botany in our high schools. The following is a list of the common genera which are abundant at Denver and Boulder.

#### Red Algae (Rhodophyceae)

*Lemanea* is abundant in streams west of the Divide, and occasional in those of the east slope of the mountains.

#### Brown Algae (Phaeophyceae)

*Hydrurus* is common about springs, and not infrequent in drinking fountains of cities.

#### Green Algae (Chlorophyceae)

The genera of Green Algae are very numerous. The following are the most interesting for study in the high schools:

*Botrydium*, *Chaetophora*, *Cladophora*, *Coleochaete*, *Desmids*, *Draparnaldia*, *Haematococcus* (*Sphaerella*), *Hydrodictyon*, *Lyngbia*, *Oedogonium*, *Pediastrum*, *Pithophora* (very interesting but rare), *Pleurococcus*, *Prasiola* (in mountain streams), *Pleurococcus*, *Protosiphon*, *Rhaphidium*, *Scenedesmus*, *Spirogyra*, *Stigeoclonium*, *Tetraspora*, *Ulothrix*, *Vaucheria*, *Volvox*, and *Zygnema*.

One of the most interesting algae for class work is the rare tropical *Pithophora Oedogonis* which occasionally develops among other algae in aquarium jars.

The ubiquitous Charas, and the much less common *Nitella*, though not closely related to the forenamed Green Algae, are usually included in this group in textbooks in botany.

#### Blue-Green Algae (Myxophyceae)

*Anabaena*, *Aphanocapsa*, *Cylindrospermum*, *Gloeocapsa*, *Gloetrichia*, *Leptothrix*, *Lyngbya*, *Nostoc*, *Oscillatoria*, *Rivularia*.

### Diatoms (Bacillariae, or Diatomaceae)

Diatoms are very abundant especially among the Blue-green Algae, and often occur unmixed with other algae in large gelatinous masses attached to rocks. A stratum of diatomaceous earth 5 to 15 inches in depth in West Denver has afforded material for study of fossil species.

#### Notes

The collections of algae at the museum, like our extensive collections in fungi, plant diseases, etc., have not been assembled, for lack of space, and so are not accessible for reference. Very little work has been done in this state on this most fascinating group of plant life, though the writer has made extensive collections for the late Prof. Collins, the eminent algologist. A list of determined species will appear later.

#### References

The following reference books on Freshwater Algae will be found most useful to high schools:

West's British Freshwater Algae; Macmillan Co. Though dealing with algae of the British Isles, the genera are well represented in the United States.

Wolle's Freshwater Algae of the United States is a large handsomely illustrated work, but now out of print.

For those especially interested in the group, the following technical publications will be found to be of great value:

Collins' Green Algae of the United States. Published by Tufts College.

Tilden's Algae of Minnesota, published by the University of Minnesota, treats the Blue-Green Algae of the whole of North America.

## Further Archaeological Research in the North-eastern San Juan Basin of Colorado, During the Summer of 1922

BY J. A. JEANCON AND FRANK H. H. ROBERTS

### Excavation Work in the Pagosa-Piedra Field During the Season of 1922

BY FRANK H. H. ROBERTS

(Continued from the March Number)

Room 35 contained the greatest evidence of any of the five of having been used as a dump. A large quantity of house dirt, ashes, bones, broken pottery, etc., was found on the floor. The greatest amount of the debris was in the east end of the room, where the remains of the ceiling were found 18 inches above the floor. At the west end the beams were but 10 inches above the floor, the interval being filled with refuse. The heavy beams which supported the ceiling ran the long way of the room with the short or cross-way being spanned by the smaller poles, these covered with twigs and bark, and an adobe floor over all. The heavy roof beams were two feet from the walls. The remainder of the filling of the room was composed of plastering, adobe, stones from the wall, and windblown sand. Room 35 yielded a large number of sherds of the black on white, red, plain and coiled varieties. Enough pieces were obtained to make reconstruction of several bowls and globular shaped vessels possible. In addition to this several pieces of turquoise originally used for inlay work, a burned turquoise pendant, bone awls and scraping tools were secured. No base or backing for inlay work was found.

Room 34 did not furnish much in the way of artifacts, the only specimens being a bone bead, a long blade-like stone instrument probably used in the tanning of hides, and a piece of a black on white bowl, the remainder of which had been found in Room 35 (Plate 9, B).

Room 33 yielded a few sherds from a piece of coiled pottery and a few black on white sherds, one bone awl, one large bone bead, and a piece of bone which had been highly polished, use unknown.

Room 32 furnished but a very few sherds, but contains a doorway of the inverted keystone type (Plate 16, upper left).

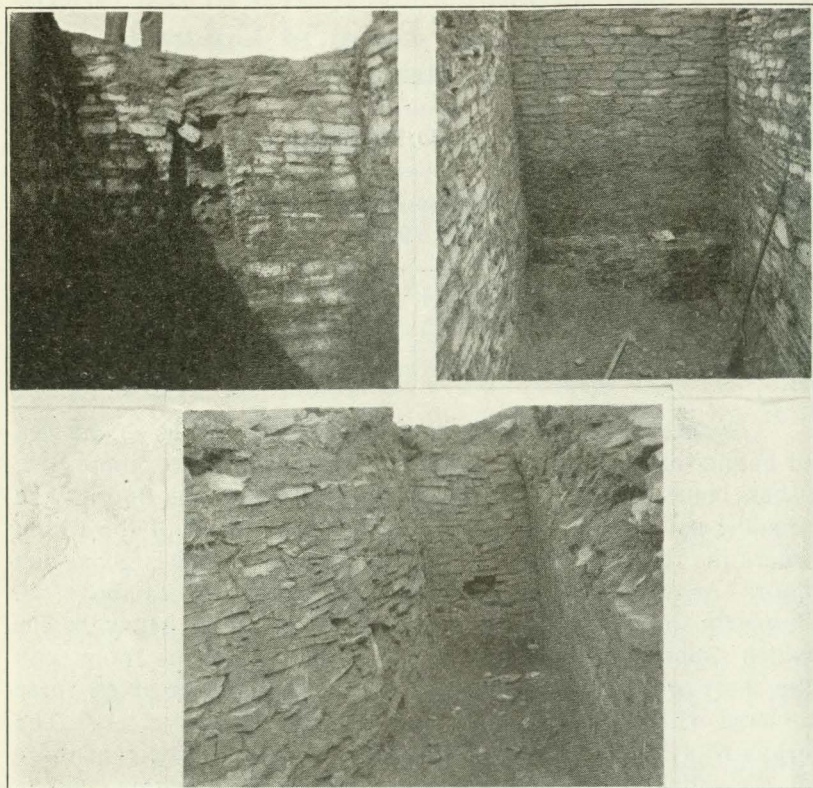


Plate 16. Upper Left—Doorway in End of Room 31. Upper Right—Reinforcing Buttresses in End of Room 34. Lower—Kiva Compartment No. 1, A.

The door is located in the west wall. It was the only one found in this series of rooms and had connected Room 32 with the small compartment formed by the straight wall of the rectangle surrounding the West kiva and the wall of the kiva. The sill is 2 feet 7 inches from the floor. The door is 2 feet 6 inches from the north wall at the sill and 2 feet 9 inches from the same wall at the lintel. The sill is 1 foot 11 inches from the south wall and the lintel 2 feet 1 inch from the same wall. The door measures one foot 5 inches in width at the sill, 11½ inches at the lintel and is 2 feet 11 inches in height. It was filled with fallen stone from the wall above.

Room 31 was almost barren of artifacts of any kind, a few sherds being the only returns. It is in the east end of this room that the wall juncture which has already been referred to is located.

Another interesting architectural feature of this group of rooms is to be found in Room 34, where a reinforcing buttress was placed at the bottom of the east wall and extending along the south wall (Plate 16, upper right). As will be seen by the ground plan this buttress has the shape of an elongated triangle running along each of the walls cited. At the southeast corner the east retaining wall is 10½ inches wide and rises 2 feet 6 inches above the level of the floor. Where it meets the north wall it is but 4 inches wide. The buttress on the south is 5½ inches wide at the corner and after running along the wall for a distance of 5 feet 3½ inches fuses into the wall. It is but 1 foot 7 inches high. The reason for the placing of these retaining, or perhaps better, reinforcing walls, was probably the slope of the mesa at this point and the belief of the builders that some additional support was necessary to keep the corner from slipping off down the hill into Room 35. Or else it was planned to build a thickened wall at the end of this room, as was the case in Room 35, but after putting in the foundation it was decided not to continue the wall on up to the height of the remainder of the walls.

The measurements of these rooms are: Room 35, east wall, 7 feet 7 inches; west wall, 7 feet 5 inches; south wall, 14 feet 10 inches; north wall, 14 feet 6 inches. Room 34, east wall, 7 feet ¼ inch; west wall, 6 feet; south wall, 16 feet 2 inches; north wall, 16 feet 2 inches. Room 33, east wall, 6 feet 11 inches; west wall, 5 feet 11 inches; south wall, 16 feet; north wall, 16 feet 2 inches. Room 32, east wall, 5 feet 8½ inches; west wall, 5 feet 9 inches; south wall, 16 feet 3 inches; north wall, 16 feet 4 inches. Room 31, east wall, 6 feet 9 inches; west wall, 6 feet 1 inch; south wall, 16 feet 4½ inches; north wall, 16 feet 7 inches.

The average depth from the top of the standing wall at the east is 11 feet and from 5 feet at the west end of Room 35 to 8 feet at the west end of Room 31. The walls running north and south, or the east and west walls of these rooms, were built at the same time in a unit, while the walls running east and west were filled in after the former had been built. The wall forming the partition between these rooms and the rectangular space about the West kiva apparently pulled away from the other walls after having been built, and the crack thus resulting was filled in with small bits of sandstone. This is the more marked in Rooms 35 and 34.

#### Kiva Compartments

A rather interesting feature of this unit, and one similar to what the 1921 excavations disclosed, is that of the compartments formed by the rectangular inclosure surrounding the West

kiva. Two rooms of this type were uncovered, just west of the group of five described above. The south compartment was the first excavated and it furnished a large amount of broken pottery, many pieces of which it was possible to restore, arrow heads, bone instruments, and two pieces of turquoise, one a portion of a pendant, the other from an inlay. The debris was similar to that taken from other rooms but gave more evidence of the place having been used as a dump. It is a large inclosure as the diagram shows (Figure 7, 1-A). Along the east wall it measures 21 feet and it is 13 feet 4 inches from the southeast corner to the point where the circular and straight walls unite. The cross-wall connecting the straight and curved walls and separating the apartments is 4 feet 4 inches in length. This piece of masonry was not built on the cap-rock of the mesa, as were the other walls, but on the top of a dirt fill one foot in depth, showing that it had been placed there after the original walls were constructed (Plate 16, lower). The facing of the straight wall on the east and the short north wall was smooth, the straight wall on the south and the curved wall of the kiva had no facing.

In the north compartment the debris was similar to that in the south or compartment 1-A, although the inclosure was much smaller than the one just described (Figure 7, 2-A). A small wall was built connecting the north wall and the kiva wall similar to that between the rooms under consideration. It was into compartment 2-A that the doorway mentioned under Room 32 opened (Plate 11, lower left). A few pieces of bone, some potsherds and a stone axe came from this room. The axe is of a rather unusual type for this region, being of the two-edged variety. The measurements of this compartment are: East wall, 11 feet 9 inches; straight west wall, 2 feet 10 inches; north wall, 10 feet 9 inches; south wall, 4 feet 7 inches.

### The West Kiva

The West kiva proved one of the most interesting features of the summer excavations. In the report for the work of 1921 it was referred to as the small kiva of the ruin, but upon excavation it was found to be practically as large as the kiva uncovered the previous season. As the weathering influences had been stronger on the southwest side of the community house the walls of this kiva are in a poor state of preservation. The outer wall had fallen away on the southern half to the level of the top of the banquette and at one place was even below the banquette. The construction of the walls was similar to that previously mentioned, although somewhat better, smaller stones having been used (Plate 11, upper right).

Many of the features common to the Mesa Verde type of kiva are missing. The room under consideration has no Sipapu or ceremonial opening to the underworld, no pilasters for supporting the roof beams and apparently no deflector. There is a wall which might have served for a deflector but it was placed on the west side of the fireplace, not between it and the ventilator opening, where it would of necessity have to be if it served the purpose of a deflector. The solution which first presented itself with respect to this problem was that the length of wall to the west was simply one portion of a deflector which had entirely surrounded the firepit on three sides, but the fact that no signs of wall construction were found on the other two sides denies such an answer. There were a few indications on the north side of the fireplace which suggested the belief that there had at one time been a wall at that place but there was nothing to establish its relation to the wall on the west. It is more probable that the stones had fallen, in the position in which they were found, at the time of the burning of the roof. If, however, this portion of wall had joined originally with that on the west it is impossible to say what the purpose was of having the fireplace inclosed on two sides, especially as those two sides were the north and west, while the ventilator opening was to the southeast (Plate 7, upper).

The fireplace had been built up from the floor and stands at a height of 1 foot 10 inches above that level. The pit was circular in form, measuring 3 feet 2 inches in diameter. It was filled with ashes at the time of excavation. A curious fact in connection with the fire place is that the bottom of the ventilator opening is the same height above the floor, 1 foot 10 inches. The probabilities are that after the kiva was constructed with the ventilator at the height above the floor mentioned it was found necessary to raise the fire level in order to secure the desired benefits from the ventilator. There is another theory which suggests itself, and that is, that this kiva was used in connection with the ceremonial fire and the fireplace was elevated, similar to those in structures in other regions of the southwest which are known to have been used for that purpose, with such an object in view.

The ventilator of the West kiva (Plate 17, upper) was very unlike that of the East kiva insofar as it did not have the horizontal shaft leading or extending into the room. The walls were shattered at this point to such an extent that it is impossible to state just how the ventilator originally appeared, but, following the general type of such openings, it is fairly safe to state that the outer wall of the kiva contained the perpendicular shaft. Burned material found in the horizontal shaft indicated that the

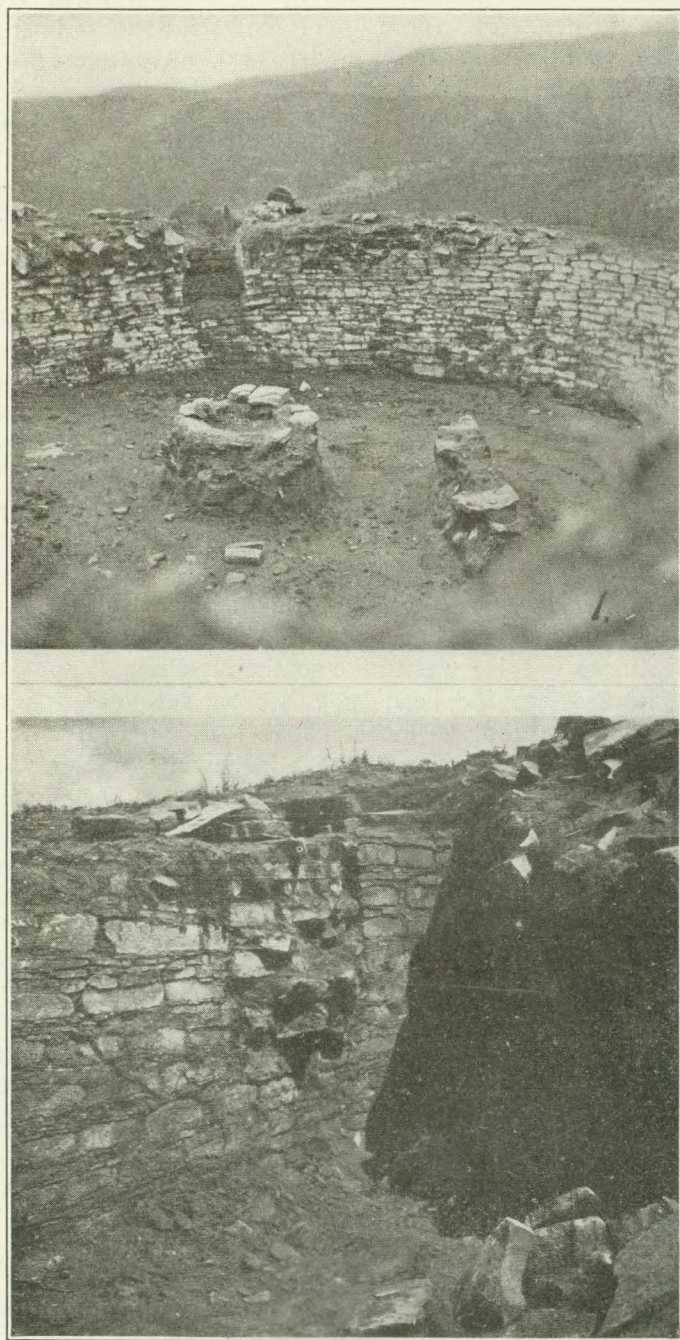


Plate 17. Upper—Fireplace and Ventilator Shaft of West Kiva.  
Lower—Doorway in Compartment West of the West Kiva.

top had been covered by wooden poles, plastered over, in order to make the banquette top an unbroken surface. A large stone was found in the opening of the ventilator. This stone just fit the opening and may have been used in the capacity of a movable deflector, the inrush of fresh air being checked as desired. The horizontal shaft of the ventilator measures 2 feet 4 inches from the bottom of the shaft to the top of the banquette. It is 1 foot 11 inches in width, 5 feet 5 inches in length. At the south, or more correctly the southeast, end there is the remnant of a wall which originally closed the opening. This bit of masonry is 1 foot 2 inches in thickness and stands to a height of 1 foot.

Because of the sloping surface of the mesa top the builders found it necessary to level the kiva floor by means of a sand fill. The floor level was readily discernible and at the west side of the kiva a foot of sand had been filled in to make the surface conform to that on the east where the adobe flooring was applied directly to the cap-rock.

The remains of burned timbers found in the debris in the excavation of the kiva were lying in such a manner as to plainly indicate that the building had been covered with the prevailing type of what is known as the cribbed roof. The beams had apparently been laid directly on the banquette top as there were no signs whatsoever of pilasters. The beams averaged from 6 to 8 inches in diameter, judging from the charred remains, which were measured at the time of removal. The north side of the roof was the first to fall, the south remaining intact for a longer period. This was evidenced by the fact that on the north side the burned remnants were lying on the floor while on the south and southeast several feet of drift sand was between the floor and the beams. Before excavation of the West kiva it was hoped that it would throw some light on the roof construction and other problems which have not been solved with regard to the East kiva, but the work did not result in any additional information that would be of value in deciding certain baffling points.

One whole piece of pottery of the black on white ware (Plate 18, A), which gave the appearance of two bowls joined together, was found in this kiva. Many black on white sherds were recovered and it was possible to restore several additional pieces of pottery from them (Plate 18, C). Most of one red ware bowl (Plate 13, F) and a great many sherds of the coiled variety were also secured.

In diameter the kiva is 28 feet 11 inches between the outer walls and from 23 feet 2 inches to 23 feet 6 inches from banquette to banquette, slight irregularities making the variation in the latter. On the north side of the kiva the wall stands 3 feet



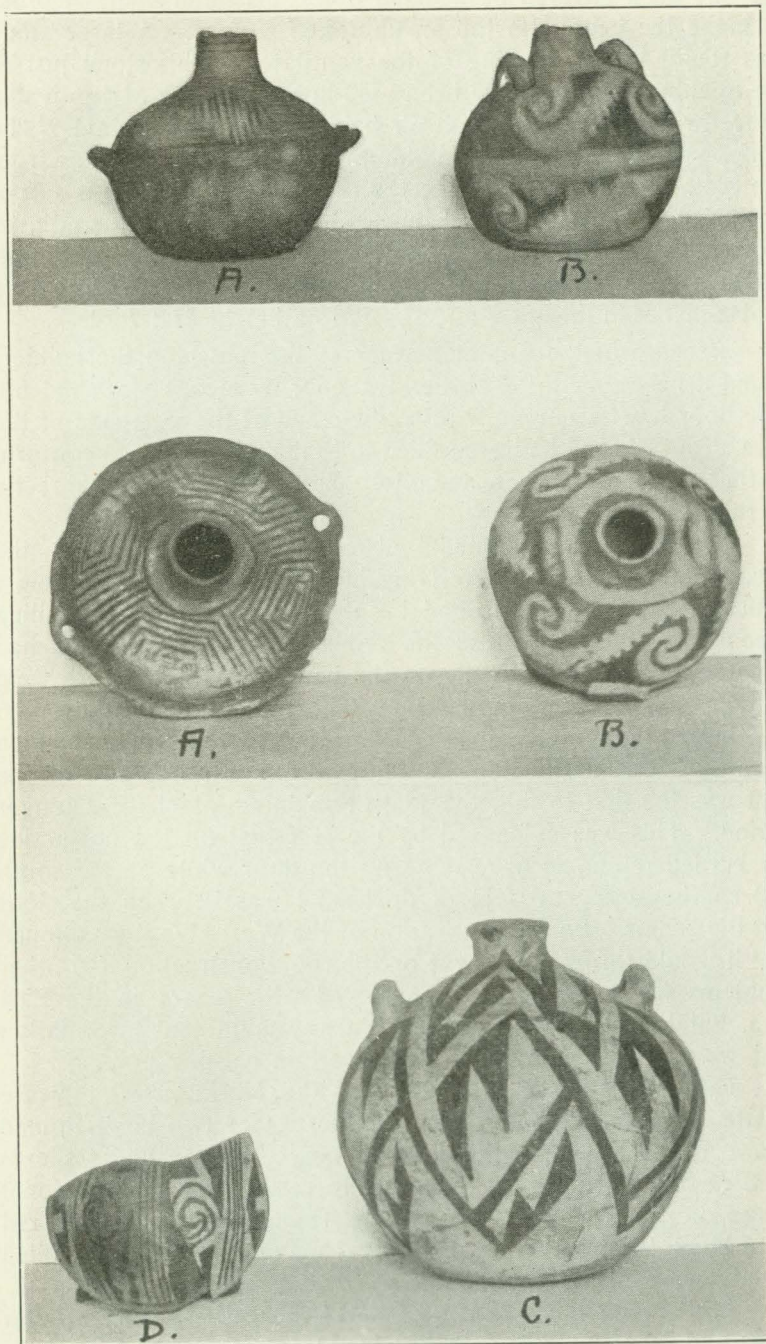


Plate 18. Black on White Ware

above the banquette. The same is true on the east, and on the west the height is but 1 foot 8 inches. On practically the entire southern arc of the circle, as mentioned previously, the outer wall is level with the top of the banquette and has fallen away in one place until it is below the top.

From the top of the banquette, which is two feet 8 inches wide, to the floor the measurements are: east side, 4 feet 2 inches; north, 4 feet 10 inches; west, 5 feet; south, 4 feet 5 inches.

Work was started on the compartments west of the kiva, similar to those already described on the east side, but the walls were in such bad condition that it was deemed advisable to leave the rooms uncleared in order to keep them from entirely collapsing. The north and south walls of the rectangle were traced to the point where they join the west wall. In the north wall another doorway was found (Plate 17, lower). It was of the rectangular type, 2 feet wide. Its height could not be determined, as the wall had fallen away until but 2 feet remained above the sill of the door. This opening is 2 feet 10 inches from the point where the straight wall and the circular kiva wall join. On the north side these two walls fuse into one as will be seen by a glance at the ground plan.

At the completion of this work the extreme western walls of the pueblo were traced and the form of the building determined. It will be noted by the dotted lines at the southern corner that there were no remaining walls at that point but there was sufficient debris to show that there had originally been masonry completing the corner as is suggested by the ground plan. It appears from surface indications that the rooms of the lower or western end of the pueblo run in the opposite direction from those of the central and eastern portions, but absolute certainty in the matter cannot be obtained until excavation is completed.

### Burials

With regard to the burial customs of the people who at one time inhabited the Chimney Rock region but little can be said at present in the nature of a general conclusion. This is due not only to the scarcity of the material but to its variety as well. During the first year's excavations evidence was found which suggested that cremation was perhaps to some extent practiced, not only by the residents of the pithouses on the first benches above the Piedra river, but also by the later inhabitants of the large pueblo on the Chimney Rock mesa. As was mentioned in the report for the work done during the summer of 1921 a curious mass of rubbish and calcined bones was found on the north side of the mesa just below the big ruin. This mass lies

but a comparatively few feet below the rim-rock of the mesa and covers an area 15 by 200 feet in extent.

Upon first investigation this was thought to be the dump heap of the village above, but exploratory excavation showed a peculiar mixture of burned material, potsherds, broken artifacts, and a large number of human bones, all calcined more or less. Feeling that perhaps this spot was merely an exceptional one, two other sections of the area were dug into and the same results obtained. This indicated that the place was not a dump but a cremation site. Regular pits were missing but it appeared as though the slope had been leveled off to some extent so as to give a sufficient surface for the placing of the body and the fuel for the pyre. There are indications that before cremation was completed earth was thrown over the entire mass and only partial cremation resulted. In no instance was there enough left of the bones to determine anything beyond the fact that they were human. As mentioned above, masses of broken pottery and remains of artifacts all showing, more or less, the effects of fire, were found accompanying the bones. Each cremation had a fairly well defined area and gave no indications of overlapping, as would have been the case were this a dumping ground.

In the Harlan Ranch pithouse excavated during the activities of the first expedition the remains of a woman of about 40 years of age were found. This was a burial of the usual type, the body having been placed in the flexed position in the southwest corner of the room. Accompanying the burial were the remains of many pots, broken by the falling roof. This burial was of the general type found all over the southwest and presented no new features.

Of the same nature as mentioned above were the burials found in Room A, Piedra No. 2, during the excavations of 1922. This room contained three burials accompanied by the usual mortuary offerings. The first skeleton removed, that of a man, was in a good state of preservation. The body had been buried in the natal or sitting position in the northeast corner of the room, the back against the north wall. The skull had fallen backward into a bowl which had been placed behind the body, presumably at the time of burial. The other skeletons had been disturbed somewhat by badgers, but indicated that one had been buried in the northwest corner in the sitting position and that the other was buried in the flexed position lying across the center of the room with the head to the east. The skulls of both these skeletons had been smashed by the falling roof material. Room B of this same house had contained a burial also. Portions of a skull and other bits of bone were found in the south end of the room,

but there was not enough evidence to indicate the type of burial, although it may be safely assumed that it was similar in nature to those in Room A.

As previously mentioned in this paper, while excavating in the Upper Pargin pithouses a large olla or storage jar was found beneath a floor slab. This jar contained a heterogeneous mass of bones in a poor state of preservation, but a few of them indicated human origin and were probably those of an infant. Urn-burial in the southwest is not new, as cases have been found in New Mexico where human remains were interred in ollas.<sup>10</sup> Such instances are, however, far from common and in the majority of cases probably the result of a secondary interment. This was probably true of the possible urn-burial from the Upper Pargin pithouse.

In addition to the above-mentioned burials a few of the ordinary earth interments were uncovered during the work of the first summer's expedition. These were located along the edge of the bluff above the river and were of the usual type, being but a few inches below the surface of the ground. The bodies had apparently been placed in the flexed position and the usual mortuary offerings accompanied them.

Endeavoring to draw up a general conclusion as to the mortuary customs of the Pre-Columbian inhabitants of the Chimney Rock region, one meets with these difficulties: First, but comparatively few of each type of burial have been found; second, there are as many of one type as of another; third, in no instance is there enough evidence to indicate that any of the above-mentioned forms of interment was common. In view of these facts it can simply be stated at this time that a variety of customs were followed in the disposal of the dead, no one of which can be regarded as predominant. It is to be hoped that further excavation and investigation will show which, if any, was the more practiced method of burial.

<sup>10</sup>Mortuary Customs of the North American Indians, Urn-Burial, H. C. Yarrow. Pages 137-138. First Annual Report Bureau of American Ethnology.