RANDOM RECORDS OF A LIFETIME
DEVOTED TO SCIENCE AND ART, 1846-1929

BY W. H. HOLMES

VOLUME II

Anywhere and everywhere

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SECTION II  EPISODES AND ADVENTURES
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2. Second expedition to the Yellowstone with the Hayden Survey, as geologist, 1878. (See Volume III of this series and the Report of the Survey for 1878.)

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11. The various explorations are, in a limited measure, recorded in subsequent volumes of these Records especially in Volumes III to X, but more fully in the Annual Reports and other publications of the Hayden Survey, U. S. Geological Survey, Bureau of American Ethnology, the National Museum and the Field Columbian Museum, and various journals.
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SECTION II, EPISODES AND ADVENTURES

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EPISODES AND ADVENTURES
1872 - 19

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THE SQUIRREL AND SNAKE STORY

Letter to Mrs. Holmes from the Survey Camp
in the Jemez Mountains, Colorado, Aug. 1887

The monotony of camp life was broken yesterday evening, August 22, by a little episode which may be of interest to you. I crossed the creek to take a short stroll in the woods that border the valley on that side. Presently I noticed what I supposed to be two squirrels fighting or quarreling in a large tree some 30 or 40 feet above the ground. The chattering was spasmodic and seemingly agonizing. In the top of the tree was a nest of leaves. Surprised at the extraordinary activity displayed I stopped to look and soon concluded that it was not two squirrels but one squirrel fighting some other creature—perhaps a snake. In order to settle the matter I went back to camp and got my field glasses and pistol. With the aid of the glasses I soon discovered a large snake coiled up on a large branch near where it joined the trunk, some twenty-five feet above the ground. The squirrel was fighting for her young. I watched her vain attempts to dislodge the snake. She would spring from the tree trunk above so as to graze the reptile as she descended, turning quickly aside just in time to avoid the serpent's thrust with open mouth sometimes falling off among the branches below and scrambling up again to renew the attack. Again she would
shoot along the branch chattering with an emphatic crescendo until within a foot of the uplifted head of the snake when she would spring back and forth threatening to spring again hoping to throw him off his balance or turn him back. But her every effort failed, and when she had exhausted every possible means of driving him off, she suddenly turned about, ran up to the nest above and seizing a young one in her mouth ran down past the snake, but on the opposite side of the tree, and made her way into a neighboring tree. She was chattering all the time and fumbling and apparently fondling the young one. She was not satisfied, however, but leaving the young one kept coming back and I soon found out why -- I shot the snake and he came tumbling down, and as I reached him I was fairly startled by what I saw -- the snake had two legs with clawed feet, a new feature in snake dom and I felt myself on the verge of a great discovery and consequent fame. The mystery was soon explained, however. A young squirrel had been swallowed and two of its legs were protruding from the bullet holes on opposite sides of the snake's body.

The distress of the mother squirrel was pathetic and her attacks on the snake heroic. After depositing the young one in the neighboring oak, she came back again and again looking for the lost one which had been swallowed by the serpent. The motherly care of the squirrel for her young, and the human-like intelligence which led her, when she realized that her most strenuous efforts to drive away the snake were in vain, to turn about and save the other little one carrying it down the opposite side
of the tree to make sure of saving it from the fangs of the serpent was most remarkable.

I carried the snake to camp where it was an object of much interest, especially the two legs projecting from its sides. I shot three times - each shot taking effect - the last one, tearing the beast's head to pieces, brought him down.

Robin's Cries Bring Aid as Blacksnake Casts Spell on Him

Mother Bird and Three Young Already Eaten When Help Arrives.

Special Dispatch to The Star.
LEONARDTOWN, Md., July 18.—A male robin, fighting gamely for his life, was rescued last night in a tall apple tree by its incessant calling when a large black snake, which had eaten its mate and three young birds, was attempting to attack the father robin. Wilson Buckler and Johnson Wood of Loveville were attracted by the bird's frantic cries and rushing out of the house, armed with a hoe and flash light, saw the snake up the tree near the house and the reptile trying to hypnotize the robin.

The young men hastily set fire to a pair of old trousers and holding this up to the tree, smoked the snake down and killed it. It measured 6 feet long. When cut open the mother bird and three other young birds were dead.

It is believed that this is the mate to the other black snake killed here several days ago, which had devoured 10 hen eggs and 6 turkey eggs, and when killed measured some 6 feet long also.
This is one of my pen sketches illustrating the unusual occupation of catching and cooking fish without removing them from the hook. The hot springs build up indurated deposits around their basins along the margin of the lake and erosion by the waves often leaves the basin partially or wholly surrounded by the waters of the lake.
Two interesting episodes of the work of the year in the Jemez region are recorded in letters to Mrs. Holmes:

3. **THE BEAR STORY**

JE MEZ MOUNTAINS, COLORADO, 1887

For a long way I rode up over an ancient village site, then up sharp ridges among the timber until I came to a flat-tish timbered shelf that lies along the base of the final ascent. Here at the elevation of about 1000 feet above camp I found many small ruins and some pottery. The final step of the plateau consists first of a steep slope up which I had to lead my mule zig-zagging back and forth over the rocks and slides. This slope ends against the base of the capping cliff which is in the main nearly vertical and from 100 to 300 feet high. It extends so for many miles. I hitched my mule on a little shelf at the base of this cliff and began to look for a place reduced or broken down sufficiently to let me climb it.

As I skirted the base of the cliff to the right I happened to look down the steep slope below and there, about 20 feet below, was a grizzly bear. He was nosing along and did not see me, but he was going right toward my mule and I concluded very quickly that that would not do since by going 20 feet further he would give my mule such a fright that he would break loose and rush down the mountain. I had no gun or pistol so I shouted "Boo, hoo," at the bear. He glanced up quickly and saw me, and made a spring away from me, facing down the steep slope. At this moment I pushed off a big stone and sent it after him, flying.
The result was "too funny for anything." The mountain was very steep for a long distance below and covered with loose stones and scattering trees. Down this slope the bear plunged and the big stone and many other loosened stones after it - rattle, bang, crash - until the cliffs re-echoed the uproar. I never saw a beast make such time and the stones were more rapid than he and made enormous leaps until they caught up with him and both, with many added stones, went out of sight together down into a rocky gorge nearly half a mile below me. It was a laughable termination of the incident, but a good riddance of an ugly customer. The wild mountain declivities echoed probably for the first time in their history with roars of amused laughter tinged possibly with a shade of relief on the laughers part.

I soon reached the top of the cliff by a very ticklish climb, pulling myself up by little notches in the rocks, and the gooseberry bushes that grow in the crevices. From the summit I had a broad view of the valley and the surrounding mountains, made a sketch and cut my initials and the date in the rock that forms the extreme point of a projecting shelf of the plateau and then, on account of a thunder storm which suddenly broke across the plateau I hurried down to my mule. In the rain I pulled the unwilling animal by main force down the steep mountain face.

Taking a different course from the ascent I encountered a cliff midway in the slope and had a hard time, going back again and taking another spur and getting into camp late, wet and tired. The boys were quite excited that a bear should be so near and wanted to go on a hunt.
An American Trail
The Bear was below.
He was an able hunter and served the Survey in this important branch for a number of years in the Yellowstone and in Colorado. See his letter which follows.
From Harry first
on hunting for several
years in the seventh
Kellins
(Rawlings)
Wyoming
October 30, 77

Dear Mr. Homes, I glad to here
from you and was glad to get
you put on your minutes good.

I wish you here.

You cover all the mine shots that
you went at Buffalo and Elk.
Big Homes, Black, Tule Deer and
Antelope thick as grass my camp,
and one the Sweet Water River down below
the three corners. I will cross the Reiter
Snake Range one the West side of
Big Homes and get where Buffalo
and gray wolf are thicker. The
Country right now String Bull out of
every I have. So soon we could see
my rifle. I think will be good deer.
They are wide Boss and easy work
on it Home; you cant to be beast one
Ask the Captain that I should have reached it Mary and I mean to show Large Bend will come to see you to-morrow Elk to Large Bend as I will stop and take no one game but I wish you here to see for yourself well I will send your same mess with whom you wrote to Cheyenne you will be there for one in spring any time

Harry Yount
August 4th. Moved 14 miles down the San Juan Valley, in southwestern Colorado, within a few miles of our western line (109° 30'). Passed by the mouth of the Montezuma, a deep valley with a dry bed but bordered by many cottonwoods. Met an outfit of Indians consisting of four men and five squaws. The two younger fellows were impudent, devil-may-care fellows. The two older were quieter and more polite. The oldest was a tall, slender man of say 50 years with a sober, composed countenance and a mouth of un-godly width. He shook hands and called me "Mi Amigo" (my friend) said also that they were Navahoes. They drove some 20 or 30 sheep and goats and indicated that their "wickiup" would be made at the junction of Montezuma and the San Juan. One of the Indians who rode by my side asked to see my rifle, which, as usual, was slung across the front of my saddle, but I declined the favor as it might have been a difficult matter to recover it in case he should be tricky. My outfit soon came up and I took them to camp four miles below the mouth of the Montezuma. Chittenden (George B), topographer, had crossed at the wagon trail ford and was making a station south of San Juan river. The Indians advised him to "pique" (get out) up the river, but Chittenden didn't "pike". The night following was destined to be one of unusual excitement.
for our party. I was awakened at ten or eleven o'clock by a confusion of sounds and the excited inquiries by Chittenden and others as to who could be yelling on the south side of the river. At the same moment my ear caught the hoarse yells of some one apparently in the greatest excitement. I was on my feet in an instant and shouted in reply. It was Tom Cooper, our chief packer. He was yelling, talking and swearing in the most desperate manner, and I could only make out that something very disastrous was happening and that our help was instantly needed. We seized our rifles and hurried out to meet him in the dark woods bordering the river, and soon learned that we had possibly escaped what might have been a serious disaster.

Early in the night as Tom happened to be lying awake in his tent he noticed that there was some rather unusual disturbance among the herd and presently that the bell began to tinkle as if the bell-horse were trotting or running. The herd was evidently moving down the valley along the river bank. He was up in an instant and after them. Steadily they moved away and he followed but found it very difficult to get closer to them. He suspected nothing wrong only that they had been frightened by a coyote or some other wild beast, in which case they would certainly soon stop. Already he had chased them a mile or more over gorges and rocks, and through weeds and brush and it seemed they would never stop. The perspiration was making him blind and his wind was nearly gone. Suddenly all sounds ceased, the bell was
silent. He could only keep on toward where he heard the sound last, and to his amazement he discovered the herd just ahead of him rounded up in a close bunch standing quite still in the darkness. He passed around them thus to turn them back toward camp in case they should be frightened. He came within a few feet of the bunch, and approaching more closely was about to place his hand on the face of the old bald-faced bell-horse when the horse shook his head and there was no bell, and it suddenly dawned upon Tom that these strange movements of the animals were not made of their own will but under the guidance of the band of Indian desperadoes. The explanation came very suddenly. A flash of lightning revealed the crouching forms of two savages, almost within the reach of his foot, engaged in cutting the hobbles from the two hobbled mules. They caught sight of him at the same moment and were so struck with amazement that they thought only of flight. With a bound they sprang upon their ponies and were off like a shot. Tom, doubtless somewhat stunned, did not take to flight but jumping on the nearest mule started the herd toward camp uttering the most fearful yells at every jump. The red-skins, as they flew up the valley and over the rolling hills must have felt their blood freeze at the very sound. Certainly they did not stop until a long distance intervened between them and the scene of their fright. In half an hour our animals were all safe in camp. We thanked Tom for having saved us from a great disaster—that of being set afoot in a practical desert 200 miles from the nearest habitation.
August 5th. On the following morning we rode out to
the scene of the mutual surprise party and there found the bell
which had been cut from the horse's neck, a pair of hobbles the
removing of which, just completed, had caused the delay that
had saved us, and also a pair of fine rawhide lariats dropped
by the thieves in their sudden retreat. (Photograph of sections
of the lariats are included herewith.)

All about were tracks showing what had gone on. We
then followed the trail of their animals back up the valley and
discovered that these two men had walked all the way from their
camp, four miles above, Indian file and that their ponies had
been brought around to them through a circuitous trail in the
hills. Tom and John rode up the valley and found their camp
soon after while Chittenden and I climbed the mesa above to do
our day's surveying. The boys were determined to raise quite
a noise in the wickiup of the supposed guilty redmen but felt
inclined to give up the idea when they discovered instead of the
four men seen yesterday, eight fierce-looking devils crouching
over their pipes and looking forbidding enough in their sullen,
stoic mood. They were neither communicative nor polite, and
the two boys came away impressed with the notion, as Tom put it,
"that the savages were determined to give us another deal yet."
The audacity of the thieving pirates went ahead of anything we
had ever heard of. Not only did they stay all night in the
camp to which we had tracked them but at noon rode boldly down
to our camp, dismounted and set themselves in a half-circle in the middle of our camp and proceeded to scrutinize every object in the outfit, and to beg this and pretend to swap for that. One old scamp had the audacity to nudge me with his elbow and order me to bring a pail of agua (water) which I did not do. We treated them as coolly as possible, kept our rifles within reach, and held such manner of powwow as we could. Traded some matches for some arrows and gave them some bread to eat. It appears that they were really trying to find their fine lariats, which we had hidden, and possibly to claim them. We watches them so closely that they failed to steal anything and saw them depart at last with feelings of relief. These fellows came more nearly up to my notion of what a bad Indian should look like than any that I had ever seen.

We mounted double guard for the night, determined to protect ourselves to the utmost. I think I recognized two of the Indians as the same we met on the 25th of July between the Mancos camp and La Plata mines. That party of four has doubtless been following us since that time. They are cowardly scamps who would not dare to steal our stock when they could be found out, or harm us personally if it were likely to endanger themselves. They know that we sleep and eat and work by our needle guns and move with great caution in consequence.
The scientific party now consisted of seven men, viz: James T. Gardner, Henry Gannett, A. C. Peale, Robert Adams, W. L. Atkinson, Cathbert Mills, Frank Pearson; the number played, six in all, were Shep, Modoc, Clarence Kelsey, Jachet Chappell, Benj. Northington, Charles McCreary and Judge Porter,—thirteen in all. Seven were armed with rifles; the remainder with revolvers. During the march the men with rifles rode in front and rear, and in camp a guard, regularly relieved at stated times, watched the animals; all except the cooks taking their turn. During the first few days no fresh Indian signs were seen, though we were continually scouting. When, at last, we marched to the south end of the range to climb the highest peak, which is a station of the primary triangulation, we found fresh signs, and I took the train far up through the woods to a little sheltered basin, directly under the peak, and 9,800 feet in altitude. The position was admirably situated for concealment or defense. Two thousand feet below, to the east of us six or eight miles, we discovered an Indian camp of nine lodges. This was August 11th. These were just about on the line between Utah and Colorado. On the 12th it rained so that work was impossible. On the 13th we climbed 9,000 feet to the top of the peak, Kelsey and Pearson carrying the large theodolite. The day was too cloudy for triangulation, but Mr. Gannett was able to complete the topography to western line 199° 30'. Six more lodges had joined the Indians below us, making fifteen in all. On the 14th I again climbed the peak with Pearson, making the last 2,000 feet in fifty-five minutes. I worked six hours and made a very fine set of observations of angles, completing the primary triangles eastward, and carrying new ones westward across the Colorado Canon eighty miles to the Honery Range, Powell's triangulating points. In the evening I made an excellent set of azimuth observations in Polaris, and thus completed the work at the most important of our western stations.

We about sixty miles travel southward of our station lies the Sierra Abajo. The country is desert, intersected with barren ridges and impassable canons. Only one spring is known in the whole distance. This I judged to be forty miles travel. From the Sierra Abajo a great plateau, whose altitude is 6,000 to 9,500 feet, stretches away one hundred miles to the east and southeast. Seeing, from our mountain, that the abrupt escarpment that terminates this table on the north was only broken by one place, and this in the exact direction in which the spring was laid down on McComb's map, we directed our march toward this point on the morning of the 15th, hastening to get away from the dangerous region. When rocky cliffs hemmed us in, we took an Indian trail leading in our direction. About 11 o'clock we came suddenly upon an old Indian and a boy, who, at the sight of us, dashed away over a pine-covered hill. We laughed at their fright. In a few moments we came upon some patches of corn which they were irrigating by a little stream from the very southernmost point of the Sierra La Sal. Two of the men declaring that they had seen a number more Indians in the thick pine growth, we did not halt for water, but pressed on. Ten miles further on the trail entered a canyon country where the endless precipices would have been impassable without its aid. We passed some pools of muddy rain-water in the rocks, where the muses got some to quench their thirst. It was, however, so alkaline as to do them little good.

About half-past four, when I was ahead searching for water-pools, in a ravine, and Mr. Gannett was half a mile in the rear of the train taking topography, nine Indians came riding after him, making signs of friendship and then shaking hands. He rode on with them to the Kelsey and Adams camp, where they desired to shake hands with the party. Mr. Gannett, Peale, McCreary and Northington recognized them of as being with a band of women and boys they had met on the reservation, twenty miles east of the Dolores, where the band was engaged in hunting. The Indians recognized Mr. Gardner's party, and, speaking some words of their former meeting, McCreary also said quite confidently that he had seen the spokesman of the party at the Los Pinos Agency of the reservation. Judging, with the fact that they called themselves Tampia Ótes, and showed a mutilated paper from White River Agency, quite disarmed suspicion. They were very anxious for us to camp at some mud-holes close by, but we found that neither men nor animals could drink the muddy fluid. They then tried to trade for tobacco and powder. As we had neither to spare, we shook hands, and, bidding them "adios," started forward over the hill.

No sooner had the rear guard passed the brow than the Indians commenced firing from behind it. This was very near being killed, bullets striking the ground close to them. Being in the advance, I rode at once to the rear. The boys began to be allowed to come forward, but I considered it unwise, considering that they were protected by a hill, and mounted on swift horses, and we on tired, slow mules. I therefore ordered the train forward in a trot to get out of range of the hill behind; then, taking Madera and McCreary with me, galloped toward a hill on the right, and in advance, under which the train must pass to reach more open ground. The redskins were already upon the opposite slope, but we drove them from it, and held the point till the train was out of shot.

Taking the advice of my most experienced men, we camped in a sagebrush plain, as far as possible from the hill. We however, exposed to fire at three hundred yards from a ravine that would shelter the camp, and from a ridge eight hundred yards distant. I formed a skirmish line of Adams, McCreary and myself, three hundred yards from camp, and so placed as to command these positions, and ordered the men, who were unloading and building a circular barricade of the apparejos and baggage. The Indians were thus forced to fight at very long range for we were unloading in the sagebrush, and fought to excellent advantage.
For the past week Mr. Jas. T. Gardner, geographer and first assistant of the survey, has been here superintending the equipment of seven field parties, Professor Hayden himself being detained by official business in Washington till July. The rendezvous camp of the expedition has been Fisher's ranch, on Clear creek, about four miles from Denver. On Monday morning this camp will be broken up and the seven divisions will march to their respective fields of labor. Mr. Wilson's division will survey the southern part of the San Luis valley, the mountains on the east of it, and those on the west as far as the head of the Rio Grande river. His southern line is fifteen miles south of the boundary between Colorado and New Mexico.

Mr. Wilson has already made a very accurate survey of the San Juan mining region, the map of which has just been published by Professor Hayden.

Mr. A. D. Wilson is the topographer in charge of the division, Dr. F. M. Endlich is the geologist, and Mr. F. Rhoda assistant topographer.

Adjoining them on the west lies the work of Mr. Holmes' division. Southward it extends below the Colorado line, and westward into Utah some sixteen miles. The 6,000 square miles in the extreme southwestern corner of Colorado, which this division will survey, is one of the most interesting in the territory, as being the seat of that ancient civilization whose remarkable ruins were discovered and photographed last year by Mr. Jackson, of the Hayden survey. The work which he began so well last season will be fully carried out this year. Mr. W. H. Holmes is the geologist in charge of the division, Mr. G. B. Chittenden the topographer, and Mr. Bradigee assistant topographer. North of Mr. Holmes' work lies that of Mr. Henry Gannett's division, Dr. A. C. Peal being the geologist and Mr. W. R. Atkinson assistant topographer. Their area includes the famed Uncompahgre valley, the winter paradise of the Utes, and that remarkable plateau and cañon country on the Dolores and lower Grand river, nearly as far west as the main Colorado river.

Mr. Gannett's discoveries in 1874 of the cañons 2,000 and 3,000 feet deep on the lower Gunnison river have excited much interest already.

Mr. G. R. Bichler's division will be engaged in completing unsurveyed portions of the mountains southwest of the Middle Park and south and east of South Park, a work of these topographical and geological parties rests upon and is bound together by a primary triangulation, locating all of the principal peaks in latitude and longitude. This work is carried forward by the geographer of the survey, Mr. James T. Gardner, who this year will extend the great net-work of triangles over the areas surveyed by Mr. Gannett, Mr. Holmes and Mr. Wilson.

To accomplish this Mr. Gardner...
A.C. Peake, scout
Henry Gannett, photographer

Members of gathering party who later joined my party on the way out
Professor Gardner's party, which was surveying the territory North of us at about the same date as that of our adventure, was not so fortunate. A band of Indians attacked his camp and kept them under long range gun fire for two or three days. The party finally managed in the night to get away on their saddle horses taking such things as could be carried. As my party ascended one of the valleys on our way to the East a few days later, I was greatly surprised to see a horseman appear over the summit of one of the mountain ridges. He was followed by another and then another and I finally recognized the leader as my friend Dr. Peale, geologist of the Gardner party. He was followed by the party and they were glad indeed to join me and appease their hunger which was fast tending toward a state of starvation. We were very glad to get out of the Indian country and return home. We enjoyed speculation, however, as to the possible enjoyment of the Indians in utilizing the feather lined sleeping pouch which Professor Gardner carried with him on his mountain expeditions.

See the gardners article herewith.
The Old Man of the Mountains.

History of the Ebony — Compilado

Ute and His Band of Assassins who Attacked the Hayden Explorers: An Indian Ishmaelite whose Hand is Against Every Man.

The following official document supplementing the account of the attack on Prof. Gardner's party, and describing the renegade Ute who has instituted a "reign of terror" in the Sierra La Sal, has been forwarded to Dr. Hayden:

DENVER, September 15, 1875 — Sir: Having had until now no access to the newspapers for many weeks, I am surprised to learn from the New York Herald's Washington correspondent of September 5th that the acting secretary of the interior, in a conversation with the correspondent, seemed to understand me as placing upon the Ute tribe the responsibility of the attack on our party, and he very justly says that a powerful people like them, familiar with every foot of the country, could easily have have killed one of our little band of explorers had they intended to. It was not my intention to make the Utes, as a tribe, responsible for the outrages; nor do I consider the Utes so exempt in the same sense that the community of Washington would be responsible for a band of highwaymen infesting the road to Arlington Heights. For the past thirty years I have been conducting geological and geographical explorations among the Arapaho, Cheyenne, Shawnees, Pah Utes, Apaches and Utes, often trusting to the rifles alone for security, and often shot at by Indians simply to frighten the difference between an attack to kill and an attempt to intimidate become very obvious after a varied experience with these tribes. During the past twenty years our work has been among the Utes, requiring us to traverse every part of the reservation. Though the explorations have been objected to by the more ignorant part of the nation, yet we have had the constant support and protection of the most powerful chiefs, Ouray and Douglass, and consequently, in general, good treatment at the hands of their followers. Our intercourse with these chiefs has led me to think highly of their wisdom, and to regard them as the friends of the whites and of peace. That it may be clearly understood to whom we are indebted for the warm reception we received at the Sierra La Sal, I will, in a condensed form, such information as I have been able to gather about them.

In 1873 I learned from some sources not now remembered, that a small but high group of mountains standing in the eastern edge of Utah, about latitude 39°, and called the Sierra La Sal, was not inhabited by Utes, but by a band of Pah Utes, who had never made peace with the whites, but from committing small depredations over in Utah, and then retreating across the Colorado river cañons to their mountain home. This must have some but as a vague rumor through the Indians, for no government expedition had ever entered the range, nor prospector, nor hunter that I have met. Knowing Powell to be the familiar with the Pah Utes than anyone else, I applied to him for further information. He confirmed the report that the Sierra La Sal was not inhabited by a band of renegade Pah Utes, but I do not recall what he said about their depredations. He did not consider it unsafe for me to go among them with a small retinue of armed men. A party of renegades is, as you know, a band made up of the worst elements, who bid defiance to all peaceful treaties of their tribes, and unite under some chosen chief to live by plunder, fighting as guerrillas.

On the 11th of July, of this year, I had an interview with Ouray, head chief of the Utes at the Los Pinos agency, in the presence of Mr. H. F. Bond, the agent. Ouray being convinced that we were sent to the reservation by an express act of congress to collect such information as the government needed, and without which the respective rights and relations of the whites and Indians could never be properly be adjusted, promised full protection to our parties. He then asked our route of travel. It was all satisfactory until I spoke of going to the Sierra La Sal; then he said that was not good; that the Indians there were robbers; that they never came into any reservations, either of the Utes or Pah Utes, but lived by depredations in Utah, and by trade with the Navajos; that they were in the habit of killing one or two men found alone and stealing a few of stock over in the direction of Salt Lake, and then retreating across innumerable and almost inaccessible canyons to their mountains. He said nothing of their trading with the Utes, at this time, nor did the speech of any Ute being among them, and from everything said, I inferred that they were Pah Utes. He said the band was small and would not probably dare to attack armed men, but that we must watch our mules well. He also said that they were farming in the valleys on the east and west sides of the mountains alternate years, and that this year they ought to be on the east side of the range. About two weeks after this we met, accidentally, a Ute with his family, traveling along in the western part of the Sierra La Sal. After a hearty dinner he gave quite genial, told us where he was going, and asked our destination. We pointed out towards the Sierra La Sal and explained that we were going there. He seemed alarmed for our safety and tried to persuade us not to go; indicating by signs and words that the Utes on the north, the east and the south were friendly, and that we could hunt there in peace; but that the Sierra La Sal Indians would steal our stock and kill us. From these warnings it is evident the band who attacked us have an established reputation as robbers and murderers, whatever may be the tribes to which they originally belonged. It was this knowledge which caused us to join Mr. Gannett's party of my own.

After our return and the rescue of Messrs. Holman and Dallas from their perilous position at the supply camp, I marched at once to the Los Pinos agency, reaching there September 10. Agent Bond, acting as special commissioner to investigate the Utes was at the agency when I arrived. Agent Bond sent for Ouray, chief of the Utes, and Mr. Harris, the well-known interpreter, and I had a long talk with Ouray in the presence of Agent Bond and Commissioner Miles. I told the chief all that had occurred. He immediately asked if the leader of the band was an old man of unusually dark complexion, and if he had several young men with him of similar appearance. This very dark complexion had been noticed by our party as a characteristic of the old leader and two of the younger men, but they had not come to shake hands with us before the firing commenced. It was this old man and a boy that we had seen at a corncob patch on the southern end of the Sierra La Sal. There could be no mistake about the identity and Ouray said that the old man and his family had been farming around these mountains for many years; that he was a very bad man who had robbed and murdered for a long time. Three years ago he paid Ouray a visit and the chief advised him to go raising and joining the reservation Indians. He answered that he was not a dog to eat bread from the hands of the white men, but intended to live at war with them. Since that time Ouray has not seen him, but through his Utes he learned that last year the band killed certainly one and perhaps more miners on their way from Salt Lake to the San Juan mines. Ouray seemed surprised that the num-
The band had increased to fifteen lodges, which he said represented twenty-five to thirty fighting men. The success of this old desperado and his family has attracted the lawless spirits of the surrounding tribes, probably both Utes and Pah Utes. He has gone so many years unpublished that his evil example is beginning to tell unpleasantly on his neighbors. Ouray had supposed that there were only seven or eight men when he advised me that seven of us would be safe. He recalled this to me, and said though taken in the number, he had nevertheless stated explicitly that they would either kill or rob if they got an opportunity. He told him that it was as much for the interest of the Utes to suppress this band of guerrillas as it would be for that of the whites to capture any band of Americans who should go about shooting and robbing Indians; and that if he furnished some Utes to act as scouts, so that I might be able to tell the difference between Ute and renegade camps, I would immediately return with five of my men and undertake to kill the whole of the gang. To this he answered that the old man, their leader, was a Pah Ute, and that the Pah Utes, who had never been his friends, would consider that he was making one of their sub-chief; but that if the government would supply regular troops and make a formal request of him, he would supply Ute guides who knew every trail around Sierra La Sal. I then asked where these renegades got so much ammunition, and said, "if trading with the Utes."

Ouray did not express the slightest doubt but that they would have killed us, as they did the others before. It was certainly the best opportunity for plunder that they had ever had. To murder a prospector is to secure but poor pay; a few pounds of flour and bacon, a blanket or two, a frying pan and a shovel, with a few bottles, comprised his all. But here were eighteen heavily loaded pack mules, with provisions, tents, blankets, ammunition, etc., sufficient to last them for an indefinite period; fifteen saddle animals, seven good rifles, and last, but not least, thirteen scalps to capture, which would make them much braves for life. Already reckless from years of unpunished crime, secure in their outlaws and on whom no white men had before entered certain wealth and reputation were theirs if they could only hold us twenty-four hours in that cliff-walled desert valley, this robber band ever came realizing their fullest ambitions. That they fought so long without killing any of us—for which we seem to owe the public an apology—is due to the fact that they shot at such long range, all but one being armed with muzzle-loading rifles; and that they were shooting at objects moving across the line of fire. It is a mistake to suppose that Indians are good shots when under excitement. They are not nearly as equal to practiced white men. I have many times been shot at for the purpose of frightening by Indians, and they always shot far over-head or off to one side; but the recorded shot which I saw these fellows fire, coming obliquely from behind, passed between two of the men who were so close that I must have been taken at the forenoon of the two. We then drove them to such a distance that their muzzle- loaders were of no use except to bombard the camp in a general way, hoping that a stray ball might take effect somewhere in so large a group as was formed by our mules and men. At night all firing at two hundred yards and over was useless; for one can neither see the sight on their gun clearly, nor can they see where the balls strike so as to get the correct elevation. In the night the bullet which by accident lodged in our bell mare, would have hit a man had it gone a foot to the left. Next morning we again kept driving them to a distance by the accurate long practice of our fine breech-loaders. Once when obliged to pass within four

hundred yards of a rocky promontory the firing of the Indians was very fast—too fast for good aim—and the balls fell thickly around the running train. Here he alone was shot in the shoulder. In a few moments all were sheltered by a hill, except Mr. Adams, who was carrying orders from me to the train. As he was alone was shot in the shoulder by the Indians all fired at him as he rode up the slope on a trot, their distance from him being about five hundred yards. I could see as the bullets raised a little cloud of dust about him as they struck the ground. The range was too long for accurate shooting at a moving object, and the time for our guns. But he remembered that during this half day, which we spent marching around the valley seeking for an exit, these Indians knew we must evidently fail and return to the trail to force our way up the cañon—the only way that a pack train could be taken to water. Once between these rocky cliffs along whose wooded and terraced sides these Indians could run their agile ponies—it was evident to us and to them that we could all be killed, with hardly a chance of revenge; they therefore chose to take no risks, since the game seemed theirs without it. When at last we appeared to be slogging them by a plan that they had not expected, and they closed with us in that final struggle in the woods, we were behind trees and rocks as well as they. Our pack mules were shot at the first, but as soon as they found us crawling around and above them so that the least exposure meant death, not one of the band of dazedF. 1. 8ea, from his hiding place to take aim. The whole history of the frontier proves that where the Indian and white man come face to face in that his nerve falls before that of the Anglo Saxon. In this trying time, when the enemy was within a hundred yards, Mr. Mills was so anxious to get a shot at an Indian that the bullets cut the twigs first on one side of his head and then on the other, before his comrades could persuade him to seek complete shelter. After we had abandoned the packs, is it probable that the Indians would have ridden twenty-five miles to cut us off from the next water unless they had wanted rides, mules and scalps? Two of the packers who fought bravely from first to last, were frontiersmen—Shepard Madras became used to the sound of bullets years ago in Montanas, and Chas. McCray rose from the ranks to a captaincy fighting in the western army, and afterwards served as an Indian in Arizona among the Apaches, where most of his party were killed. These men do not frightened easily, and know well the sound of the war cry when the Indians mean death. If this renegade band, after their former record and this attack upon the United States geological and geographical survey, are allowed to escape immediate punishment, their success will embolden every desperate character in the neighboring tribes to join them or imitate their example. No amount of whitewashing can make these fellows pass as injured brethren. The Sierra La Sal lies on the most direct and what would be the best trail—we are not for these robbers—from Salt Lake to the newly discovered mines in the La Plata mountains, and at the head of the San Miguel and Dolores rivers. The route is practically closed by this handful of renegades who are bringing disgrace on the peaceful tribes about them, and whom the head chief of the Utes has promised to assist in catching. Their home is within a day's ride of this new Uncompahgre, a region to which a wagon road has been built. Their country being thus accessible, I would respectfully suggest that it be urged upon the government to take immediate steps to punish the renegade band occupying the region around the Sierra La Sal.

Very respectfully yours,

JAMES T. GARDNER,
Geographer.

TO PROF. F. V. HAYDEN.
I had a laughable little adventure with a party of Navajos one day a little later. I was riding toward a small Indian camp, when, on ascending the face of a terrace, I suddenly noticed two Indians sitting silently and stiffly on horseback, each at some distance from the trail upon which I was riding, so that I was passing about midway between them. Soon I saw two others beyond sitting in the same position, only nearer together; then two others still closer; and I soon realized that I was riding into a long V of mounted Indians. Was it a trap? I began to grow apprehensive. Finally a horseman near the apex of the figure dashed up the lines, not coming straight forward, but turning in and out, and raising a great dust and noise. Directly he was followed by others, and the mêlée became general. I was much puzzled at these evolutions, but soon discovered that it was a rabbit hunt, which they laughingly invited me to join. They chase the jack-rabbits thru the sage-brush, killing them with sticks.
I had a curious little bear experience in the Gallatin Range when with the first Hayden expedition. As I rode along I saw much small game and frequently tracks of mountain lions, bear, deer and elk. I was forging ahead alone on my tired little pony, when suddenly I saw a large black object just ahead. I thought at first it was a horse, but finally made it out to be a large black bear rooting in the snow. I was armed with a pistol only, and, deciding that discretion was the better part of valor, turned about and beat a hasty and perhaps undignified retreat. After returning to camp I secured reenforcements and returned to seek his bearship, who of course had gone his way. Examing the tracks made in the snow, I found that at the very moment I had started in one direction the bear had started in the other, and with such remarkable impetuosity as to clear ten or more feet at a jump, while my tired pony hardly cleared more than a yard. My chances of escape would have been very slight indeed had he decided to come my way. We followed his trail and came upon him in a deep ravine, where he was finally killed and the skin carried to camp in triumph.

1929

It was not long after this that I found out that the bears of the Park were as a rule not vicious, indeed inclined to be friendly with visitors. Today, 57 years later, they have become accustomed to visitors who infest the Park by tens of thousands. They are almost domesticated.
THE HYPOTHETICAL SNIPE HUNT -- YELLOWSTONE PARK, 1872

The snipe hunt was arranged by members of the Survey party for the benefit of young naturalists of the Survey. On a dark night, as the scheme was planned, the victim of the joke was induced to go to a designated spot supplied with a suitable sack which was to be held with open mouth and with a lighted candle before it. The birds, surrounded and driven in by the members of the party, were attracted by the light, rushed toward it and soon filled the sack. Some of the boys claimed that the scheme had worked alright in this case, but no one fully believed it as there were no snipe in evidence.
there be questions to business your hands to fear to.

In the darkness there is a touch with the grasp

and content with the pinch of the... 

...in the darkness where there...
THE WATER OUZEL

(Taken from "Samples of Notebook Pages, destroyed on account of bulk, 1872, W. H. H."

The odometer party started back to Camp. Peale, Platt, Savage and I were left. During the day I made some sketches in the canon below the lake and came upon a very fine bed of fossils. While on a steep bank or slope above the creek I noticed a strange little bird flitting along the water edge. On the opposite side of a large stream of water poured out of the cliff some thirty or forty feet high and spread in white dashing sprays down over the moss covered rocks. The strange bird paused on the wing before the beautiful cascade, flitted for a moment and to my great surprise shot directly through the foaming sheet of water, and I knew immediately that I had found the home of the Cinclus Americanus - the Water Ouzel. Descending to the foot of the fall I attempted to see through and behind the falling water but this was quite impossible, and in trying to reach through at the place where the bird had disappeared, I was dashed away dripping wet by the force of the heavy torrent. The next day Platt went with me and by using a gum blanket to shield off the water, the nest was easily reached. It contained three young.
The "Jungle-hunters"

They were told that if at night they
would hold an open sack with a
light, if the birds would fly into the sack
beside.

The water fowls went;
a proof from a drawing by W.H.
On the way to the Yellowstone, 1872

W.H. Holmes
"You know Rocky Mountain Jim!" "Yes." "He was shot the other day." "Shot! how did that come about?" "Well, you see he had been staying a good deal in Estes Park during the last year and insisted on paying some attentions to the daughter of Mr. Evans, the principal ranchman of the locality. This was very displeasing to the old gent, so Jim was forbidden the ranch. But the temptation was too great and Jim very incautiously presented himself at the gate and was cordially greeted by a charge of buckshot from the old man's fowling piece. But I guess he will get over it; he has a charmed life, that man has. Did you never hear how he was chawed up by a grizzly about a year ago?" "Yes." "He came mighty near his end, Jim did. Had the breath squeezed out of his body and his eyes out of his head, so that when he came to his senses the first thing he did was to pick them up and set them in place again."

"You see, I was in Middle Park at the time and held him in my arms for two whole days after it happened, so I ought to know how it was. Jim was prospecting somewhere along the Grand River near Grand Lake, high up, and happened to get short of grub; but he had nothing with him but a six-shooter and it was pretty hard to get big game with that particular kind of an iron. But he was an old 'un in the business and could most always get even with circum-

STORY OF ROCKY MOUNTAIN JIM. 1874.
one of?" They "take admission until 7:30," which means that we must be there by 7:20. I still cannot believe the news. I should have been there earlier, but I was away from home. I am not sure if I will be able to attend the rest of the ceremony.

I knew that the event was going to be very important for me, and I was excited about it. I had been preparing for this moment for a long time. I wanted to make sure that I would not miss any important details.

As I arrived at the venue, I noticed that there were many people already there. I felt a sense of excitement and anticipation. I knew that this was going to be a memorable event.

I waited for a while, and then I was finally called to the stage. I was nervous, but I tried to remain calm. I knew that this was going to be a special moment.

I was called up to the stage, and I received my certificate. I was very happy and proud of myself. I knew that this was going to be an important milestone in my life.

I want to thank everyone who has supported me on this journey. I could not have done it without you. Thank you for believing in me and for supporting me. This is just the beginning of a new chapter in my life.
stances, no matter what odds. So, late in the evening, Jim, followed by his little dog, starts out up stream to a little lake. It was moonlight and dozens of deer would come down out of the timber in the dusk of the evening and later to drink. He finds a likely place and lies down among the willow bushes near the bank to enjoy the moon and wait for the game to come along. But the blasted dog was not content to wait, but went off to hunt something up and sure enough he did fall afoul of game enough, a regular old Rocky Mountain grizzly, and fool like didn't know enough to pass by and let the beast alone but fooled about till he got the old fellow riled. Then he began to think about his master and wanted to go home, but as fast as he retreated the bear came tearing after. So, he turned tail entirely and went for Jim, yelping at every jump. Jim, roused from his meditations by this hasty approach, rose to his feet just in time for the dog to pass between his legs and meet the grizzly face to face. But the bear was not looking for Jim so much as for the dog. So, he didn't stop for compliments, but knocked the underpinning from under the flustered hunter and man and beast brought up in a pile together and the responsibility was shifted from the shoulders of the dog to those of his master and a rough and tumble scramble followed in which the result described above took place.}
"During our somewhat protracted stay in the lower basin, I found time to observe pretty carefully all the geysers of any considerable importance. Among the six or eight which throw columns of water to the height, say, of 30 feet, there is only one that possesses the dignity and grandeur of the great geysers of the upper basin. Although, in some respects, it is much inferior to its more popular rivals, in others it is certainly superior. In approaching the crater of this geyser the observer is not at first impressed with its importance, as the outer rim of the basin or rather table - in the center of which the fissure is situated - is raised but two or three feet above the general level. This elevated part I should estimate to be upwards of 120 feet in diameter, and, with the exception of the crater, it is built up nearly to a level with the border. The surface, formed entirely of siliceous deposit, is diversified by an infinite number of forms and colors. The depressed parts in some places are so level and white and hard that a name could be engraved as easily and as well as upon the bark of a beech-tree. In others there are most exquisitely modeled basins and pockets, with ornamented rims and filled with perfectly transparent water, through which thousands of white pepples of geyserite could be seen lying in the white, velvety bottoms. Rising above the general level are innumerable little masses and nodes of cauliflower-like and beaded silica, standing out of the shallow water like so many islands. Those near the crater swell into very
large rounded masses. The whole surface is so solid that I walked, by stepping from one elevation to another, up to the very brink of the fissure, where I looked down with no little apprehension into the seething caldron, where, 12 or 15 feet below, was a mass of dark-green water in a state of constant agitation, threatening an eruption. The crater is about 10 feet in diameter, lined with an irregular coating of beaded silica. The water soon began to rise, plunging from side to side in great surges, sending up masses of steam and emitting angry, rumbling sounds. This demonstration caused a precipitate retreat, on my part, to the border of the basin, thinking that I could appreciate the beauties of a scalding shower-bath better from that point of view.

An irregular mass of water was thrown into the air in the utmost confusion, spreading out at every angle and whirling in every direction, some jets rising vertically to the height of 60 or 80 feet, then separating into large glistening drops and falling back into the whirling mass of water and steam; others shooting at an angle of 45° and falling upon the islands and pools 30 or 40 feet from the base. The eruptive force, for a moment, dies away and the water sinks back into the tube. Then, with another tremendous effort, a second body of water is driven into the air, but with a motion so much more simple than before that the whole mass assumes a more regular form and is like a great fountain with a thousand jets, describing curves almost equal on all sides and forming a symmetrical whole more varied and more grand than any similar work by man. The intermittent action continues for nearly an hour, but is so constantly
changing that at no two moments during that time are the forms or movements the same. The eruptions are repeated at irregular intervals of a few hours and are not known to vary essentially from the manner of action here described; yet I have good reason to believe that at certain times there is a much greater exhibition of power. It must be borne in mind that all the elevations, such as the tubes, rims, and mounds about the crater of a geyser, are built by the evaporation of the water, and the portion of surface covered by the beaded silica indicates precisely the area over which the erupted water falls. In no case did I observe the water fall outside of a circle of 60 feet in diameter, and the additional force necessary to scatter it over twice that amount of surface must produce a display truly magnificent. That this display actually occurs is attested by one of our mountaineers and almost demonstrated by the extent of the beaded surface. During the earlier part of the eruption a considerable quantity of water flows over the rim and down the sides, where it has formed a series of basins somewhat similar in form and color to those at the springs on Gardiner's River. Falling from one to another of these it passes off down the slope and joins a large stream of hot water which issues from a steady spring not far away.

A few hundred yards farther up the ravine, and on the opposite side of the creek, I discovered a small spring that deserves in a quiet way to be one of the great attractions of this attractive region. It is isolated from the neighboring springs and nestled in against an abrupt bank, so obscured by tall pines that the visitor
is liable to pass it by unnoticed. In approaching from the creek I passed up a gradually ascending slope down which the water flows, covering in its meanderings more than an acre of ground and leaving, wherever it touches, brilliant streams of color. About a hundred yards from the creek I came upon the spring, the waters of which stand nearly on a level with the surrounding surface. Approaching the border I looked down into the blue mysterious depth and watched the large bubbles of steam slowly rising to the surface and passing off into the air. The larger of these bubbles would lift up a considerable quantity of water sometimes to the height of 3 or 4 feet, producing a kind of spasmodic boiling and dashing a succession of waves against the rim. The spring is surrounded by an irregular rim which stands a few inches above the general level of the water. The basin is 20 feet long and 10 feet wide, one end being narrower and partially separated from the main basin by an irregular row of beaded islands and projections.

Although the spring and basin are very chaste and delicate in form as well as color, there are other springs more beautiful in those respects. But when I ascended the bank and looked down upon the spring and its surroundings, I concluded, without the least hesitation, that I had never seen anything so uniquely beautiful. On the upper side of the spring, next to the bank, the water overflows into large shallow pools, painting whatever it touched with the colors of the rainbow. Beds of rich, creamy white and rich yellows are interlaid with patches of siennas and purples, and divided up and surrounded by the most fantastic patterns of delicate
grays and rich browns. On the side next the creek the running water has made a net-work of streams. In these where the water is still hot, the colors are bright, varying from a creamy white to the brightest yellows, but, as the water becomes cooler, farther down, the colors grow darker and richer, the siennas greatly predominating, while the basins of the larger pools are stained with still darker colors, frequently of a purple tint and reflecting the picturesque groups of pines on their dark surfaces. Scattered irregularly over the whole surface are numberless little areas of dry deposit, from which the brighter tints have faded but which still retain such a great variety of purple and blue grays that the harmony of the whole field of color is delightful."

(Sixth Annual Report of the U. S. Geological Survey of the Territories, 1872, Pages 144 and 145.)
The Spectacular Fountain Geyser, Seldom in Eruption

Two views of the great Fountain Geyser, Yellowstone Park, named by W. H. Holmes.
It was a melancholy duty of the party in 1872 to follow the body of Lady Blackmore, wife of the great traveler, Sir William Blackmore, who accompanied us that year, to a humble grave at the base of the great range of mountains known as the Gallatin Range. Afterward, eight days were spent in ascending one of these snow-capped peaks, that it might be appropriately and officially named Blackmore Peak.
Temporary grave of Lady Blackmore,
with fence to keep out the wolves.
Mr. Holmes' account of the ascent of the Holy Cross is added in this place:

First Ascent of the Holy Cross.

By W. H. Holmes, of the Hayden Exploring Expedition, 1873.

Until the middle of June the great front range of the Rocky Mountains had been crowned with an unbroken covering of snow, and the higher peaks looked forbidding enough to cool the ardor of the most ambitious mountaineer. We spent a few months on the plains and pine-covered foot-hills watching impatiently, the faces of the mountain. We marked how the snow line moved gradually upward, how the black rocks began to peep out making innumerable black patches, and how the snow finally occupied only small areas where it had filled depressions and accumulated in deep drifts. Our little party was not slow to take advantage of this growing weakness in our enemy's front and steadily advanced up the valleys, into dense timber, up long, steep slopes, through swamps and torrents and treacherous snow-banks; and long before the grass and flowers of those upper regions had felt the touch of spring, we were there. And many days before winter had finally surrendered the lofty summits, from a peak more than 14,000 feet above the sea we looked around upon one of the grandest panoramas that the world affords. To the east the great plain gave a horizon entirely unbroken, to the west innumerable mountains notched the sky like saw teeth. From the ramparts of a continent we looked out upon a boundless ocean, calm, motionless, inwardly upon a waste of mountains whose heights and depths and mystery fairly confounded us.

This was to be the field of our labors, and we summoned our half-bewildered faculties to the task of identifying such great landmarks as would be necessary to guide us in our future wanderings. An indefinite number of high, ragged ranges could be traced by their lines of lofty summits as far away to the north and south as the eye could reach. But one among all these summits caught the eye and fixed the attention. Far away to the westward, we discovered a peak, a very giant among its fellows, a king amidst a forest of mountains, that bore aloft on its dark face a great white cross, so perfect, so grand in proportions that at a distance of sixty miles we felt ourselves in its very presence.

Two months later we found ourselves approaching the region in which this mountain is located. On the 19th of August we stood on the ocean divide, from which the waters to the east are carried by the Arkansas down to the Gulf, while those to the west sink away and are lost in the mysterious gorges of the "great Colorado of the west." On the one side a narrow valley stretched away to the southeastward in a seemingly endless vista, while on the other the streams and valleys were almost immediately obscured by a mass of irregular
mountains. The course chosen would lead us first down the Pacific slope into a deep and rugged canon which we would be compelled to descend for some 20 miles or more, thence by means of one of the great creek valleys that come down from the range to the west, we hoped to be able to ascend to the base of the peak.

For two days we pushed forward, sometimes in the river bed, sometimes high up on the walls where our trembling animals had to be led along the narrow ledges and treacherous rock-slides. In places we would appear to be completely shut in by walls so steep and high that the nimble deer could hardly escape, where the river came seething and boiling from some dark chasm utterly blocked up by massive rock, and disappeared again in a canon which no living being could penetrate and from which came constantly up the smothered roar of pent-up torrents.

On the evening of the second day we reached the mouth of a large creek which it was agreed must drain the high regions about the Holy Cross. As yet no one had caught sight of the object of our search since the first discovery some sixty miles away, for since entering the canon no mountains had been in sight, only the rocky walls, the densely timbered slopes and the sky.

In vain we searched for a trail or passable route up this creek valley. It was pronounced impossible and we essayed to climb the ridge to the right, but night was upon us and camp must be made.

By noon the next day we were on the high ridge north of the creek, free from the prison-like valley, but not free. A broad freshly-beaten game-trail led us on charmingly for a while, but presently entered the timber and we were plunged into such a slough of despond as strong hearts only could encounter and pass safely through. To the right, to the left, and in front, the mountain face bristled like a porcupine. Countless multitudes of giant pine-trunks, uprooted by some fierce hurricane, were piled up and crisscrossed and tangled in such a way that an army must have stopped as before the walls of an impregnable fortress. Up and down, advancing and retreating, struggling through the most aggravating mazes, to find ourselves returning again to the starting point, we worked on until horses and men were thoroughly tired out and disgusted. At night, after nine hours of unremitting exertion, we pitched camp in a little swampy gulch among the logs and rank weeds, only two and one half miles in advance of the camp of the preceding night.

On the following morning we moved in another direction and with much better success. By noon we emerged from the timber and stood upon a high promontory that overlooked the grand valley. What a remarkable sight! broad and deep and regular, it looked like a great pasture, dotted with a million white-backed sheep. In ages past a mighty glacier, rivalling the modern ice rivers of the Alps, had swept down this valley smoothing down its rugged sides and rounding
and polishing the projecting masses of granite. So great was the resemblance of these rounded rocks to flocks of sheep that we named it, after the manner of the French, Roche Moutonnes valley.

On the opposite side of this valley and somewhat farther up, there stood a dark mountain that immediately attracted our attention, and seemed certainly to be the object of our search. High and rugged and cold, its scarred granite faces were tattooed by many ragged lines and patches of snow. But there was no cross. We looked in vain for forms that might even suggest a cross; but neither on this mountain nor on any of those that lay back of it could the object of our search be found.

But after all this must be the one, and the cross, if it has not already melted away, will be found on one of the other faces. It is at least our duty to see, and first this great valley must be crossed. Two thousand feet of weary zigzagging brought us to the creek bed. Turning up this we picked our way among the rocks and fallen trees until within about three miles of the mountain's base. Here we found it necessary to halt, not only because our animals were utterly tired out, but because the way was completely blocked up. So camp was made by the banks of the roaring creek, with no alternative for the morrow but to advance afoot.

At night it rained in torrents, but we sat stoically by the camp-fire talking of the past day's work and planning for the prospective ascent. It was decided that one party with the surveyor's instruments should move up the valley along the main creek until opposite the northern spur of the peak and ascend from that direction. The photographic party would climb directly up the valley rim from camp so as to reach a long high ridge that hemmed in the peak on the east, and from which it was thought a good view could be obtained of the main eastern face and the cross if it still existed. When it grew late we spread our blankets among the wet logs and went to bed.

By sunrise all hands were stirring, and the start was made almost with a dash, every man for himself and the best man to the front. It was not long before the party was pretty well scattered, but communication was kept up by frequent shouts. The heavy instruments, which weighed some forty pounds, had been carried a mile or more ahead the evening before, so that we scaled the barriers of rock and wood that lay in our way with unusual rapidity, but when the rock on which the heavy instrument-box had been cached was reached, a halt was called and the announcement made that each man must take his turn at the box and carry it a distance proportionate to his strength.

Our party consisted of seven members. Only four had come up, but we decided to move on. Dr. H. was the first to take up the load. It was strapped to his shoulders and he marched off with an ease and
rapidity that did great credit to his prowess as a mountaineer.

There could be no flagging now. The man who, comparatively unincumbered, could not keep pace with the Doctor must certainly be in disgrace, and the scrambling advance grew more lively than ever. Presently it began to rain and the smooth rock grew slippery and the grass and bushes dripping wet. By the time we had reached the point where the mountain rises abruptly from the valley, we were soaked to the skin, but we must push on.

From this point the course was upward. Hour after hour we toiled on, the box was shifted from one to another, and the carrier was constantly assisted where the walls were steep. But the box grew heavier and heavier as we advanced, and the changes more frequent. At timber line all parties were glad to take a rest. We were now in the midst of the rain clouds and the day was so unpromising for mountain work that it seemed useless to advance. A fire was built in the shelter of the great pines and an attempt made to dry our clothes.

It was midday, and 3,000 vertical feet intervened between us and the summit. It now became a serious question as to what it was best to do. We had brought only a sandwich for lunch, and had no blankets not even an overcoat to protect us during the night. We could do nothing on the peak among the clouds, and the idea of returning to camp and making the entire ascent again on the following day could not be entertained for a moment. It was finally decided to complete the ascent immediately and trust to Providence to lift the shroud that enveloped the mountains.

Meantime the photographic party, much more heavily laden than ourselves, had encountered far greater difficulties. Mr. Jackson and his two associates carried among them upwards of one hundred pounds of apparatus, but were not men to yield before ordinary difficulties. The rain, the greatest possible damper on a photographer's enthusiasm, could not make them hesitate; torrents and cliffs and dense forests and prowling beasts were interposed in vain. They had set out to accomplish an object, and success at whatever cost of exertion and hardship must be attained.

By the middle of the day Mr. Jackson finds himself far in advance of his companions, but in spite of his unusual enthusiasm he begins to fear for his results.

Eight hours of weary climbing have brought him nearly to the summit of the ridge. There is nothing to be seen but the dull, gray clouds which rise and fall and sweep back and forth and sink down again oppressively around him. Is this all labor lost? Have the fates conspired against him, and is the holy cross a myth, an illusion
that has led him on through all these weary days, only to deceive him?

He sits down among the rocks to rest and ponder. Meantime the winds rise and the dull mists are driven along the cliffs and torn to tatters on the sharp projections. To the west great billowy passage-ways are opened, and glimpses of the lofty mountains can be had, looking like ghosts through the thin mists. Suddenly the artist glances upward, and beholds a vision exceeding dramatic and beautiful. He is amazed, he is transfixed. There, set in the dark rock, held high among the floating clouds, he beholds the long-sought cross, perfect, spotless white, grand in dimensions, at once the sublimest thing in nature and the emblem of heaven.

He recalls himself, and remembers his ambition, his duty, to transfix, by his art, an image of this vision, that can be carried back to the world. He sets his camera in haste, and invokes the aid of the floating sunlight. He turns for his chemicals, but they are not there. They are far down the mountain on the backs of weary men. In despair he sees the clouds gather and settle down for the night.

At nearly the same hour our party stood on the summit of the mountain itself and gathered snow from the very top of the holy cross. We, too, saw the clouds break and scatter, and gazed with wonder upon the rolling sea, with its dark mountain islands, and crouched behind the great rocks to avoid the cold winds that battle so incessantly about those high summits.

The utter solitude and desolation of these summit regions are never so deeply impressed upon one as when the rest of the world is shut out thus by clouds, and nothing greets the eye but dull granites and frozen snows.

And, now, since no observations could be made, we decided to descend to timber line, and spend the night.

In passing down the crest of the northern spur we stopped near the edge of a great precipice to watch the play of the storm-clouds below, and to pitch great rocks into the abyss. While here we were favored by a most unusual phenomenal display. The sun at our backs broke through the clouds, and there was immediately projected on the mists that filled the dark gulf a brilliant rainbow; not the arch, as usually seen, but an entire circle, a spectral ring, which, as we still gazed, faded away, and in a minute was gone. Far beyond, on the opposite side of this deep valley, we could see the ridge occupied
by the photographer, and, by using our field-glasses, the camera could be dimly seen standing on the very highest point.

A shout from one of our party elicited a reply from Mr. Jackson himself, that came back to us like the faintest echo, for the distance must have been more than half a mile. It was interesting to notice the effect of this very meagre communication upon the feelings of our party. It was cheering to feel that we were not entirely alone; the bond of sympathy with other beings of our kind was not utterly sundered. Shouts were exchanged frequently as we descended, and when we reached timber line and kindled our fire for the night, a companion blaze twinkled like a star against the dark mountain opposite.

Later the cheerful blaze of two immense fires lit up the faces of surrounding objects far and near, and for the time we forgot that we were supperless and bedless, and that a hard day's work must follow an almost sleepless night. The rain had ceased and the night was not as cold as had been expected, so that we talked and dozed away the time without especial discomfort.

At daybreak we were up and moving, but we found ourselves stiff and weak, and the ascent was most tedious. Our shouts were not so frequent and strong as before, and the replies came back hesitatingly and late.

But all turned out well. The scientific work was completed by noon and the photographs secured before that time. The descent was made in safety. On reaching the first creek-crossing we were overjoyed to meet our companion, who had returned to camp the day before, with a basket of provisions and a pot of tea. At six in the evening both parties were in camp, and a bountiful supper was all the more enjoyed by being seasoned with stories of adventure and success."

W. K. Holmes
Signed 55 years after

(The Illustrated Christian Weekly, May 1, 1875, page 209)
"The ascent of this peak was a very interesting and exciting experience. The mountain is so called from the fact that it has on one of its faces great cross crevices - one vertical, and the other crossing it horizontally near the top. The vertical portion is over 600 feet in height. The snow and ice remain in these crevices throughout the summer, becoming a little discolored, and therefore not so plainly visible in autumn, but brightening up again when snow falls, which is every month of the year. We saw the cross first from a range far away to the east. It was distinctly seen against the dark granite face of the mountain, which leomed up in the mirage effect to a marvelous height.

Later we found a creek which we knew must come down from the face of the peak if not from the very foot of the cross. Climbing was very difficult; a thick virgin forest extending in a belt several miles wide across the base had to be traversed before we reached the final ascent. There we had to leave our animals and proceed on foot. Dr. Hayden, who was always a reckless climber, had the misfortune to fall into one of the mountain torrents crossed during the ascent, but was rescued without much difficulty, and pushed forward with the rest.

Then it began to rain, so that we could see nothing, and we resolved to camp over night, tho we had started out with no provisions but a small lunch. We made our fires at the timber-line.
2,000 feet below the summit, and whiled away the weary hours telling stories and watching the bright spark of light made by the camp-fire of our photographer, W. H. Jackson, who was storm-bound on the ridge to the east.

"In the morning, breakfastless and weak, we reascended the mountain. By this time the clouds had parted so that many summits were in sight. As we stood on the narrow rocky summit we sought the upper end of the stem of the cross, and found that it occupied a long straight gully, and consisted in the main of whitish glistening ice. Our photographer, from the opposite ridge, got some excellent views of the cross, and these have been the basis for almost all the illustrations of the mountain and cross which have since appeared. Some time afterward the artist Thomas Moran went out and painted the mountain, the cross, and the rearing torrents with wonderful truthfulness and skill.

"A notable episode of the descent of this peak was the wonderful storm effects. The sun at our backs broke thru the clouds, and there was immediately projected on the mists that filled the dark gulf to the east a brilliant rainbow - not the arch as usually seen, but the entire circle - a spectral ring, with our shadows thrown across the lower half, our heads appearing in the centre."

(From "The New Voico" January 28, 1899)

W. H. Holmsted
April 2nd, 1927
The Circular Rainbow

Sun
East

Seen during the descent from the Cross.
"Our trip down the Eagle River had for its principal object the discovery of some way of access to the mountain of the Holy Cross. A little stream joins the Eagle River from the west side, which rises among the group of mountain-peaks of which the Holy Cross is most conspicuous. The valley of this stream varies from one-eighth to one-fourth of a mile in width, and is about eight or ten miles in length, and so covered with the rounded glaciated forms of granite that it was impossible to ascend it with our pack-trains. We were obliged to descend the river about three miles and then climb the steep mountain-side over a net-work of fallen timber. The obstructions to traveling were very great. We often labored for a day or two to find some path to approach the mountain-peak, and were obliged to cut our way through the fallen timber, and finally succeeded in getting within about five miles of the base of the peak.

"The most remarkable feature of this wonderful region is the proof of a great ancient glacier which must have filled up the valley from mouth to source. The bottom, extending high up on either side, is covered with the rounded granite masses, varying in size from a few feet to several hundred feet length; so that, looking down upon them from a high point, they resemble a huge flock of sheep, and from this fact they have received from the Alpine geologists of Europe the appellation of "Roches Moutonnés." It is most probable
the valley itself has been worn out of the granite mass. The mountains on either side rise to the height of 2,000 to 3,000 feet above the valley, and the glacial markings are visible 1,200 to 1,500 feet. The morainal deposits on the northwest side reach a height of 1,200 feet above the stream and form a sort of irregular terrace, which, when cut through by the little side-streams, show that it is made up of gravel and boulders much worn. In some instances there are well-worn cavities in the sides of the mountains, showing how the running water, in connection with a mass of rock, formed the cavity much as a "pot-hole" is made in our streams at the present time."

(U.S. Geological Survey of the Territories, 1873, page 73)
"The main mass of the peak, like the whole of the Sawatch range, is composed of granite gneiss. The summit of the Holy Cross is covered with fragments of banded gneiss. The amphitheatres on all sides have been gradually excavated, as heretofore described, and the more or less vertical sides show the intermediate steps very clearly. The characteristic feature of the Mount of the Holy Cross is the vertical face, nearly 3,000 feet on the side, with a cross of snow which may be seen at a distance of fifty to eighty miles from other mountain-peaks. This is formed by a vertical fissure about 1,500 feet high, with a sort of horizontal step, produced by the breaking down of the side of the mountain, on which the snow is lodged and remains more or less all the year. Late in the summer the cross is very much diminished in size by the melting of the snow which has accumulated in the fissures. A beautiful green lake lies at the base of the peak, almost up to timber-line, which forms a reservoir for the waters from the melting snows of the high peaks. From this, one of the main branches of the Roches Moutonnés Creek flows down the mountain-side, forming several charming cascades on its way. The worn rocks or "sheep-backs" in the valley of the creek display most remarkable examples of the curious markings on the surface of gneiss produced by the separation of the different constituents of the rocks."

(U.S. Geological Survey of the Territories, 1873, page 74)
A GRIZZLY BEAR ADVENTURE - 1874.

Mr. George B. Chittenden of Connecticut, who was a member of the Hayden Survey of the Territories in 1874, happened to be my guest with Mrs. and Miss Chittenden, Mr. W. M. Jackson and Mr. Story B. Ladd at the Cosmos Club in February, 1927, and he told the story of my grizzly bear adventure in Colorado, details of which I had almost completely forgotten.

The party was at work among the high rockies of Colorado and on the day of my adventure we had to cross one of the ranges and descend into the valley of the Roaring Fork. The story as told by Chittenden is as follows: "Holmes was always an independent cuss and usually took his own course in the days' work, studying the geology and sketching the ranges, having arranged on this day to join the party at camp at a designated point on Roaring Fork. The party had hardly made camp when we heard a rifle shot near at hand, and shortly Holmes arrived, reporting that he had just shot a grizzly bear; that in working his way through the forest he happened to come upon a large log along side his path. Hearing a slight noise on the opposite side of the log he glanced over and discovered a grizzly bear with his head down in the search for food. Not wishing to pass on without a word of greeting he shouted 'boo-hoo' over the log. The bear's head immediately rose to return the greeting. There was a question of appropriate action on the part of both man and bear, and Holmes decided to
settle the matter at once, so raised his Springfield rifle, carried always in these wilds, and shot the beast in the fully exposed chest. The bullet, his last cartridge it happened, must have gone directly to his heart for he was dead in a moment. When the story was told in camp the boys volunteered to go back with Holmes to the log and skin the bear." The only note regarding the adventure found in my report of the day's doings was "my bear skin is a beauty."

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Typewritten 54 years after.

Mr. Chittenden visited Washington again during the holiday season of 1928 and added to the above story a most interesting incident.

One of the young men who had joined the bear skinning party borrowed Chittenden's silver mounted pistol which was inscribed with his own name, thinking it might possibly be needed in the deep woods. While the bear skinning went on he laid the pistol on a big log and forgot it and it remained there for a long period. Years later it was found by a hunter in the wilds who gave his attention to the task of finding the owner. In 1927 or 28 he finally located Chittenden and the return of the weapon was in process during the present holiday season (1929) 54 years later.
Pistol Lost in Rocky Peaks
55 Years Returned to Owner

Killing of Grizzly Bear Figures in Story of G. B.
Chittenden.

"And on the tree stump where they skinned the grizzly bear was where
my companion left my pistol. I wish I had it now as a souvenir of those
days." With these words has George B. Chittenden, of the Argonne
Apartments, often completed one of the
narratives of his early adventures as a
member of the first Geological Survey
party in the wild and woolly West to
his children and grandchildren. For
55 years he has bewailed the loss of a
pistol which was presented to him
when he left the Coast Survey to go on
the first expedition of the then newly
formed Geological Survey and which
was left on the stump of a tree in
Colorado by a friend who forgot it in
the excitement of skinning a grizzly
bear.

Several days ago, the pistol was returned to him by a guide who had
found the pistol in 1912 while hunting in Colorado.

But Mr. Chittenden tell the story, just as he has recounted it many
times to while away the evening for
his children and friends.

Was Student at Yale.

"When I left Yale in 1871, after a
course in scientific school, I was
given a position with the Coast Survey
for two years worked on the survey
of New Haven harbor. About this time
the Geological Survey was created and
when the first appropriation was made
available in the spring of 1873, the
survey took several young men from
Yale, Harvard and Princeton to
accompany an expedition into the Elk
Mountains to make special study of
that high range in Colorado.

While they were eating, they heard
a shot some distance off, and as they
took up the rifle they fired several shots in
the air to tell the missing wayfarer the
location of camp. Holmes hurried into
camp, breathless after that, and the campers
began guying him for losing his way.

Killed Grizzly With One Shot.

Holmes laughed at them and told
them: "If you will go up there where
I fired the shot you will find the big
gas, grizzly bear you ever saw."

He had been walking toward camp
when he approached a giant tree trunk
which had fallen to the ground. He
could barely peer over the edge.
Hearing a noise on the other side he thought
it one of his fellow campers and
looked over. As he placed his hands on
the log to steady himself he found
himself face to face with a gigantic
grizzly bear. Raising his rifle he fired
into the beast's chest, killing the bear
with one shot. This was the shot
heard by the campers.

The next morning the explorers
wanted to go out and see the grizzly and
secure its skin. Mr. Chittenden did
not accompany the expedition but
loaned his pistol to one of the men.

That day camp was moved about
20 miles away. Toward evening the man
who had borrowed the pistol remem-
bered that he left it on the log
while helping to skin the bear. The
distance was far to return for so small
a thing as a pistol, so left the pis-
tol there.

William H. Jackson, who was pho-
tographer on that expedition, last
year accompanied members of the
Rocky Mountain Club, of Denver on a
camping trip to the Snow Mass Lake.
Most of their equipment had to be
packed in and several natives were
to handle the packing of the property.

One of these packers learned that
Jackson had been a member of the
Geological Survey and asked him if he
knew a man named Chittenden. The
photographer replied that he had
passed seven weeks at Mr. Chittenden's
summer home at East River
Conn.

How Pistol Was Found.

"My brother and I were camping
on the headwaters of the Roaring Fork in
1912," the packer explained, "and lying
on a log we found a nickel-plated .44
caliber Smith & Wesson revolver, with
Chittenden's name and the date, 1873,
engraved on it, and we wanted to
return it to its rightful owner."

Jackson told Mr. Chittenden of the
discovery, and after some correspond-
ence Henry K. Hutchins, of Ragged
Mount, Colo., the guide, returned the
pistol to him.

Delightedly Mr. Chittenden showed
the treasure to his children as proof
that he had not been spoiling them
about the grizzly bear story. The old
pistol, which was in very good condi-
tion, considering its 58 years of ex-
posure to wind and weather, brought
back many memories.

The Rocky Mountain Club has asked
him to donate his to its museum as
an example of the rare climate of
that region. The wooden butt had
rotted away, but the stock of the
pistol was in fairly good condition and it
still will stand shooting. Mr. Chitten-
den says he probably will present the
pistol to the museum now that he has
had a chance to vindicate his adven-
ture tale.

Reunion in Washington.

Recently the five surviving members
of the first Geological Survey expedition
held a reunion in Washington and re-
counted to each other their adventures
since those happy days when they were
young. Mr. Chittenden, Mr. Jackson
Storey A. Ladd, who has just sailed for
Peru on another trip of adventure.

Mr. Chittenden is the only one left as
far as they could find out.

Holmes, Ladd and Chittenden for
many years had positions in the
Balm and Life Building, at Ninth and
B streets northwest, and the bear skin
was stretched across a winter long.

Mr. Chittenden, who is now 79
years old, appears hale and hearty for his age
and as he recounts the story that far-
avay look that only adventurers have
in their eyes shines forth. Ten years
ago he left Washington to live at his
ancestral home in East Rutland, which
he has been in his family since the first
grant, but each winter he comes to
Washington to renew old acquaintance.
One shot killed him dead.

I could not draw the beaver as can be seen.
“Deep in the Woody Wilderness”

Photograph by George F. Belden
In 1875-76 Professor G. K. Gilbert, of the U. S. Geological Survey, explored the desert-like region bordering the Grand Canyon of the Colorado in southern Utah. He came upon a number of mountains the structure of which was new to him, the elevation of the mountain lying above the general surface of the country being due to the intrusion from the interior depths of masses of molten lava which did not reach the surface at the time, but spread out beneath the superficial strata pressing them upward in an arch creating a dome-shaped elevation or mountain. Subsequent erosion as in many cases carved the dome into irregular, rugged elevations exposing the lava core, often fantastically carved. These masses of lava were called laccolite-lakes of stone--by Mr. Gilbert.

It happened that in 1875 while conducting the San Joaquin division of the Hayden Survey of the territories in southern Colorado I had observed and described cases of this particular mountain structure (See U. S. Geological Survey of the Territories, 1875) and Mr. Gilbert recognizing my claim to priority in describing this peculiar form of mountain building, named one of the mountains of this type after me. The mountain group named after Professor Henry, first Secretary of the Smithsonian Institution, includes a number of mountains of this type.

The following extracts are from Mr. Gilbert's Report of 1877.
During the summer of 1877 I remained in the office, superintending the publication of the Atlas of Colorado, and completing the other unfinished work of the previous year, - reports, notes, drawings, the modeling of cliff dwellings, etc. A large portion of the time was devoted to the preparation of the "Economic Map," the "General Geological Map," the "Geological Sections," and the "Panoramic Views."

NAMING OF MOUNT HOLMES.

One event of this year is especially noteworthy. Due to my studies of the peculiar volcanic phenomena of Southern Colorado in 1875, which brought to the attention of geologists a new type of mountain building, Professor G. K. Gilbert, who spent the summer of 1877 in a study of the Henry Mountains* of Utah, named one of the mountain masses of the range after me, the main summit Mt. Holmes and a subordinate, somewhat detached summit the Lesser Holmes.

*Mountain range named by Professor G. K. Gilbert after Professor Joseph Henry, First Secretary of the Smithsonian Institution.
MOUNT HOLMES.
From Gilbert's Report on the Henry Mountains, 1877.

"Mount Ellsworth (8,000 feet) and Mount Holmes (7,750 feet) stand close together, but at a little distance from the others. The pass which separates them from Mount Hil-lers has an altitude of 5,250 feet. They are single peaks peculiarly rugged in their forms, and unwatered by springs. They stand almost upon the brink of the Colorado, which here flows through a canon 1,500 feet in depth.

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"The order of sequence which places Mount Ellsworth before Mount Holmes is the order of complexity. The former contains one lacolite, the latter two. Neither of the two is visible, but the strata which envelop them shadow forth their forms and leave no question of their duality. They are so closely combined that the lesser seems a mere appendage of the greater. From the center of the greater there is a descent of strata in all directions, but from the center of the lesser the rocks incline toward one-half only of the horizon. Where the two convex arches join there is a curved groin—a zone of concave curvature uniting the two convexities. About the compound figure can be obscurely seen a line of maximum dip, and beyond that the fading of the curves. The curves throughout are so gentle that it was found exceedingly difficult to establish their limits. In a general way it may be said that each of the Holmes arches is as broad as the
Ellsworth arch, but the vertical displacement is less. In the formation of the greater Holmes arch the amount of uplift was 3,000 feet; for the lesser arch, 1,500 feet.

"There is no evidence in the forms of the arches which proves one to be older than the other. Studying the curves in the field, I could not discover that either arch asserted itself more strongly than the other in their common ground. They seem to meet upon equal terms. Still it is probable, a priori, that they were formed successively and not simultaneously. The coincidence in time of two eruptions of lava from neighboring vents is no more unlikely than the coincidence of the two irruptions, and the same principle of least resistance which causes individual laccolitic arches to assume spheroidal forms, would have given to the compound arch of two laccolites, coincident in time, a simple instead of a compound form.

"Assuming that the arches were successive in origin, I shall in another and more appropriate chapter discuss the problem of their chronological order in the light of their somewhat peculiar drainage system.

"The lesser arch betrays no dikes nor sheets. The Vermilion Cliff sandstone covers it to the top. The greater is crowned by a few grand dikes which govern its topography. From the center a long dike runs to the south, a short one to the north, two to the east, and one to the west. The course of each is a mountain spur, and between them are amphitheaters and gorges. Clinging to the dikes are bodies of altered sandstone, but
Result of erosion of the original domes. This is how they appear today. The arched surface of the bow is very slightly curving away.

Fig. 56. Gilbels' Henry Mountains with Summit Crags and Hobbes.

Fig. 18. Analysis of the intrusive Plana about 183 to the final development of Mr. Hobbes.
the great sandstone masses of the summit were unaltered and from them have been excavated the gorges. Along the dike-filled fissures there has been some faulting, but there is no reason to believe that the displacement is great in amount. Toward the flanks of the mountain there are a few sheets, the outermost of which is far within the line of maximum flexure. Their escarpments instead of facing upward like the revetting sheets of Mount Ellsworth, face downward; their buried and unknown edges are the edges toward the mountain. Their thinning toward the periphery of the arch is conspicuous to the eye in many instances, as is also the thinning of the dikes.

"Another peculiarity of dike form, one which has since been noted in a number of localities, was first detected in Mount Holmes. It consists in a definite upper limit. The dike so marked is often as even upon its upper surface as an artificial stone wall. The upper surface may be level or may incline toward one end of the dike, but in either case it is sure to be found parallel to the bedding of the strata which inclose the dike. This fact led to the suspicion, afterward confirmed by more direct evidence, that the flat top of the dike was molded by an unbroken stratum of rock bridging across the fissure which the lava filled (Figure 20). The converse phenomenon can be observed in the ridge which joins Mounts Ellsworth and Holmes. A great dike there forms the crest of the ridge for half a mile, its base being buried in
sandstone; but at the end of the ridge the strata are seen to be continuous beneath it (Figure 21).

"That a fissure several feet or several scores of feet in width should end thus abruptly, demands explanation, and the phenomena immediately concerned offer none. Nevertheless, it is easy to make an assumption which if true renders both cases clear. If we assume that the fissure instead of ending at the crosshead is merely offset, and resumes its course beyond, and that the dike contained in it has two bodies connected by a thin sheet (Figure 22), we shall have no difficulty in conceiving the erosion which will produce either of the natural appearances described.

"The rocks which constitute Mount Holmes are the same as those about its base. The Vermilion Cliff and Gray Cliff Sandstones alone appear in the crests. The underlying Shinarump shales are cut by the erosion at a few points only, and those are near the base. For this reason the Vermilion Sandstone is not undermined about the base, and the circle of revet-crags which surrounds Mount Ellsworth finds no counterpart. There are, indeed, a few revetments of Gray Cliff sandstone, but they are scattered and for the most part inconspicuous.

"In the general view of Mount Holmes (Figure 16), one of the main dikes crowns the nearest spur, and another the spur leading to the right. At the left are minor dikes, and high
up is a trap sheet notched on its lower edge. At the left base of the mountain lies the lesser arch.

"Figure 23 gives a section exhibited by one of the northward canons. It shows one of the faults of the upper part of the arch and illustrates the thinning of the sheets as they descend."

Page 118.

"Mount Holmes, a few feet lower (than Mount Ellsworth) has the same flora, with the addition of a score of spruce trees, high up on the northern flank. Its summits are bare.

"In Figure 56 are the summit crags of Mount Holmes. They are dikes of trachyte denuded by a discriminating erosion of their encasements of sandstone, and carved in bold relief. In virtue of their superior hardness they survive the general degradation."

Page 146.

"Turning now to Mount Holmes, we find that its two domes are not equally respected by the drainage lines. The crest of the Greater arch (see Figure 72) is the center of a radiating system, but the crest of the Lesser arch is not; and waterways arising on the Greater traverse the Lesser from side to side. More than this, a waterway after following the margin of the Lesser Arch turns toward it and penetrates the flank of the arch for some distance. In a word, the drainage of the Greater arch is consequent on the structure, while the drainage of the Lesser Arch is inconsequent."
"There are at least two ways in which this state of affairs may have arisen.

"First, the Greater arch may have been lifted so long before the Lesser that its waterways were carved too deeply to be diverted by the gentle flexure of the latter. The drainage of the Lesser would in that case be classed as antecedent. If the Lesser arch were first formed and carved the lifting of the Greater night throw a stream across its summit; but it could not initiate the waterways which skirt the slopes of the Lesser, especially if those slopes were already furrowed by streams which descended them. If the establishment of the drainage system depended on the order of uplift, the Greater arch is surely the older.

"Second, the drainage of the Lesser arch may have been imposed upon it by planation at a very late stage of the degradation. Whatever was the origin of the arches, and whatever was the depth of cover which they sustained, the Greater is certain to have been a center of drainage from the time of its formation. When it was first lifted it became a drainage center because it was an eminence; and afterward it remained an eminence because it was a drainage center. When in the progress of the denudation its dikes were exposed, their hardness checked the wear of the summit and its eminence became more pronounced. It was perhaps at about this time that the last of the Cretaceous rocks were removed from the summits and slopes of the two arches and the Flaming Gorge
shale was laid bare, and so soon as this occurred the conditions for lateral corrasion were complete. With trachyte in the peaks and shale upon the slopes planation would naturally result, and a drainage system would be arranged about the dikes as a center without regard to the curves of the strata. The subsequent removal of the shale would impart its drainage to the underlying sandstones.

"Either hypothesis is competent to explain the facts, but the data do not warrant the adoption of one to the exclusion of the other. The waterways of the Lesser arch may be either antecedent, or superimposed by planation. The Greater arch may have been the first to rise or the last."


For data regarding the geological work and workers of this period see Merrill in the report of the National Museum for 1904; in his directory of American Geology, Merrill gives credit to Gilbert that really belongs to me.
GILBERT
Washington, March 12, 1880

My dear Holmes,

Your letter of Dec. 24 was very welcome, and read with interest. I would have been answered sooner but I have been in the field. Soon as my health is cared for I shall write for Utah and I spent three winter months staying at Lake Bonneville. I am not yet through and shall return in a few months. I am thinking seriously of going to Salt Lake to live so as to have my family more close to my work.

King has estimated for about $80,000 dollars for the next fiscal year, dividing the amount among into a dozen different plates. The division of the plates is assigned more money than any other so that Powell can push on his Grand Canyon work to publication at an early date. The amount to extend the field of the Survey is so as to include the States has not yet been brought up in the Senate. If it does not pass, the estimates will be diminished by the amount allotted to eastern work. Dana is opposing the amendment, but King is confident of carrying it. Powell has
asked for $50,000 for Etimologia. White is to have a place in the Post. Gannett is gregarious of the 18th Century what that may be. I have heard nothing of Slaven recently.Except that he was in the White Hole last summer. Mrs. Mann was called to work at Etimologia, and as usual Knoll has a book in press. So has Gannett and so has Drutton. Drutton is secretary of the Land Commission and has little time for geology just now. Hanson is still at work editing weekly reports. Mann was his chief clerk is now King. Mannott, a new man from New York, spent the summer at Karab and vicinity and made a splendid collection of fossils. He has established some of the Primordial, discovered a distinct brown with granules, marked out a distinct Permian found fossils in the Trias.

King inquired last night addition when you would return.

The Enoos Club has taken to itself another room and added a billiard table to its attractions. Monday night has been adopted as "club night" for the room are fuller then at other times.

This is about all I know of new. Prob'ly I could tell you more if
I had been home a month instead of a week.

Yours sincerely,

M.R. Gilbert.
Mt. Holmes, Utah, stands on the margin of the Grand Canyon of the Colorado River, in Utah and rises from the desert plateau to the height above the sea of 7,700 feet. It belongs to the Henry Mountain Group which was named by Major Powell in 1869 for Professor Henry, first Secretary of the Smithsonian Institution.

This peak was named for me because I had been the first to diagnose the peculiar volcanic structure represented.

See Gilbert’s Report, Department of the Interior, U. S. Geo-

logical Survey of the Rocky Mountain Region. 1877.
Fig. 1
Section showing probable method of intrusion of masses of trachyte.

Fig. 2.
Arching of strata produced by intrusion of single mass uniformly distributed.

Fig. 3.
Degree of arching really produced by the irregular intrusions.

Intrusion of masses of Trachyte.
Sierra el Late.
The rocks which constitute Mount Holmes are the same as those about its base. The Vermilion Cliff and Gray Cliff Sandstones alone appear in the crests. The underlying Shinarump shales are cut by the erosion at a few points only, and those are near the base. For this reason the Vermilion Sandstone is not undermined about the base, and the circle of revetcrags which surrounds Mount Ellsworth finds no counterpart. There are, indeed, a few revetments of Gray Cliff sandstone, but they are scattered and for the most part inconspicuous.

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Figure 23 gives a section exhibited by one of the northward canons. It shows one of the faults of the upper part of the arch and illustrates the thinning of the sheets as they descend.

"The north and west of Shiva Temple is a massive square rock-pile which I have named Holmes Tower, after that most gen-
ial and accomplished scientist in so many branches, Mr. W. H. Holmes. Geology not only owes him much for his charming draw-
ings, which embellish Captain Dutton's canyon report, but arch-
eology and ethnology are his great debtors, as a cursory survey of the reports of the Bureau of Ethnology will reveal. And it seems most appropriate that one of the great canyon monuments, which stood almost under his eyes as he sat on Point Sublime making his inimitable drawings, should receive his name.

West of Confucius Temple is another great butte which is named Becker Butte, and between this and Holmes Tower, at the western extension of Shiva Temple, is Russell Butte, so named after the geologist who traced the beaches of the prehistoric Lake Lahontan. Beyond Russel Butte, and almost due west of Becker, is a square red tower named Gannet Tower, after the man whose topographical work has made world-famed the maps of the United States Geological Survey."

In and Around the Grand Canyon, by George Wharton James,
(The Grand Canyon of the Colorado River in Arizona) 1908
Further explorations have since been made under the direction of the United States Geological Survey while Major Powell was its director, and as a result Captain Clarence E. Dutton has published one of the most interesting monographs ever penned by a specialist. Its title is "The Tertiary History of the Grand Canyon District," and it is accompanied with a large atlas containing admirable pictures, etc., of the Canyon region, from sketches made by Mr. W. H. Holmes, the accomplished field geologist, artist, archaeologist, and writer, now in charge of the Anthropological Department of the United States National Museum. No praises bestowed upon these gentlemen, for the fidelity with which they have described this marvellous rock region, can ever be adequate return for the pleasure they have afforded those who have enjoyed the fruit of their labors."

("In and Around the Grand Canyon" by George Wharton James, p35)
Ann Eliza Young, Nineteenth Wife of Brigham Young, Founder of Mormonism.

On my way to the field of our summer's campaign in Colorado, I traveled west with her and her friend Miss Briggs. She is a pleasant average Iowa girl, good looking and intelligent. I did not venture to inquire of her religious views or her opinion of Mormonism.
When in my school teaching days in Ohio, I taught the District School known as "Science Hill" near the town of Cadiz and within one-half mile of my father's home; I had a pupil, a slender boy of perhaps ten, Melvin Grove Kyle, whose father had a small farm and operated a saw mill in the Creek Valley down the plank road below the school. He was not as yet of any particular promise and I lost trace of him on the day my service ended.

Years later, after I had made my place in the world, and not having heard from Melvin for at least forty or fifty years, I came across his name in some publication as the Rev. Melvin Grove Kyle, D.D., LL.D., President of the Xena Theological Seminary of St. Louis, Missouri. I wrote him and had the pleasure of a reply and the opening of a correspondence that lasted for many years resulted. His various publications on explorations in Palestine and elsewhere are full of interest, even of thrill.

The following clipping referring to my work in archaeology is worthy of preservation.
A Marvel Without Parallel, if True

LETTER, a few days ago, from Dr. William Henry Holmes, the distinguished head of the Anthropological Department of the National Museum at Washington, which began, "My dear Melvin," filled me with pleasant recollections of my boyhood days, when I used to address him as "Teacher" in the little schoolhouse at old Science Hill. Then, "Melvin" was one of his obstreperous boys, and also one of his most ardent admirers. This letter and the accompanying off-print from a scientific journal, was most opportune apropos of the presentation of Indian Lore in the last Archeological Review.

I have often called attention to the natural resemblances and at the same time the lack of evidence of historical connection between Indian remains in America and the remains of Europe and the East, and, also, to the comparative recentness of the Indian occupation of America. It is with great pleasure that I quote now from Dr. Holmes some sentences as a fitting summary and conclusion of the presentation of Indian remains.

Concerning recent discovery, at Vero, Florida, of human remains associated with fossil remains of the Pleistocene age, and the inference of the great age of man on the western continent which some have hastened to draw, Dr. Holmes calls attention, in response, to the shifting back and forth of channels of streams over wide areas, and the slipping of strata on slopes: "It is the failure to recognize these important considerations," he says, "that has led in many cases to the confident and regrettable announcements on the part of students respecting the original association of human remains with the remains of fossil animals of the earlier periods. If now such views ... are allowed to prevail, we shall have to accept the conclusion that American man had advanced to the pottery-making stage in the middle or early Pleistocene, and that, after the lapse of a vast period, the art was revived by the same or another people using the same materials, employing similar methods, and attaining identical results in the same region—a marvel without parallel in the history of man.

"It is manifestly a serious duty of the archeologist and the historian of man to continue to challenge every reported discovery suggesting the great geological antiquity of the race in America, and to expose the dangerous ventures of little experienced or biased students in a field which they have not made fully their own."


By my boy pupil at Science Hill, near Cadiz, Ohio, about 1868, now, 1920, he is the Right Reverend Melvin Kyle, D.D., L.L.D., President of the Xenia Theological Seminary, St. Louis, Missouri, conducting explorations in Palestine.
William Holmes
McBride
President
Xenia Theological Seminary
6354 Washington Ave., St. Louis, Mo.
Founded A.D. 1794
Melvin Grove Kyle, President

PROFESSORS
Jesse Johnson, D.D.
Church History

J. H. Webster, D.D.
Greek Exegesis and New Testament Literature

M. G. Kyle, D.D., LL.D.
Biblical Theology and Biblical Archaeology
Adjunct, Pastoral Theology and Missionary Preparation

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Hebrew Exegesis and Old Testament Literature
Adjunct, Religious Education

George B. McCreary, Ph.D., D.D.
Philosophy of Religion and Applied Christianity

T. S. Duncan, Ph.D.
Instructor in Public Speaking

OFFICE OF
THE PRESIDENT

My dear Mr. Johnson,

I am just back from New York and all my business. I was in New York and did not call or call you up. But, the weather has moderated some and I expect to reach home the 8th or 9th of this month. I am glad to see you the next day to call. I hope you are well.

Wm. M. Holmes
President

[Handwritten note: I am just back from New York and all my business. I was in New York and did not call or call you up. But, the weather has moderated some and I expect to reach home the 8th or 9th of this month. I am glad to see you the next day to call. I hope you are well.]
THE END OF THE YEAR

MY DISASTER IN THE JEMEZ MOUNTAINS, NEW MEXICO, 1887.

Our Party Comprised Major Powell, Professor Langley, Mr. & Mrs. James Stevenson & others.

My letters home recite the many interesting events occurring from day to day in our camp life and our explorations among the ruins, the Indian Pueblos and the rugged mountains and charming valleys, but my season's work came to a sudden close. About the end of September I joined Major Powell in a mountain excursion and one afternoon, descending on horseback from a high peak, I had the misfortune to suffer a very serious injury. The Major rode a large, free-going horse and I rode a pony, selected for convenience in mounting and dismounting in gathering specimens and making sketches. This pony had a gait, when on good roads, as comfortable as a rocking chair, but he had stiff forelegs and coming down the mountain trail I had great difficulty in keeping up with Powell. I suffered terribly from the long continued jar and by the time we reached camp my back was broken, or near-aboutss, and I was quite helpless. The injury was so serious that Stevenson constructed a litter of long poles on which, with a mule attached, I was placed and drawn out to the railway and sent home. Mrs. Stevenson aided materially in caring for me, and in due course I arrived safely in Washington, and was soon fully restored.

The only mention or note I have of this episode is a brief letter from Colonel Stevenson written in answer to a letter from Mrs. Holmes thanking him for his care of me. This letter is as follows:

(However, after the lapse of 42 years (1929) the back of my neck is still sensitive to any decided jar as in driving rapidly over rough streets.)
Bernalillo, N. M.
October 9, 1887

Dear Mrs. Holmes:

If you will excuse the note paper I am using I will drop you a line to acknowledge the receipt of your kind letter of thanks to Mrs. Stevenson and myself for the little we did for your husband while ill in camp. Mrs. Stevenson did all she could under the circumstances. Mr. Holmes was a very ill man and when I constructed a machine to drag him out of the mountains I had but little hopes of getting him in safety to the railroad. I am glad, however, to learn that he has reached you in as good a condition as he has.

I am here to assist Professor Langley home. He left for the East at 2 this A.M. Mrs. Stevenson and I will remain out considerably later to work among some of the Pueblos.

Please present Mr. Holmes our best wishes and gratification that he is at home.

With great sincerity from Mrs. Stevenson and myself, I am

Truly yours,

/s/ JAS. STEVENSON
THE MILITANT PACK MULE
"The impertinent mule"

A spirited mule often resents the unwelcome pack and the throwing of the "diamond hitch" and gives no end of trouble. It is no easy task to subdue him when he breaks control and "goes on the air", and the scattered remnants of the mess boxes and their contents tell the story.
June, Montana (pawnee)

Hayden Survey 1861

Through the “Beaver Hole”
IMITATING THE SLOTH.

This sketch shows the result of a light head in crossing a natural bridge. It might have been worse as a raging torrent awaited him below.
Good fortune smiled on me again when in the early spring of 1899 I was asked to join a party of scientists on a trip to Mexico. Mr. George W. Breckinridge of San Antonio had asked Major Dutton, who was then a resident of San Antonio, to accompany him on a visit to Mexico and to invite one or more scientists to join the party and the invitation was extended to me, as indicated by appended letters and telegram. I reported at San Antonio on April 1, 1899.

Mr. Breckinridge is a banker and in appearance resembles Secretary Langley. He is an agreeable man who enjoys outings of the kind proposed. G. K. Gilbert, the geologist, was invited to join the party which travelled by a special car by way of Monterey, Tampico, Orizaba, Cordoba, Vera Cruz to Mexico City, arriving on April 7. Our itinerary involved five or six trips with the City of Mexico as a starting point, some being for geological and others for archeological observations. Mr. W. W. Blake of Mexico City, an old friend of mine, joined us in some of our trips.

The following quotation from a letter addressed to Mrs. Holmes from Orizaba on April 7, 1899, will give an informal touch to the otherwise formal accounts of the trip. It seems that my notes have largely disappeared and the only publication resulting from the trip is a study of the Obsidian Mines, see paper on same, American Anthropologist, 1900.
"Although I have written Orizaba at the top of this sheet, I am really at Cordova, 20 miles lower down the road toward Vera Cruz. Our car is standing on the sidetrack here in front of the station where we were dropped off at three this afternoon. It is eight in the evening and is dark with a dripping rain outside. Dutton and Gilbert are at the table playing cribbage and Mr. Breckinridge is playing "solitaire."

Since writing you last in Monterey we have been constantly on the go through dust and rain and chill and heat over half of Mexico. Yesterday afternoon we reached the City of Mexico, attended to some business and then set out for this point. We would have gone on to Vera Cruz but Dutton seemed to fear the yellow fever. The trip to Tampico was given up for the same reason. There is as yet no yellow fever in the country and there is no danger. Our object in coming here is to see the great peak of Orizaba (see picture in the Cosmos Club) the face of the great plateau where the highland breaks off next the Gulf and to get a glimpse of Popocatapetl on the way. Our itinerary is now made out for five or six trips with the City of Mexico as the starting point. Some of these are archeologic and some are geologic. I found my friend W. W. Blake in Mexico City and he will go with us on two or three of the trips.

I have sketched a little as we ran, but of course the results amount to but little. I may get time to sketch something at Orizaba tomorrow where we will probably tie up for a day. It is very picturesque place with plenty of bridges.
THOMAS MORAN'S MASTERPIECE ACQUIRED BY THE
NATIONAL GALLERY OF ART, WASHINGTON.

The Thomas Moran painting of the Grand Canyon of the Yellowstone which has been on exhibition in the National Gallery for a number of years as a loan, first by the artist and later by his daughter, Miss Ruth B. Moran, has been added to the Gallery's permanent collections. In May of the present year during a visit of Mr. George D. Pratt of New York City to the Gallery he became deeply impressed with the importance of this great work artistically and nationally, and soon after announced his willingness to contribute ten thousand dollars to its purchase. Miss Moran was so greatly pleased with the prospect of having the picture become the property of the Nation, thus retaining its place in the National Gallery, that she decided to accept this amount.

Moran, who died in his ninetieth year, August 25, 1926, was exceedingly skillful with the pencil, the graver and the brush and was a colorist unsurpassed. After three visits to the Yellowstone he found the Grand Canyon most worthy of his crowning effort, and prepared the way for its pictorial realization by a multitude of studies in pencil and water color. The canvas finally chosen was so large (8 x 14 ft) that it could not be accommodated in his East Hampton studio and a nearby carpenter shop was utilized for the purpose.
The subject of this work was selected by the master after years of familiarity with the scenic wonders of the far west. It was executed with a skill bordering on the marvelous and is realized in forms, colors and effects as exquisitely beautiful as can be conceived without transcending the verities of earthly landscape. Considering the full range of attributes essential to great art, this painting has strong claims to rank as America's greatest landscape. Its acquirement is a triumph for the National Gallery of Art.

In this degenerate day in art the people pass by this picture giving it a mere glance because perhaps it represents one of America's grandest landscape wonders. As a landscape it is without doubt the greatest masterpiece of landscape by an American, if not by the painters of any people or age. This will doubtless come to be recognized by critics when the lunacy of impressionism has passed, as it must pass if the painter's art is ever to be resuscitated.
The greatest landscape art painted by an American—or any other

In a book on American art and artists published in 1924 Michaelis forte was to mention Moran, at the same time granting but passing attention to many painters not deserving a passing notice.

For an account of the Moran family and their before 1924 achievements, see the International Studio, 1926.
Introducing Mrs. Walcott on the occasion of her presentation with colored slides of her studies of the wild flowers of British Columbia at the home of Mrs. Frank B. Noyes, 1239 Vermont Avenue, Washington, D. C., February 13, 1924.

(wife of Secretary Walcott of the Smithsonian)

Genius breaks through the boundaries of the unachieved and accomplishes the thing never before thought of, or regarded as beyond the limits of the possible. The explorer, gifted with strong will and tireless limbs, reaches the summits of mountains and penetrates the cheerless deserts and is rewarded by the thrill of discovery; but this is not all. He descends the mountains and returns from the deserts burdened with a wealth of priceless observation which finds its way through varied channels to the home-staying people of the world.

It is an old saying that "The rolling stone gathers no moss," but this applies only to the stone that does nothing but roll. Applied to the humankind, the figure is far from the truth. Columbus, urged by the lust of the wanderer, sailed the unsailed seas and brought back a new world. Marco Polo penetrated for the first time by a European, the then great unknown of China. Stanley and Ward ventured into the wilds of Africa and brought back new knowledge of the black continent and of the black people.

Dr. Walcott, year after year, has explored the glorious Columbian ranges and has brought back chapter after chapter of the story of the geological ages, adding thus to the world-building chapters that have gone before. Mrs. Walcott, ever by his side, has followed the obscure paths that lead ever upward toward the
forbidding summits draped in eternal snow. She has found and established her claim to a new and vast realm, a realm of fragrant bloom of which the world knew nothing.

For untold ages the plains, the valleys and the mountains of this remote land have bloomed in vain. The carpet of tender blossoms has, year after year, spread itself over the vast slopes creeping eagerly upward behind the fields of retreating snow to the very margins of the glacial ice.

Mrs. Walcott's footsteps have rustled these endless clouds of bloom heretofore undisturbed save by the feet of the deer, the elk and the bear and by the breezes that come with the tardy spring. She has not wandered in these far fields in vain. She has filled her portfolio with a marvelous record of the wild - a surprising and wonderful display. Thus she has made for herself a lasting place in the realms of both science and art. She has brought home to the world a record of bloom, the pages of which make for her a monument not less enduring than the monument of stone.

Read also at a dinner given by Dr. George P. Merrill, in celebration of my eightieth birthday at his home, Mrs. Walcott being present. 1929

[Signature]
SEARCH FOR AN APPROPRIATE RESTING PLACE FOR THE GREENOUGH STATUE OF GEORGE WASHINGTON.

The pathetic story of the colossal statue of George Washington, by Horatio Greenough, is given in all available detail in Fairman's valuable work "Art and Artists of the Capitol of the United States of America." This great work was executed by Horatio Greenough, American sculptor, in Florence, Italy, 1832-40 and reached Washington July 31, 1841. It had a cold reception officially in Washington and also by the country generally, and was spoken of by some as the Father of his Country "without a shirt" and in other equally derisive language. It remained practically an outcast for nearly 70 years being installed in turn in the Capitol building, where the floor would not support it, and in the Capitol grounds. Finally it was found to be suffering seriously from exposure to the elements, and the question of its preservation was finally referred to the Secretary of the Smithsonian Institution and, as Curator of the National Gallery of Art, I was asked to find a place for it. After going into the matter quite thoroughly, I reported that the Chapel of the Smithsonian Institution, not at the time serving any important purpose, came nearest an ideal situation - dignified yet unobtrusive, where visitors to the Institution could view it without feeling that it was forced upon their attention.
Statue of George Washington, colossal, marble.
By Horatio Greenough
Example of American Historical Portraiture.
Appendix to the Gallery Report, 1929. List I.

This statue of Washington was transferred by Act of Congress, May 22, 1908, from the Capitol grounds to the Smithsonian Institution.
"By act of Congress, approved May 22, 1908, the colossal marble statue of Washington by Horatio Greenough, completed in 1840 and since 1875 occupying a position in front of the main steps of the Capitol, was transferred to the custody of the Smithsonian Institution. It is intended to place this work in the Smithsonian building until a more fitting location for it shall be found, probably in connection with the National Gallery of Art. The statue has been greatly injured by its long exposure in the open air, but its preservation has been urged by artists qualified to pass upon its merits."

(Report of National Museum, 1908, page 21)
Potomac fresh fish

Towing in the ground with many tons of fish and alewife, about 1872.

Four, Williams of Berkeley
The award of the Le Duc de Loubat prizes, founded with Columbia College of New York, to be awarded once in five years, for the most noteworthy works on American anthropology, has been made, and the first grand prize of $1,000 was captured by Mr. William Henry Holmes of Washington, Head Curator of Anthropology, at the United States National Museum, and formerly Curator of the Department of Ethnology in the Field Columbian Museum at Chicago.

Le Duc de Loubat is American born, of French descent, inheriting his title from his father. He is immensely wealthy, and is a cosmopolitan, spending a greater portion of his time, however, in New York City. He recently gave $1,000,000 to Columbian College in that city, aside from founding the prizes for anthropological works. The award of these prizes is the first that has been made, and the importance of the works submitted in competition cannot be overestimated. Judges are appointed for each five-year period. The committee of judges which has just completed its services was composed of Professor H. T. Peck of Columbia College, Dr. Daniel G. Brinton and Professor W. J. McGee of the Bureau of Ethnology in this city.
Besides carefully scanning the works received in competition, the committee also examined such other works relating to American archaeology as have been published in the English language during the last three years. In the consideration of the monographs the committee took into account not only the scientific value of the work, but also the importance of the subject treated, the method of investigation pursued by the authors, and the artistic and literary excellence of the presentation.

The monographs that were formally submitted for examination were the productions of eight different authors. Of these the committee selected as being the most meritorious and as fully complying with the conditions prescribed for the competition the treatise offered by Mr. William Henry Holmes of Washington, the title of whose treatise was "Stone Implements of the Potomac-Chesapeake Tidewater Provinces." In recommending the award of the first prize of $1,000 to Mr. Holmes, the committee says:

"This volume may be held to mark an epoch in American archaeological research by interpreting the remarkably abundant artifacts of a typical region in the light of previous studies of actual aboriginal handiwork, and thus establishing a basis for the classification of the stone art of the western hemisphere. It is the result of
many years of personal study, numerous experiments and close typological analysis, and is supplied with a wealth of illustrative material that gives it most exceptional interest and value."

The second prize of $400 was awarded to Dr. Franz Boaz of the Metropolitan Museum of Natural History of New York the subject of whose monograph was: "The Social Organization and Secret Societies of the Kwakiutl Indians." Honorable mention is due Dr. Karl Lumboltz, who treated the subject: "Objective Symbolism of the Huichol Indians," and Mr. Frank H. Cushing of Washington, who offered a manuscript interpretative of aboriginal art and industry, under the title: "Tomahawk and Calumet, Shield and Gorget," and Dr. Walter Hoffman, whose extended memoirs embodied a careful study of the Menomini Indians. The committee also especially commended the work of Alfred P. Mandslay of London, dealing with the archaeology of Central America, but which was not submitted or completely published.
MR. HOLMES' HONORS.

Washington Scientist Receives an Important Prize.

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Le Duc de Loubat is American born, of French descent, inheriting his title from his father. He is immensely wealthy, and is a cosmopolitan, spending a greater portion of his time, however, in New York city. He recently gave $1,000,000 to Columbian College in that city, aside from founding the prizes for anthropological works. The award of these prizes is the first that has been made, and the importance of the works submitted in competition cannot be overestimated. Judges are appointed for each five-year period. The committee of judges which has just completed its services was composed of Professor H. T. Peck of Columbia College, Dr. Daniel G. Brinton and Professor W. J. McGee of the bureau of ethnology in this city.

Besides carefully scanning the works received in competition, the committee also examined such other works relating to American archaeology as have been published in the English language during the last three years. In the consideration of the monographs the committee took into account not only the scientific value of the work, but also the importance of the subject treated, the method of investigation pursued by the authors, and the artistic and literary excellence of the presentation.

The monographs that were formally submitted for examination were the productions of eight different authors. Of these the committee selected as being the most meritorious and as fully complying with the conditions prescribed for the competition the treatise offered by Mr. William Henry Holmes of Washington, the title of whose treatise was "Stone Implements of the Potomac-Chesapeake Tidewater Provinces." In recommending the award of the first prize of $1,000 to Mr. Holmes, the committee says:

"This volume may be held to mark an epoch in American archaeological research by interpreting the remarkably abundant artifacts of a typical region in the light of previous studies of actual aboriginal handiwork, and thus establishing a basis for the classification of the stone art of the western hemisphere. It is the result of many years of personal study, numerous experiments and close typological analysis, and is supplied with a wealth of illustrative material that gives it most exceptional interest and value."

The second prize of $400 was awarded to Dr. Franz Boas of the Metropolitan Museum of Natural History of New York, the subject of whose monograph was: "The Social Organization and Secret Societies of the Kwakiutl Indians." Honorable mention is due Dr. Karl Lumboitz, who treated the subject: "Objective Symbolism of the Huichol Indians," and Mr. Frank H. Cushing of Washington, who offered a manuscript interpretative of aboriginal art and industry, under the title: "Tomahawk and Ocalmet, Shield and Gorget," and Dr. Walter Hoffman, whose extended memoirs embodied a careful study of the Menomini Indians. The committee also especially commended the work of Alfred P. Mandellay of London, dealing with the archaeology of Central America, but which was not submitted or completely published.
Extract from a letter addressed to Mrs. Holmes:

Hotel Santiago, Chile,
Sunday, December 27, 1908

"I am back from my trip to the south and am again in the troublous torrent of social and scientific affairs in Santiago. Today is comparatively quiet, although I have to dine with the President of the Republic, Sr. Pedro Montt at eight this evening. I had hardly expected that the invitation would be repeated and rather hoped to escape this particular function -- but there is no let up to the hospitality of these people.

Last night I attended a great banquet, given to the various delegations of the Congress, at the University. Friday night, Christmas, a warm June day with a cool night, the opening session of the Congress was held at the theater and the Chairmen of the various delegations had their opportunity to tell the Chileans how glorious their country is and how beautiful their women. The fact is that all concede that the percentage of handsome women is greater here than in any other country of the world. My good friend Smith is fully convinced of this, and tomorrow night at a great reception to be held at the Club de Union I shall have a good chance to make up my own mind on this point.

"The first scientific meetings of the various sections were held yesterday and my paper comes on Wednesday. It will be read in abstract only and in Spanish by Mr. Philippi, a young lawyer, son of the German director of the local Museum."
and a most helpful and obliging fellow. I think I told you of his good mother in my last letter. On Monday morning I went with Mrs. Philippi and the five grandchildren of the family down to Constitution on the Pacific where I spent two days sketching and wandering along what is perhaps the most picturesque coast in America. I got only four good sketches. The wind blew hard and was cold and I have caught a pretty bad cold, but otherwise am in excellent shape.

"So far I have only one letter from you here and on the assumption that one or more were forwarded to Buenos Aires I have had them telegraph to the Paris Hotel there making inquiries.

"Being busy since my return from the south, catching up in various matters I have had to cut out a dinner at the Argentine Minister's and several horse show receptions and flower bombardments. I am now counting the days to pass before we set sail for the north -- on the sixth of January. A dozen or more of our American party and half a dozen ladies will be stopping in Peru. If everything goes well I hope to spend about two weeks in the visit to Lake Titicaca and Cuzao and a week about Lima. Then! oh, then! I am off for home."

[Signature]

[Handwritten note: "Tell the story told by Mrs. Bruck in the letter.

[Signature]

[Handwritten note: "Signed by Mrs. Bruck.""]
"My evenings were spent usually with Professor W. H. Holmes and a number of other artists, when I was not with a crowd of cyclists at the rooms of the Capitol Bicycle Club. Professor Holmes was then in Major Powell's department of the Ethnological Bureau, and so was Thomas Moran, who ought to have been a great artist — he is bigger than the present-day duffers, anyway — and Holmes had assisted at the discovery not only of the Yellowstone Geysers but of the Grand Canyon of the Colorado. He gave wonderful descriptions of the way Powell's party traveled across the desert, knowing nothing of the Canyon; and how for some days they crossed the level plain; at last sighting trees on the faraway horizon with nothing but clouds beyond, strange in that country, astonishing these scientists as they slowly approached; of their keeping on until the mules refused to go further; of their own terror as they came to the trees and that awful screen of clouds; and how, when they did reach the edge, there was nothing, and Major Powell, in his ghastly fright, whispered, 'My God, boys, its true, we've struck the end of the world!'

In the Yellowstone they sat down for supper one evening by a quiet boiling spring and put things in it to cook, but suddenly, it went off and spouted a hundred feet in the air;
'and,' said Holmes, 'some of the crowd didn't stop running till they got to Washington.'

Stories like these and the offer of a post if I could make satisfactory drawings - satisfactory, that is, from a government critical standpoint - induced me, for the first and last time, to compete for a post. I was given a sort of profile map which Holmes had made in pencil and told to copy it in ink. Holmes said he had made it with the thermometer away below zero, thawing the lead pencil, or himself, over a fire between his legs as he drew. I felt like telling him, as I used to be told, 'there was no merit in that.' The only other thing about it I can remember is that there was a Mount Pennell on the drawing, but where that Mount is or was, I do not know or care. I believe there is an Elizabeth River discovered by Landor in South America, but then both he and Teddy said the other never was there. I took the map and improved it, and I did not get on the Survey. But how Holmes, who could make the most stunning direct watercolors, should have preferred this sort of drudgery was beyond me mentally as well as artistically. There were other Washington artists, and the first American prize student, and Doctor Burnett, who was, I believe, the first person in Washington to collect etchings, whom I used to go to see. They are all, save Professor Holmes, rather vague in my rather dim memory of forty years ago."

("The Adventures of an Illustrator," by Joseph Pennell, pp 82-83)
THE CENTENNIAL EXPOSITION
Philadelphia, 1876

Washington, May 19th, '76

I have just returned from a four days' trip to Philadelphia.

The Centennial show is truly enormous.

In four days, I have hardly an outline of it.

Spent the greater part of two days assisting in arranging our survey exhibit. We shall have a credible display, certainly. The Cliff houses, models, and the transparencies are much admired.

The fine art display is very great. Americans are not so far behind other nations.

Gifford, Moran, Richard and Hill are among the greatest landscape artists.

Gifford is my favorite.

The water-color exhibitions is excellent.

Page from my notebook on returning from the installation of exhibits, among which were several models of cliff dwellings and many art objects of the Colorado cliff dwellers.

For an account of our participation in this exposition see the Smithsonian Report for 1876, pages 53-66. (op. p. 57)
"The following year the same region was visited by Mr. W. H. Holmes, one of the geologists of the Survey, and a careful investigation made of all the ruins." (1875) (page XXIII)

"The occasion of the Centennial Exhibition at Philadelphia led to the idea of preparing models of these ruins for the clearer illustration of their peculiarities, four of which were completed in season for the opening of the exhibition. Since that time not only the number of these interesting models has been increased, but they have been perfected in execution and faithful delineation of these mysterious remains of an extinct race who once lived within the borders of our western domain.

A study of these models will give a very excellent idea of the ruined dwellings themselves. The first of these models, executed by Mr. Holmes, represents the cliff house of the Mancos Canon, the exterior dimensions of which are 28 inches in breadth by 46 inches in height, and on a scale of 1.24, or two feet to the inch. This is a two-story building, constructed of stone, occupying a narrow ledge in the vertical face of the bluff 700 feet above the valley, and 200 feet from the top. It is 24 feet in length and 14 feet in depth, and divided into four rooms on the ground-floor. The beams supporting the second floor are all destroyed. The doorways, serving also as windows, were quite small, only one small aperture in the outer wall facing the valley. The exposed walls were lightly plastered over with clay, and so closely resembled the general surface of the bluff that it becomes exceedingly difficult to distinguish them at a little distance from their surroundings." (1876) (page XXIII)
TESTIMONIAL TO PROFESSOR WILLIAM HENRY HOLMES

As a testimonial to Professor William Henry Holmes, director of the National Gallery of Art, on the occasion of his eightieth birthday, on December 1, a volume was presented containing one hundred and fifty personal letters of felicitation from intimate friends and those colleagues and co-workers who during the past sixty years have been closely associated with him in the fields of geology, ethnology, anthropology, exploration and the fine arts. The dedication of this volume, by Dr. Marcus Benjamin, reads as follows:

Out of the West came the boy, and we can fancy in those long ago days that he had a natural instinct for things beautiful, such as pleasure in the brilliant coloring of a fragrant flower; joy in watching a gay butterfly flitting to and fro in the air; following the sunlight as it glistened on the babbling brook or the foaming water dashing over the rugged rocks; listening to the music of a bird; or perchance enjoying a wonderful sunset with its reds and yellows darkening into violets and purples. And so the boy learned color values and became an artist.

The happy days of boyhood soon passed into adolescence and manhood, and with his powers of close observation trained to study nature, Holmes concentrated his natural talents on the study of land formations. The details of rocks and strata were differentiated and he learned nature in a new way as he crossed the continent in the service of our national surveys. And the boy artist became the man geologist.

Evolution was the spirit of his time and from investigating the geological horizons of our great continent, he sought higher objects and turned his attention to the highest form in nature, which is man. The beginnings of culture attracted him. Original forms of weaving and primitive pottery became the objects of his study. And so the geologist progressed and became the anthropologist. His classical memoirs on the arts of early man are still accepted as the last words on the subjects of which they treat.

Then more years came to him and he was advanced to the charge of the Bureau of American Ethnology. His mission was to direct the studies of his disciples for the purpose of increasing and diffusing the knowledge of which he was the accepted master. And so for a decade or more the results of the progress of his favorite science were given to the world in the annual reports and bulletins issued under his supervision.

Still in the prime of his days and rich with the art instinct of his early life, cultivated and developed by the experience of many years he turned again to the ideals of his boyhood dreams and became director of the National Gallery of Art under the supervision of the Smithsonian Institution. And his duty since has been the privilege of selecting the art productions of his many contemporaries and arranging them for the edification of the public. May he long continue active in the prosecution of this work.

Of honors he has many, but why chronicle the collegiate degrees that have been conferred on him or the memberships in scientific or artistic societies that he has received? His election to the National Academy of Sciences and to the presidency of the Cosmos Club tell the story. They are all negligible when we think of the man.

Gentle and kind, sweet and true, he has given always the best that he had to his fellows, and our earnest prayer is that he may long abide with us, so that the world may continue to be made more beautiful by his splendid influence.
QUESTIONNAIRE FOR 1929-30 EDITION OF

Who's Who IN THE NATION'S CAPITAL

Your biography will be edited solely from information given us by yourself.

The scope of data asked for herewith is more complete than that asked for in the questionnaire of two years ago as you will see from your biography in that edition. This questionnaire reflects a digest of comment and criticism of many people on the last volume and our own careful study of the work of other compilers. Although we offer the option on this page of correcting your old biography we would much prefer your filling out this new questionnaire.

We will send, for your information and correction, a galley proof—sample below—of your biography in type and as it will appear in the volume. We will take care to represent you accurately but cannot accept responsibility for errors which may creep in.

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<th>CORRECTION MARGIN</th>
<th>SAMPLE BIOGRAPHY</th>
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YOUR PROMPTNESS IN RETURNING THIS QUESTIONNAIRE IN THE ENCLOSED SELF-ADDRESSED ENVELOPE WILL FACILITATE WORK
QUESTIONNAIRE FOR 1929-30 EDITION OF

Who's Who IN THE NATION'S CAPITAL

Published by
RANSDELL INCORPORATED

1315-1317 C Street N. W.            Washington, D. C.

PHONE MAIN 3082

QUALIFICATIONS FOR ADMISSION

RANSDELL INCORPORATED, owner and publisher of "WHO'S WHO IN THE NATION'S CAPITAL," is bringing out the 1929-30 edition. Our editorial policy has been greatly strengthened by the accession to our staff of certain civic leaders in the capacity of associate editors. Our basic policy remains the same—no biography will be and none can be paid for and our qualifications for admission remain identically the same as for the first volume. These qualifications are divided into two groups. They are:

Distinguished leaders who by virtue of their position are eligible from that very fact. This group arbitrarily includes members of the President's Cabinet, Justices of the Supreme Court of the United States, and all members of Congress; all executive officials of the judiciary departments of the Federal and District Governments; Federal Department heads, and prominent departmental executives; American Ambassadors, Ministers and Consuls appointed from the District of Columbia; all Foreign Ambassadors, Ministers, and certain Attaches of the Diplomatic and Consular Services accredited to the United States and residing in the District of Columbia; all officers of the Army and Marine Corps above and including the rank of Major and all officers of the Navy above and including the rank of Lieutenant Commander. Heads of recognized Universities and Colleges; heads of important Philanthropic, Educational, Commercial, Industrial, Religious, and Scientific Organizations; heads of leading institutions and organizations of Arts and Letters; and others.

Those who have made some unusual contribution to the Religious, Social, Commercial, Industrial, Cultural, Professional, or Physical Development and Advancement of the National Capital. This group includes those distinguished as Doctors, Lawyers, Teachers, Ministers, Lecturers, Authors, Writers, Artists, Scientists, Bankers, Philanthropists, Inventors, Merchants, Manufacturers, Architects, and others.

NEED FOR PUBLICATION

This volume has become of great use, not only to the public of Washington, but to many leading newspapers and public libraries of the country, which have placed standing orders for every edition, and the data asked for in this questionnaire is in wider demand than ever heretofore. The questionnaire is based not only on our own experience but on that of other compilers and asks for what we know to be interesting and valuable information. We earnestly request you to fill it out as carefully and completely as you feel free to do. In no case do we ask for information which you wish to withhold.

The Copyright Law prohibits us from using the work of other compilers. Please cooperate with us by filling out this questionnaire.
Troubles of an Editor of Science

My Editorial period in charge of closing up the Affairs of the Hayden Survey of the Territories furnishes an episode of unique kind. The work was the difficult task of putting through the Government Printing office the unfinished publication of professors Cape, Dr. Cook, Marsh and others. Cape gave me a good deal of trouble of the kind indicated in the accompanying letter from Mr. Davis, Foreman of the printing office.

1880-81. 82.

W. H. Holmes
Jan. 8th, 1931
Office of Public Printer,
Washington, D.C., March 8, 1881.

My dear Prof. Holmes:

I return Cape's proofs. It is simply outrageous. He has had three or four gallley proofs of the same thing. I am directed by the Public Printer to say that if any more such proof comes in, he will not receive it. Cape must be somewhere near corner's when it is sent up, or it will be returned.

I am sorry to enclose such a report which can only be sent up. Return the proofs to me, I will have it corrected.

Yours,

A.H.S. Davis

Foreman of Printing

Government Printers
Copy.

Field Columbian Museum
Chicago.

The Yucatan Volans

Merida, Yucatan
Jan. 14th, 1894.

My dear Mr. McGee:

I am just in Merida over night having come up from Uxmal. In the morning we are off for Izamal and Chichen Itza. The Uxmal ruins are superb representing a culture and people the more remarkable the closer we approach them. The ride of 25 miles in a volans was also a novel experience. The roads are limestone beds of awful ruggedness and the vehicle is a box bed on two high, heavy wheels drawn by 3 mules abreast. The volans and mules are marvels in having existed through the 50 miles made that day. I have taken the volans as my fetish. We have had two "northers" on the Gulf of Mexico but that volans ride was equal to ten "northers" tied in knots.

Everything, everywhere is limestone, soft rather massive and full of fossils, hard to secure as the rock is friable or gnarled and brecciated. The formation is late tertiary I suppose.

What I am coming to is to ask that if possible you send to E. H. Thompson, Merida, Yucatan, some reports,—the Annuals after the 19th, Bulletins, save Fillings, the quartos save VI and VII, as far as you can.

Thompson is at work on Chichen—owns it and deserves everything.

Yours truly,

/s/ W.H. Holmes.
Lt. Holabird's Camp

The Dog Tent - Camp - Colorado 1874
Mr. W. H. Holmes

Dear Sir,

Your picture entitled "A Walk on the Sands" is marked at $160. Do you think that is too low a figure? It certainly seems to the Committee. The picture would probably sell just as readily at $260 or $300 as at the first figure.

Please answer at once.

Very truly,

[Signature]

F. Farrer
VOLUME II

SECTION II, EXPOSITIONS.
EXPOSITIONS.

The Smithsonian Institution, the National Museum and the Geological Survey were called upon with great frequency during the exposition period, (1876-1916). The collections already in hand were utilized and extensive collections were made and exhibits prepared for the various occasions, adding thus materially to the riches of the National Museum. It happened that I was called upon for active participation in the Centennial Exposition in 1876, partly because I had just completed studies in the Pueblo Cliff House country and had in hand the construction of several models of villages and ruined Puebloes and no end of collections of pottery, stone implements and other art objects. Although employed in the Hayden Survey of the Territories I took part on account of my artistic skill, in nearly all of the expositions throughout the period.

Remnants of these exhibits are to be found today not only in the National Museum but in collections preserved in other Museums throughout the country. These interesting and important undertakings can not be more than briefly mentioned in this account, but the reports of all are published in more or less elaborate form in the annual reports of the Museum and as a rule in reports of the various expositions. Were I so disposed, several volumes of descriptive
and pictorial material relating to the expositions and their varied exhibits could be brought together here. The exhibits themselves are fast passing into the shadow of the years and are largely forgotten but they were the forerunners of a wide range of exhibits illustrating culture history and industrial progress. They served their purpose at the time and are now built into the fast growing fabric of American History.
EXPOSITIONS ParticIpated In

International Exposition, Philadelphia, 1876
Centennial Award.

The Southern Exposition, Louisville, 1884.

The World's Columbian Exposition, Chicago, 1894.
Diploma of Honorable Mention.

Trans-Mississippi & International Exposition,
Omaha, Nebraska, 1898.

Pan-American Exposition, Buffalo, New York, 1901.
Diploma.

Louisiana Purchase Exposition, St. Louis, Mo., 1902-04.
Commemorative Diploma and Medal.

South Carolina Interstate and West Indian Exposition,
Diploma and Gold Medal.

Lewis and Clark Centennial. American Pacific Exposition
and Oriental Fair, Portland, Oregon, 1905.
Commemorative Diploma.

Jamestown Ter-Centennial Exposition, Hampton Roads,
Virginia, 1907.
Commemorative Medal.

Diploma.

Appalachian Exposition, Knoxville, Tenn., 1910.
Silver Medal for Water Color.

Silver Medal.

San Diego Exposition, 1915.

Charleston Exposition,
INTERNATIONAL EXHIBITION.
PHILADELPHIA, 1876.

The United States Centennial Commission has examined the report of the Judges, and accepted the

E. Larrinna

John Backshaw

J. U. da S. Coutinho.

A true Copy of the record.

Knox D. Walker

Chief of the Bureau of Awards.

Given by authority of the United States Centennial Commission.

A. T. Goshorn,
Director-General.

J. L. Campbell,
Secretary.

J. R. Hawley,
President.
INTERNATIONAL EXHIBITION.
PHILADELPHIA, 1876.

The United States Centennial Commission has examined the report of the Judges, and accepted the following reasons, and decreed an award in conformity therewith.

REPORT ON AWARDS.

Product—Models of Cave and Cliff Dwellings and Pottery

Name and address of Exhibitor, U.S. Geological Survey of the Territories, Hayden's division


The undersigned, having examined the product herein described, respectfully recommends the same to the United States Centennial Commission for Award, for the following reasons, viz.

Commemorated for the very interesting and instructive exhibit relating to the cliff villages, cave dwellings, and mounds in the West.

R. M. Hunt,
signature of the Judge.

APPROVAL OF GROUP JUDGES.

Lawrence Mathewes
George E. Haring
J. G. W. Pynne
E. Larmore

Jas. B. Eads
J. H. B. Franklin
John Backshaw
J. M. de S. Coutinho

A true Copy of the record.

A. T. Goshorn,
Director-General.

J. L. Campbell,
Secretary.

J. R. Hawley,
President.
The United States Centennial Commission and the Centennial Board of Finance respectfully invite you to be present at the exercises in honor of the One Hundredth Anniversary of the Declaration of the Independence of the United States.

July 4th, 1876,

Independence Square, Philadelphia.

To W. H. Holmes, Esq.
Washington.

Philadelphia, June 10th, 1876.
No. 1963
Louisville, Aug 16, 1884

THE SOUTHERN EXPOSITION

COMPLIMENTARY

Admit W. K. Holmes.

Washington, D.C.


On his depositing his personal card with the gatekeeper.

Void after date punched in margin.

L. WIGHT
General Manager.
World's Columbian Commission.

Executive Committee on Awards,

JOHN BOYD THACHER, Chairman, Albany, N.Y.
W. J. SEWELL, New Jersey
A. T. BRITTON, District Columbia.
A. B. ANDREWS, North Carolina.
B. B. SMALLEY, Ex-Officio Member, Burlington, Vt.

January 6, 1894.

John A. Holmes,

Chief Bureau of Ethnology.
Washington, D. C.

Dear Sir:

This Committee is unable to recompense judges for the historical and educational articles which they may write on their special subjects, but we find that most of the judges who have been selected for this special work are willing to write such articles for the honor of standing in the history of the Exposition as special authority on a given subject is considered sufficient recompense. Of course ordinary expenses to which judges are put for this work we would expect to meet.

You are hereby invited to write the historical and educational report on Aboriginal Art in America, refer to this form of letter, and send it.

Will you please communicate with me immediately, if you are willing to make this report, in order that we may provide in the event of your not being able to respond to our invitation for some other judge to perform the service.

Yours,

John Boyd Thacher

Chairman Executive Committee on Awards.
The Board of Lady Managers of the Worlds Columbian Commission, by virtue of the authority vested in it by an Act of the Congress of the United States of America, confers this Diploma of Honorable Mention upon

Professor W.H. Holmes

a certificate having been filed with said Board stating that by his skill as an Archaeologist he assisted in the production and perfection of the exhibit of United States Government Bureau of American Ethnology which was awarded a Medal and Diploma at the Worlds Columbian Exposition.

Witness our hands and seal this 9th day of July 1894 in the City of Chicago.

Virginia C. Meredith
Chairman of the Committee on Awards.

Bentie Ammi Palmer
President of the Board of Lady Managers.

Geo. R. Davis
Director General of the Columbian Exposition.
Dear Sir:—

The Secretary of the Smithsonian Institution having approved your detail, you will please hold yourself in readiness to proceed to Omaha, Nebraska, to assist in the installation of the exhibit of the Smithsonian Institution and National Museum at the Trans-Mississippi and International Exposition.

As, by reason of this detail, you will be put to extraordinary expense for transportation and subsistence, your necessary expenses will, upon your return, be defrayed, upon the presentation of the customary vouchers, from the fund appropriated by Congress and allotted to the Institution for the preparation, transportation and care of its exhibit.

Upon the conclusion of your duties at Omaha, you will return to Washington.

Yours respectfully,

[Signature]

Representative,
Smithsonian Institution and National Museum.

Mr. W. H. Holmes,
Head Curator,
Department of Anthropology,
United States National Museum.
Garden Finds

Try this delicious sauce

on the following occasion:

that you will be preparing

Thy Gifts for the Host...

which will make our guests

feel like our friends and neighbors.

will happily address the proceedings.

You can be sure that this event

our dreams and goals and ambitions.

like held promenade June 3rd with the year

preamble

from the address and presentation do.

Oh, we needed milk
PAN-AMERICAN EXPOSITION

BUFFALO-NEW YORK-A. D. 1901

COMMENORATIVE DIPLOMA

TO DEPARTMENT OF ANTHROPOLOGY, U. S. NATIONAL MUSEUM

FOR COLLECTIVE EXHIBIT
July 8th, 1901.

W. H. Holmes, Esq.,
Smithsonian Institution,
Washington, D.C.

Dear Sir:

The Director-General of the Pan-American Exposition desires through me to invite you to act as Juror of Award in the Department of Ethnology and Archaeology, at the Pan-American Exposition. It is expected that the Juries will assemble on the 18th of July, or as near that date as possible, and that the work of judging the exhibits will be promptly finished. All expenses of transportation and of living will be, of course, at the cost of the Exposition.

Permit me to say in addition that it is the wish of the management to invite to these Juries only men of the best qualifications, and to make the awards in such way as to command universal respect. I trust that you will find it possible to take part in this work, and that you will inform me by wire, care of Service Building, Pan-American Exposition, as soon as possible, of your decision.

Very truly yours,

Henry S. Mitchell
Superintendent of Awards.
"Annual Report of the Board of Regents of the Smithsonian Institution, for the Year Ending June 30, 1902."

"Expositions" Participated in by W. H. Holmes

"Buffalo and Charleston expositions.--The Institution and its bureaus participated in the Pan-American Exposition held at Buffalo from May 1 to November 1, 1901, and by authority of the President the exhibits there displayed were transferred to the South Carolina Interstate and West Indian Exposition held at Charleston from December 1, 1901, to May 31, 1902. Dr. F. W. True, of the National Museum, was appointed by the Secretary to represent the Institution on the board in charge of the Government exhibits at both these expositions, and his report on the Buffalo Exposition will be found in the Appendix.

"Louisiana Purchase Exposition.--Congress having made an appropriation for a Government building and exhibit at the exposition to be held in St. Louis in 1904, the Secretary has appointed Dr. True to represent the Institution and its bureaus in the preparation and installation of the exhibits." (Page 16)
W. H. Holmes, Esq.,

Washington, D. C.

July 11th, 1901.

Dear Sir:

The Juries chosen for the different Departments of the Pan-American Exposition will meet at the office of the Superintendent of Awards, Room 226, Service Building, Exposition Grounds, on Monday, July 22nd, at 10:30 A. M.

On arrival at Buffalo please proceed to Hotel Lenox, where quarters have been engaged for members of the Jury.

Please inform me of the date on which you will arrive.

Very truly yours,

Henry S. Pritchett
Superintendent of Awards.
Prof. W. H. Holmes,

Pan-American Grounds.

Dear Sir:-

Mr. Pritchett has informed me of your appointment to the Jury of Awards for the Division 16, Ethnology and Archaeology. I desire to express my gratification at the appointment and shall hope to meet you Monday morning or earlier.

Very truly yours,

[Signature]

July 19th, 1901
COMMITTEE ON ANTHROPOLOGY AND ETHNOLOGY.

F. W. Lehmann, Chairman.
Goodman Kino, Vice-Chairman.
Walker Hill.
Isaac Schwab.
Edwards Whittaker.
A. A. B. Woerheide.
C. F. Blance.

St. Louis, Mo.
August 9, 1901.

Professor W. H. Holway:
The National Museum.
Washington, D.C.
St. Louis, Mo.
August 9, 1901.

Dear Sir:

The Department of Ethnology of the Louisiana Purchase Exposition is planning a comprehensive exhibit of the Indians of North America, and in particular of such tribes as are at the present day living on a low plane of civilization. The work is to take two directions: it is hoped, in the first place, to gather together as complete representation as possible of all the main tribes, each living in its native shade, and carrying on the activities of its daily life exactly as at home; in the second place to r
material illustrating their houses, customs, manners of living, etc., etc., in the past.

Later the plan will be enlarged to include the uncultured races of the entire earth as far as they can be reached, but at present the committee is concerning itself chiefly with the Indians of America, with special attention to those of the United States and Mexico, and with the native races of our new possessions, who, just as this time these are naturally a more wide-spread and popular interest than any of the others.

In carrying out these projects, which, of course, are still in a rather unsettled state, the committee feels that it needs the advice and cooperation of the men who best represent the anthropological knowledge of our own country. For this reason Mr. Lehmann, Chairman of the Committee on

COMMITTEE ON ANTHROPOLOGY AND ETHNOLOGY.

F. W. Lehmann, Chairman.
Goodman King, Vice-Chairman.
Walker Hill, Isaac Schwab.
Edwards Whitaker, A. A. B. Woerheide.
C. F. Blanke.

St. Louis, U. S. A.

Seth W. Cobb, Fifth Vice-President.
Charles H. Ruthe, Sixth Vice-President.
August Gehee, Seventh Vice-President.
Pierre Chouteau, Eighth Vice-President.

James L. Blair, General Counsel.
Anthropology and Ethnology, has directed me to write to you, begging this advice and cooperation on your part. The Committee, then, will greatly appreciate a letter from you offering advice and suggestions of any nature whatsoever which you may be kind enough to give.

Hoping that I have made myself clear, and thanking you in advance

I am

Very truly yours,

Chas. E. Hulbert
Secretary Committee on Anthropology and Ethnology.
August 21st, 1901.

Dear Sir:

I take pleasure in sending you herewith a Badge, which I hope will serve as a pleasant reminder of your stay in this City as a member of the Jury of Awards, at the Pan-American Exposition. I regret very much that it was not possible to have these badges ready for the Jurors at the commencement of their work here, but the delay was unavoidable.

Kindly acknowledge receipt, and oblige,

Yours very truly,

Henry S. Pritchett
Superintendent of Awards.
Mr. W. H. Holmes,
Head Curator, Department of Anthropology,
U. S. National Museum.

Dear Sir:

I take pleasure in sending you herewith two commemorative diplomas from the Directors of the Pan-American Exposition Company, conferred upon the Department of Anthropology, U. S. National Museum for the collective exhibit of the Department, and upon yourself for valuable services.

Yours respectfully,

[Signature]

Representative, Smithsonian Institution and U. S. National Museum.
Mr. W. H. Holmes,
Head Curator, Department of Anthropology,
U. S. National Museum.

Dear Sir:

The time having now arrived when it is necessary to decide upon the general plans for the exhibit of the National Museum at the St. Louis Exposition, I shall be glad to receive from you a scheme for the exhibit of the Department of Anthropology, with an estimate of the probable expense for each principal item, including the number and probable compensation of preparators and other assistants to be employed and the kind and amount of space needed. I should be pleased if you would send me also a memorandum of the number, size and character of cases which would probably be required. In this connection I would say for your information, that the entire space allotted to the Smithsonian Institution and National Museum is 16,500 square feet, of which about 4,000 square feet can probably be assigned to the Department of Anthropology. The loca-
tion of the space has not yet been determined by the committee of the Board having that matter in hand, as the final floor-plan of the building has not been received from the Treasury Department.

Yours respectfully,

[Signature]

Representative.
Mr. Wm. H. Holmes,
Head Curator, Department of Anthropology,
U. S. National Museum.

Dear Sir:
I take pleasure in informing you that the sum of $12,500.00
has been allotted for the exhibit of the Department of
Anthropology at the St. Louis Exposition, illustrating the
aesthetic achievements of the native American peoples, and
comprising carvings, paintings, sculptures, etc., as proposed
in your recent memorandum.

It is understood that the sum mentioned will cover all
expenses connected with the assembly and preparation of the
exhibit, including specimens, field expenses, transportation
charges on specimens from the field or from dealers, etc.

Cases and other furniture and fixtures, and transport-
ation of exhibits and staff to and from St. Louis will be
provided for from other allotments.

Yours respectfully,

[Signature]
F. W. True, Representative, Smithsonian Institution & National Museum.
Dear Sir:

The plans of the Department of Anthropology of the National Museum for an exhibit at St. Louis are, so far as laid out, about as follows:

A series of exhibits covering the entire range of arts and manufactures of the native American peoples, so selected as to illustrate their artistic or esthetic development; the specimens chosen in each case to be the highest examples of their kind.

The exhibit will include illustrations of architecture (models); water-craft (models); sculpture in its many branches; ceramics; weaving; metal work; musical instruments; inlaying; pictorial art; pipes; ornaments; ceremonial art in its manifold forms, etc., - the whole to form a synopsis of the achievements of our native peoples, from the far north down through the United States, Mexico, Central America and South America to Patagonia.

The exhibit planned for the Bureau of American Ethnology is to consist of certain series of objects illustrating the researches of the Bureau, as for example, one of our ethnologists
is engaged in studying the habits and customs of the Pawnee tribes, and among other things, makes a particular study of their genealogic system, finding that the crests of particular groups are painted upon shields and lodges and woven or embroidered on the garments of the family. It is proposed that a systematic collection be made illustrating this subject - the heraldry of this people. So others will take up special subjects in whatever field they happen to be working, bringing together new materials in such ways as to illustrate important features of the culture of the native tribes of the United States.

Other minor exhibits are in view for both the Department of Anthropology and the Bureau of Ethnology, but I am not as yet ready to report upon them.

Sincerely yours,

Chief

Mr F. W. True,
United States Government Board,
Louisiana Purchase Exposition.
EXPOSITION WORK.

The preparation of an exhibit for the Louisiana Purchase Exposition, begun during the preceding year, was continued, and completed shortly after the opening of the exposition in May, 1903. This work was under my personal supervision who at the same time had charge of the preparation of an extensive exhibit for the Department of Anthropology of the United States National Museum. As the allotment of $2,000, made by the Government Board for the Bureau exhibit, was too small to warrant the assemblage of an extensive display, and as the space assigned was small, it was decided to confine the exhibit to illustrations of the present field researches of the scientific corps of the Bureau.

Seeking a subject that would be well within the range of the Bureau's legitimate field, yet susceptible of effective presentation by means of objective material, it was decided to take up and illustrate as the chief topic the mythic symbolism of various tribes as embodied in their decorative art. Prominent among the concepts thus embodied are the various forms of animal and plant life, clouds, lightning, rain, sun, moon and stars, as well as various monsters.
These motives existing only in the primitive imagination. These motives are interwoven with the thought and life of the people, and are introduced freely into their various arts. The forms taken by them are exceedingly varied, undergoing modifications with the different peoples, and assuming distinct forms in each art according to the nature and form of the object, the method employed in execution, and the purpose in view. During the year, exhibits were prepared also for the Pan American Exposition at Buffalo.

The preparation of an extensive exhibit for the National Museum gave me the opportunity of assembling a large series of exhibits illustrating the higher achievements of the American race in various branches of art, including architecture, sculpture, plastic art, carving, basketry, featherwork, and weaving. A leading feature of the work consisted of restorations of a number of the great ruined buildings of Mexico and Yucatan. Five models of these buildings were made: One on a scale of one-twelfth, one on a scale of one-eighteenth, and three on a scale of one twenty-fourth; and much time and research were expended in collating data and in determining the details of construction and embellishment. These models were assigned to the Department of Ethnology of the National Museum.
LOUISIANA PURCHASE CENTENNIAL

DEDICATION CEREMONIES
ST. LOUIS, U.S.A.
APRIL 30th to MAY 1st-24th, 1903.
Joint Committee on Ceremonies.

Louisiana Purchase Exposition Commission:

Thomas H. Carter, Chairman.
John M. Allen.

Louisiana Purchase Exposition:

Corwin H. Spencer, Chairman. W. H. Lee, Vice-Chairman.
The honor of the presence of
Professor W. H. Holmes
is requested at the Celebration of the
One Hundredth Anniversary
of the acquisition of
The Louisiana Territory
to be commemorated by the Dedication of the
Louisiana Purchase Exposition,
Saint Louis,
April thirtieth, and May first, and second,
nineteen hundred and three.

David A. Francis
President,
Louisiana Purchase Exposition.

Thurston Carter
President,
Louisiana Purchase Exposition Commission.
Saint Louis, Missouri, September 1, 1905.

Dear Sir:

By direction of the Louisiana Purchase Exposition Company a Commemorative Diploma and a Commemorative Medal are conferred upon you in special recognition of your active interest and efficient cooperation in the Universal Exposition of 1904.

Respectfully,

Walter B. Stevens
Secretary

David R. Francis
President

To W. H. Holmes, Collaborator,

Smithsonian Institution and National Museum.
CERTIFICATE OF AWARD.

Department of Anthropology
Washington, D.C.

No. 1674

Dear Sir:

You are hereby informed that you have been awarded at the South Carolina Inter-State and West Indian Exposition, a Diploma of Good Medal for an exhibit of

The Diploma of the Exposition will be issued to you at a subsequent time. Should you desire a copy of the Medal, you may correspond with this office.

Respectfully yours,

[Signature]

Selim H. Peabody
Superintendent of Awards.

Address correspondence to E. L. Tessier, Jr.,
Manager of Exhibits and Concessions.
Charleston, S.C.
VERY MUCH ALIVE, THESE ARCHAEOLOGISTS. The Archaeological Institute of America last week brought to St. Louis the country's best authorities. In this picture at Washington University are, left to right: John H. Breasted, University of Chicago; H. R. Fairclough, Leland Stanford University; D. M. Robinson; F. W. Shepley, Washington University; W. H. Holmes, Smithsonian Institution, and Ralph Van Deman Magoffin, Johns Hopkins University.

From the desk of my secretary. You look well. 8/14/61
The honor of the presence of
Hon. W. H. Holmes,
is requested at the Celebration of the
One Hundredth Anniversary
of the acquisition of
The Oregon Country
to be commemorated by the
Formal Opening of the
Lewis and Clark Centennial Exposition
Portland, Oregon, U.S.A.
Thursday, June first
Nineteen hundred and five

E. Reed
Secretary
Lewis and Clark Centennial Exposition

W. H. Wood
President
Lewis and Clark Centennial Exposition
UNITED STATES OF AMERICA

UNIVERSAL EXPOSITION SAINT LOUIS MDCCCCIV

COMMENORATING THE ACQUISITION OF THE LOUISIANA TERRITORY

COMMENORATIVE DIPLOMA

W. H. HOLMES

CHIEF BUREAU OF AMERICAN ETHNOLOGY

COLLABORATOR UNITED STATES GOVERNMENT EXHIBIT

1904
APPALACHIAN EXPOSITION,
KNOXVILLE TENNESSEE

THE JURY OF AWARDS HAS CONFERRED
A Silver Medal
TO W. H. Holmes
FOR THE Best Painting, EXHIBIT
OF Water Color, Landscape.
THIS 12th DAY OF October, 1910.

William J. Oliver
PRESIDENT
Prof. W. H. Holmes,
Head Curator of Anthropology,
U. S. National Museum.

Dear Professor Holmes:

I am afraid that I will have to submit my scheme as to the Smithsonian exhibit to the Government Board the first part of next week, and am writing to ask if you will take this matter up as soon as possible after your return and let me have an outline of what may be done with cost and amount of space it would occupy.

Very truly yours,

[Signature]

Representative S.I.
Gov't Exhibit Board.

Plan handled in
Nov 19, 1913
November 11, 1913.

Mr. W. de C. Ravenel,
Administrative Assistant,
U. S. National Museum.

Dear Mr. Ravenel:

Suggestions for an exhibit of the Department of Anthropology at the San Francisco Exposition.

After going carefully over the ground, the conclusion is reached that the most promising field, all points considered, for an exhibit of this Department at San Francisco would consist of a series of models and accompanying collections illustrating the people, the houses and house life of the aborigines of America and more especially of the United States and her dependencies.

The exhibit would include a limited number of life size lay-figure family and industrial groups showing typical peoples—the Indian, the Eskimo, the Indian of North America, the Indian of South America, the Samoan, and the Filipino; of models on a suitable scale of a large number of dwelling groups of typical peoples, showing houses and by means of modeled figures the house and industrial life. These exhibits would be supplemented by collections of many interesting objects and art works
associated with the home and the industrial occupations of the people.

This material, well selected and presented would make an exhibit exceedingly attractive and at the same time most instructive and would result in permanent exhibition material of great value. The exhibit would represent in the fullest sense the essential activities of the Department of Anthropology of the U. S. National Museum.

The space required would be a hall 40 x 100 feet or an equivalent space and the cost could be limited to $25,000.00.

Sincerely yours,

Head Curator,
Department of Anthropology.
Dear Mr. Holmes:

Referring to our conversation, should you find it convenient to spend a day at Albuquerque on your way east I think you would enjoy looking over some of the Indian material that we have in some of the collections that are not packed away in boxes. I am writing this to ask you in the event that you should decide to stop to ascertain from Mr. Nusbaum whether Mr. Schweizer is going to be there. He will be pretty busy with the San Diego fair until two or three days after the opening but I think he will be at Albuquerque again two or three days before the first of January.

In other words, I would like to have him present so he could show you the various articles that he has stored away. In the absence of Mr. Schweizer, his assistant, Mr. Snively, will be glad to take his place.

I am so sorry that I did not have the pleasure of seeing more of you. Please don't forget if you go through Kansas City that our offices are on the second floor of the new Union Station and most trains stop there from half an hour to an hour, but better than that I am in hopes that you may find time to stop over and spend the day with us.

With kindest regards,

Yours truly,

Professor William H. Holmes
San Diego, California
F. S:

I am mailing you a book on California that we just published thinking you might be interested in glancing over it.
My dear Mr. Holmes:

I think the time has arrived for taking preliminary steps toward carrying out the plan that Dr. Hrdlicka and I discussed while he was here, with reference to the future use of the collections that we have assembled. Our idea was to establish what might be called the San Diego Anthropological Station. It would be a branch of the School of American Archaeology and would have its headquarters in the permanent buildings here. It would, I feel sure, have no detrimental effect upon the institution in Santa Fe, but on the contrary would serve to support the school there, because of the larger number of people that can be interested in the work through the organization here. The permanent buildings, I am certain, would be placed at our disposal, and I have no doubt the collections in physical anthropology, ethnology and archaeology would be turned over to us. I think the maintenance would be provided for locally, in fact, it would have to be. Some support would probably be given by the Park Board because of the organization being within the limits of the city park. Then, too, we have a very fine body of men, such as Mr. George Marston, President Davidson, and many others that could be mentioned, who would bring to the organization considerable financial support.

Will you please call a meeting of the Executive Committee as soon as possible after receipt of this letter and take the matter up. You have a quorum in Washington City. You, Mr. Springer, Mr. Hodge, Miss Fletcher, Dr. Hrdlicka and Dr. Carroll would constitute, as I remember, more than two-thirds of the Committee, and perhaps you might be able to secure
the attendance of Mrs. John Hays Hammond.

I would suggest that you pass a resolution somewhat after the style of the one that I enclose herewith. You will, of course, all make your suggestions and agree upon what you deem best, and I will proceed to carry out your orders. It would first be well I think to talk the matter over with Dr. Hrdlicka for he and I had considerable discussion of the matter while he was here. Kindly let me know what you decide as soon as you can conveniently get the matter under consideration.

With sincere regards, I am as always,

Very cordially yours,

Edgar L. Hewett

Mr. Wm. H. Holmes,
National Museum
Washington, D.C.

ELH-R.
May
Twenty-six
1915

My dear Prof. Holmes:

I would recommend that you add to the names of the proposed Committee on the Anthropological Station those of Mr. William Templeton Johnson and President Edward L. Hardy. This would, I think, give us a splendid committee representing the best forces of the city.

I enclose herewith for your own personal information a letter that I have just received. It is on the strength of many such representations as this that I am urging Carroll and Shipley to maintain an office of the Institute here during the next three or four months. I believe it would pay them.

With sincere regards, I am as always.

Very cordially yours,

Edgar L. Hewett

Prof. Wm. H. Holmes,
National Museum,
Washington

ELH-R.
June 8, 1915.

Dr. Edgar L. Hewett,
San Diego, California.

My dear Doctor Hewett:

In accordance with your request contained in your letter of recent date, the Executive Committee of the School of American Archaeology was called yesterday and your proposed resolution relating to the establishment of a station at San Diego was carefully considered. Slight changes were made in the resolution, as will appear from the copy enclosed herewith. It was the feeling of the Committee that, being on the ground and the person most deeply concerned in the project set forth in the resolution, you are better able than any one else to determine the steps to be taken.

Doctor Hrdlicka prepared the following notes of inquiry which were considered by the Committee which agreed that at your convenience it will be glad to be favored with such information as you may be able to give relating thereto:

I. Who owns the buildings in question and the collections?

II. What regulations are extant regarding the eventual control or disposal of the Buildings and collections?

III. What can be done for the American School of Archaeology in regards to the permanent buildings and the anthropological collections, without involving undue expense, litigation, or opposition?
IV. What are the main points of the plan concerning the "San Diego Anthropological Station?"

Of course, we are fully satisfied that you carrying forward the great task now before you, you will keep the interests of the School and the Institute always well in the foreground.

Sincerely yours,

W. H. Holmes
Chairman,
Executive Committee of the School of American Archaeology.
My dear Mr. Holmes:

I am in receipt of your good letter of the 8th inst and am pleased to know that the Committee thinks favorably of the idea of the Anthropological Station.

I am not fully able to answer all of your questions but can give you nearly all of the information you desire:

1. The buildings will be under the absolute control of the Park Commission of San Diego and will have to be secured for museum purposes on a long-term lease, say fifty or one hundred years. This is the plan used in the case of the American Museum in Central Park.

2. No regulations have been made as yet with reference to final control or disposal of the buildings and collections.

3. The indications now are that the Park Commission to be appointed within a few days will consist of Mr. George Marston, Mr. Thomas O'Halloran and Mr. Louis Blochman. These men are all in closest sympathy with our plans and they will favor the greatest liberality in arranging suitable headquarters for us. A local museum corporation is being formed which will be ready from now on to negotiate with the exposition directors for the scientific collections.
idea is that they should secure all these at the end of the year. This local corporation will be made up of about seventy-five of the leading men and women of this city, all thoroughly in sympathy with our work. They will appoint a board, of probably fifteen, which is the number adopted by the Field Museum in Chicago. This board will include stockholders of the Exposition and will, I think, be able to deal effectively both with the Exposition Company and the Park Commission. I can see no possibility of litigation or legal complications of any kind and I feel sure that the local people here will get behind the combined Museum and Anthropological Station. I do not anticipate anything like the difficulty in financing this that we have had at Santa Fe, because there is so much more wealth and population here. As to opposition, I do not expect much, though there will be some. Dr. Hrdlicka can perhaps tell you something about the intrigues of our Dr. Thompson of the Navy. He has been occupying a desk here in connection with the anthropological collections at a guest of our department since Dr. Hrdlicka left. He seemed to us to be rather promising as a scientific aid, but it appears that without taking any of us into his confidence, he has matured rather ambitious plans for getting control of the anthropological collections. All this has been very carefully looked into by our friends and they seem to have a thorough understanding of the situation. Personally I have not had time to give it any attention, but I think the situation is properly safeguarded, and that the action taken recently in forming a large museum corporation has effectively check-mated his schemes. Aside from this I can hear of no opposition at all, though as I have told you before, the ruling element on the Executive Committee of the Exposition has never cared for this work. What we have done has been in spite of them, and their spirit has not changed with reference to it up to the present time, notwithstanding the fact that our work here has won the undivided support of the community and is continually spoken of by the visitors to the Exposition as the all-important thing here. I am relieved of the necessity of bragging much about the showing we have made because the citizens and visitors do quite enough of that without me. I really think that you will find that a very favorable impression has been made, not only upon the lay visitors but upon the scientific men who have been here, and which now is a considerable number.

4. As to your fourth point, the main things in the plan concerning the Anthropological Station, I think I ought to take quite a little time to work upon that before submitting any scheme in detail. Off hand, I should favor putting it in the hands of an assistant director of good administrative ability, and make it the
headquarters for the work of such men as Harrington and a number of others that are now developing in this region, together with such new students as may come on and who would appreciate the opportunity to work in this field, as well as in the adjacent portions of Mexico when, if ever, it becomes safe to work there again. I think I should be very glad if it would turn out that I could spend three or four months of each year out here myself, for when I get rid of the exposition work and have my time again for research, I am very anxious to do some exploring in Lower California.

Perhaps what I have outlined here will sufficiently inform you of the plans that I have been trying to formulate during the past few months until I can settle down to more careful analysis of the scheme. I want to assure you, however, that we have already been able to rally to the project an exceptionally fine lot of men and women, who, I believe, will be disposed to stay with it clear through.

With sincere regards, I am as always,

Very cordially yours,

[Signature]

Mr. Wm. H. Holmes,
National Museum,
Washington, D.C.

ELH-R.
I have the pleasure of announcing to the members of the Managing Committee that, through the generosity of Mr. Frank Springer and a group of his friends, the sum of $30,000.00 has been raised for the School of American Archaeology to enable it to make available an equal sum voted by the State of New Mexico and a valuable site adjacent to the Palace of the Governors, donated by the people of Santa Fe, for the construction of a new Museum and Art Gallery.

The new building, contents, and site, together with the Palace and its equipment, valued at $350,000.00, are granted to the School of American Archaeology for its perpetual use. The collections costing $100,000.00, assembled by the School for the Panama California Exposition and which have become the property of the Museum of San Diego, together with ample laboratories in the fire-proof California Quadrangle, have been made available for the use of our projected San Diego Anthropological Station.

The entire equipment of the School may be conservatively valued at half a million dollars, against which there is no indebtedness. To this must be added the permanent appropriation of $10,000.00 a year (the income on $250,000.00 at four per cent) by the State of New Mexico for the maintenance of the local establishment. It is expected that the branch at San Diego will
be equally well supported. This is the contribution of a few people devoted to the advancement of Science and Art in two western communities that are as yet comparatively undeveloped in population and wealth.

It is gratifying to be able to announce this during the decennial year of the foundation of the School and the organization of the Managing Committee. During the five years prior to this decade, the Institute, for its work in American Archaeology, maintained only a fellowship with annual stipend of $600.00, before which nothing was expended in the American field for many years. Under the present organization we have in less than ten years established the Institution and equipped it with buildings, museums, libraries, and laboratories adequate for the research work that we should pursue, at the same time carrying on a fair amount of field work and providing practical training for men and women who are already making important contribution in ethnology, archaeology and art.

The consummation of these plans enables us to go ahead with great confidence. We have next to secure a general endowment fund that will enable us to maintain fellowships, laboratories and studios, and support research and publication. This necessitates an income of $50,000.00 per year. In making plans for the permanent financial foundation the Director will from time to time seek your counsel and assistance.
THE SAN DIEGO AND SAN FRANCISCO EXPOSITIONS
BY CHRISTIAN BRINTON

Editor's Note.—It was Dr. Christian Brinton's wish to have the two expositions run concurrently in this issue but considerations of space have necessitated our reserving San Francisco for the month of July. This will enable us to illustrate the articles more fully. Other contributions by the same writer will follow in due course giving special heed to the paintings and statuary.

I. SAN DIEGO

It must be confessed that the congenital weakness for hyperbole which obtains west of the Mississippi leads one to be cautious not alone of the Grand Canyon but of the eloquently exploited expositions at San Diego and San Francisco. Superlatives not unwarrantably make for suspicion, yet in none of these instances is there occasion for undue conservatism. Like the thumb-print of God pressed into the surface of the earth so that man may forever identify His handiwork, the Canyon transcends the possibilities of verbal or pictorial expression. Although by no means so ambitious as its competitor, or, rather, its complement, farther northward along the historic Camino Real, the Panama-California Exposition has scant reason to fear comparison with the Panama-Pacific. Restricted in area yet rich in suggestion the San Diego Exposition is a synthesis of the spacious Southwest. It seems to have sprung spontaneously from the soil and the vivid race consciousness of those who inhabit this vast and fecund hinterland. Regional in the sense that the recent Baltic Exposition at Malmö and the Valencian Exposition of 1909 were regional, it is at once more concentrated and more characteristic
than either of those memorable displays. Though you may have seen many expositions you have encountered none like this red-tiled, white-walled city set amid luxurious semi-tropical vegetation and flanked on one side by a deeply incised arroyo, and on the other by the azure expanse of the sea. On crossing the majestic Puente Caballo you enter the Plaza de California, or California Quadrangle, the architecture of which furnishes the keynote of the exposition. To the left is the California Building, which exemplifies the cathedral type, to the right is the Fine Arts Building, which conforms to the better-known Mission style. These structures are permanent, and are not only a credit to the exposition and the municipal authorities, but reveal in new and congenial light the varied talent of their designer, Mr. Bertram G. Goodhue. At San Diego you have in brief something that at once strikes a picturesque and appropriate note. The remaining buildings which, with the exception of the Music Pavilion, are the creation of Mr. Frank P. Allen, Jr., all continue the Spanish-Colonial motif with conspicuous success. None of them is in the least out of harmony with the general ensemble, and there is not one that does not display uncommon capacity for the assimilation and adaptation of this singularly effective architectural style. It is impossible not to respond to the seductive flavour and opulent fancy of such an offering as confronts one at Balboa Park. Climatic conditions royally concur in assisting the architect to the utmost. Almost every conceivable flower, plant and tree here attains un wonted magnificence. The sun is brilliant but does not burn, and the close proximity of the sea softens and freshens the atmosphere without undue preponderance of moisture. Proceed along the acacia-lined Prado which constitutes the main axis of the general plan, stroll under the cloisters, linger in the patios, or follow one of the countless calcadas or pathways skirting the crest of the hill, and you will experience the sensation of being in the gardens of a typical Mexican mission. The mind indeed travels even farther back—back to the Alcázar of Sevilla, the Generalife, and to remote and colourful Byzantium. Unlike most of its predecessors, the San Diego Exposition does not convey an impression of impermanency. The luxuriance of the floral and arboreal accompaniments, of course, help to dispel any such feeling. Yet behind this is a distinct sense of inevitability which derives from the fact that here is something which is at one with the land and its people—a visible expression of the collective soul of the Southwest.
FAÇADE OF THE CALIFORNIA STATE BUILDING
ARCHITECT, BERTRAM G. GOODHUE
Robert Henri, Mr. Joseph H. Sharp, and others in the Fine Arts Building, one is forced to conclude that the capacity for pictorial representation has diminished rather than increased with the advent of our latter-day art schools and academies.

You can hardly expect perfection, even in such an exposition as that at San Diego, and it is in the choice of paintings for this same Fine Arts Building that one may point to a certain lapse from an otherwise consistently maintained standard. It is not that Mr. Henri and his coterie are not admirable artists. It is simply that they do not fit into what appears to be and in other respects manifestly is a carefully worked-out programme. San Diego is so rich in the fundamental sources of beauty and feeling that had there been no paintings on view one would have had scant cause for complaint. The welcome absence of the customary flatulent and dropsical statuary, which is such a happy feature of the exterior arrangements, might well have been supplemented by the exclusion of the pretentious and sophisticated canvas. Intensive rather than extensive in appeal, basing itself frankly upon local interest and tradition, conscious of its inheritance and looking with confidence toward the future, the Panama-California Exposition stands as a model of its kind. If this

fitting little city perched upon its green-crested mesa teaches anything, it teaches that the most precious things in life and in art are those that is nearest the great eloquent heart of nature. The subtle process of interaction which forever goes silently on between man and his surroundings, the identity between that which one sees and feels upon and that which one produces, are facts which you find convincingly presented at the San Diego Exposition. It is more than a mere show-window of the Southwest. Alike in its architecture and its specific offerings it typifies the richness and

romance not alone of New Spain but of immemorial America.

ARTHUR HOEBER

Following closely upon the death of F. Hopkinson Smith, so famous in the triple rôle of author, artist and engineer, it is our sad task to record the loss of that genial writer and artist, Arthur Hoeber, who for many years has been a contributor to our columns and an ever welcome friend inside and outside of the office. He was a landscapist of merit and the kindliest critic that ever sat in judgment upon the work of others.
The Smithsonian Institution, in behalf of the United States National Museum, returns a grateful acknowledgment to Mr. William H. Holmes, M. D., National Museum, for the gift of the object mentioned in the accompanying list.

Assistant Secretary, in charge of National Museum.


Signed ( illegible).
Bronze medal awarded to William Henry Holmes by the Panama-Pacific International Exposition, San Francisco, 1915, for services in the preparation and installation of Smithsonian exhibits for the Exposition.

[Accession 67455]
Washington, D. C.,
December 5th, 1925.

Dear Sirs:

At the request of the Department of Public Education of México, I have the honour to send you, herewith enclosed, a Medal which was struck in commemoration of the celebration of the First Centennial of the National Museum of México, and which this institution begs you to accept as a memento of the occasion.

I avail myself of this opportunity, Sir, to present to you the assurances of my high consideration.

Manuel C. Trélez,
Ambassador of México.

es.
encls.
Special Privilege Ticket.

This ticket will admit W. H Holmes

To the "CLIFF-DWELLERS' EXHIBIT" (south end of World's Fair Grounds) during the year 1893. The presentation of this ticket will assure special attention from guides and lecturers.

H. Jay Smith.

EXPIRES BY LIMITATION APRIL 30, 1893, UNLESS OTHERWISE NOTED.

THE WORLD'S COLUMBIAN EXPOSITION.

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SUPT. DEPARTMENT OF ADMISSIONS.
SECTION IV, CONGRESSES

THE SECOND PAN AMERICAN CONGRESS, WASHINGTON. Dec. 27, 1915-Jan. 8, 1916

FOURTEENTH INTERNATIONAL CONGRESS, STUTTGART. August 18-23, 1904

My dear Dr. Holmes:  

I am writing this line in order to emphasize as much as possible the responsibility which rests upon the United States Official Delegation in the forthcoming Pan-American Scientific Congress. At the two recent meetings of the delegation held in the Department, preparations for the Congress have been outlined and matters of general interest have been discussed. The individual duties of the delegates, however, have not been fixed, nor is it indeed possible to define these duties. I hope, however, that this fact has not conveyed the impression that your responsibilities in the Congress are not distinct and of grave importance. As a matter of fact, our guests from the Latin-American countries, and also from the various universities and educational institutions in this country are looking to the United States as the hosts of the Congress and the success of the enterprise will rest largely on the shoulders of our delegation.

I have taken the liberty of writing to you in this matter in the hope that you will be able to spend considerable time between now and December 27th in coming in touch with the
the work of the Congress as a whole and in meeting, not only the Latin-Americans who have already arrived in Washington, but also, the delegates from the various institutions in this country who have already reached the Capital.

Sincerely yours,

[Signature]

Dr. William H. Holmes,
Head Curator, Smithsonian Institution,
Washington, D. C.
EXECUTIVE COMMITTEE

WILLIAM PHILLIPS, A. B.,
THIRD ASSISTANT SECRETARY OF STATE,
CHAIRMAN EX OFFICIO.

JAMES BROWN SCOTT, LL. D., J. U. D.,
SECRETARY, CARNEGIE ENDOWMENT FOR INTER-
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WILLIAM H. CLAXTON, LL. D.,
SECRETARY, NATIONAL ACADEMY OF ARTS
AND LETTERS.

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BRIG. GENERAL U. S. A., RETIRED.

PHILANDER P. CLAXTON, LL. D.,
COMMISSIONER OF EDUCATION.

WILLIAM C. GORGAS, M. D., SC. D.,
SURGEON GENERAL, U. S. A.

WILLIAM H. HOLMES, B. S.,
READ CURATOR, SMITHSONIAN INSTITUTION.

HENNEN JENNINGS, C. E.,
FORMER PRESIDENT, LONDON INSTITUTION MINING
AND METALLURGY.

GEORGE J. RONDEL, B. S.,
CHIEF, ANIMAL HUSBANDRY DIVISION, BUREAU OF
ANIMAL INDUSTRY, DEPARTMENT OF AGRICULTURE.

L. S. ROWE, PH. D.,
PRESIDENT, AMERICAN ACADEMY OF POLITICAL AND
SOCIAL SCIENCE.

ROBERT S. WOODWARD, PH. D.,
PRESIDENT, CARNEGIE INSTITUTION OF WASHINGTON.

ORGANIZATION OFFICERS

JOHN BARRETT, LL. D.,
SECRETARY GENERAL.

GLEN LEVIN SWIGETT, PH. D.,
ASSISTANT SECRETARY GENERAL.

MEMBERS OF THE CONGRESS

OFFICIAL DELEGATES.

DELEGATES OF BUREAUS, SOCIETIES, ASSOCIATIONS,
AND EDUCATIONAL INSTITUTIONS.

HONORARY MEMBERS.

MEMBERS OF COMMITTEES OFFICIALLY APPOINTED.

WRITERS OF PAPERS.

THIRD SPECIAL ANNOUNCEMENT TO MEMBERS OF
THE CONGRESS.

The Congress will have its formal opening Monday, December 27th,
10 a. m., in Memorial Continental Hall, Seventeenth and D Streets NW.,
adjointing the Pan American Building.

The Honorable the Secretary of State and the United States Delegation
will tender a reception to the members of the Congress and invited guests
Monday night, December 27th, at 9 o'clock in the Pan American Building.

There will be semiformal openings of the nine sections of the Congress,
meeting separately, Tuesday morning, December 28th, at 9.30 o'clock. Place
of meetings for sections will be announced on the convening of the Congress.
Each of the nine sections of the Congress will have a formal closing on Friday,
January 7th. The official closing of the Congress will take place Saturday,
January 8th, in the Pan American Building, at 10 o'clock a.m. Immediately
subsequent to the opening of each section on Tuesday, December 28th, and
continuing to the close of the Congress, the various sections and subsections
will be meeting in separate and joint sessions.

Members may register at the Official Headquarters of the Congress in the
New Willard Hotel, beginning Saturday, December 25th. Registration for the
members from the United States will be in the Red Room, first floor. All
members are requested to report immediately on arrival for the purpose of
registration, assignment to sections, and the receiving of such printed informa-
tion as will be of interest. Members will register according to their class of
membership. Members of committees and writers of papers will register at
the table of the corresponding secretary assigned to the section to which they
belong as committee members or writers of papers.

Ushers with badges marked "Scientific Congress" will be at the F Street
entrance to receive all members of the Congress. Mail of members should be
addressed to "Postal Branch, Pan American Scientific Congress, New Willard
Hotel, Washington, D. C.," established in the subway adjoining the Red
Room. Wraps, packages, etc., may be left in the Gridiron Room to the right
of the F Street entrance.

The office of the Secretary General and Assistant Secretary General will be
in the Blue Room, directly opposite the Red Room.

Headquarters rooms of the United States delegation, of the Secretary of the
Women's Auxiliary Conference, of the delegation aids and assistant secret-
taries in charge of social entertainment and reception of Latin American
delegates will be on the second floor.

Large posters placed at the entrance of the principal hotels and meeting
places will give further information.
PROVISIONAL ARRANGEMENT FOR RECEPTIONS.

Assuming that many members will be unable to remain in Washington during the entire period of the Congress, your attention is called to the following provisional arrangement for receptions, official and otherwise, to be tendered to the members of the Congress:

Reception by the President of the Congress, His Excellency The Ambassador of Chile, Señor Don Eduardo Suarez Mujica, at the Chilean Embassy, 1023 Sixteenth Street, Thursday, December 30th, 4.30 to 7 p. m.

NOTE! Reception tendered by the Regents and the Secretary of the Smithsonian Institution to the members of the Congress Wednesday evening, December 29th, at 9 o'clock.

Theater party by the Secretary of State and United States Delegation to the Latin-American Delegations at the New National Theater Friday, December 31st, at 8.30 o'clock. Other members of the Congress are requested to make their reservations at once with the management of the theater.

NOTE! Reception tendered to the members of the Congress by the President and officers of the Cosmos Club Saturday afternoon, January 1st, 3 to 6 o'clock.

Reception by the Governing Board of the Pan American Union to the members of the Congress and invited guests at the Pan American Union Saturday night, January 1st, at 9 o'clock.

January 2d, Pan American Mass at St. Patrick's Church. The pastors of the leading Washington churches have been invited to preach sermons of Pan American interest.

The members of the Second Pan American Scientific Congress will be the guests of the American Association for the Advancement of Science on the occasion of a special meeting to be held in Memorial Continental Hall Monday night, January 3d, at 8 o'clock.

The Trustees of the Carnegie Institution of Washington will tender a reception to the members of the Congress Tuesday night, January 4th, 9 p. m., at Sixteenth and P Streets.

There will be a special drill at Fort Myer in honor of the members on January 5th, Wednesday afternoon.

On January 6th, Thursday afternoon, there will be a trip to Mount Vernon in honor of the Latin-American Delegations.

Thursday night, January 6th, The President will address the members of the Congress.

Friday night, January 7th, The President will give a reception to the members of the Congress at the White House.

Saturday night, January 8th, the Secretary of State and the United States Delegation will give a banquet in honor of the Latin-American Delegations.

WOMEN'S AUXILIARY CONFERENCE.

In view of the circumstance that many of the delegates will be accompanied by their wives and daughters, it has been decided to take advantage of the opportunity thus afforded and hold a special conference of women in connection with the Congress.

Topics of interest to women on educational and social subjects will be discussed by several of the most prominent women of Pan America.

The Women's Auxiliary Conference will open Tuesday morning, December 28, in Memorial Continental Hall. Details concerning this conference will be announced shortly.
The Pan-American Scientific Congress

At a time when scientific solidarity has been so seriously impaired in the Old World as a result of the European war it is gratifying to note that preparations are afoot for bringing the scientific men of the New into closer and more friendly relations. The first much-needed step in this direction was taken at the end of the year 1908, when the first Pan-American Scientific Congress assembled at Santiago, Chile. The second congress is to meet in Washington next October, and the plans for it have been formulated by a committee headed by Mr. William Phillips, Third Assistant Secretary of State, the other members being the Director General of the Pan-American Union; the U. S. Commissioner of Education; the Surgeon General of the U. S. Army; Mr. G. M. Rommel of the Department of Agriculture; Mr. William H. Holmes of the Smithsonian Institution; Prof. L. S. Rowe, University of Pennsylvania; and Dr. J. B. Scott of the Carnegie Peace Endowment.

The congress is to be organized in eight sections, as follows: 1. Anthropology. 2. Astronomy, meteorology, and seismology. 3. Conservation of natural resources; agriculture; irrigation and forestry. 4. Education. 5. Engineering, transportation, and commerce. 6. International law, public law, and jurisprudence. 7. Mining and metallurgy; economic geology, and applied chemistry. 8. Public health, medicine.

If the history of the last congress repeats itself, the forthcoming meeting will be an event of exceptional interest, from both a scientific and a political point of view. At Santiago delegations attended from eight North and Central American countries, including the United States, and from nine South American countries, and an imposing list of papers was presented, more than fifty of which emanated from this country. The President of Chile attended the opening session, held an official reception for the delegates, and entertained all of the latter at dinner, a limited number being invited each day during the congress. Other entertainments, official and unofficial, were overwhelming in number.
WASHINGTON GREETS PAN-AMERICAN HOST

More Than 1,000 Delegates to Attend Scientific Congress Opening Tomorrow.

RECEPTION AT WHITE HOUSE

Scores of Business Sessions with Entertainments Arranged — Noted Men There.

WASHINGTON, Dec. 25.—Preparations for the Second Pan-American Scientific Congress, which opens Monday, were being completed here today. With all the hotel rooms in the city reserved for the 1,000 to 1,600 members of the congress and of the permanent scientific organizations which will meet with it, practically every square foot of convention space chartered, from lodges hall to bathroom and including even the Government and educational buildings, the city is awaiting the largest and most comprehensive international gathering of its kind ever held in this country.

Hosts and hostesses have arranged scores of Pan-American breakfasts, luncheons, dinners, receptions, and balls, which will make the hours between the sessions of the congress a continuous whirl of entertainments, concluding on the night of Jan. 7 with the first Pan-American reception ever held in the White House. It is expected President Wilson will return to Washington in time to address the members at a special meeting in the Pan-American Building on the night of Jan. 5.

Many of the delegates, who include hundreds of noted scientists, educators, and publicists of the two continents, have arrived in the city. The rest will reach here tomorrow afternoon in time for the "get acquainted" reception to be given by the official United States delegation, headed by Judge George Gray of Wilmington, Del., member of The Hague Peace Court. This reception will be held in the New Willard Hotel, where the organization committees have established official headquarters.

Decorated with the flags of the twenty-one nations of Pan-America, the hotel presents an expanse of color followed by other hostesses, and to a lesser degree elsewhere throughout the city. A registration office has been opened in the New Willard, and ushers, with badges marked "Scientific Congress," are at the entrances to receive the delegates as they arrive. A branch Post Office has been set up to handle the delegates' mail, and arrangements have been made for banking and other facilities.

The formal opening will take place at 10 o'clock Monday in Memorial Continental Hall, national headquarters of the Daughters of the American Revolution. The assembly, comprising some 250 representatives of Latin-American Governments and scientific institutions and societies, about 150 representatives of American organizations, and about 500 from educational institutions of this country, will be called to order by John Barrett, Director General of the Pan-American Union, acting as Secretary General of the congress. After the singing of the "Pan-American Hymn" by a chorus, Mr. Barrett will introduce William Phillips, Third Assistant Secretary of State, as Chairman of the Executive Committee which organized the congress, and Phillips will call on Ambassador Suárez of Chile to take up the gavel as presiding officer for the thirteen-day meeting.

A welcome on behalf of the United States Government has been tendered by Vice President Marshall in the absence of President Wilson. This will be followed by a formal address by Secretary of State Lansing. Responses will be made by the respective Chairmen of the twenty-one national delegations, beginning with Dr. Crespo Quesada of Argentina. In most cases the Latin-American Chairmen are the Envoys of their Governments in Washington. In the evening there will be a reception to the members of the congress and guests tendered by Secretary Lansing and the United States delegation.

The scientific discussions will begin Tuesday morning with the semi-formal opening of the main sessions of the congress, at which arrangements will be completed for consideration of the general subject assigned to each section. Section No. 1 has anthropology, with Dr. William H. Holmes, head curator of the Smithsonian Institution, as Chairman; No. 2, astronomy, meteorology, and seismology, with Robert S. Woodward, President of the Carnegie Institution; No. 3, education, with P. P. Claxton, United States Commissioner of Education; No. 4, engineering, with Gen. William H. Fitzhugh, U. S. A., retired; No. 5, international, with James Brown Scott, Secretary of the Carnegie Endowment for International Peace; No. 6, mining and metallurgy, with E. Clegg, Head of the Chemical Bureau of the National Academy of Sciences; No. 7, mining and metallurgy, with James Brown Scott, Secretary of the Carnegie Endowment for International Peace; No. 8, public health and medical science, with Surgeon Gen. William C. Gorgas, U. S. A.; No. 9, transportation, commerce, finance, and taxation, with E. H. Rove, President of the Academy of Social and Political Science.

The sections on Wednesday will split up into forty-five subsections, each with its special topics. From them on the Congress will consist of a large number of separate meetings until the day before adjournment, when the main sections will meet again to formulate their resolutions to be acted on at the closing exercises in Memorial Continental Hall on Jan. 8.

There is to be a Women's Auxiliary Conference meeting four days each of the two weeks. Mrs. Robert Lansing, wife of the Secretary of State, is to preside, and a prominent women will be taken by Mrs. Superior, wife of the Chilean Ambassador. Addresses will be made by many prominent women. Women who speak Spanish have been as engaged as interpreters for the women of the foreign delegations.
DELEGATES OF THE UNITED STATES TO THE PAN-AMERICAN
SCIENTIFIC CONGRESS TO BE HELD IN WASHINGTON
DECEMBER 27, 1915, TO JANUARY 7, 1916.

Hon. Judge GEORGE GRAY, Member of the International Permanent
Court of Arbitration, Chairman of the Delegation.

Dr. FRANZ BOAS, Professor of Anthropology, Columbia University.

Brigadier General WILLIAM H. BIXBY, U. S. A., Retired; Chairman,
Section on Engineering, Second Pan American Scientific Congress.

Dr. JOHN A. BRASHEAR, President of the American Society of Me-
chanical Engineers; Director of the Alleghany Observatory,
and Chancellor of the University of Pittsburgh.

Hon. JOHN BARRETT, Director General Pan American Union; Secre-
tary General, Second Pan American Scientific Congress.

Dr. PHILANDER. P. CLAXTON, Commissioner of Education; Chairman,
Section on Education, Second Pan American Scientific Congress.

Mr. WILLIAM WALLACE CAMPBELL, Director of the Lick Observatory.
President of the American Association for the Advance of
Science.

Dr. RICHARD C. CABOT, of the General Hospital of Boston, and
Professor in the Harvard Medical School.

Dr. HENRY B. FINE, Dean of the Department of Science, Prince-
ton University.

Mr. HENRY S. GRAVES, Chief of the Forest Service of the United
States.

Gen. WILLIAM C. GORGAS, Surgeon General, U. S. A.; Chairman,
Section on Public Health and Medical Science, Second Pan
American Scientific Congress.

Dr. WILLIAM H. HOLMES, Head Curator, Smithsonian Institution;
Chairman, Section on Anthropology, Second Pan American
Scientific Congress.

Mr. HENNEN JENNINGS, former President, London Institution of
Mining and Metallurgy; Chairman, Section on Mining,
Metallurgy, Economic Geology, and Applied Chemistry,
Second Pan American Scientific Congress.
Hon. WILLIAM PHILLIPS, Third Assistant Secretary of State; Chairman ex officio of the Executive Committee of the Second Pan American Scientific Congress.

Dr. GEORGE M. ROMMEL, Chief, Animal Husbandry Division, Bureau of Animal Industry, Department of Agriculture; Chairman, Section on Conservation of Natural Resources, Agriculture, Irrigation, and Forestry, Second Pan American Scientific Congress.

Dr. LEO S. ROWE, President, American Academy of Political and Social Science; Chairman, Section on Transportation, Commerce, Finance, and Taxation, Second Pan American Scientific Congress.

Dr. JAMES BROWN SCOTT, Secretary, Carnegie Endowment for International Peace; Vice Chairman, Executive Committee of the Second Pan American Scientific Congress; Chairman Section on International Law, Public Law and Jurisprudence, Second Pan American Scientific Congress.

Mr. ALFRED R. THOM, General Counsel of the Southern Railway.

Dr. CHARLES D. W alcott, Secretary of the Smithsonian Institution.

Dr. WILLIAM H. WELCH, President, National Academy of Science; Honorary Vice Chairman, Executive Committee of the Second Pan American Scientific Congress.

Dr. ROBERT S. WOODWARD, President, Carnegie Institution of Washington; Chairman, Section on Astronomy, Meteorology, and Seismology, Second Pan American Scientific Congress.

SECRETARY OF THE DELEGATION.
Mr. WALTER SCOTT PENFIELD

ASSISTANT SECRETARY OF THE DELEGATION.
Mr. HENRY RALPH RINGE
SECOND PAN AMERICAN SCIENTIFIC CONGRESS.
December 27, 1915 - January 8, 1916.

Organization Officers:
John Barrett, LL.D., Secretary General.
Glen Levin Swiggett, Ph.D., Assistant Secretary General.

Headquarters:
Pan American Union, Washington, D. C.

SPECIAL NOTICE TO CONTRIBUTORS.

The nine main Sections of the Program of the Congress, with the names of the Chairmen in charge of each section, are as follows:

III. Conservation of Natural Resources, Agriculture, Irrigation and Forestry, George M. Rommel, B.S., Bureau of Animal Industry, Department of Agriculture, Washington, D. C.
VII. Mining and Metallurgy, Economic Geology, and Applied Chemistry, Hennen Jennings, C.E., Washington, D. C.

Each Section is divided further into Sub-Sections. There are forty-five of the latter in all, each with a special committee and program. The deliberations of the Congress will be based according to the subject-matter to be discussed in the various Sub-Sections. There will be general sessions of the Congress as a whole. Each Section will have one or more general sessions. The various Sub-Sections of the Congress may arrange for joint sessions. There will also be joint sessions between certain Sections and Sub-Sections of the Congress and certain national Associations meeting in Washington at the time of the Congress.
The following persons will be members of the Congress:

The official delegates of the countries represented.
The representatives of the universities, institutes, societies, and scientific bodies of the countries represented.
Such persons in the countries participating in the Congress as may be invited by the Executive Committee, with the approval of the countries represented.
All writers of papers.

All members of the Congress shall be entitled to attend its sessions, to take part in the debates and to receive a copy of such publications as the Executive Committee may issue. There will be no membership fee of any character.

A GENERAL STATEMENT FOR ALL SECTIONS.

Rules of the Congress:

III. In view of the great number of papers to be submitted, they should be as concise as possible. It is desirable that each paper shall be typewritten. They may be accompanied by illustrations and tabular matter to clarify and shorten descriptions.

IV. It is suggested that illustrations be limited in number, and be submitted upon sheets not over 10 inches by 22 inches (25 cm. by 56 cm.) including the border, or 9 inches by 21 inches (23 cm. by 53 cm.) inside the border.

V. Each paper should be accompanied by a résumé of not more than 1,500 words, followed by a footnote giving the bibliography of the subject to include references to important original papers and sources of information referred to in the paper. Article V may not apply to all sections. Writers of papers will govern themselves accordingly.

Papers should not exceed 30 minutes in length. Technical matter should be made particularly plain. Definite arrangements for the use of illustrative matter and lantern slides in the reading of a paper should be made as early as possible. Lanterns will be provided by the Congress. Authors are to furnish other material for this purpose. In addition to the above-mentioned résumé, authors are respectfully requested to furnish an abstract of their papers not to exceed 500 words, preferably 300 words. This abstract should be furnished in the language of the paper and should be sent to the Secretary General as soon as possible, although it may accompany the paper.
SECTION I - ANTHROPOLOGY.

I. Anthropology is properly defined as the Science of Man. It seeks to find out and place on record all that can be known of the history and characteristics of the human race. Beginning with the present period, researches in Anthropology extend backward in an almost endless perspective to the birth of the race. Slowly but surely they are penetrating the shadows of the past and in good time the veil that has obscured the story of man's origin and becoming will be lifted, and those who will may know the truth. Science does not stop, however, with the work of unveiling the past: it seeks to know and to understand the present man and to apply that knowledge to his betterment. Its activities extend thus to a consideration of the problems of education and to a determination of the most effectual means of applying the principles of eugenics of the further evolution of the race.
II. It was with the view of bringing together the many devotees of this great branch of research that the Section of Anthropology was organized and the program formulated, and the results have justified the most sanguine expectations. Joint sessions were arranged with five kindred organizations whose activities come within the field of anthropology, and the papers and discussions had a wide range. The body of students of the science thus brought together is believed to have exceeded in number and importance any previous assemblage of its kind on this side of the Atlantic at least.

Necessarily the papers presented and discussed - 162 in number - touch upon but a limited number of the salient features of the extensive and much diversified subject-matter. Chief attention was given to the results of recent researches in the Pan-American republics - studies relating to man himself as the most important biologic unit, to the living stocks and tribes and their extremely varied cultures, and to the vast body of
material traces of the prehistoric occupancy of the continent.

They physical man, and more especially the aboriginal American man, received the attention his position as the original proprietor of the continent and as one of the principal races of men would suggest and make appropriate. The problems of the origin of the American race have occupied many minds since the discovery of the continent, but it is only within recent years that anything like real scientific deductions have become possible. It was made apparent that there is but one American race, and that no trace has ever been found of any other than the Indian race on the continent. It was shown that this people represents physically an advanced and hence a relatively late form of humanity; that it connects in its physical and physiological characteristics with the yellow-brown people of eastern Asia, and more remotely, in all probability, with the latest paleolithic or early neolithic peoples of the Old World.

It was shown that the original inhabitants of America must
have come to this continent by the several northwestern routes; that this advent could not have occurred before Asia itself was well peoples; and that immigrants could not have arrived on this continent in any considerable numbers at one time, but rather that arrivals were in relatively small parties and extending over long periods of time. Among the important subjects discussed were those of the racial elements entering into the modern population of America, and the ethnic problems of immigration. These diversified racial elements have united in varying degrees with the native American population and are slowly developing new ethnic variants, the study of which is of great interest and importance.

The branch of anthropologic science known as ethnology deals mainly with the problems of the present and historic populations, with their physical and mental characteristics, and with every department of their culture—language, social institutions, religion, technology, aesthetics, traditions, and lore.
There are upward of a thousand tribes, and each presents an ethnic complex so intricate and obscure that no single one has as yet been exhaustively studied and placed on record.

In the conferences of the Section attention was given in certain measure to (1) the origin, development, characteristics, and relationships of the 500 or more languages distributed over the continent from Alaska to Patagonia; (2) to the problems of the social institutions which, when mastered, will become available to the historian of the race in his efforts to determine the processes and laws of the evolution of civilized institutions; (3) to the problems of the diversified systems of belief which men have devised to explain the mysteries of the cosmos and of their environment and their relations thereto, and to the endless array of devices - the rites and ceremonies - by means of which primitive man has sought and still seeks to influence the deities which he has created; (4) to the problems of technology which involve the consideration of each and every art and industry known to man, and the activities by means of
which he has advanced through a long series of experiments, inventions, and adaptations to his present state; (5) to the problems of the esthetic arts - the embellishing and fine arts - which take so prominent a place in the history of civilization, for nowhere are these more readily and effectively studied as in the primitive American field; (6) to the problems of geography, which relate to the original habitat, and migrations, and the complicated course of distribution which has resulted in the present geographical position of the tribes and nations.

Archeological research, which had an important place in the deliberations of the Section, serve to carry backward into the past the story of the known peoples and to supplement this with the almost endless perspective of prehistory. These researches make clear the course of human progress from the first weak and halting step in the manual arts to the building of temples, the invention of the calendar, and the invention of phonetic writing - the latter the stepping stone to the
stake known as civilization. Archeology has to solve also the problems of chronology, to determine the place of the race in the geological scale, and the ordinary scale of time. The solutions await, however, prolonged and profound studies which involve also the sciences of geology, biology, climatology, geography, and even astronomy, for man's career in the world has intimate relations with all of these.

It is believed that the time has now arrived when the many misconceptions regarding the scope and significance of anthropological science - the science of human history - must disappear and the importance of its position in the hierarchy of sciences will be fully recognized. The Second Pan American Scientific Congress has had a godly share in the promotion of this great end.
OFFICIAL DELEGATES OF THE UNITED STATES.

James Brown Scott, Secretary, Carnegie Endowment for International Peace; John Barrett, Director General, Pan American Union; General W. H. Bixby, United States Army, retired; Francis E. Dodge, Columbia University; A. A. Bradish, president, American Society of Mechanical Engineers; Richard C. Cabot, of Harvard Medical School; William W. Campbell, director, Lick Observatory; Philander P. Chasen, United States Commissioner of Education; Henry B. Fine, of Princeton University; General William C. Gorgas, United States Army; Henry S. Graves, Chief United States Forestry Service; Judge George Gray, member of the International Permanent Court of Arbitration; William E. Holmes, Head Curator, Smithsonian Institution; Hemen Jennings, of the London Institution of Mining and Metallurgy; William Phillips, Third Assistant Secretary of State; George M. Rommel, of the Department of Agriculture; L. S. Bowes, President, American Academy of Political and Social Science; Alfred P. Thurn, Chief Counsel of the Southern Railway; Charles D. Walcott, Secretary, Smithsonian Institution; William H. Welch, president, National Academy of Sciences; Robert S. Woodward, president, Carnegie Institution of Washington; Walter Penfield, secretary; Henry Ralph Ringe, assistant secretary. Not appearing in the group are Walter Penfield, secretary, Henry Ralph Ringe, assistant secretary, of this delegation.
LOCAL DELEGATES TO PAN-AMERICAN SCIENTIFIC CONGRESS

L. S. ROGERS,
Director of United States census,
GEN. OTIS SMITH,
Director of United States geological survey.

DAVID FAIRCHILD,
Chief of plant introduction bureau.
A. H. FAY,
Bureau of mines.
RUPERT BLUE,
Surgeon general, United States public health service.

VAN H. MANNING,
Director of bureau of mines.
W. H. HOLMES,
Curator of Smithsonian Institution.
Pan-America.

The second Pan-American Scientific Congress brought its labors to a close today. Altogether, much good was accomplished. Not only scientists, but statesmen of note met, and exchanged views on matters of special and of general interest. Old friendships were strengthened. New friendships were formed. Larger views of large questions were presented to take the place of views that had served their day.

If what may be called political and governmental questions somewhat overshadowed strictly scientific questions it was with the consent of the scientists present. They, as others, recognized the fact that the momentous new times had put general questions into the foreground and demanded their consideration. Pan-Americanism in its most comprehensive signification is the prize topic now whenever for any purpose North, Central and South Americans meet.

What the public has heard the most about, therefore, during the sittings of the congress has related to matters other than scientific—the Monroe doctrine, the value and growth of democracy, the belief that this hemisphere is dedicated to the rule of the people, and that the people of both continents should act in sympathy with that belief, and in co-operation to that end. Both the President and Secretary Lansing spoke in that vein, and all the other deliverances carried a similar message. And delegates and onlookers alike showed by their attention and applause warm support of all the sentiments expressed.

The next congress will assemble at Lima five years hence. Time and place carry assurance of another successful meeting. Peru is progressive and hospitable, and as host will forward all the purposes disclosed here.

By that time, too, let us all hope, peace will have returned to the world in a form warranting the prospect of a long stay, and encouraging to the complete success of all the aims the three Americas have in mind.

Meanwhile, much may be done for the cause in all the countries in interest in the way of public discussion, and the putting of discussion into action. Scientists, statesmen and capitalists may, and should, work together for what concerns all. The task in hand—the full development and advancement of the western hemisphere—is gigantic, and calls for that famous "pull with a will and pull together" for its accomplishment.
Gentlemen,

We beg to call your attention to the fact that the XIVth International Congress of Americanists is to be held this year in Stuttgart, August 18th - 23rd.

The General Program (see enclosure) was sent out at the end of 1903 to a number of representatives and friends of Americanistic Science and shortly afterwards, through intermediary of the Imperial Foreign Office, your Government was respectfully asked to send an expert delegate to attend the Congress.

We have now the honour to invite your Institution to select and send a delegate, and can assure you that we shall be exceedingly glad to welcome him to Stuttgart and shall appreciate most highly his assistance at the work before us.

We hope that you will give our invitation favourable consideration and have the honour to remain, Gentlemen,

Yours respectfully,

Karl von den Steinen

[Signature]

[Name]
The Fourteenth International Congress of Americanists is to be held at Stuttgart, Germany, August 18 to 23. Meetings are held alternate years. In 1902 a very successful session was held at the American Museum in New York. The Congress is patronized by European governments, and concerns itself with the problems of the native American races, their origin, distribution, history, physical characters, languages, inventions, customs and religions; with the monuments and archeology of America and with the history of the discovery and occupation of the New World.

An exceptionally large number of American anthropologists will attend the Stuttgart Meeting. W. H. Holmes will represent the Smithsonian Institution as well as the American Association for the Advancement of Science and the National Geographic Society. Dr Franz Boas and Professor M. H. Saville will represent New York institutions. Dr George A. Dorsey represents the Field Columbian Museum, Chicago, and Dr Charles W. Currier the Catholic University, Washington City. These delegates are furnished with credentials from the State Department, through the intermediary of the Smithsonian Institution. A movement is on foot to have the Meeting of 1906 held in Washington, but the Argentine Republic is also urging the claims of that country.
"Mr. William H. Holmes, chief of the Bureau of American Ethnology, besides visiting some of the principal European Museums in behalf of the National Museum, attended the Fourteenth International Congress of Americanists at Stuttgart, Germany, from August 18 to 23, 1904, as the representative of the Museum and Institution and of the Government. Other official American delegates were the Duc de Loubat, a patron of American archeological research; Dr. Paul Haupt, of the National Museum and Johns Hopkins University; Dr. Franz Boas, of the American Museum of Natural History, and Rev. C. W. Currier, of the Catholic University of America. A number of papers were read dealing with questions of American history, ethnology and archeology. Mr. Holmes presided at a meeting of the Congress on August 20, and on the same day delivered an address on "Contributions of American Archeology to the Science of Man."

CONTRIBUTIONS OF AMERICAN ARCHEOLOGY TO HUMAN HISTORY

By W. H. Holmes.

(Read before the Congress of Americanists, Stuttgart, Germany, August 21, 1904).

Not wishing to weary the Congress with the reading of a lengthy paper I shall attempt to give the substance of what I would say in brief outline, but in the beginning, as the representative of the Smithsonian Institution, I have the honor to present to the Congress a set of publications to be disposed of as it may deem expedient. These volumes, about sixty in number, are selections from the archeological publications of the Institution and two of its bureaus - the National Museum and the Bureau of American Ethnology. They deal almost exclusively with the problems of primitive American history and prehistory and mainly with the aboriginal history of the extensive region now comprised within the United States. Most
of the volumes were published under government auspices and largely in the annual reports of the Bureau of American Ethnology of which Major J. W. Powell was the founder and the guiding spirit.

The Bureau's work extends over a period of 25 years but the parent Institution began the publication of archaeological material almost from its foundation and the first number of its great series of contributions to knowledge was the "Monuments of the Mississippi Valley" by Squire and Davis, a work known and esteemed by Americanists everywhere. The works here presented comprise only the more important papers relating to this branch issued by the Institution and form but a fraction of its anthropological publications, a complete list of which includes several hundred titles. I have the honor also to present a set of photographic portraits of American Indians made during the past winter by the photographers of the Bureau of American Ethnology and the National Museum and representing members of the various delegations of the natives
visiting Washington on business growing out of their relations with the Government. The portraits, about sixty in number, represent upwards of twenty tribes, front and profile views of each individual being given. Beside the portraits physical measurements were taken of all and masks were made of such as could be induced to undergo the unpleasant ordeal.

What I now desire to say does not have to do with what American archeologists or the American Government have done for Archeological Science but rather with what prehistoric America has contributed and may be expected to contribute in the way of the materials of human history.

The importance of archeology to the student of history is now fully recognized. The science is establishing its claims more fully year by year, and especially since it has become allied with Geology which furnishes the necessary time scale and with palaeontology which supplies the scale of life. The branch of inquiry which only a few years ago dealt with
isolated fragments of knowledge, with disjointed portions of
the framework of human history, now essays to aid in building
up the entire skeleton of that history, and, with the aid of the
allied sciences of Ethnology and Psychology, in clothing it
with the integuments of a living reality.

America is taking a noteworthy part in this rehab-
ilitation of the race and fortunately is most helpful just
where the Old World is weakest. In America the past of man,
for the most part at least, connects directly with the present
and with the living. Each step backward in culture is a step
out from a well established and fully understood base and there
is thus no baffling gap between history and prehistory, as in
the Old World.

In America all the steps of culture from the highest
to the lowest, within the native range, are to be observed among
the living peoples, and we are thus able to avoid many of the
snares of speculation with respect to what men have thought
and men have done under the greatly diversified conditions of
of primitive existence.

In America the conditions are simple. The antiquities of a region represent in a large measure the early history of the known peoples of that region. There have not been the successive occupations, the racial interminglings, the obscuring and obliteration of phenomena that so seriously embarrass the student of the ancient nations of the Old World. The stone age and the red race stand practically alone within the field of study.

In America the high water mark of culture barely reached the lower limit of civilization. In the Old World the fuller representation of man's career is above that limit so that America can be expected to assist, especially, in building up the substructure of human history; she can be expected to furnish a fuller reading of the early chapters of culture progress than any other region of the world.

The position of the aboriginal America in the field of culture history and the area of that history which American
archeology, as well as American ethnology can be expected to illuminate is clearly indicated in the accompanying diagram.

In this diagram the whole field of human history is represented by the five spaces which, beginning below, are,

(1) the stage of prehuman development through and out of which the race arose; (2) the savage stage in which humanity took definite shape; (3) the barbarous stage in which the powerful nations were founded, and systems of record were developed; (4) the civilized stage in which higher culture was achieved, and (5) the enlightened stage, reached as yet only by a limited number of nations. The idea of time is not involved in this diagram. The stages of progress thus become the scale on which the cultural achievements of any race or people in its struggle
upward may be laid down. It enables us to show just what relative place is taken by each race of people and just how much and at what points each can contribute to the history of man; for human history as written is a composite made up of the separate histories of many peoples of all grades of development, set together as a mosaic.

The fan-shaped figure, A, in the diagram, may be taken to express the history of the race, that is the whole of human progress from the slender beginnings of the savage stage up to its greatest expansion at the present day. The same figure may stand with equal propriety for the career of a single people or nation that has reached the highest limit of culture. As shown in the diagram, the beginning of cultural development is represented by a few slender threads of activity. in savagery these threads multiply slowly into a considerable number and with ever accelerated rapidity divide and subdivide in barbarism and civilization, expanding with marvelous rapidity in the horizon of enlightenment. While this expanding figure may be
regarded as expressing the growth of human culture it may also 
symbolize the development of the race in numbers and in physical 
perfection.

The figure indicated by B may stand for the career 
of a people of the lowest existing order of culture, such as the 
Fuegians or Andamanese — peoples which can contribute to gen-
eral history only in a very limited range, since their career 
traverses only the lower half of the filed of savagery. It is 
to be noted, however, that these lowly peoples can contribute 
much more fully to this particular stage of the history of pro-
gress than can any of the nations that have passed this stage 
and have arisen to higher levels.

The field covered by the American race is outlined in 
C. Uncertain and indefinite in the beginning stages the traces 
being hardly legible on account of the absence of records and 
the insufficiency of archeological research, it develops up-
ward stopping just short of the level of civilization. Many
strands of culture had appeared and had grown strong but writing had not been achieved and other arts peculiar to civilization had not made their appearance. Within this field Americanists pursue their studies and make their contributions to the history of the race and of developing civilization. Above this stage they find nothing and below only meager and uncertain traces of the beginning stages of human culture. The archeologist finds within this limited American field extensive phenomena relating to the various branches of barbarian activity and especially to such as leave their traces in objective form. Prominent among these branches are the acquirement of the raw materials of culture, including agriculture, hunting, fishing, quarrying and mining; the shaping of implements and utensils; the building arts, metallurgy, sculpture, ceramics, the textile arts, the graphic arts and writing, war, games, culinary arts, religious arts, personal adornment, the decorative arts, etc. These groups of phenomena as exhibited in America have been the
subject of earnest study by a large number of scholars and already
a great body of data relating to them has been collected and
an extensive literature is in existence.

QUARRYING AND MINING — Much of the history of the activities
concerned in the acquisition of the raw materials of subsistence
and the arts is best studied among existing peoples. This is
esspecially true of hunting and fishing, the gathering of wild
fruits and grains, and agriculture, but archeology can alone
be depended upon to tell the story of the industries concerned
with developing the mineral resources. These activities es-
caped the observation of the conquerors and colonists and were
discontinued so abruptly that very meager records of their op-
eration have been preserved. The story of the struggles of
primitive man in exploiting the valleys and mountains and in ex-
tracting the staple materials of the stoneage culture from their
rocky beds forms one of the most interesting and important
chapters in the history of incipient civilization. With only
stone, bone, and wood for implements the aborigines attacked the
massive strata breaking up solid bodies of flint, quartz, obsidian, jasper, etc., for implements and carving out huge monoliths from the living rock for building and sculpture.

A study of the American mines and quarries gives us a vivid conception of the strength and persistency of the forces that underlie human development, and of the difficulties encountered by the race in carrying culture upward through the stone age to the higher level of the age of metal. The shaping of the stone into implements and utensils necessarily followed the work of the quarrymen and the story of the work is clearly told in many lands, but America's contributions to the history of this most important branch of activity are exceptionally full and satisfactory.

ARCHITECTURE -- Aboriginal architecture in America teaches the initial lessons of the development of this branch of culture with exceptional clearness beginning at the lowest stage and carrying it up (about to the level of the keystone arch). The present period displays a wide range of phenomena representing
the elementary forms of building, and post-Columbian chronicles give us glimpses of the higher development that came under the observation of the Spanish conquerors, but archeologic remains supplement the lessons of the historic period. We find constructions of great variety and of remarkable preservation in the Mississippi Valley, in the pueblo country, on the Mexican plateau, in Yucatan, Guatemala, Honduras, and in South America. By the aid of these we see how the midden and the earth mound develop into the pyramid with its multiple stairways of cut stone; how the walls change from irregularly placed stone and clay covered wicker to massive structures of accurately hewn stone; how the chamber spaces, ceiled at first with weak timbers subject to quick decay are spanned later by the offset arch of stone. We see supported on this native arch the concrete roof so massive to defy the earthquake and support the forests of successive centuries; we see the multiplication of stories, tier on tier; we see the spanned space limited at first to a few feet, increase indefinitely to the many vaulted roof support-
ed by a wilderness of limestone columns; we see walls within and without decorated with symbolic sculptures, a single building presenting thousand of square yards of embellished surface, lofty false fronts, and roof crests being raised to afford space for the exercise of the native genius.

These are chapters in the evolution of the building arts not taught with equal clearness and fullness in any other part of the world. Beside the direct lessons of the art of architecture which bear upon its own history, many side lights are thrown upon other branches of primitive culture - mural decorations, sculpture and furnishings, as well as the organization of society, religious beliefs and systems of writing.

SCULPTURE -- Sculpture reached its highest development in Greece, but the stages through which the art passed are but meagerly recorded in the existing art of Hellas. The earlier steps are represented by isolated bits in many places, but the primitive phases of the art are nowhere so fully developed as in America. We have here a vast body of material covering every
stage from the very beginning of stone shaping up to full
relief and realistic portrayal of the human subject. No people
known to us has within the culture range of the Americans shown
such a versatility and power with the hammer and chisel, none
that has embodied in stone a mythology so rich in imagery, in-
cluding as it does the forms of men, beasts, monsters and cosmic
phenomena of many kinds. With the work of the living peoples
as a key the archeologist has spread out before him as in an
open book the whole story of the evolution of sculptural phe-
nomena as manifested within the horizon of barbarism.

METALLURGY -- The utilization of metals is among the most im-
portant activities of civilized man and has been a chief agency
in the development of culture and especially in gigantic for-
ward steps of recent years. Although the general course of its
development and the relation of its successive stages of pro-
gress are well made out much remains to be learned, and in this
direction America is able to make the most valued contributions.
Historically we learn something of the metal work of the American aborigines. Tin, lead, and iron were little known and the smelting of ores was in its infancy but gold, copper, and silver were extensively employed when the Spaniards arrived. and these metals were forged, fused, cast, alloyed, plated and otherwise handled with a skill that astonished the conquerors. Archeology verifies the statements of historians and adds much to our knowledge of methods of manipulation and of the forms produced in the primitive stages of culture, not only for the Western continent but for the general history of the subject at those periods where the records in the old world are most defective.

CERAMICS--Of art in clay we may say much the same as of sculpture. No people known to us has furnished such a vast body of material for the study of this art from its beginnings up to the level of glaze and the wheel as have the pre-Columbian Americans. The clay took on a multitude of forms in which were
embodied a wide range of mythologic and esthetic concepts.

WRITING AND THE GRAPHIC ARTS -- To the history of writing aboriginal America makes many contributions, and these as in the other cases referred to are within that part of the history of progress where old world evidence is least satisfactory.

In the old world we trace the history of writing back step by step to near the beginning of the glyphic system; in the new world we pass back from the lower margin of the glyphic to the very beginning of the graphic, thus completing the column of progress in the evolution of the recording arts.

With a knowledge of the present and pre-historic phase of picture writing it is easy to interpret and utilize the vast body of material in this branch furnished by archeology, but rich as is this material, insufficient light is thrown upon the particular state of development which witnessed the transition from picture writing to phonic writing, and archeologists find here one of the most fascinating fields of research. The
great body of evidence brought before the conquering Europeans
was not appreciated by them, but rudely destroyed and now the
architectural and sculptural, are being gathered to-
gether and studied in the most painstaking manner by our schol-
ars, who hope almost against hope to find a sufficient key
to solve the problem. Within the same cluster of graphic
phenomena which gave birth to writing we have evidence bearing
upon other important branches. Here we get glimpses of the
history of the calendar; here we find traces of the pictorial
art which had not yet reached the stage of light and shade,
perspective, and portraiture, and discover many germs of em-
bellishment mythologic and esthetic.

Although many of the obscure problems arising in
this American field have been successfully worked out, many
others are still awaiting the attention of Americanists and will
no doubt yield little by little to their persistent efforts.

The greater unsolved problems of aboriginal America
are chiefly those of race origins, of culture origins, and of
chronology. These problems do not relate so much to particular nations as to the history of the race as a whole; not so much to peculiar or local cultures as to the origin and evolution of the native activities; not so much to tribal or national chronology as to correlations of race and culture history with the geological time scale.

With respect to race and racial characters American archeology has as yet little to add to what may be learned from studies of the living peoples. So far as observed the variations in type of fossil forms do not extend decidedly beyond the range of variation observed among the living. It has been sought to establish a palaeo-American type in South America but we are not at all certain that a sufficient com- parative study of the osseous remains of the present peoples of the world has been made to warrant a satisfactory determination. Conservatism is especially desirable in any attempt to establish new racial types or special orders of culture.

Regarding race origin it may be said that there is
still room for speculation. Opinion seems, however, to be settling down to the view that the American race, as it stands today, is not autochthonous but is an offshoot of Asiatic peoples more or less diverse in character originally and arriving in America, mainly at least, by the Bering strait route and this not abruptly but in the normal course of race distribution from the natal habitat, and in time extending over untold centuries. Americanists have here a difficult, a perplexing, but a most fascinating field of research.

Today one of the most absorbing questions encountered by the student of American archaeology is that of the origin of the aboriginal cultures. Some regard these cultures as autochthonous, others have looked for their source in many different parts of the world. Although as yet no final conclusion can be announced we may assume that along with the incoming peoples, all or most of whom must have been extremely primitive dwellers of the far north, there came the simplest
forms of the arts of hunting, fishing, shelter building, and the preparation of food; that from these elements, under the influence of more southerly environments there arose in time diversified culture groups such as are now under investigation in various parts of the continent. We cannot but admit, however, the plausibility of the theory that ocean wanderers from other lands have now and then reached American shores bringing with them the germs of distinct cultures, and further, that the characteristics of the art phenomena in certain centers of progress are such as to give countenance to this idea. This is a most interesting and important branch of archeological research, and one with which archeologists must at this stage particularly concern themselves.

Archeology furnishes a vast amount of interesting data regarding the states of culture of the American race, but we note that in all the researches so far conducted no traces of culture phenomena have been found which extend below - on the one hand, or above on the other - the range observed among the
living and historic tribes. There is nothing so unique that it
might not belong to the known tribes or their immediate ances-
tors. It has been sought to differentiate a paleolithic cul-
ture and period in America but without tangible result. So far
as the use of the terms "paleolithic" and "neolithic" are con-
cerned they may both be omitted from the literature of American
archeology without loss if not to possible advantage. The sim-
plest forms of stone implements occur everywhere in connection
with the most highly developed forms and neolithic forms are
reported from formations of nearly all periods back to the
earliest that have been observed.

In America and especially in North America we have
sought almost in vain to establish a definite chronology of
man and culture. Evidence of antiquity is not wanting but
when we try to adjust the phenomena to the geological time
scale we meet with indifferent success. Hundreds of ancient
caves have been searched with only negative results; glacial
gravel s have been examined with great care but the returns are
exceedingly meager; river terraces, and kitchen midden deposits, yield nothing of particular value, and the results, when viewed as a whole, instead of enlightening the mind, fill it rather with confusion. It is within the bounds of possibility that this confusion may in a measure be due to the presence in America of an autochthonous race element. The contributions of American archeology in this department are not to be compared with those of the Old World where on all hands definite chronological results are forthcoming. That America may yet furnish contributions of importance in this branch of enquiry is, however, well within the bounds of possibility.

It is thus seen that there are in America numerous questions awaiting solution and there is vagueness in many places, but notwithstanding this the results of our archeological investigations are on the whole most gratifying; each year the areas of the uncertain and the unknown are being reduced; and when the results achieved are supplemented by the rich materials furnished by a study of the living peoples, they must go far
toward illuminating the pages of the story, which the Old World has been gradually but surely revealing.

Viewing the whole field of prehistorical research we are struck with the fact that the past of man is rapidly disclosing itself to our vision, so that presently we shall be able to look backward along the biological and cultural vistas of his coming, and connect the present with the vanishing point of the human perspective, with an ease and comprehensiveness little dreamed of until now.
SECTION OF ANTHROPOLOGY AND HISTORY.

Conferences will be arranged for the discussion of problems relating to the following grand divisions of American Anthropology and History, and more especially to the aboriginal phases of the subject:

I. Physical Anthropology, which considers problems of race origin, migrations, differentiation; its causes, processes, and laws; physical characters, anthropometry, pathology, chronology.

II. Ethnology, which considers the problems of tribes and stocks; language - characteristics and relationships; social organization - family, clan, tribe, government, laws, etc.; religion - beliefs and practices; technology - arts and industries; aesthetics - embellishing arts.

III. Archeology, which deals especially with problems of cultural history and chronology.

IV. General Pan-American Anthropology, which may consider racial components and nationalities, present conditions and tendencies; eugenics - purposeful selection, possibilities of stirpiculture.

V. History, general.

2. Standardization of mental tests for the study of radial differences.


4. Relation of mental abnormalities and diseases to geographical and climatic conditions.

5. Influences of medical drugs, alcohol, tobacco, tea, etc. on the psychological functions of different races.

6. The psychology of bilingual habits.

7. The rhythm of mental development in different races.

8. The value of experimental psychology for vocational guidance.

9. The value of psychology for geographical and biological exploration.

10. The value of experimental psychology for commercial propaganda.

11. The psychology of the thought processes.

12. The psychology of the subconscious.

13. The relation of gland processes to emotional behaviour.

14. The relation of psychology to eugenics.

15. The psychology of the apes.
February 1, 1905

Sir:

I have the honor to make the following report on the meeting of the Congress of Americanists held at Stuttgart, Germany, August 18-23, 1904, which I attended as a delegate from the Smithsonian Institution in accordance with directions contained in the Secretary's letter of May 3, 1904. In addition to the commission received from the Institution I was instructed to make certain studies in the museums of Europe, having in view the interests of the Institution in the preparation of plans for the new Museum building, as provided in the Assistant Secretary's letter of July 12, 1904. I was also the duly accredited representative at the Congress of the American association for the advancement of Science and the National Geographical Society.

I sailed from New York on July 26, in company with Mr. J. R. Marshall of the firm of Hornblower and Marshall, architects of the new Museum building, and reached Plymouth, England, August 1. Nine days were spent in visiting the museums of London, Oxford and Cambridge, and eight days in similar work in Paris, and on August 18th, I reached Stuttgart. The opening session of the Congress was held in the forenoon of that day and was attended by a large number of members and other prominent persons.
including the King of Wurtemberg, who in response to the address of the President of the Congress, Dr von den Stienen, expressed at length his appreciation of the aims and work of the Congress, and his pleasure at having the present session held in his capital city - Stuttgart. A report of the meeting of the Congress held in New York City in 1902 was read by Dr Franz Boas, of the Natural History Museum, New York, and other routine business was transacted. The Congress was invited to take luncheon with the King in his suburban palace and many members of the Congress and their friends attended. Afterwards a reception was held in the palace gardens. The King's interest was highly appreciated and contributed much to the success of the Congress. Sessions were held on the 19th, 20th, 22nd, 23rd and 24th, and a large number of papers were read dealing in the main with questions of American history, ethnology and archeology, the program being as follows:
Program

Friday August 19.

Prof. Dr E.Fraas: Comparison of the Jurassic Formation of America and Europe.

Dr Hans Meyer: Historic Man in the Andean Regions of Equatorial South America.

Dr Henri Froidevaux: A New Chapter in the History of the Filibusters of the Antilles (The Filibusters of Darien during the 18th Century).

Dr Angvar Nielsen: The Relations of Norway with Greenland and North America During the Middle Age and their Repetition in the 18th Century.


Dr August Wolkenhauer: Was the Magnetic Declination Before Columbus First Voyage (1492) as a Matter of Fact Unknown).

Prof. Dr Lejeal: The Memoirs of Fray Toribio, Motolinia.


Saturday August 20

Dr Owan Bloch: L'origine de la Syphilis (Morbus americanus)


Dr Clements R. Markham: The Megalithic Age in Peru.

Dr Jonkheer van Panhuys: The Last Dutch Expedition to Surinam


Dr A. Plagemann: Report upon the Chilian Pintados
Dr Eduard Seler: The Grunstein Idol of the Stuttgart Museum.
Dr Eduard Seler: The Ancient Inhabitants of the Castle of Teayo.
Dr Walter Lehmann: A Chapter from Mexican Mythology.

Tuesday August 23

Dr Waldemar Jochelson: Concerning the Asiatic and American Elements in the Myths of the Koriaken.
Prof. Waldemar Bogoras: Religious Ideas of Primitive man, from Chukchee Material.
Dr P. Ehrenreich: Distribution and Migration of the Myths of the South American Peoples and their Connection with those of North American and the old World.
Prof. Robert Lehmann: European Stories Among the Araucaneans of Argentina.
Dr L. C. van Panhuys: A European Custom of Pagan Times brought over to America. (Halloween at Chicago)
Mr William Thalbitzer: Eskimo Dialects and Migrations.
Rev. Charles W. Currier: The Indian Languages of the United States.
M. Pablo Patron General Writings of America
M. de la Grasserie On the Tehuelche Language.

Besides myself, representing the Smithsonian Institution, the American National Geographic Society and the American
Monday August 22.

Prof. Dr K. Sapper: Manners and Customs of the Pokonchi Indians.

Dr Franz Boas: Influence of the Social Foundation of the Kwakiutl upon their Culture.

Dr K. T. Preuss: Sun Feast of the Old Mexican and the Moki.

Prof. Dr Fritz Regel: Remarks Concerning the Residue of the Wild Tribes of the West Antioguia.

Dr van Panhuys: Observations on the Ornaments of the Primitive People of Dutch Guiana.


Dr A Plagemann: Report upon the Chilian Pintados.

Dr Eduard Seler: The Grunstein Idol of the Stuttgart Museum.

Dr Eduard Seler: The Ancient Inhabitants of the Castle of Teayo.

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M. Pablo Patron  General Writings of America
M. de la Grasserie  On the Tehuelche Language.
Besides myself, representing the Smithsonian Institution, the American National Geographic Society and the American Association for the Advancement of Science, there were present from America, the Duke of Loubat, patron of American Archeological researches, Dr Franz Boas, representing the Natural History Museum, New York, and the Reverend C. W. Currier, representing the Catholic University of America, Washington. England was represented by Sir Charles Markham of London, France by Dr E. T. Hemy, of Paris, Holland by Dr L. C. van Panhuys of the Hague, and Sweden by Dr Hjilmar Stolpe.

On the 20th I had the honor to preside at the meeting and in the afternoon delivered an address on "Contributions of American Archeology to the Science of Man." A copy of the address accompanies this report. At the close of the address I had the pleasure of presenting to the Congress a list of 75 bound volumes relating mainly to American archeology and ethnology published by the Smithsonian Institution and its two bureaus - the National Museum and the Bureau of American Ethnology, for which the President extended the thanks of the Congress. The list of publications presented is as follows:
List of Publications

Boehmer. Pre-historic Naval Architecture of the North of Europe.

Fewkes. Archeological Expedition to Arizona in 1895.

Fewkes. Two Summers Work in Pueblo Ruins.

Fowke. Archeologic Investigation in James and Potomac Valleys.

Fowke. Stone Art.

Gann. Mounds of Northern Honduras

Henshaw. Animal Carvings from Mounds of the Mississippi Valley.

Henshaw. Perforated Stones from California

Holden. Central American Picture Writing

Holmes. Ancient Art of the Province of Chiriqui

Holmes. Ancient Art of the Province of Chiriqui

Holmes. Ancient Pottery of the Mississippi Valley

Holmes. Ancient Quarry in Indian Territory

Holmes. Anthropological Studies in California

Holmes. Art in Shell of the Ancient Americans

Holmes. Development of the Primal Shaping Arts.

Holmes. Flint Implements and Fossil Remains from a Sulphur Spring at Afton.

Holmes. Form and Ornament in Ceramic Art

Holmes. Illustrated Catalogue of Collections, 1881

Holmes. Pottery of the Ancient Pueblos.

Holmes. Prehistoric Textile Art of Eastern United States

Holmes. Study of Textile Art.

Holmes. Textile Fabrics of Ancient Peru

Holmes. Aboriginal Pottery of the Eastern United States.

Jouy. Korean Mortuary Pottery
Hough. The Lamp of the Eskimo.
McGuire. Pipes and Smoking Customs of the American Aborigines.
McGuire. Study of the Primitive Methods of Drilling.
Mindeleff. Aboriginal Remains in Verde Valley
Mindeleff. Casa Grande Ruin, 1890.
Mindeleff. Casa Grande Ruin, 1891.
Mindeleff. Cliff Ruins of Canyon de Chelly
Mindeleff. Pueblo Architecture
Muniz & McGee. Primitive Trephining in Peru.
Rau. Lapidarian Sculptures
Thomas. Burial mounds
Thomas. Catalogue of Pre-historic Works
Thomas. Circular Square and Octagonal Earthworks
Thomas. Day Symbols of the Maya Year
Thomas. Manuscript Troano
Thomas. Maya and Mexican Manuscripts
Thomas. (The) Maya Year
Thomas. Mayan Calendar Systems
Thomas. Mayan Calendar Systems II
Thomas. Mound Explorations
Abbott. Stone Age in New Jersey
Bransford. Archeological Researches in Nicaragua
Carr. Mounds of the Mississippi Valley
Dall. Remains of Later Prehistoric Man from Alaska and the Caves of the Aleutian Islands
Fewkes: Archeological Field Work in Arizona
Fewkes. Archeological Trip to the West Indies
Fewkes. Expedition to the Pueblo Ruins near Winslow, Arizona.
Gillman. Mound Builders in Michigan
Habel. Sculptures of Santa Lucia Cosumalwhuapa, Guatemala
Haven. Archeology of the United States
Holmes. Development of the Primal Shaping Arts
Holmes. Evidence Relating to Auriferous Gravel Man in California.
Holmes. Fossil Human Remains near Lansing, Kansas.
Jones. Aboriginal Remains of Tennessee/
Lapham. Antiquities of Wisconsin
Mason. Guesde Collection of Antiquities in Pointe-a-Pitre
Mason. Lattimer Collection of Antiquities from Porto Rico.
Mayer. Observations on Mexican History and Archeology
Packard Pre-Columbian Copper Mining in America
Pickering On the Gliddon Mummy Case in the National Museum.
I also presented to the Congress a set of 66 photographs of American Indians, the series taken conjointly by the Bureau of American Ethnology and the National Museum, of the delegations of aborigines which visited Washington during the winter of 1903-4. The following tribes are represented:

**Tribes.**

- Sioux Yankton
- Sioux Sisseton
- Sioux Oglala
- Sioux Santee
- Iowa
- Muskogee Creek
- Sac and Fox
- Nez Perce
- Navaho
- Osage
- Yakima
- Onondaga
- Seneca
- Kickapoo
- Wenatchi
- Klamath
- Oneida
- Omaha
- Tuscarora
- Cayuga
Various excursions were made to points of interest, the principal one being to Schaffhausen, Switzerland, to visit the site of Dr. J. Muesch's recent explorations of ancient lake dwelling stations. On the 22nd I found it necessary to leave Stuttgart in order to meet Dr. A. B. Meyer of the Dresden Museum, consultation with him being a leading feature of my museum program. Although about to set out for a summer vacation in the Alps, Dr. Meyer consented to await my arrival on that day.

After leaving Dresden a number of cities in Germany, Holland, and Belgium were visited with a view to Museum study, and on August 12th, I returned to Paris and on the 25th sailed from Cherburg, en route to New York. Between the date of my arrival in Plymouth August 1, and my departure from Paris September 25, I visited and made studies of upwards of 50 museums, the observations made being embodied in a separate report to be submitted at a later date.
Dear Sir:

On Monday, December 27th, at 9:20 a.m., the members of the Organizing Committee of the Nineteenth International Congress of Americanists, with such past-officers of the Congress as may then be present in Washington, will meet in Room 42, United States National Museum, for the Initial or Constituting Meeting of the Congress, and your presence is earnestly requested.

The proceedings of this meeting will consist of (1) a brief greeting by the Chairman of the Organizing Committee; (2) the delivery of authority by an officer of the last Congress; (3) the election of the Permanent Bureau; (4) the definite appointment of honorary officers; and (5) resolutions and individual motions.

The officers elected at this meeting and confirmed at the Inaugural Meeting, which will be held the same day at 1:30 p.m. in the Auditorium of the United States National Museum, will include the entire Organizing Committee, with the President of the Congress, the honorary officers, and such additional members as may be elected. These will constitute thenceforth the Council of the Congress.

The Council will meet for a brief period every morning at 9:00 o'clock (in the room in which the Initial Meeting was held) and again immediately before the closing meeting on Friday, December 31, at 4:30 p.m.

Kindly note these details, particularly the dates, in order that further special notices may not be necessary. Your presence at these several brief meetings, and especially the Initial and Closing Sessions, is of urgent importance, for on these occasions
It may not be generally understood that there are two important and distinct scientific congresses meeting in Washington during the holiday season - the Nineteenth International Congress of Americanists and the Second Pan American Scientific Congress, and that allied with these congresses are more than a dozen other scientific bodies of national scope and distinction. Those affiliated with the Americanists comprise, besides Section I, Anthropology, of the Pan American, the American Anthropological Association, the American Folk-Lore Society, the American Historical Association, and the Archaeological Institute of America.

The Congress of Americanists is one of the oldest international scientific organizations in existence, having for over forty years held a high place in the estimation of the Old World as well as the New. Abroad, as well as in the American republics, it is patronized and encouraged by the national rulers and its sessions are usually honored by the presence of the President or monarch and of the leading officials of the government. It assembles at two-year intervals, alternately in America and the Old World, and has for its object the discussions of all matters that relate to American anthropology, archæology, ethnology, folklore, history, and linguistics.

The original date set for the Washington meeting or session of the Americanists, was October 5, 1914, but the war having just opened, it was decided to postpone the session until a more propitious time so that the official delegates and others from abroad could better attend; but the war continuing, a fully satisfactory time seemed to be far in the future and in con-
sequence, it was decided by the Organizing Committee to hold
the Congress here this winter, at the same date as the Pan
American Scientific Congress and other related societies. The
membership of the two congresses, being largely in common,
delegates would be enabled to attend both meetings, and a series
of joint meetings have been arranged.

The sessions for the presentation of scientific papers will
be held in the National Museum beginning Monday afternoon, Dec-
ember 27th, and continuing until New Year's Day. Special new ex-
hibits of high scientific interest have been arranged for the
meeting and will occupy the ground floor of the Museum.

The principal social events will be: A reception by the
Regents and Secretary of the Smithsonian Institution at the
National Museum on Wednesday evening, December 29th; a dinner
at the Cosmos Club on Thursday evening, December 30th; and a
reception by the Secretary of the Smithsonian Institution, as
President of the local branch of the Archaeological Institute
of America, in the Main Hall of the Smithsonian Institution on
the afternoon of Friday, December 31st.

Patron and
The principal officers of the Congress are:

Patron, The President of the United States.

President, The Honorable, John W. Foster, Ex-Secretary of
State; former Minister to Mexico and Russia; special plenipo-
tentary to Brazil, Spain, Germany; Ambassador on special mission
to Great Britain and Russia; member Hague Peace Conference; ex-
President, Washington Society of the Archaeological Institute,
etc., etc.
Honorary Presidents:

Dr. Charles E. Talcott, Secretary of the Smithsonian Institution.

Mr. Clarence B. Moore, Archeologist, Philadelphia.

Professor William H. Holmes, Head Curator, Department of Anthropology, United States National Museum.

Treasurer, Mr. Clarence F. Fosment, President of The National Bank of Washington.

Secretary, Dr. Alex midick, Curator, Division of Physical Anthropology, United States National Museum.

Sir,

I have the honor to inform you that you were elected an Honorary Member at a meeting held June 19th 1930.

Very Respectfully,

William Bowie
President

To

William H. Holmes
Washington

Acknowledged Sept 25th 1930

[Signature]
LIST OF VOLUMES

Volume I. Brief Biography, Positions Held, Loubat Prizes, Medals, etc., Societies and Clubs, Bibliography.

II. Explorations, Episodes and Adventures, Expositions and Congresses.

III. Part I, Yellowstone Explorations, 1872. Part II, Yellowstone Explorations, 1878.

IV. Part I, Colorado Explorations, 1873, 74, 75, 76 & 87. Part II, The Cliff Dwellers.

V. Europe 1879-80; Grand Canyon of the Colorado; Explorations in Mexico with Jackson and the Chains; Colorado with Powell and Langley, 1887.

VI. Aboriginal Bowlder Quarries, Piney Branch, D. C., Soapstone Quarries, Paint Mines, and Lay Figure Groups.


VIII. Cuba with Powell; Jamaica with Langley; Mexico with Gilbert and Dutton; California with McGee; Physical Anthropology, Hrdlicka, Current Work 1900.

IX. Chief Period, Bureau of American Ethnology, 1902-1910; Visits to Stuttgard and Chile 1908.

X. Transfer to the Museum June 10, 1910, the Guatemalan Trip, Powell Monuments, Seventieth Birthday Celebration, 1920.

XI. Director of the National Gallery of Art, 1920-1931.
XII. The Freer Gallery of Art.

XIII. Portraits, Smithsonian Institution.


XV. Masterpieces of Aboriginal American Art.

XVI. Various Articles on Art and the Art Gallery.

XVII. Personal.

XVIII. Personal.

XIX. Personal.

XX. Personal. Water Color Sketches.
Contents of envelope:

v. 2  Mrs. Holmes' letter to Dr. Abbot, and reply.
     Copy of Dr. Abbot's letter to Mr. Tolman.

v. 3  Excerpt of 10th annual report of the U. S. Geological
     (1 p.) Hoyden Survey of the territories for 1876. (1 p.)
May 17, 1935

Mr. Johnson

As we have back the original of my letter of May 3, the situation is now restored. Best

Dear Dr. Abbott,

Saw go party to

the theater in returning the

closed letter, but have been

a little ill. Personally, I think

it very fitting and fit. It was

just a comment of medical notice

insinuated by events of the last few

years. Soon I did think it

power they close to write about,

since you've given me lead,

for it's a pleasure to be in touch with you.

Sincerely,

Mary Holmes.
May 3, 1935.

Dear Mrs. Holmes:

I have your letter of April 22, and enclose herewith a copy of a letter to the Acting Director of the National Gallery of Art covering the situation as you present it.

I do not see why you should ever "run out of things to write about", for we always enjoy hearing from you.

I am glad that times are looking up a little in your neighborhood, and hope that improvement will be continuous.

With kindest regards,

Very sincerely yours,

[Signature]

Secretary.

Mrs. W. H. Holmes,
373 St. Clair Avenue,
Grosse Pointe, Mich.
May 3, 1935.

Dear Mr. Tolman:

You will recall that the heirs of the late William H. Holmes deposited at the Institution Mr. Holmes' memoir scrapbooks. At Mrs. Holmes' request, at that time I informed her that we would be happy to preserve them permanently if the heirs wished to part with them that way, but that if the heirs should wish to reclaim them at any time we would regard the memoir scrapbooks as deposited in the way of a loan subject to reclamation.

Mrs. Holmes writes me under date of April 22 that she would like this arrangement permanently and officially of record so that if at any time her children should feel it necessary to reclaim the books, there would be no difficulty as to ownership. You will please, therefore, preserve this letter in the files of the National Gallery for future reference.

Very truly yours,

[Signature]

Secretary.

Mr. R. F. Tolman,
Acting Director,
National Gallery of Art,
Washington, D.C.