

the most stupendous piece of masonry that I have seen, and one stands before it in awe and reverence.

Visitors to the Yosemite are sometimes entertained by the explosion of dynamite cartridges within the walls of the canyon, the echo from the various parts reminding one of reverberating thunder. Glacier Point is the best place for the production of this effect. The beauty of the valley is much enhanced by the verdure, everything excepting the bare rocks responding to the moisture and the warmth.

In returning from Yosemite we stopped a day at Lake Tahoe, which lies up in the mountains on the borderline between Nevada and California, fifteen miles by rail from Truckee, a station on the Southern Pacific between Ogden and San Francisco. The lake is called the Pearl of the Sierras and has a depth of two thousand feet and an area of two hundred and fifty square miles. Its elevation above the sea is something over six thousand feet and, owing to the varying depths, the water takes on many shades of blue and green.

In the northern portion of the Rockies there are innumerable fishing and hunting resorts, such as the Jackson Hole country, just south of the Yellowstone, the Big Horn Basin near Sheridan, Wyoming, the North Platte headwaters in the neighborhood of Saratoga, just south of Rawlins, Wyoming, the Black Hill streams near Custer and Spearfish, not to speak of the Gunnison country and many other places in Colorado.

THE PETRIFIED FOREST.

This year we took most of our summer vacation in New Mexico and Arizona, the principal places visited being the Petrified Forest and the Grand Canyon.

The Petrified Forests are in eastern Arizona and near the line of the Santa Fe. The two smaller forests are near Adamana; the largest of the three is near Holbrook. We visited the Holbrook forest, sixteen miles southeast of that town, and found it a place of surpassing interest. No one who has formed an opinion of the petrified wood from the few pieces seen at the various expositions can realize the immensity of the force, the size of the logs or the variety of coloring. In some places it looks like a logging camp and many of the trees seem to have been sawed into sections, the lengths proportioned somewhat to the diameter of the log. Thousands of pieces can be found showing the entire circumference of the tree, and varying in diameter from eight inches to two feet and in length from a foot to three feet—pieces convenient for shipping. Every institution of learning in the land ought to supply itself with one of these specimens for the benefit of the students. If the government, which has made a reservation of the forest, does not now permit such use of the specimens, it ought to do so, for these fragments of logs record a wondrous story of the earth's convulsions before man was born. Geologists tell us that this portion of the earth's surface was once submerged, probably by water from the Gulf of California, and that after the work of petrification was completed another convulsion converted this section into the arid plateau which we find there today. It is evident that these trees were at one time covered with a deposit of soil which is now being gradually washed away exposing the logs to view. As the washing continues new trees are disinterred and now acres added to the thousand or more now included in the largest forest.

One of the petrified trees is nearly nine feet in diameter and some show a length of two or three hundred feet. One tree, or what seems to be one tree, must have been more than four hundred feet high, but as the center of the tree is still covered by a deposit of soil the identity of the two sections is not clearly established. A section of one tree shows five branches and there is a stump which shows where the roots have been broken off. In what appears to have been a hollow in a stump there is something which looks like driftwood, petrified with the tree.

At the Chicago exposition in 1893 a visitor, after inspecting some of the specimens of petrified wood, innocently asked whether they were petrified by hand. The question brought a smile to the face of the man in charge of the exhibit and I smiled too, when he related the incident to me, but I recently heard Captain Jack Crawford, the poet scout, recite some verses which make the inquiry seem less ludicrous. Captain Crawford, after a visit to the cities of the east, wrote a poem contrasting the rugged natural beauty of

the western mountains with the handiwork of man and concluded each verse with the following:

"Like it? No. I love to wander
'Mid the vales an' mountains green,
In the borderland out yonder,
Where the hand o' God is seen."

I have thought often during the last few weeks of his description of the mountain country. "Where the hand o' God is seen—!" In the canyon of the Yellowstone, in the valley of the Yosemite, in the brilliantly colored logs of the Petrified Forest and more distinctly still in the Grand Canyon of the Colorado in Northern Arizona "the hand o' God is seen."

Of all the wonders of the west, the Grand Canyon, the mightiest and most impressive, is now the most accessible of them all to tourists. The Santa Fe railroad has a branch which runs from Williams to the very edge of the canyon. Here the Bright Angel hotel and others of less capacity supply the wants of the traveler and furnish outfits for a visit to the various points of interest. The Santa Fe is building at this place a hotel of one hundred rooms with all modern conveniences, which is to be run by the Harveys who have made the Harvey eating houses famous in the southwest. As the canyon is far enough south to be visited during all the months of the year it is destined to become a popular resort. The Bright Angel hotel takes its name from the beautiful stream which enters the canyon from the opposite side of the Colorado.

How can one describe this awful chasm? More than eight miles wide at the top, nearly three hundred miles long and almost a mile deep—its immensity, its beauty and its grandeur are inexpressible. The adjectives which one is accustomed to employ at the sight of other wonders seem feeble and insufficient. There are various points from which different views of the canyon can be obtained, the most extensive being Grand View, some sixteen miles distant, but the views from O'Neill's Point, only a few miles east of the Bright Angel hotel, and Rowe's Point, a like distance west of the hotel, answer every purpose. From the rim of the canyon at any of these points one looks upon a charging scene so modified by sun and cloud and shadow that it presents a different picture each time it is seen. The canyon is made up of a great many smaller canyons and of countless piles and peaks and pinnacles of rock. Some of the rocks look like frowning forts, some like castles and others like slender spires. The different strata of rock from the granites at the base, the limestone above it, the red sandstone surmounting this, the light sandstone still higher and the softer stone at the top—these rent by earthquake, raised by volcanic action and worn by erosion, assume an infinite number of shapes, of figures and of hues.

There is an excellent trail leading from the rim of the canyon to the muddy waters of the raging Colorado. During two-thirds of the descent, one is near the walls of the canyon and can measure the depth of each stratum of rock and note the seams where the strata meet. About thirteen hundred feet above the river a spring of pure, cold water breaks forth and the vegetation about it has given the place the name of the Indian gardens. The trail from this point leads over a sloping plateau to the edge of the walls of the river where a descent of some six hundred feet is made by a picturesque route down the precipitous sides of a granite cliff.

There are "sermons in stones" and the stones of this canyon preach many impressive ones. They not only testify to the omnipotence of the Creator but they record the story of a stream which both moulds, and is moulded by, its environment. It can not escape from the walls of its prison and yet it has made its impress upon the granite as, in obedience to the law of gravitation, it has gone dashing and foaming on its path to the sea.

How like a human life! Man, flung into existence without his volition, bearing the race-mark of his parents, carrying the impress of their lives to the day of his death, hedged about by an environment that shapes and moulds him before he is old enough to plan or choose, how these constrain and hem him in! And yet, he too, leaves his mark upon all that he touches as he travels, in obedience to his sense of duty, the path that leads from the cradle to the grave. But here the likeness ends. The Colorado, pure and clear in the mountains, becomes a dark and muddy flood before it reaches the ocean, so contaminated is it by the soil through which it passes; but man, if controlled by a noble purpose and inspired by high ideals, may purify, rather than be polluted by,

his surroundings, and by resistance to temptation make the latter end of his life more beautiful even than the beginning.

The river also teaches a sublime lesson of patience. It has taken ages for it to do its work and in that work every drop of water has played its part. It takes time for individuals or groups of individuals to accomplish a great work and because time is required those who labor in behalf of their fellows sometimes become discouraged. Nature teaches us to labor and to wait. Viewed from day to day the progress of the race is imperceptible; viewed from year to year, it can scarcely be noted, but viewed by decades or centuries the upward trend is apparent, and every good work and word and thought contributes toward the final result. As nothing is lost in the economy of nature, so nothing is lost in the social and moral world. As the stream is composed of an innumerable number of rivulets, each making its little offering and each necessary to make up the whole, so the innumerable number of men and women who recognize their duty to society and their obligations to their fellows are contributing according to their strength to the sum total of the forces that make for righteousness and progress.

Nevada vs Colorado

Nevada and Colorado, the former with a democratic governor and the latter with a republican governor, illustrate the difference between the orderly working out of reforms through law and the violent and lawless methods employed by the representatives of plutocracy. In Nevada John Sparks, a democrat, is governor. While he is a man of large means and interested in both mining and agriculture, he is in sympathy with the masses and anxious to improve the condition of the laboring men. The democratic and silver parties adopted platforms favoring an eight-hour day. They were successful, a fusion legislature passed the eight-hour law, the democratic governor signed the bill and the fusion supreme court declared the law constitutional. As a result Nevada has peace and progress. In Colorado the people demanded an eight-hour law and the law was passed, but the supreme court declared it unconstitutional. The people then proposed and adopted a constitutional amendment authorizing the enactment of an eight-hour law, but the republicans carried the state and while Senator Teller was elected by one majority on joint ballot the corporate influence was strong enough to prevent the passage of a law carrying out the constitution as amended. As a result of this disregard of the will of the people by the corporations Colorado is in a state bordering on anarchy and the republican officials are the ones who are ignoring the law. Peabodyism is the natural and legitimate outgrowth of that contempt for the rights and interests of the masses which is manifesting itself more and more among the plutocrats. Governor Peabody is the willing exponent of this element and his administration is giving the people a foretaste of what can be expected if organized wealth ever gets unquestioned control of the nation and carries out its purpose to employ the army for the subjugation of the wage-earners.

Democratic Nevada and republican Colorado present a striking contrast and make plain the difference between the democratic and the republican methods of dealing with the labor question.

Utilizing Man's Muscle

In *The Commoner* recently appeared an article written for the Chicago Tribune, showing the result of some experiments made by Prof. Atwater of Wesleyan University. The professor has been transforming man into electrical energy and finds that he is more perfect and wastes less power than any machine known. The experiments suggest a new use for muscle. If Edison will give us a good storage battery we may yet see men lighting their houses by manual labor and if the labor can be performed on a stationary bicycle the boys may, for a little while—until the novelty wears off—store light for the family by taking a few turns at the wheels. The head of the family can fit up two bicycles and have his daughter and her beau take enough exercise before dark to furnish light for the parlor during the evening. Now, if the professor will give us a plan for transforming into fuel the energy expended on golf, lawn tennis, football and baseball, we will soon be independent of the oil trust and the coal trust.