

REPORT

OF THE

ACTING SUPERINTENDENT

OF THE

SEQUOIA AND GENERAL GRANT NATIONAL PARKS,

IN THE

STATE OF CALIFORNIA,

TO THE

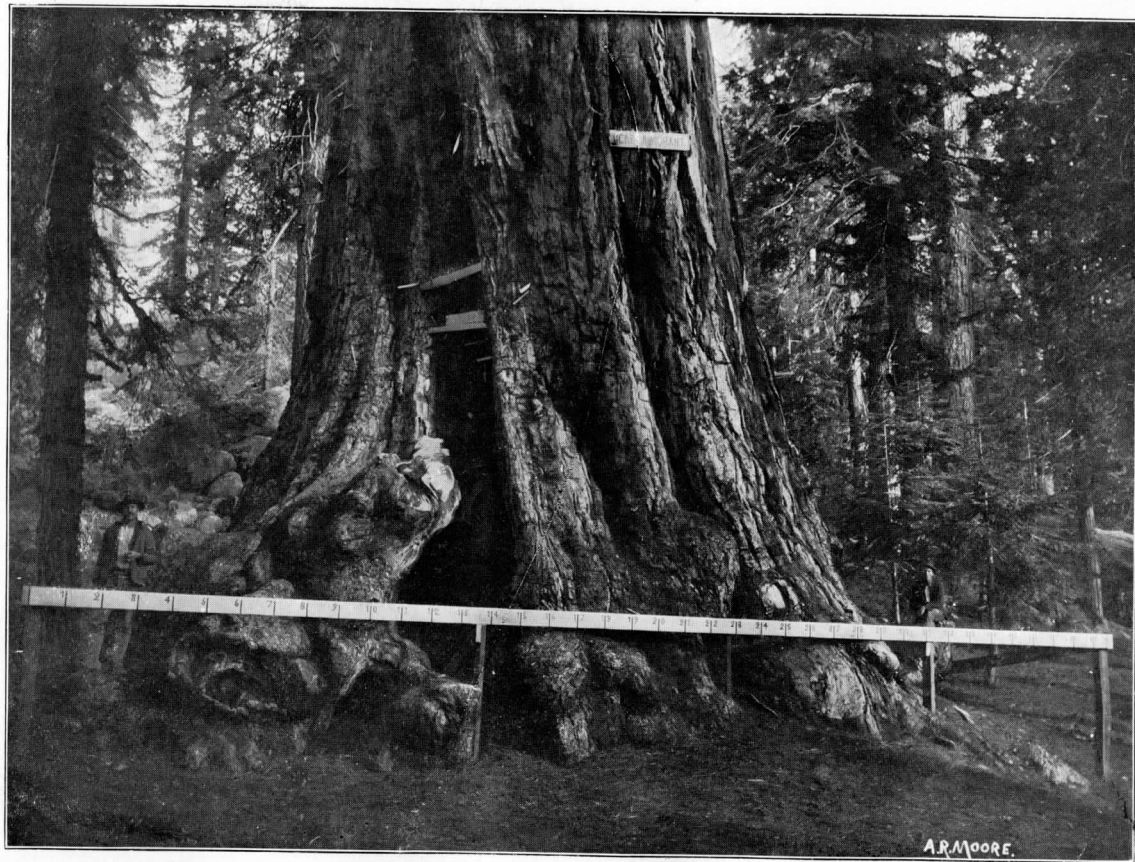
SECRETARY OF THE INTERIOR.

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1901.

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WASHINGTON:  
GOVERNMENT PRINTING OFFICE.  
1901.



GENERAL GRANT TREE



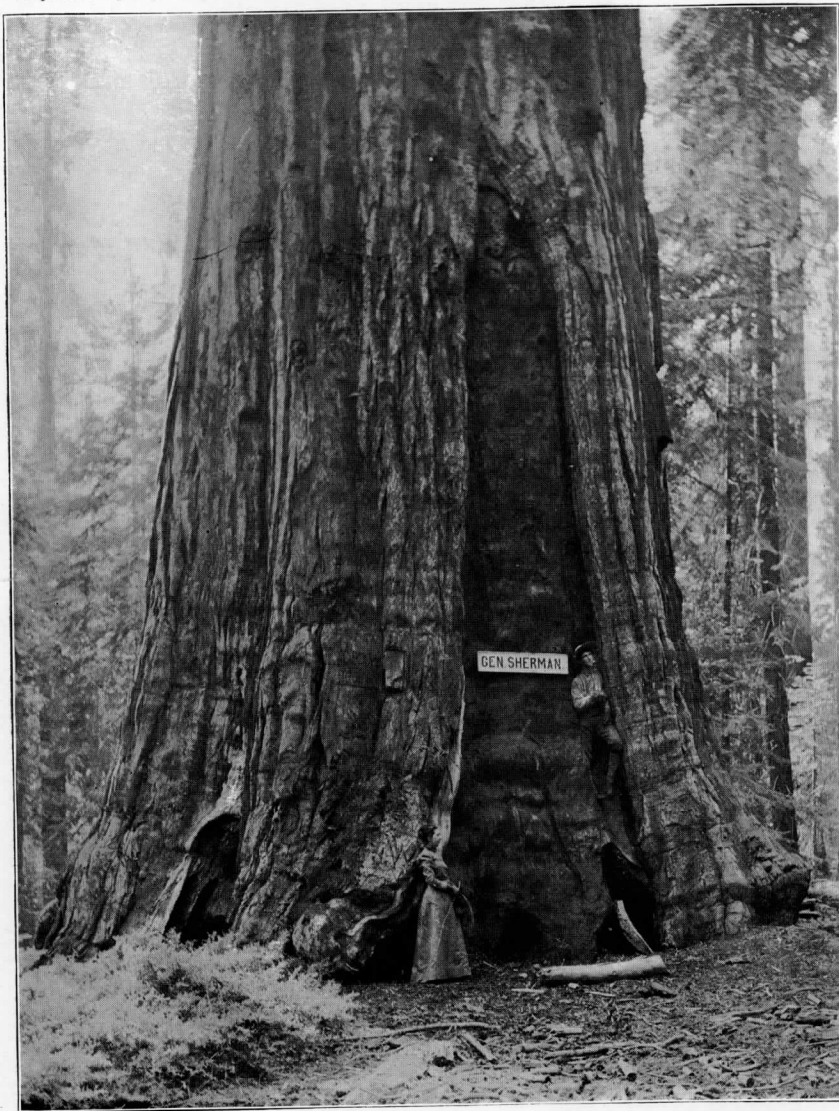
GENERAL WASHINGTON TREE.

Rept. Acting Supt. Sequoia and Gen. Grant National Parks, 1901.



THEODORE ROOSEVELT TREE.





GENERAL SHERMAN TREE.

## REPORT

OF THE

ACTING SUPERINTENDENT OF THE SEQUOIA AND GENERAL GRANT  
NATIONAL PARKS, CALIFORNIA.

OFFICE OF THE ACTING SUPERINTENDENT,  
SEQUOIA AND GENERAL GRANT NATIONAL PARKS,  
*Kaweah, Cal., October 13, 1901.*

SIR: I have the honor to report as follows on the conditions obtaining in the Sequoia and General Grant national parks during the present season of 1901.

Troop I, Fifteenth Cavalry, was directed to march from the Presidio, San Francisco, Cal., on June 3, 1901, and act as guard for these parks. The command arrived and went into camp at Kaweah, on the Hopping range, on June 19.

Reconnoissances of trails and detachment camp sites were made as rapidly as possible, and one detail sent under Park Ranger Britten to open up the South Fork trail to Hocketts Meadows. It was desired to make the main camp as near as possible to the work on the Giant Forest road, and after personal inspection I selected the bluff overlooking Old Colony Mill and the canyons of the Kaweah and East Branch of the North Fork. This is a beautiful camp site, except that water has to be hauled from the spring at Old Colony Mill, about 500 feet below.

The detachments were established July 1, a large one at Hocketts Meadows and one each at Weishers Mill, Halstead Meadows, and the General Grant Park. A fifth detachment was then left in charge of the supply camp at Kaweah, and on July 9 the main camp was established in the mountains.

These detachments by diligent patrolling have been able to keep most of the park under close observation, and weekly reports of each have kept me informed of conditions. The detachment commanders were kept permanently throughout the season and the men changed as circumstances made advisable.

A target range was constructed by soldier detail at Halstead Meadows, having two targets in the butt, and all ranges to include 1,000 yards. These, however, were over wet, overflowed ground, and the range itself being in a narrow canyon the light was poor at best, while evaporation made it worse. The water also made it impracticable to have any skirmish running. The whole troop had practice to include 600 yards, but I can not recommend the range to my successors. When the troop can camp within practicable distance, Crescent Meadow, or Long Meadow, if drained, should make a fair target range.

## CAMP SITES.

The main camp should be as near the Giant Forest as practicable, and perhaps within it when the road is completed. The extension of the road now makes it practicable to camp next season at the Marble, where very desirable sites will be found, lacking only an outlook to equal the one above Old Colony Mill. As soon as the road opens up the Giant Forest a permanent camp site should be selected and suitable buildings erected for the accommodation of the troops; at least a kitchen, bake oven, and storehouses. In the forest these could be readily constructed by soldier labor. The same are needed at the supply camp at Kaweah. Here the site is necessarily on private property, and the Government is thus dependent on private good will for camping privileges. A permanent site should be secured and buildings erected.

## GIANT FOREST ROAD.

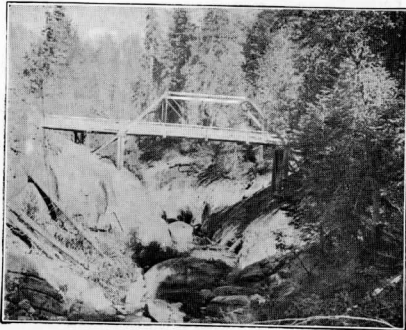
The first point of interest in the park is the Giant Forest of Sequoias. To make this accessible, a fine mountain road is now building in extension of the country road from Visalia.

For this purpose \$20,000 has been appropriated and expended during the two seasons past, and with it the Old Colony Mill road has been opened up and made passable, a little over 5 miles of new road built, and a well-constructed Pocett truss bridge placed across the Marble Canyon at a picturesque spot, 50 feet above the water, in a narrow, precipitous gorge.

The survey for the extension of the road into the forest is now progressing. The route out of the canyon is picturesque, and will contain no grade greater than 8 per cent. It will raise the crest and enter the forest near the Moro Rock, thence pass by Crescent Meadow, which will furnish fine pasturage for tourists' horses, through the best portions of the forest to the General Sherman, the largest tree there. Between the road and Moro Rock stands a lone Sequoia, considered the most perfect specimen, though not so large, which I have named for His Excellency Theodore Roosevelt, President of the United States. Farther on the road will pass near the beautiful trees named, respectively, Abraham Lincoln and William McKinley.

The direction of the road is such as to admit its extension to Kings River Canyon in case Congress sees fit to include that in the park.

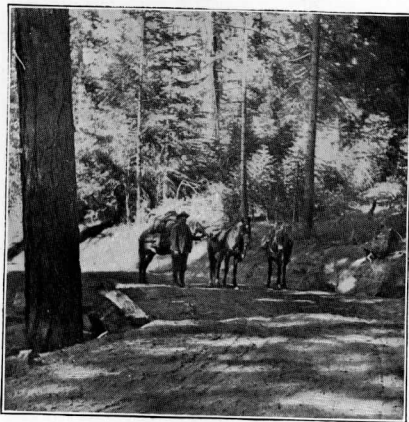
When first assigned to duty in the park, I communicated with Mr. Taylor, of Kaweah, who had been foreman on the road work under my predecessor. Upon his recommendation I directed the necessary expenditure of not to exceed \$600 in opening the Old Colony Mill road, made impassable by the winter storms. This was completed satisfactorily by the time of my arrival. Inspecting the 3 miles of road built last year, I found it in very bad condition, due to the retaining walls having gone out below and land and rock slides having come in from above. Further, the failure to provide for drainage, especially at gulch crossings, had allowed the wash to make great havoc throughout. I therefore turned my first attention to the repair of this road, putting in substantial stone culverts at the gulch crossings, widening the roadway throughout, and building turn-outs on the prominent points. I had thus repaired about 2 miles of the road when I decided that the rest of the appropriation would be necessary for building the road on to the Mar-



THE MARBLE FORK BRIDGE.



THE MARBLE FORK BRIDGE.

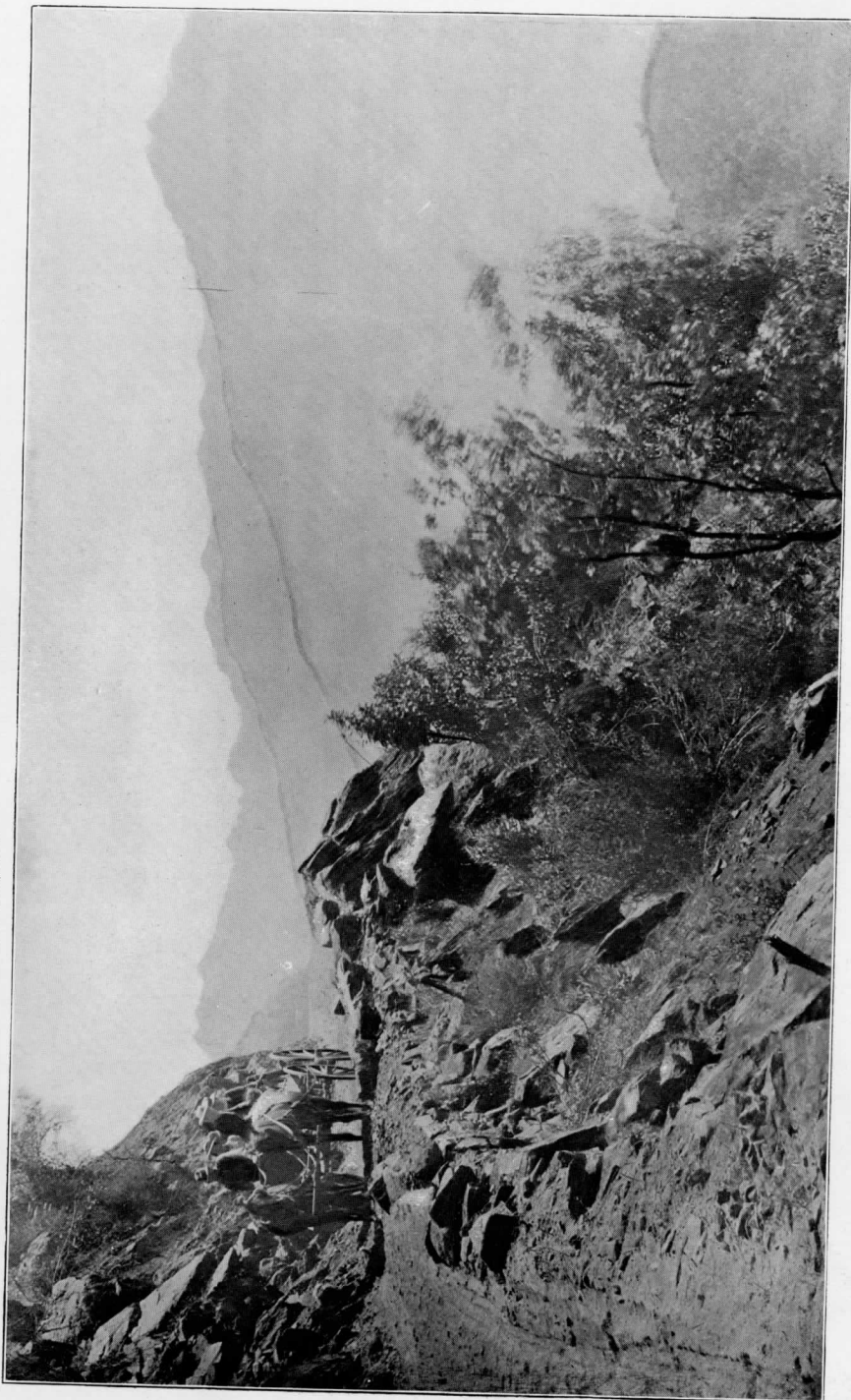


SCENE ON THIS YEARS' GIANT FOREST ROAD.



THE MARBLE FORK BRIDGE.





POINT LOOK-OFF, ON THE GIANT FOREST ROAD.

ble Canyon and putting the bridge across it. All energies were then bent to the extension of the road, and it was completed in less than a month, a distance of a little over 2 miles—a wide roadway, accurately graded, sloping toward the bank, where a gutter carries off all surface to small water culverts that discharge it under and below the road. There are 26 of these small culverts and 3 stone ones at gulch crossings in these 2 miles, as well as much rock work, one particularly hard rocky point having been rounded.

This new road was constructed at less cost per mile than was required in the repairing of last year's road, as here the work could be largely done by teams instead of hand.

The San Francisco Bridge Company had the contract for the bridge designed last year and completed it October 8, when I inspected and approved it. The best of timbers have been used, the foundations are solid native rock, and the workmanship good. The wings of the bridge were bent to meet the roadway on the sides of the canyon, so the whole sweep makes a substantial and attractive feature of the road. I have had every fourth plank of the flooring spiked, designing to have the two contiguous planks taken up during the winter and laid on the spiked one. This will prevent the snow banking up 15 or 20 feet, as it would on a solid flooring, and save the strain on the bridge. Next spring the loose planks can be relaid and held in place with one or two spikes. I recommend that this be done each season.

The opening of this Giant Forest road would appear to be the important consideration now, and from close study of the situation and this season's experience, I am convinced that the following steps should be taken: First, it should be put in permanent charge of one man and not left to chance detail of an officer who may never have seen a mountain road (as in my case); who comes late in the season and quite ignorant of all conditions, so that much time must be lost in studying the situation before organizing the work; who must learn all the men he is to work with, and who even then makes expensive mistakes while he learns the art of mountain-road building, only to turn his work over to another inexperienced man the next season. Then this man should be here to organize his working force by May 1. Great saving in time and money can be made by working the ground when moist, before the long dry season has made it hard and unworkable. If the work is to continue in charge of an army officer, let him come on ahead of his command.

The first work to be done, during May, while the snow still makes work impossible higher up, is to put culverts on the Old Colony Mill section of the road, and properly drain it. Until this is done it will wash out each winter, as last, and each spring require, as this, about \$500 for necessary repair. Further, there must be about twenty-five turn-outs built on this section of the road. There are practically none now for its 9 miles, a dangerous condition, as it is very narrow, often causing an hour's delay, hard work, and no little danger when teams meet. This was exemplified time and again this season and is a condition that ought not to exist on a road designed for the pleasure of tourists. The present expenditure of \$20,000 on the 5 miles beyond this, would seem to justify the small expense necessary to place these 9 miles, also within the park, in a safe and permanent state. For this part of the work \$2,000 are needed.

By the time this work is done the repair of the remaining mile of

last year's road can be taken up. This rounds a rocky point, where a vast amount of blasting and wall laying must yet be done to render the road safe and stable. This will cost not less than \$3,000. It also contains another stretch in and out of a gulch farther on, where \$1,000 must be spent in widening and retaining the road. This will perfect the road to the Marble, excepting a few simple additions that I will point out in a letter to my successor.

By this time work can be taken up on the extension beyond the Marble, and with such an organization as I had for about six weeks this season from 2 to 3 miles can be built per month, and with the best economy. This should open the road as far as the forest in July, in time for the tourists that season. The whole extension should be about 6 miles long and will cost about \$20,000.

#### TRAILS.

The so-called trails of the park are but little more than cow paths, and in fact have their foundation therein. Furthermore, it has been the practice to go round a fallen tree when met with, and so from year to year the loops increase, till the traveler wonders why. I am attempting to straighten the main trails, and look for a marked improvement now that the Department has approved my request and added a second ranger for the park. Two can do much where one will do nothing. I append my order of instructions to these men, to which attention is invited, and trust that my successor will find the trails more satisfactory. The first trail constructed this season was from the end of the new road, across the ford in the Marble Fork, and to Round Meadow in Giant Forest. This made the forest accessible for saddle and pack animals, and several tourists have taken advantage of it during the season.

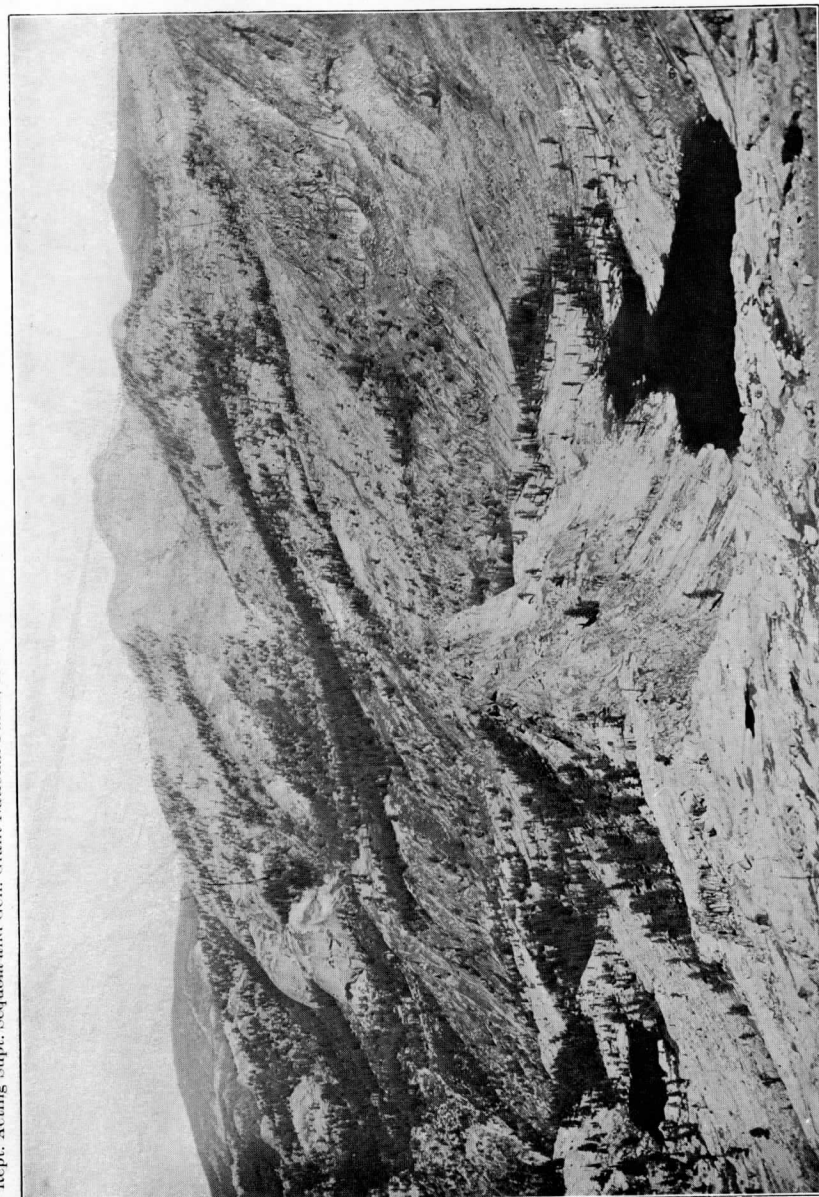
I soon found that the one point of interest beyond the Giant Forest was the Kings River Canyon, and so made a proposition to the Visalia Board of Trade, to extend this trail on past the General Sherman tree to the north line of the park, if they would continue it from there into the canyon. This was accepted and the trail is just completed; so next season's tourists will find a well-constructed trail direct to the canyon. My portion of it was done by volunteer soldier work, under Corpl. L. A. Dunbar, and by Ranger Britten.

Another important trail has been put in by Mr. Britten, cutting off about forty-five minutes time and some bad climbing on the trail, from the Forest to Alta Meadow and Panoramic Point, which is considered as furnishing the finest views in the mountains and passing within a few hundred feet of the top of Panther Peak, a lookout of no mean value.

#### CAVES.

By direction of the Secretary of the Interior I have personally inspected the Clough and Palmer caves. Both are in the limestone belt that traverses the park.

The Clough Cave is in the rocky side of the canyon of the South Fork, five hours from Kaweah post-office. A good trail will be opened to it by the beginning of next season. In formation it is but a tunnel, varying in width and in height from 3 to 12 and 15 feet. The first 100 feet are perpendicular to the face of the cliff, the floor practically



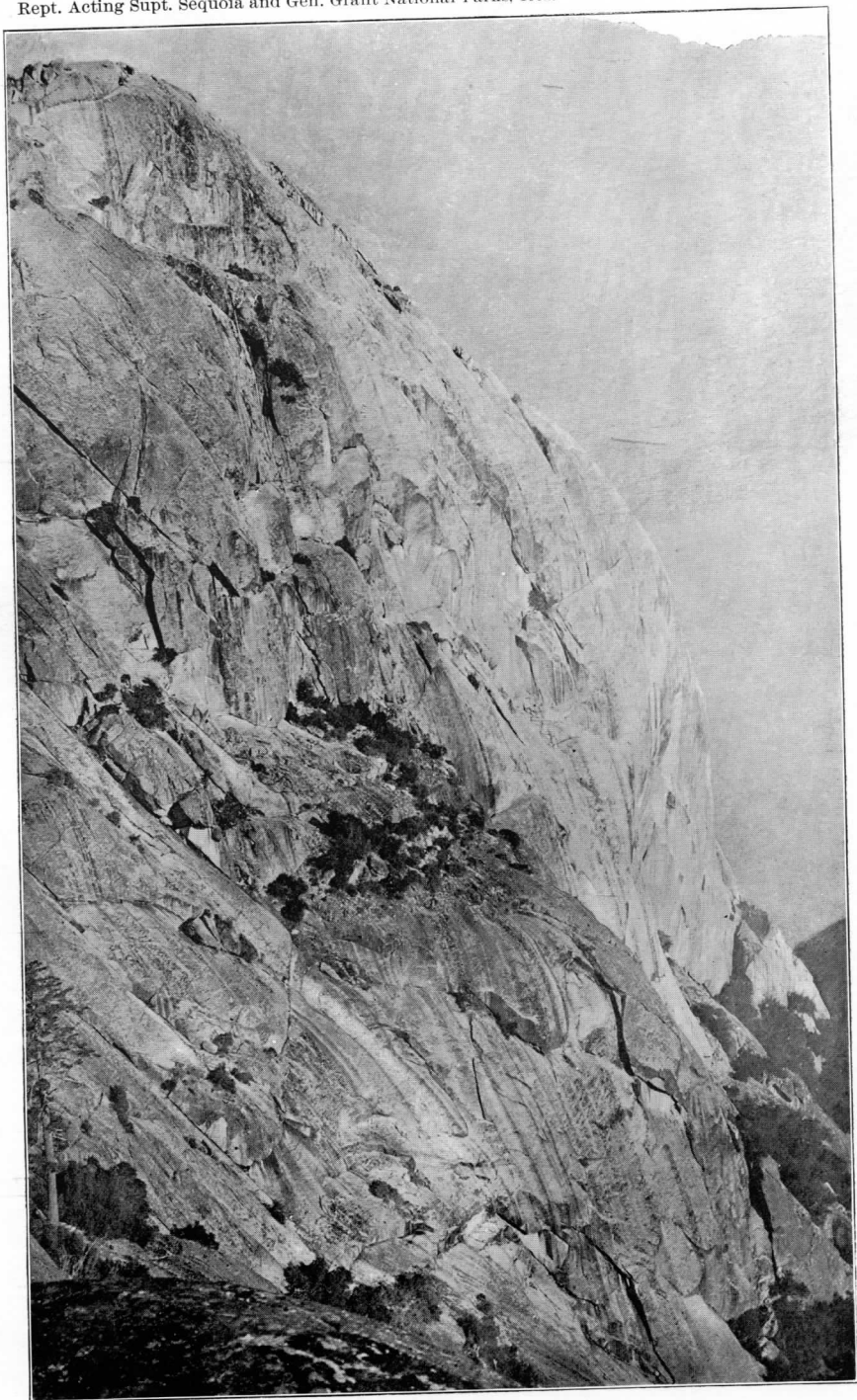
Rept. Acting Supt. Sequoia and Gen. Grant National Parks, 1901.



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ALTO PEAK FROM NORTHEAST.



MORO ROCK FROM HILL WEST. SEE MORO ROCK FROM POINT LOOK-OFF.



NORTH DOME AND LUMACT MEADOW, KING RIVER CANYON.  
Thirty-three horses may be counted, with glass, in the meadow.

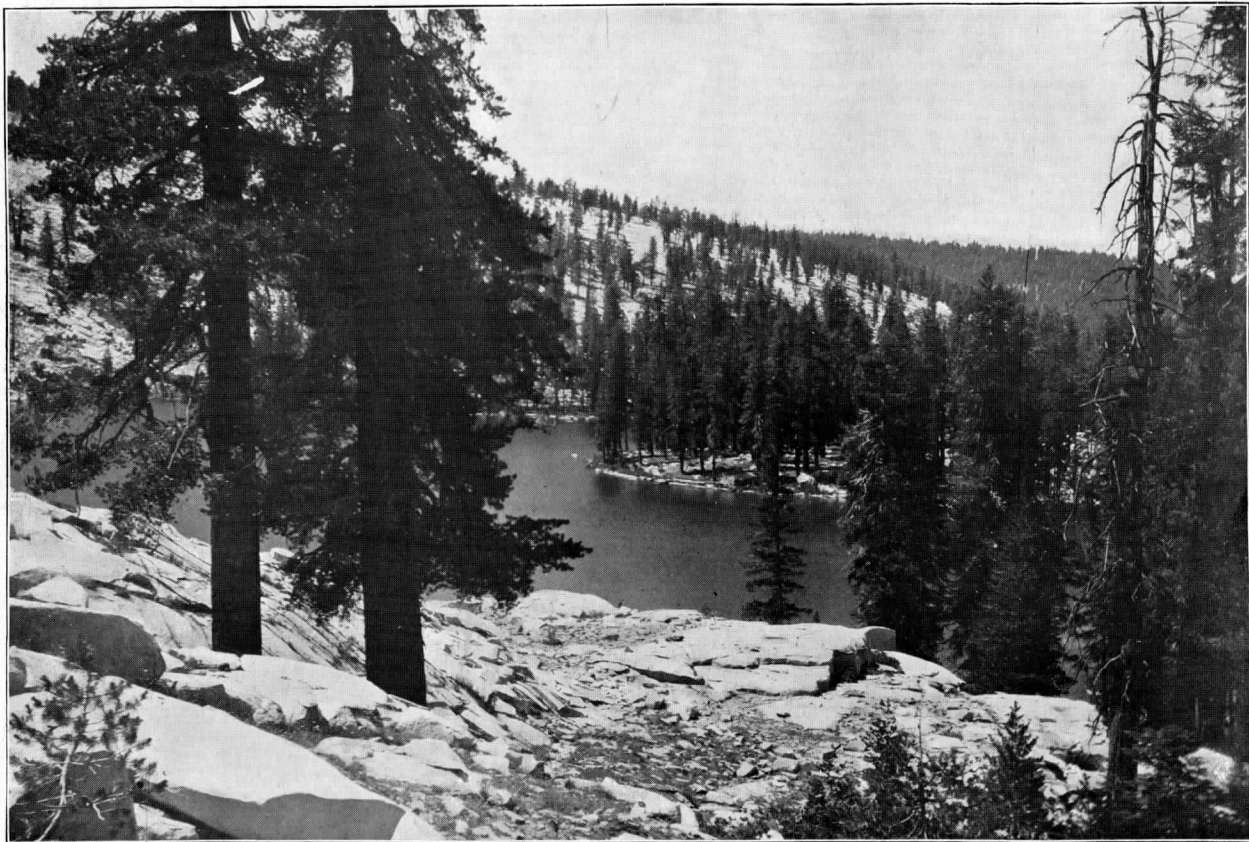
Rept. Acting Supt. Sequoia and Gen. Grant National Parks, 1901.



EAST SIDE OF BUCK CANYON, BELOW MOOSE LAKE.



Rept. Acting Supt. Sequoia and Gen. Grant National Parks, 1901.



LAKE ON SHELL MOUNTAIN.



level. It then turns to the left and parallels the face for about 400 feet, the last 150 being on a plane some 8 feet higher and ending in a circular loop 100 feet in circumference.

This has been a beautiful cave for its stalactites, stalagmites, and pillars. But these have been broken by the hundred, while all are blackened by the smoke of the pine torches used in its exploration.

I consider the beauty of this cave too much impaired to justify the expense of its proper protection. An iron grating and gate could, however, be easily put in, when it could be entered only in the presence of such guards as the Department saw fit to furnish with keys.

The Palmer Cave is situated high in the mountain range to the northeast of the Clough, and about six hours from Kaweah on the old Hockett trail. This is quite different in formation, being a large cavern in the ground with an irregular opening in the roof about 10 by 20 feet. Through this we were lowered by rope tackle, a sheer drop of 60 feet, into the end of a vaulted cavern about 150 feet long, the floor sloping rapidly down away from the entrance, the roof perhaps 50 feet high at its highest, the sides very irregular, due to caving off of large rock masses, the greatest width being about 50 feet. Through a low opening well back and on the right side one climbs through into another large cavern, generally circular in shape, 100 feet in diameter, and about 30 feet high. Here are some beautiful stalactites and stalagmites and one noticeably beautiful pillar. Beyond this is yet another room, long, narrow, and of no particular interest. The beauties of this cave are unimpaired and the specimens quite perfect. Apparently it has been visited by but few parties, due to the hardship now attending its entrance. It is well worth preservation, and I recommend that an iron ladder be placed to admit easier access, with an iron grating, trapdoor, and key to prevent unauthorized visiting.

Now that the cave question is exploited, I am hearing of other caves but little known. I would recommend that a thorough investigation of these be made next season when time will admit.

#### FENCES.

Each of the small mountain meadows on main trails in the park should be fenced for the accommodation of tourists, whose stock must depend on grazing for feed. This could be done at little expense, as the posts could be gotten by having down timber worked up on shares. This timber should be cleared up in any event to lessen the danger from fires.

The county road along the North Fork, connecting with the Giant Forest road, is now obstructed by gates at farm lines, a great annoyance to travelers. I have arranged with the road commissioner at Visalia to have these gates removed and the road fenced during this winter, allowing the fence posts to be made from specified down trees now encumbering the right of way on the Giant Forest road, these posts to be all taken out under my supervision and before my departure. The road commissioner also promises to repair as far as possible the county roadbed, and especially to remove the one bad pull on the whole road—the hill at "Progress." I recommend that the park line be fenced where it crosses the South Fork canyon, with a gate on the trail. A mile and a half will close this entrance to stock and remove the present temptation of the many acres of fine pasturage on Bald Mountain.

## PARK REGULATIONS.

The sheep have gone out of the country and that annoyance seems to be past. The stockmen have nowhere attempted to enter the park unlawfully, and but few hunters have been reported, and these from signs, none having been caught. In fact, it seems to be the spirit of the community to observe park regulations, now that it is believed that the Government is interested in developing the park.

## FIRES.

During the season five forest fires have been controlled and extinguished, two in the Giant Forest itself.

The danger from fires will increase from year to year, due to the present accumulation into a fine mat of grasses, ferns, and underbrush heretofore eaten by the cattle. Furthermore, the forests would look better with this removal, and I recommend that stockmen be allowed to graze their herds in the park, under the direction of the acting superintendent, unless it is found that this materially lessens the storage capacity of the mountains for the summer supply of water for irrigation. The sheep did the damage, leaving the country bare behind them; but it is not so with the cattle.

## GAME AND FISH.

It has not been unusual to see a deer or two in riding through the park, and they are apparently becoming more tame in the absence of hunting. Black and brown bear are also numerous, while grouse and mountain quail are very plentiful and tame. Many streams are already stocked with trout and Mr. Broder promises to stock Wolverton Creek this season. Tourists can always get fresh trout to eat, caught in a few moments.

## PATENTED LANDS.

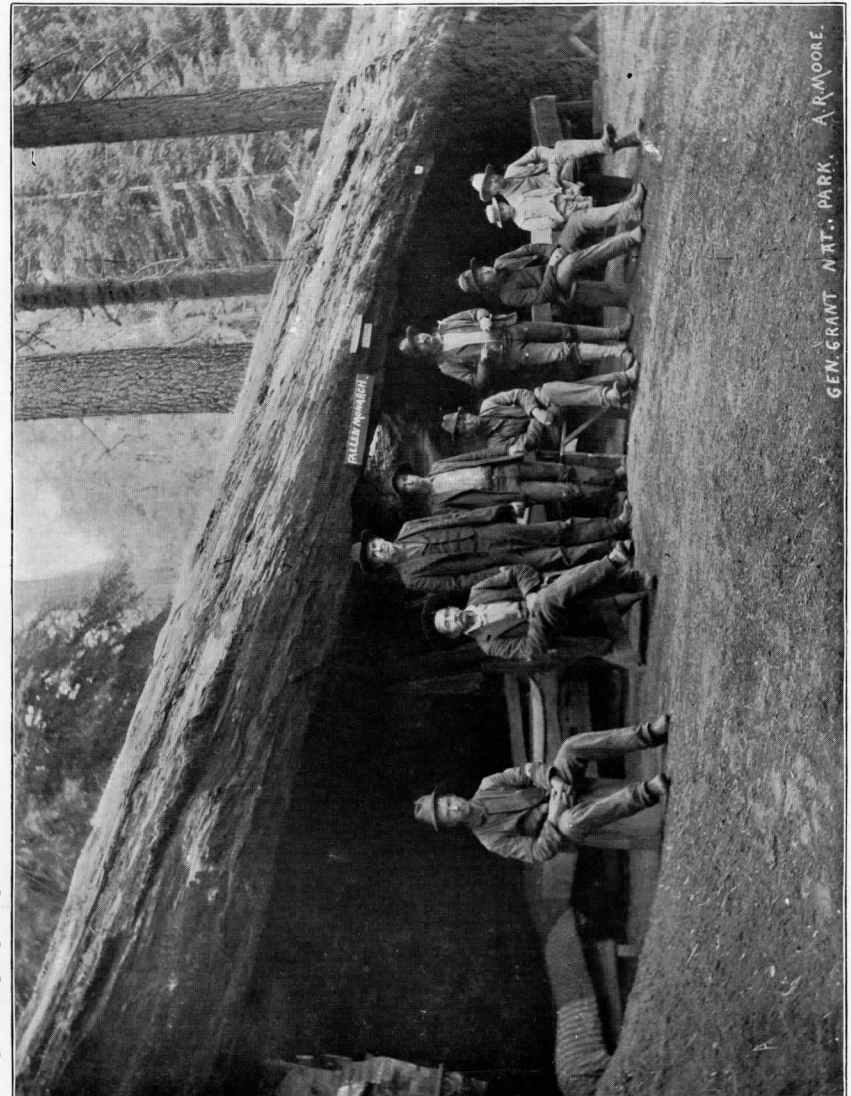
There are several private claims within the park, and even within the Giant Forest. This is a wrong condition if it is really designed to make a national park of this tract, and action should be taken to absorb them in the public ownership. I am told by citizens here that several of these claims could not hold good under a strict reading of the law, especially some classed as "swamp and overflowed land." This information would appear to justify an official investigation by the Department and I recommend that the matter be taken up at once.

## TELEPHONE.

It is almost a necessity that the main camp of troops up in the mountains be connected by wire to the line at Three Rivers. This would also be of great value to the road work and to business men who may wish to visit the park, and I recommend that proper steps be taken to put in such a line.

## GENERAL GRANT PARK.

This park is but 2 miles square and contains but the one attraction of 2 Sequoia groves, one, however, containing the General Grant tree. It is distant two days from the supply camp at Kaweah.



Rept. Acting Supt. Sequoia and Gen. Grant National Parks, 1901.

GEN. GRANT NATL. PARK. A. R. MOORE.

A CALIFORNIA LODGING HOUSE.

During this season \$2,500 have been expended in improvements. The park has been completely fenced, the top rail put on last season having been removed (what little was left of it), and used for post braces. This rail held the snow and was responsible for the breaking down of the fence during the winter. It was replaced by another strand of wire.

The "Stevens grade" was sufficiently repaired to admit the getting of teams into the park, but is still a poor and dangerous road, one person having been killed there this season in an accident due to the bad road. It could, however, be replaced by 2 miles of good grade at a cost of \$4,000, and I recommend that this be done next season.

Within the park a good road has been constructed from the entrance,  $2\frac{1}{2}$  miles, through the first and to the second Sequoia grove, passing close to the General Grant tree and lacking but a half mile of connecting with the Converse Basin road. This can be completed for \$300, and I recommend that it be done.

One thousand dollars has already been expended on cleaning up the rubbish and down timber in the Sequoia grove, thus protecting the trees from fire and adding to the appearance of the park. This costs about \$50 per acre, and there are about 40 acres yet to be cleared. I recommend the continuance of this work and the appropriation of \$1,000 therefor.

As to guards, it is an unnecessary expense to send soldiers there, now that the park is fenced. Further, depending on a soldier guard leaves the park unguarded for eight months of the year, and souvenir hunters have left traces of their presence during this time by taking a great many chunks of bark from the General Grant tree. If this spoliation is continued the tree will be killed in a few years.

One man can guard the park now as well as 10, and if there permanently, much better. More than this, he could keep the fence and road in repair and do much toward clearing up the ground about the trees. I have made special recommendation that such guard be established and the troops relieved in future, and trust that favorable action will be taken thereon.

In making the above recommendations I have been guided by what I understand to have been the policy for the park in the past, and I believe them for the best interests of that policy. But I regret that the Department has not been able to send a representative here this season to go over the ground with me before I submitted this report, that the future policy of the park might be clearly understood and a scheme of development adopted, on which I could have based broader recommendations.

If it is the design only to preserve the Giant Forest I would drop all those southern portions containing nothing to justify the name of park, and confine attention to the forest proper, completing the Giant Forest road and standing on that.

If, on the other hand, it is desired to combine the wonders of nature in this section into a national park to be in the same class with the Yellowstone and Yosemite, this, too, can be done. The canyons and mountains are here as grand, perhaps, as any in the world. Within reasonable distance of the Giant Forest is a central feature, and separated only by rugged, picturesque country, of no industrial value but as a reservoir for valley irrigation, are the Kings River and Kern River canyons, reported to be the deepest in the United States, and Mount Whitney, the highest mountain.



This will require the personal exposition in Washington of some representative man or committee of men who have first investigated the whole situation here on the ground and digested a complete plan of development, and in my judgment the natural features here more than justify the Department in taking such a course.

Very respectfully,

L. C. ANDREWS,  
*Captain and Quartermaster, Fifteenth Cavalry,*  
*Acting Superintendent.*

The honorable the SECRETARY OF THE INTERIOR.

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INSTRUCTIONS TO PARK RANGERS.

In addition to your regular duties as guards you will do the following work:

First. Watch the Giant Forest road as to drainage and by timely care keep it from washing out during the winter storms. Then, as weather admits, work out the following trails for future use:

(1) A trail from near Burdicks, on the Old Colony Mill road, to open up the Black Oak Spring country, and making a circuit, connect with the Mineral King trail at or near Halstead Meadows. Total distance, about 15 miles.

(2) Repair the South Fork trail to Hocketts Meadows, making an offset to Cloughs Cave, with an easier approach to the cave itself, as explained personally to Ranger Britten. Then, as weather admits, continue this trail through Hocketts Meadows via Tar Gap to Weishers Mill.

(3) A trail, mostly repair work, from the Sherman Tree via the Panther Peak cut-off into the Alta Meadows country.

During the winter, when storms prevent outside work, prepare well-printed, clearly expressed signboards and next spring place them at all important trail crossings, indicating directions and distances by time scale for ordinary travel.

For example: One large sign to be placed at the park line on the Giant Forest road, as follows:

Sequoia National Park.

Giant Forest road.

To Cedar Spring, 1½ hours.

To Old Colony Mill, 2½ hours.

To Marble Fork Bridge, 3½ hours.

To the Giant Forest, 5 hours.

Also signs to mark each point of interest on this road. The paint for these signs has been purchased; the lumber is hereby authorized and will be paid for next season.

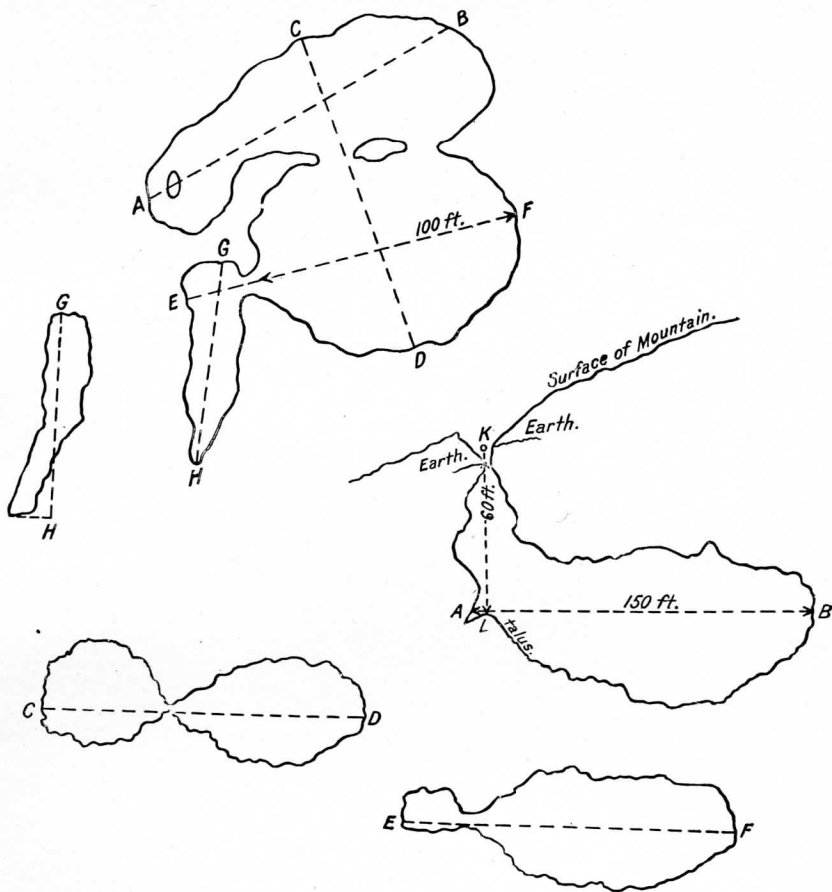
The two rangers are issued the following tools for their exclusive use and for which they are responsible: One crosscut saw, 2 axes, 2 brush cutters, 2 iron wedges, 1 iron sledge, 1 mattock, 1 pick, 1 short and 1 long handle shovel, and 1 crowbar.

The rangers will habitually work together, especially on trail and road work. It is designed that the main trails be straightened and widened and made trails, instead of rambling cow paths as at present, and attention will be paid to bushing out overhead and on the sides, as well as to making a good trail bed. It is assumed that my successor will be able to ride main trails next season without being brushed from the saddle or traveling 5 miles unnecessarily in order to go 2 miles.

By order of

L. C. ANDREWS,  
*Captain and Quartermaster, Fifteenth Cavalry, Acting Superintendent.*

Rept. Acting Supt. Sequoia and Gen. Grant National Parks, 1901.



HORIZONTAL PROJECTION OF THE PALMER CAVE, SEQUOIA PARK, AND FOUR VERTICAL SECTIONS ON LINES INDICATED.

Tackle rigged at K; landing place on talus at L.