YOSEMITE NATURE NOTES

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YOSEMITE NATURE NOTES

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AMONG THE BIG TREES IN THE MARIPOSA GROVE

By William C. Godfrey

Editor's Note — Ranger William Godfrey of the National Park Service has spent many months in the Mariposa Grove of Big Trees. Great Sequoias have held sheltering arms over his head. Yet it is he who has been the real protector, ever alert for their age-old enemy, fire, and for those vandals among humans who would deface the majestic trunks or carelessly grind tender seedlings into the dust. Ranger Godfrey has come to know many of the giants in an intimate way. To him they are individuals of personality.

SCARS OF THE GIANT SEQUOIA

While all of the mature trees of the Mariposa Grove have been burned well into the heartwood at the base of their massive trunks, less than a dozen in the class with the Grizzly Giant and the Faithful Couple display the great endurance of the Sequoia gigantea to withstand the ravages of its greatest enemy—fire.

Most of the trees of a younger generation will have healed over the scars that in numerous cases have affected but one side of the trees, and again assume a natural cylindrical trunk long before their more ancient neighbors can spread a new cambium growth across the burned surface that in some cases has exposed 80 per cent of barkless circumference.

THE CORRIDOR TREE

The most prominent trees in the Mariposa Grove are more severely burned at the base, probably because they have witnessed a greater number of fires during the centuries before the less affected trees sprouted into existence. For example, the Corridor tree in the lower grove has been so badly burned at the base that six pillars have been formed by freakish burning of fires which have eaten between these pillars and the heart wood. One may walk with ease through the spacious chambers between these pillars and around the solid heartwood which remains to help support the great weight of the trunk.

The Corridor Tree

Located on the inside of a sharp turn along the old stage road and considered a curiosity during early days, the Corridor tree seems to have lost popularity since construction of the new road, which runs far enough away so that one may see this tree only by walking a distance of 100 yards to the right from where the road passes the famous old Fallen Monarch.

The Corridor tree, measuring 68 feet in circumference at the base, has been so badly burned that but 35 feet of living bark has been spared to heal over the great scars which extend upward to 30 feet above the roots. Though scarred for life, this tree will never cease to be a curiosity, as the arrangement of corridors when completely healed over with new bark will resemble huge rounded trunks as though six trees had grown together into one great tree.

THE MASSACHUSETTS TREE

The Massachusetts Tree

Even the longest lived things on earth must inevitably face all-conquering death. The Massachusetts tree has most recently dropped from the ranks of the old guard sequoias in the Mariposa Grove

Throughout the centuries during which the Massachusetts tree stood on the ridge that affords a view across the line marking the south boundary of the grove it must have been the overlord of those other great trees of the same generation, with positions not affording such scenic diversion.

The act which set aside the Mariposa Grove of Big Trees as a public reserve in 1864 came too late for this old veteran. Already it had suffered so much injury from fire, disease and human folly that little could be done to save it from the fateful climax which resulted

in its crash to the ground during the early spring of 1927.

Two-thirds of the bulk of its great base had been eaten away by recurrent fires, forming a fire scar in its heart which tapered toward the top, terminating at a point 51 feet above the roots. It was evident that the already weakened root system could not for long withstand the abuse caused by increasing automobile travel, for in the early '70s, a road had been constructed across the few remaining roots which served as feeders and anchors against gravity, which never ceases its struggles until its craving has been satisfied.

The Massachusetts tree has measured its length upon the ground, leaving a great gap in the forest cover. However, though dead it is still a thing of unusual interest, serving to emphasize by comparison the magnificent proportions of the standing trees.

The lofty tree, measuring 22 feet in diameter 15 feet above the ground, must have fallen with a terrific crash across the brow of the snow-covered hill, which caused the bole to separate in a clean break 75 feet above the roots. The portion of the tree above the break opened up in halves and quarters across the ridge top and down the other side, exposing the heartwood in the most effective manner that could have been devised.

And this revealed one more secret of the Big Trees—it exploded the theory that the Sequoia Gigantea is not subject to disease. The break exposed a brownish dry rot in the center which measured 30 inches in diameter. It was loosely formed, so that large light squares of decayed wood could be easily pried off. It resembled the dry rot of incense cedar. This form of decay extends through the heart to a distance of 125 feet above the roots, where the affected area is 16 inches in diameter. At this point there are dry sheds of broken wood cells streaked with strings of white mycelium.

From this point the rot seems to spread in three sheets from the center toward the sapwood, dividing the tree three ways from the middle. Decay, which extends from the base right through to the spiked top, indicates that the telescope tree may have suffered in the same way, and thus have been hollowed by firees burning in the punky wood.

Further study of the newly fallen Massachusetts tree may reveal still other new facts concerning the story of the Big Trees.

The Telescope Tree

THE TELESCOPE TREE

The telescope tree is unique among the giant sequoias of the Mariposa grove for the arch enemy —fire—has run his black magic clear through its heart. Standing inside and gazing aloft, one sees sky branches and glimpses of heavenly blue as though the eye were directed through the small end of a telescope.

As far back as the late 70's, this tree had attracted so much attention as to be one of the determining factors in locating the loop on

The Haverford Tree

the first road constructed through the grove. Today, visitors are ever more inclined to worship the big trees for their majesty and awesome cathedral-like beauty, than as curiosities, but the telescope tree is still one of the drawing cards.

At the time that this first road was being built the plans called for the carving of a tunnel through the telescope tree and the running of the roadway through it.

Repeated forest fires had already eaten away no less than two-thirds of its great basal area so that only a small effort would have been required to chop a large eonugh hole through the remaining shell-like wall. Axemen were already at work when the better judgment of one of the supervisors brought the attempt to a halt. He wisely feared that the completion of a tunnel through a tree which had already suffered such extreme fire mutilation would probably further weaken the base, this to the extent that the great weight of the gutted hole could no longer be supported.

The inspiration of the man who first conceived the idea of building a roadway through a California big tree, bears record on the inside of the great cavity. Visitors speculate upon the cause of these old axe marks which really indicate the beginning of a novel task that was completed in the Wawona tree just a few hundred feet beyond.

The chimneyed trunk of the telescope tree is devoid of heartwood. visual proof that the living, growing part of the tree stem is limited to the narrow ring of sapwood just next to the bark. In addition to the loss of its heart, the tree has suffered the destruction of 39 feet of its 74 feet of circumference. The inside burn has gutted the great hole until one may look up through an opening which measures about seven by ten feet for a distance of 175 feet to where the original top has disappeared, letting in the light from above.

A wierd old cylinder of a tree with hardly "a leg to stand on," it still has a fine crown of growing leaves and branches. The telescope tree is beautifully symbolic of the desire to cling to life, even though that life may be a scarred and mutilated one.

THE HAVERFORD TREE

The Haverford Tree, with a periphery measurement of 106 feet around its great spreading trunk, has had its fire scar photographed more than those of any other of the Big Trees in the Mariposa Grove.

Here is a tree immediately attracting notice by reason of the three great openings which expose a cavity measuring twenty-eight feet from east to west and thirty-five feet from north to south. It is said as many as fifteen horses have found shelter there during stormy weather in those early days when horse-drawn vehicles afforded the only means of transportation to the Mariposa Grove.

Although known to stage drivers as the Shelter Tree, or tree of refuge, one can still marvel at the spacious chamber which has been carved into the base of such a large tree by repeated forest fires that have occurred in the region of the Big Tree groves during past centuries.

The tremendous weight of the stately body is supported by three individual pillars, shell-like in appearance, which hold the tree perfectly balanced in weird conspicuousness. Altogether, the Haverford is one of the most outstanding trees in the Mariposa Grove.

THE SUNSET TREE

The Sunset Tree stands in majestic solemnity, ineffable in its aspect toward tomorrow, apparently unconcerned about life or death. living, it seems more like the image of a living thing.

Battered by lightning and wind, its height has been reduced to less than two hundred feet. Scars of terrific storms are still discernible along the upper half of its massive trunk, while around its mutilated base, the fire demon has all but finished its struggle for existence. Yet it stands today, a martyr, defying the elements, as a thing forgotten by death.

Surrounded by sugar pine, white fir, and sequoias of a younger generation, the ghostly snag that forms the upper half of the battered trunk of this tree, the most westerly situated of all the ancient monarchs in the Mariposa Grove, stands like a huge candle throughout the day, to be relit by the crimson glow of the setting sun. It is known as the Sunset Tree because the last rays

The Sunset Tree

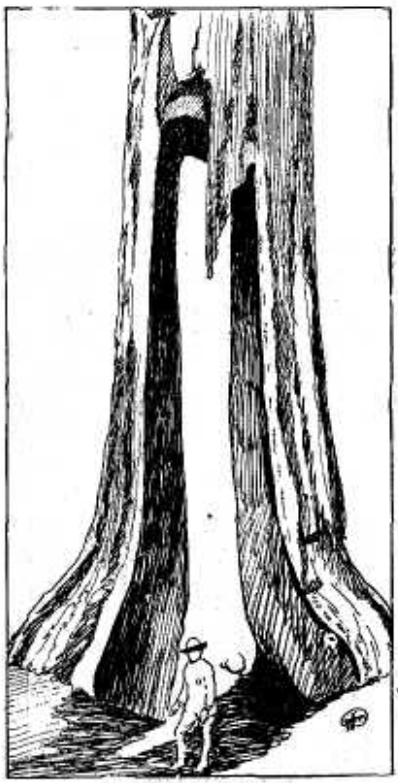
of the sinking sun reflect delicately through its few remaining branches as evening twilight blends into darkness in the deep solitude of the forest

Four feet above the ground this old tree measures seventy-three feet in circumference, of which fifty-one feet and two inches forms a charred ugly fire scar. Over two-thirds of the bark surface has been burned away from the base by forest fires that burned through the grove during the centuries that this veteran has cast its morning shadow toward the glacier-carved gorge of the south fork of the Merced river

Yet, with but twenty-one feet and eight inches of living bark covering to function in support of its limbless body, it still maintains, in stalwart stature, the outstanding individuality which stirs one's imagination so deeply.

Having suffered more from fire and storm than any other tree in the Mariposa Grove, the Sunset Tree has the appearance of a dead thing waiting for the wind to blow it to the ground. But, in spite of all, it is very much alive, and the effort to heal over its great fire scar is mute evidence of stubborn resistance to misfortune.

THE CLOTHESPIN TREE



The Clothespin Tree

What more fitting name might be given a tree that has been carved by destructive agencies of Nature until it stands today so that upon first sight one might involuntarily exclaim, "That's the clothespin tree!"

Stretching a tape around the clothespin tree we find that the base of this freak originally measured 72 feet in circumference. Through repeated fires the heart has been eaten away to a height of about 70 feet, leaving an opening through the center which measures 16 feet between the two great slabs that remain to support its massive trunk.

These two slabs, divided by the great fire scar which measures 24 feet through the heart, are like two individual trunks to the great body of the tree. One slab has a bark covering of 19 feet and the other a covering of 15 feet, or a total area of 34 feet of bark around what remains of the tree's original circumference. Above the forks the trunk has a decided lean. Each year many visitors to the Mariposa Grove comment that the Clothespin

tree will surely go over soon, but it persists through winter after winter, and for aught we know, may see the coming and going of several more generations before giving up the struggle for perpendicularity.

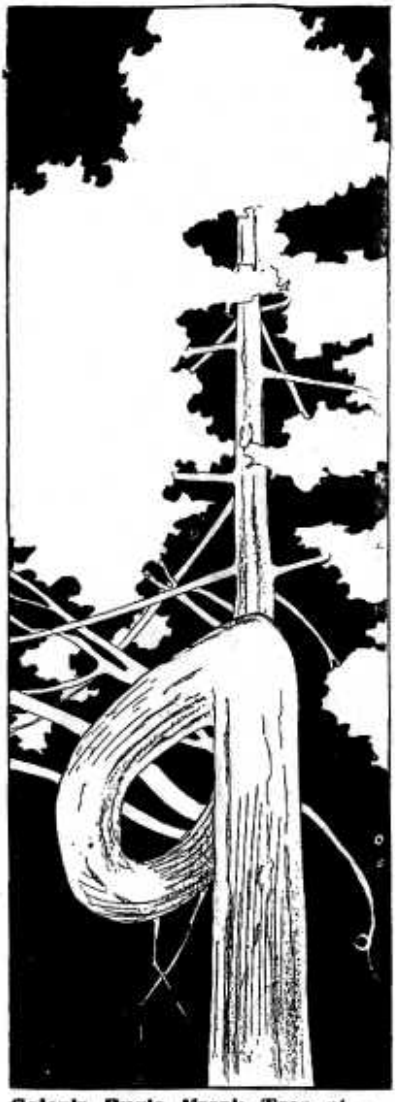
GALEN'S BUGLE

"As the twig is bent, so the tree inclines."—And thereby hangs the tale of Galen's Bugle in the Mariposa grove.

No doubt everyone has noticed that, whereas saplings grow straight up from the soil, mature forest trees seem to lean away from the perpendicular, at least to some degree. Nature's plan would seem to indicate that trees growing under favorable conditions should pull directly away from the force of gravity; yet, throughout the coniferous forests of the Sierra few have held perpendicularity to maturity. The outstanding, offsetting factor here would appear to be the struggle for light which causes the topshoot, or leader, to reach towards the open spaces. Trees leaning in all directions are so commonplace as not to be considered unusual growths, or even freakish. In fact, conifers of truly unusual form are such rarities as to attract much attention.

Such a one is the incense cedar (Libocedrus decurrens) which grows on the ridge near Wawona point. Because it resembles a huge bugle standing on end, this weirdest of incense cedars, which grows near the point where Galen Clark made his eventful discovery of the Mariposa Grove of Big Trees, has been appropriately named "Galen's Bugle."

The breast-height diameter of this cedar is twenty-six inches. There is a gradual taper approximating that of a normal tree to a height of 22 feet, where the trunk



Galen's Bugle Freak Tree of ... Mariposa Grove

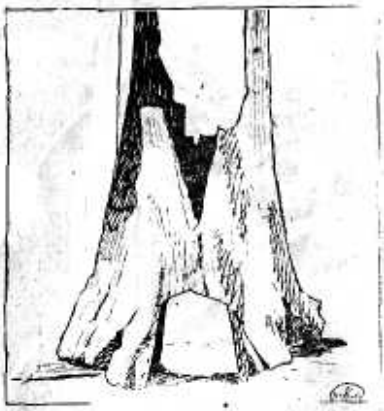
suddenly swings through a loop, forming an almost perfect circle half way up the tree. From there on the stem resumes its upward course and bears a crown of foliage, erect and proud, in the pyramid shape characteristic of the incense cedar.

All the sap which goes to feed the leaves and growing apex of the stem must course through the loop of the bugle. In the great, unceasing struggle for life, the bugle tree has won out against some disaster. The accident which befell the tree must for the present remain a mystery. And, indeed, it may never be solved except in imagination. There is no evidence of an adjacent leaning or fallen tree which could have caused the inclination that has terminated in a growth that resumbles some giant doughnut.

TUNNELED TREES OF MARIPOSA AND OTHER GROVES

The mode of travel has changed since the first vehicle was driven through a California Big Tree, and the several popular Big Tree groves are more accessible now than they were during the days of the horse *stage*.

The experiences of those appre-



The Tuolumne Tree

ciative people whose good fortune permitted them to travel from all parts of the civilized world to visit these natural wonders have been recorded in books to be found today on the shelves of libraries throughout the country.

Among the authors of such volumes is W. G. Marshall, who in 1878 visited the Big Tree groves and the Yosemite valley. In his book entitled "Through America, or Nine Months in the United States," he refers to his journey into the Sierra during the month of June, 1878.

From a chapter of his book we quote the following:

"After remaining a couple of days at the Calaveras grove, we set out on the evening of June 23 for Yosemite valley. We obtained extensive, glorious views over forest-clad valley and mountain; till at length we came to the Tuolumne Big Tree grove, and at the same time upon a novelty such as one does not come across every day. This is a tunnel through the stump of one of the largest sequoias in the grove, through which the road passes, and the stage coach is driven: The stump so standing—the trunk has been severed about ninety feet from the ground—is entirely barked, and measures 30 feet 8 inches in diameter; but, the diameter of the trunk with its bark is said to have been over 40 feet. In height, the tunnel measures 12 feet, and it is 10½ feet wide at

the top. When we reached the middle of it, we pulled up, of course, for here we were with coach and four horses standing inside one of the mammoth trees of California. We waited a considerable time within the tree. The tunnel had only been completed a week before our visit to the grove, the first coachful having passed through the stump on the afternoon of Tuesday, June 18."

Four of Them Now

Since that time three living trees have had tunnels chopped through their hearts, making a total of four tunnel trees in the groves of sequoia gigantea throughout their range in the Sierra. Of these four tunnel trees, three are within the boundaries of Yosemite National Park—namely The Dead Giant in the Tuolumne grove and the California and Wawona trees in the Mariposa grove.

The other tunnel tree, known as the Pioneer, is in the Calaveras grove. It is located near the center of the grove, and measures thirty-two feet in diameter near the base.

In that section of the Mariposa grove located about one hundred yards east of the ancient Grizzly Giant is to be found the California tree. A tunnel was cut through the heart of this tree about 1895.

A roadway was built so that passengers of the horse stages might be carried through a big tree in the Mariposa grove during that part of the season when snow and mud kept the road in a condition preventing travel into the upper grove and through the famous Wawona tree. The California tree has a diameter measurement of twenty-one feet, and is 248 feet high.

Gets the Publicity

The Wawona tree is the most

The Pioneer

conspicuous of all the big trees of its species; it is the most perfect specimen of the Sequoia gigantea, through which a tunnel has been cut, and is probably the most famous tree in the world today, as it has had wider publicity than any other individual tree.

The tunnel was cut through the Wawona tree by two brothers named Scribner, who were paid $75 for their labor by the Yosemite Stage and Turnpike Company shortly after completion of the first road into the Mariposa grove.

Frank Strausser of San Diego, Calif., in a letter to Chief Natural-

The California Tree

The Wawona Tree

ist Hall, claims to have entered the Mariposa grove with a party of Knight Templars from Philadelphia during the month of August, 1880. Upon arriving at the Wawona tree, the stage upon which he was riding was held until the workmen removed the blocks of freshly shopped heartwood from the roadway so that this stage might be the first vehicle to pass through the new tunnel tree. Mr. Strausser states further that he remained with the driver on the stage, after the other passengers had alighted, and as the stage was moved carefully through the new opening on a test, he claims the distinction of being the first passenger to have ridden through the Wawona tree.

The width of the tunnel through the Wawona tree is slightly over eight feet, and the length equals the diameter of the tree, twenty-six feet. The tree is 227 feet high, and supports a beautifully balanced crown.

Photographs of this tree with a troop of cavalry, four horses abreast, passing through its aperture, or the old coach and six horses drawn up at the exit to be photographed, are found displayed throughout the civilized world. It has been painted by the foremost artists, and in some cases these paintings have been used commercially in advertising.

The name "Wawona" was appropriately selected from the language of the Miwok Indians—Wah-wo-nah—meaning Big Tree.

THE FRAGRANCE OF THE FOREST

Whether driving your own car, or traveling by auto stage over the winding roads, through the forests north or south of Yosemite Valley, you no doubt experience the carefree, restful feeling which causes one to relax and forget all, except the changing scenery. There is the broken topography, the array of colors, the contrasts in light and shadow and the stillness awakened by the spiritlike rustle of the shiny needles, trembling in the stir of soft summer breezes as they carry through the forests that fragrance which balances the surroundings in perfect harmony.

This fragrance of the forests is perhaps most misunderstood of all that comes to our attention on a journey through the Yosemite. How often have we remarked that one should be very healthy or live to a ripe old age, in such environment, breathing this perfume of the forests, this pleasant odor of the pines, or could it be the balsam of the fir trees that smells so very much like witch-hazel?

Quite naturally, we should expect to find the forest floor carpeted with pine needles, and here and there a thrifty group of seedlings, but so much comes to our attention

that we may have failed to recognize the little fern-like plant that is directly responsible for the fragrance of the forests of Yosemite, Chambaetea foliolosa, more commonly known as Bear Clover. From the leaves of this plant, the ever present fragrance of the forest is distilled by the heat of the sun.

Forming a beautiful smooth surface of dark greenish cover through its dense growth over large areas of open forests, the stand of Bear Clover conceals such objects as rocks, fallen limbs and debris. Although a member of the rose family, it is referred to by such common names as bear clover, tar brush and mountain misery, and is known to the Indians as "Kit-Kit-Dizee." Among the finely divided leaves are concealed the white blooms which are very like strawberry blossoms. This carpet lends to the forests a finishing touch which highly gratifies the aesthetic sense.

MISTLETOE

Everywhere among English-speaking peoples, the legendary symbolism of mistletoe is common knowledge. Few are familiar with the life history of this strange plant.

Throughout the valleys of California the leaves of broadleaf trees, responding to seasonal changes, turn yellow and brown and crimson, and ultimately fall to the ground. Until then, we are unaware of their deception in concealing the trees' affliction. With bare branches silhouetted against the sky, the skeleton forms of the great valley oaks are found to be weighted with clusters of mistletoe.

The clusters of pearl-like berries, in contrast to the small, oddly green and leathery leaves, make this plant immediately attractive of attention and admiration. Yet the extent of detrimental effect upon the host trees and the great area throughout which the parasite makes its abode are matters of no small moment. Nor are the conifers exempt. Mistletoe is present commonly throughout the great pine forests of the Sierra.

The family Loranthaceae has two genera in the United States. These are called Phoradendron and Razoumofskya. The Phoradendron is the larger of the two, and may have leaves as on the oaks, or be leafless as on incense cedars. Its berries are rounded, white or pink, and contain a seed imbedded in a thick sticky glue. The seeds are carried by birds from tree to tree, whence they adhere to the bark and germinate.

Phoradendrons are light seeking, and therefore grow high up in the tree. Although they belong to the higher plants which are characterized by roots, stems, green leaves and flowers, parasitic life has robbed the mistletoes of their independence. They are unable to obtain sustenance from raw foods in the soil. Their root system is much reduced and has adapted itself to the function of tapping the tissues of host trees. They depend, therefore, on their hosts not only for water, but also for the greater part of elaborated food. Phoradendrons however, generally possess green leaves, or at least green stems. Thus they can elaborate the raw foods and water obtained from the host.

The various species of Phoraden-

dron are parasitic on both hardwoods and conifers but chiefly on hardwoods. The irritation of the cambium by the roots of the mistletoe results in considerable swelling of the branch at the point of attack.

Cone Bearers Play Host

Members of the genus Razoumofskya are found exclusively on conifers. The thin brittle stems stand out from the branches on which

Mistletoe on White Fir

they grow like small yellow brushes and they often cause growth called witches brooms. Mistletoes of this group are more tolerant of shade than are the Phoradendrons. The foliage is reduced to small scales which contain very little of the green chlorophyll which is essential to food manufacture in the presence of sunlight.

Several species of Razoumofskya have become so prevalent in the Western United States as to constitute a serious menace. The Western yellow pine mistletoe (Razomoufskya Cryptopoda) is one of the most widely distributed of all, being found practically coincident with the range of the yellow pine.

It flowers during April and May, and the fruit matures in August and September of the following year. In ripening, the berry develops a considerable internal pressure which increases until the slightest disturbance is enough to make it explode, and eject a seed with some force. The seed is shot upward for a distance of several yards by the giving way of a ring of tissue situated near the base of the berry. As the seeds are scattered about at random, many perish for lack of a favorable resting place while some stick to the bark of young branches and twigs and there germinate. This method of seed dissemination is common to all species of Razoumofskya.

Mistletoe seeds can germinate under normal conditions almost anywhere, but they can penetrate only the young thin bark of the hosts to which they are particularly adapted. For instance Razoumofskya seeds thrown from a Jeffrey pine onto the twig of an oak standing beneath it can germinate, but cannot penetrate through the living tissue. The same seed would, if it landed on a young Jeffrey pine twig, develop a small rootlet which would perforate the bark.

A Sad Abuse of Hospitality

Different species of mistletoes are confined to different hosts. White firs are hosts for species of both Phoradendron and Razoumof-

skya. The light-seeking Phoradendron Bolleanum lives exclusively on the very top of older trees, chiefly in the leader where it develops conspicuous bunches of green foliage. Eventually the leader is killed outright. It will then be replaced by a second leader which may in turn meet the same end. This top mistletoe is held to be responsible for by far the greater number of spike tops in white fir.

Mistletoe infections cause a marked decrease in the rate of growth of the host, which continues until the virulent parasite often causes the death of the tree. The percentage of infection and the resulting mortality of the host is usually higher on exposed dry ridges and south slopes than on more favorable sites. The most practical known method of control is removal of the tree parasitized, but up to the present time no serious attempts have been instituted in this direction.

THE STAGHORN LICHEN

Staghorn lichen (Letharia vulpina), so named because of the resemblance of its small branching stems to the horns of a stag, is to be found on trees of all species throughout the sugar pine belt in the Yosemite region.

The matty tufts of this somewhat moss-like growth on trunk and limb in the coniferous forests, stand out with such prominence that they rarely fail to call forth interested comment from travelers in the woods. They are notably conspicuous because of their vivid green-yellow coloring. The Indians used this lichen to manufacture a crude paint. In the forests it effectively neutralizes the sharp contrasts in the depths of the shadows.

Its clustered grip on the bark of the great tree trunks coupled with the poisonous looking color contribute to the usual verdict that this must be some dangerous parasite. This rather mars the tourist's appreciation of the rich beauty it adds to the dead limbs. The truth of the matter is that this growth in no way drains the life blood of its host but merely finds its support there. Lichens are examples of the symbiotic relationship among plants. Two plant organisms are involved, each necessary to the other and unable to live apart. One is a fungus and the other an alga. The fungus provides support and protection for the alga, which manufactures the food upon which the

Staghorn Lichen

two live. Thus the lichen, which to all appearances is an entity, is in reality two plants which have come to live together to their mutual benefit. And the trees upon which it grows suffer not at all, but rather enjoy enhanced colorfulness.

Although staghorn lichen is found adhering to the bark of the **Big Tree**, sugar pine, yellow pine

and incense cedar, none of these bears quite such profuse decorative banners as the white fir. This may possibly be due to the structure of the bark of the fir in contradistinction to the others mentioned. The corky character of the bark and the manner of shedding the scales of bark would be important causative factors here.

Wherever it grows the light yellow-green of the lichen is one of the dominant notes in the color scheme of the woods. It is often transformed to gold by contrast to the dark background of bark, especially where the bark coloring has been darkened by the moisture of storms. In stormy weather the staghorn lichen is like sunshine in the gloomy atmosphere of the deep forest.

HISTORY OF THE MARIPOSA GROVE

By C. P. Russell

The first published mention of Big Trees of the Sierra apparently is that of Zenas Leonard in his narrative of the Joseph Reddeford Walker Expedition of 1833. This party of explorers crossed the Sierra from the east near the headwaters of the Tuolumne River. Leonard, who was clerk of the expedition, writes in his 1833 publication, "Leonard Narrative":

"In the last two days' traveling we have found some trees of the Redwood species, incredibly large—some of which would measure from 16 to 18 fathom around the trunk at the height of a man's head from the ground."

Since the route of the party is known to have been between the Tuolumne and Merced rivers, there is no doubt that Leonard's comment refers to the Merced or Tuolumne Groves of Big Trees, and that his note is the first published mention of the Sierra species.

In 1841 the first party of bona fide emigrants entered California via Sonora Pass. This was the Bartleson party and John Bidwell, one of its members, came upon the Calaveras Grove of Big Trees while searching for a route for the train. Small mention of the find was made at the time and the discovery of Sequoia gigantea is usually credited to A. T. Dowd, who located the Calaveras Grove in 1852 and promptly induced a party of friends to accompany him to the site of his discovery. Shortly thereafter the tale of the finding of the forest giants was published in the Sonora Herald. Other publications picked up the story and the Calaveras Grove was given wide publicity. American scientists attempted to classify the new plant find but circumstances, by chance, caused the American attempt to fail, and the naming of the largest living thing was effected by an Englishman, Lindley, who, in Gardner's Chronicle of December, 1853, dubbed the Big Tree Wellingtonia Gigantea. Irate American botanists promptly attempted to overthrow the essentially British name and by 1854 the fact was established that the new tree was of the same genus as the coast redwood and that Sequoia must replace Wellingtonia.

The Mariposa grove, with which we are most concerned, experienced a number of "discoveries," but credit for the find goes to Galen Clark who first made known the existence of the trees. L. H. Bunnell records that a laborer employed by him in 1851 declared that he had seen big trees in the region of the Mariposa grove in 1849. Apparent-

The Ancient Cabin In The Mariposa Grove

ly no report of the matter was made until Galen Clark announced his discovery in 1857. Stephen F. Grover, one of that party of prospectors who came to grief in Yosemite valley in 1852, writes that he passed through the Mariposa grove en route to Yosemite in 1852. However, no notice was given the fact until after Clark had made known his experience. D. J. Foley reports that Clark had told him of finding the remains of a well equipped miner's camp very near the Mariposa grove. This find was made on one of Clark's early trips of exploration, and is further evidence that the trees were viewed by white men prior to the recognized date of discovery.

Galen Clark has given an account of his discovery of the Mariposa Grove in Foley's "Yosemite Souvenir and Guide" of 1915. He explains that a hunter, Mr. Ogg (or Hogg), reported in 1855 that he had found three giant trees near the present Wawona. At that time Clark was employed as a surveyor's assistant on the survey of a water ditch which was to conduct water from the South Fork of the Merced river to the Fremont Grant. Quoting from Clark's account: "In April, 1857, I built a log cabin and settled on the South Fork of the Merced river, where the Wawona Hotel is now located, and spent considerable time in hunting and exploring in the mountain forests, being always on the lookout for the three large trees reported by Mr. Ogg, who was then dead. In the latter part of the next month, May, in company with Milton Mann, on a hunting trip, we discovered what is now known as the Upper Grove of the Mariposa Big Trees, and a few days later I was in the lower portion of the grove, and as they were in Mariposa county, I named them the Mariposa Grove of Big Trees. Some months later I found the three trees described by Mr Ogg in a gulch about three-fourths of a mile southeast of the cabin now in the grove, a half of a mile distant from other trees of the same kind."

Very little public notice was

given the Big Trees of the Mariposa region but the Calaveras Grove soon became celebrated. As early as 1853 one of the monsters of this grove was cut down and the bark removed for exhibit in New York. Later exhibits were made abroad. As as result of this publicity, great numbers of tourists made their way to the Calaveras Grove in the '60s and '70s. It was usual for Yosemite visitors to include a visit to these wonders while en route to or from Yosemite valley. Some attempt was made by Galen Clark and others to attract visitors to the Wawona route to Yosemite and the Mariposa Grove was offered as an inducement. Some travel through the grove resulted, but since the wagon road did not enter the grove nor extend beyond Clark's Station (Wawona), comparatively few tourists braved the exertion of the necessary extended travel in the saddle.

In 1875 the Washburn brothers purchased Clark's Station (then known as Clark & Moore's) and the Wawona road was built to Yosemite Valley. Soon thereafter a road was constructed to the Mariposa Grove and because of its favorable position on the Wawona stage route to Yosemite this formerly neglected Big Tree tract has become the mecca of ever increasing throngs of tourists. The Calaveras grove has been forgotten by the traveler.

The log cabin mentioned in Mr. Clark's account of his discovery of the Mariposa Grove is the same structure which today lends a quaint touch of romanticism to the human developments within the grove. It has been known as "Galen's Hospice" and a sentiment has grown up about it which links it with those early affairs when travelers won the privilege to view the grove by dint of strenuous effort in the saddle or on foot. As a matter of fact, a cabin did exist there in those pioneer days as witnessed by early Muybridge, Fiske and Watkins photographs possessed by the Yosemite Museum. Old wood cuts appearing in a number of books published in the '70s also call attention to it, but it is in vain that we search for a printed account of its history. The present cabin can claim small place in the pioneer history of the grove. In the report of the commissioners to manage the Yosemite Valley and the Mariposa Big Tree Grove for 1885-86, it is recorded that "A comfortable and artistic log cabin has been erected at a central point in the grove for the shelter and convenience of visitors, ornamented by a shapely massive chimney of stone with commodious fireplace graced by traditional crane and pendant kettle."

Although the log structure cannot be associated with the earliest human events of the grove, it is nevertheless as much a well-known feature as many of the living giants which surround it. It lends fitting atmosphere to the wonderful spot in which it stands and for nearly fifty years it has been pictured here and abroad with its entourage of Giant Sequoia. No effort should be spared to guarantee its perpetuation, or, should its becoming old walls prove to be irreparably decayed, to construct a replica of its familiar form.

One of the outstanding features of the Yosemite ranger-naturalist service is the public contact work now done in the Mariposa Grove. The fitting old cabin will serve admirably as local headquarters for this work and can well become a worthy branch of the Yosemite Museum, in which may be exhibited historical and scientific specimens which will tell the story of the Sequoia. Five thousand dollars will accomplish this reconstruction, and it must be secured before the old cabin is further reduced by decay.