

the valley, we find on the same (south) side, a prominent and massive pile of granite, sculptured by nature so as to suggest its name of "Cathedral Rock." Just beyond are isolated columns of granite, at least 500 ft. high, standing out from, but connected at the base with, the walls of the valley; and these graceful pinnacles, graced by the winds and mists, well deserved to be called "The Spires." In fact the whole side of the valley along this part of it is fantastically but exquisitely carved out into forms of gigantic proportions, which, anywhere else, except in the Yosemite, would be considered objects of the greatest interest.

On the north side again, beyond El Capitan, is a triple group of rocks, rising in steps one behind the other, and known as the "Three Brothers," and from the summit of the highest, "Eagle Peak," there is a superb view of the valley and its surroundings. As you step on the crest and your eye glances over the vast field of wonder, before and beneath you, an overwhelming feeling of awe and bewilderment pervades the mind, for you look down perpendicularly almost 4,000 ft., and look up again to see mountain peaks quite 5,000 ft. above you. Just below is a large stream surging on to make the mightiest leap recorded; it shoots down at lightning speed 2,600 ft. and you realize, at least in some degree, the immense height of the Yosemite falls. This cascade, if not the most stupendous feature of the Yosemite, is at least the most attractive of the valley. All the accessories of this fall are of a character worthy of and commensurate with its immense vertical height, so that everything is added which can augment the impression which the descent of so large a mass of water from such a height could not fail, by itself, to produce. This fall though only 30 ft. wide at the start, widens, out, so great is the mass of descending water, probably to 300 ft.; and like Bridal Veil, gains in its headlong descent; a vibrating motion peculiar to themselves, with an effect indescribably grand.

Beyond the Yosemite falls are the Royal Arches, under which we camped on a sandy meadow amidst pine trees, which, though large, were dwarfed by the surroundings. East of this again is the "Washington Column," a rounded columnar rock; and surmounting this and the Arches is the "North Dome," the latter made up of concentric plates of granite. Here is where the valley forks, the left-hand branch containing the beautiful pool called "Mirror Lake," above which rises the "Half Dome," whose face next the lake is absolutely vertical for 1,500 ft. The right-hand fork, or Illioullette, is but rarely visited, as it is rough and difficult to climb; but the central canyon carries the main stream or Merced river, which descends 2,000 ft. in two miles, making, besides innumerable cascades, two grand falls. The lower is the Vernal fall, a perpendicular sheet, with a descent estimated at 475 ft., which is seen to great advantage from the base. Here, however, the visitor is on a narrow, steeply-sloping mountain ledge just over the raging torrent. The rocks are always wet with spray and consequently very slippery. Some of our ladies coming upon the fall unprepared were blinded by the water, and terrified by their apparent danger.

A remarkable parapet of granite, just breast high, at the top of the cliff over which the water flows, looks as if made on purpose to afford the visitor a secure position from which to enjoy the scene. Above the Vernal falls is a succession of cascades and rapids of great beauty, and beyond these again is the grand Nevada falls, environed by majestic scenery. The "Cap of Liberty," on the north side of the river, is a stupendous mass of rock, rising 2,000 ft. above its base, all the more imposing because isolated and nearly perpendicular on all sides.

This short sketch of the salient and most striking points in the walls of the Yosemite, every portion of which is sublime, necessarily omits others, which, though of great beauty, cannot be even so much as mentioned for want of space.

One word as to the supposed cause creating

this unique valley; the most natural explanation is that suggested by Prof. Whitney, viz: That the bottom sunk down to an unknown depth, and the vast mass of detritus which must have fallen from the walls, has gone to fill up the abyss opened by the subsidence. The atmosphere of the valley is exhilarating, tonic and delicious; the memory of the scene, a joy forever. The Yosemite is a Government park, given to the State of California in trust, "on condition that the premises shall be held for public use, resort and recreation;" but I regret to say that this commonwealth has ill fulfilled the trust she accepted, by neglecting to provide money to keep the roads, etc., in decent traveling condition.

THE SEQUOIAS.

On our return we stopped in the Mariposa group of big trees, which, though about 16 miles from the Yosemite, is included in the Congressional grant to California. Though these trees extend 120 miles north and south along the Sierras, they are mostly gathered in eight or nine distinct groups or groves. They are the largest and most interesting trees in America, and certainly the grandest and most impressive productions of the vegetable kingdom.

The genus, named in honor of Sequoia, an Indian chief of the Cherokees, who invented an alphabet and written language for his tribe before the whites had heard anything of it, will always keep his memory green.

There are several fossil species of the *Sequoia*, one being found in Greenland, but the *S. gigantea* is exclusively limited to the Sierras, on which it extends vertically 2,000 ft., while its twin brother, the redwood, *S. sempervirens*, is strictly a seaboard tree, and confined to the Coast Ranges of California and Oregon. The tallest specimen of the big tree is 325 ft. high, and the one of the greatest diameter was 27 ft. through; and the age of the oldest one whose rings have been counted was 1,300 years. The cones are about two and a half inches in length and about two inches in diameter. The seeds are much sought for, are widely distributed and readily vegetate, so that millions of plants, it is said, are now growing. Though so large a tree, yet it must yield the palm to the *Eucalyptus amygdalata* of Australia, of which one specimen reaches the enormous elevation of 480 ft., thus overtopping the tallest *Sequoia* by 155 ft.

The following itinerary of the route to Yosemite will prove of interest to those proposing to make the trip, and I give the distance from point to point.

From Santa Barbara to Gaviota.....	40 miles
To Ballerds.....	18 "
" Central City.....	24 "
" San Luis Obispo.....	30 "
" Pinnacles.....	30 "
" Piute Ranch.....	27 "
" Low's Mountain.....	30 "
" Soledad.....	43 "
" Nativity.....	25 "
" Gilroy.....	28 "
" Bell's Station.....	20 "
Cross Contra Costa Mts. via Pacheco Pass.	
" Los Banos.....	20 "
Cross San Joaquin river at Dickenson's Ferry.	
" Merced.....	40 "
" Snelling.....	16 "
" Coulterville about.....	30 "
" Brown's Ranch ".....	25 "
" Big Meadows ".....	25 "
" Black's Hotel ".....	8 "

A RETURN IN 1881.

Our last year's trip as outlined above was so satisfactory that we start again by May 15th, with 3 wagons, 14 people, 2 (combined) cooks and drivers, 6 saddle horses, to camp, to the Yosemite, to spend two months in the valley. Can't you come in and camp with us? I propose to hold two weekly camps fires, Wednesday and Sunday, for visitors. If you know any "saw-bones" looking for a job, send him in to spend his summer in the valley. His presence will create a crop of patients.—Horace J. Smith, in Rural Press.

SAXIFRAGE.—Messrs. Garreau and Machelart, Paris, have extracted from the stems of the saxifrage, tannin, starch and a new proximate principle, bergennin, which possesses valuable medicinal properties, and may rank between quinine and salicine.

RAILSIDE HORTICULTURE.

The Central and Southern Pacific railways have done a good thing for the State by their system of tree planting beside their tracks. We have been pleased also to see here and there a switch-tender so imbued with the love of the beautiful that he has embowered his little cabin with a fine growth of vines and surrounded it with miniature flower beds. There is also a disposition in some towns to beautify the surroundings of the railway stations. The Dwight-way station, in Berkeley, is enclosed in a pretty little park, arranged under the auspices of the Berkeley Neighborhood Improvement Society. There is room for much more good work of this kind all over the State, for many stations are unsightly places; as inhospitable and bare as neglect can make them. This is exceedingly unfortunate, for many reasons, and should be changed. First impressions are very strong with many persons and if one is met at the station, when descending from the car steps, with a view of desolation and unthrift, it may take many miles of flower gardens afterward to win a good opinion of the town. If the stations were made over into little oases of shrubs and trees the effect would be quite different. Each village and town should have a pride in a work of this kind. It would be comparatively easy if the people would interest themselves in it. We are of the opinion that the railway company would furnish most of the trees and shrubs, and then all that the people need do is to see that they are kept in condition fit for growth. There is no telling how wide reaching the influence of such improvements might be. It is quite possible that the picnic character of the surroundings would impel the station loafers to indulge in an occasional clean shirt, and the agent might tread the platform with polished boots. Even such great changes as these are quite within the possibilities.

Railsides and station horticulture is not at all a new idea. It is practiced quite generally in the older States and abroad. The *New York Tribune* recently noted facts in this connection, stating that there are some pleasing examples of railway gardening in Maine. In Pennsylvania many of the station areas are brightened by the smiling beauty of flowers and the graces of foliage. In Europe, where there are more people with less to do, and where the shorter lines of roadways of all sorts can be kept on that account, in garden trim, it is common to see at every little country station, however lonely and retired, beds of bright flowers edging the walls and shining in the windows. All stations are enclosed there; the gates being opened from the gatekeeper's lodge for every passing vehicle. Here, each planted area has necessarily its own fence, all around being entirely open. The outtings near Paris are planted all over the slopes with American locusts.

As we have hinted before, California has already some good examples of what we would make prominent. There are also some beautiful spots along the dreary overland route through Nevada. We would have a thousand times as much of it. Which town in California will have the prettiest station? It is time now to plan and next fall to plant.—Exchange.

SUBMARINE PHOTOGRAPHY.—Improvements are said to have been made in submarine photographic apparatus, by means of which views have been taken near Glasgow, at a depth of ten fathoms underneath the water. One of these views, taken in the bay of that city, shows distinctly a sandy bottom, with a large number of boulders covered with seaweed, and an old anchor; also, in the shade, three mooring cables, belonging to small yachts.

A COUNTRYMAN from New Hampshire, who had never heard of a bicycle, came to Boston, and when he beheld a youth whirling along upon one of those airy vehicles, he broke out into soliloquy thus: "Golly, ain't that queer? Who'd ever 'spect to see a man ridin' a hoop-skirt."