

The Passes of the Sierra

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THE sustained grandeur of the California Alps is forcibly illustrated by the fact that, throughout their whole extent, there is not a single pass lower than 8,000 feet above the level of the sea. In a distance of 140 miles, between Latitude 36° 20' and 38°, the lowest I have yet found exceeds 9,000 feet, and the average height of all that are in use is, perhaps, not far from 11,000. A carriage-road has been constructed through what is known as the Sonora Pass, on the Stanislaus and Walker's rivers, the summit of which is 9,600 feet above the sea. Substantial wagon-roads have also been built through the Carson and Johnson passes, near the head of Lake Tahoe, over which immense quantities of freight were hauled from California to the mining regions of Nevada, prior to the construction of the Central Pacific Railroad. A considerable number of comparatively low passes, accessible to wheeled vehicles, occur in the northern half of the range, through whose rugged defiles long emigrant trains toiled wearily during the exciting years of the gold period. But, however interesting, these northern passes cannot properly be brought within the scope of this work. Between the Sonora Pass and the southern extremity of the Alps, a distance of , nearly 160 miles, there are only five passes through which trails conduct from one side of the range to the other, These are barely practicable for animals; a pass in these regions meaning simply any notch or canon through which one may, by the exercise of unlimited patience, make out to lead a mule, or sure-footed mustang. Only three of the five passes may be said to be in use, viz. the , Kearsarge, Mono, and Virginia Creek, the tracks leading through the others being only obscure Indian trails, not graded in the least, and scarce at all traceable by white men; for much of the way is over solid rock pavements and bosses, where the unshod ponies of the Indians leave no appreciable sign, while only skilled mountaineers are able to detect the marks that serve to guide the: Indians, such as slight abrasions of the looser rocks, the displacement of stones here and there, and bent bushes and weeds. A general knowledge of the topography, however, is the main guide, enabling one to determine where the trail ought to go-must go. One of these Indian trails crosses the range by a

nameless pass between the headwaters of the south and middle forks of the San Joaquin, the other between the north and middle forks of the same river, 1st to the south of the Minarets; this last being about 9,000 feet high, the lowest of the five. The Kearsarge is the highest, crossing the summit of the range near the head of the south fork of Kings River, about eight miles to the north of Mount Tyndall, through the midst of the most stupendous rock-scenery to be found anywhere in the Alps. The summit of the pass is over 12,000 feet above sea-level; nevertheless, it is one of the safest of the five, and is used every summer, from July to October or November, by hunters, prospectors, and stock-owners, and to some extent by enterprising pleasure-seekers, also. For, besides the surpassing grandeur of the scenery about the summit, the trail, in ascending the western flank, conducts through a grove of the giant sequoias, and through the magnificent Yosemite Valley of the south fork of King's River. This is, perhaps, the highest traveled pass on the North American continent. The Mono Pass extends across the Alps, to the east of Yosemite Valley, at the head of one of the tributaries of the south fork of the Tuolumne. This is the best known and most extensively traveled of all that exist in the "High Sierra." A trail was Lade through it about the time of the Mono gold excitement, in the year 1868, and has been in use ever since by mountaineers of every kind. Though more than a thousand feet lower than the Kearsarge, it is scarcely inferior in the terrible sublimity of its rock-scenery, while in snowy, falling water far surpasses it. Being so favorably situated for the stream of Yosemite travel, the more adventurous tourists cross over through this glorious gate-way to the volcanic region round Mono Lake. It has therefore gained name and fame above every other pass in the range. According to the few barometrical observations made upon it, its highest point is 10,765 feet above the sea. The other pass of the five we have been considering is somewhat lower, and crosses the axis, of the range a few miles to the north of the Mono Pass, at the head of the southmost tributary of Walkers River. It is used chiefly by roaming bands of the Pah Ute Indians and "sheepmen." But, leaving wheels and animals out of the question, the free mountaineer can make his way across the range almost everywhere, and at any time of year. To him nearly every notch between the peaks is a pass, though much patient step-cutting is at times required up and down steeply inclined glaciers, and cautious climbing over precipices, that at

first sight would seem hopelessly inaccessible to the lowlander. In pursuing my studies during the last 11 eight years, I have crossed from side to side of the range at intervals of a few miles all along the highest portion of the chain, with far less real danger than one would naturally count on. And what fine wildness was thus developed - storms and avalanches, lakes and water-falls; gardens and meadows - only those will ever know who give the freest and most buoyant portion of their lives to climbing and seeing for themselves. All the passes of the alpine portion of the range make their steepest ascents on the eastern flank. On this side the average rise is not far from a thousand feet to the mile, while on the west it is about two hundred feet. Another marked difference between the eastern and western portions of the passes is that the former begin at the very foot of the range, while the latter can hardly be said to begin until an elevation of from seven to ten thousand feet is reached. Approaching the range from the gray levels of Mono and Owen's Valley on the east, the traveler sees before him the steep, short passes in full view, fenced in by rugged spurs that come plunging down from the shoulders of the peaks on either side, the courses of the more direct being disclosed from top to bottom without a single interruption. But from the west one sees nothing of the pass he may be seeking until near the summit, after days have been spent in threading the forests growing on the main dividing ridges between the river canons. It is interesting to observe how surely the alpine-crossing animals of every kind fall into the same trails. The more rugged and inaccessible the general character of the topography of any particular region, the more surely will the trails of white men, Indians, bears, deer, wild sheep, etc., be round converging into the best passes. The Indians of the western slope venture cautiously over the passes in settled weather to attend dances, and obtain loads of pine-nuts and the larvae of a small fly that breeds in Mono and Owens lakes, which, when dried, forms an important article of food; while the Pah Utes cross over from the east to hunt the deer and obtain supplies acorns, and it is truly astonishing to see that immense loads the haggard old squaws make out to carry barefooted rough these rough passes, oftentimes for distance of sixty or seventy miles. They are always accompanied by the men, who ride on unburdened and erect a little in advance, stooping occasionally to pile stepping-stones for them against steep rocks, as they would prepare

the way in difficult places for their ponies. Bears evince great sagacity as mountaineers, but although fond of traveling, they seldom cross the range. I have several times tracked them through the Mono Pass, but only in late years after cattle and sheep had passed that way; when they doubtless were following to feed on, the stragglers and on those that had been killed by falling over the rocks. Even the wild sheep, the best mountaineers of all, choose regular passes in making journeys across the summits. Deer seldom pass from one side of the range to the other. I have never yet observed a single specimen of the mule-deer of the Great Basin west of the summit, and rarely one of the black-tailed species on the eastern slope, notwithstanding many of the latter ascend the range nearly to the summit every summer, to feed safely in the wild gardens and bring forth their young. The glaciers are the pass-makers, and it is by them that the courses of all mountaineers are predestined. Every pass without exception in the Californian Alps was created by them without the slightest aid or predetermining guidance from any of the cataclysmic events. We have seen elaborate statements of the amount of drilling and blasting accomplished in the construction of the railroad across the Sierra, above Donner Lake; but for every pound of rock moved in this way, the glaciers which descended east and west rough of this same pass, crushed and carried away more than a hundred tons. The so-called practicable road-passes are simply those portions of the range more graded by glacial action than the adjacent portions, and degraded in such a way to leave the summits rounded, instead of sharp and impracticable; while the peaks, from the superior strength and hardness of their rocks, or from more favorable position, having suffered less degradation, are left towering above the passes as if they had been heaved into the sky by some force acting from beneath. The scenery of all the passes, especially the head, is of the very wildest and grandest description - lofty peaks massed together and laden around their bases with ice and snow; chains of glacier lakes; cascading streams in endless variety, with glorious views, westward over a sea of rocks and woods, and eastward over the strange ashy plains and volcanoes and mountain ranges of Mono and Inyo. Every pass, however, possesses treasures of beauty all its own, and the finding of these is one of the mountaineer's exceeding great rewards. Having thus in a comprehensive way indicated the height and leading features and the

geographical distribution of the principal passes, I will now endeavor to give a plain description of the Mono Pass in particular, which may, I think, be regarded as a fair sample of the higher alpine passes in general. The main portion of the Mono Pass is formed by Bloody Cañon, which begins at the very summit of the range, and runs in a general east-north-easterly direction to the edge of the Mono Plain. The first grand rush of white men that forced a way through its somber depths were eager gold-seekers, during the exciting discoveries made in the year 1858. But the canon was known and traveled as a pass by the Indians and mountain animals long before its discovery by white men, as is shown by their numerous tributary trails which converge at the head of the pass from every direction. Its name accords well with the character of the "early times" in California, and may perhaps have been suggested by the predominant color of the metamorphic slates in which it is in great part eroded; or more probably by blood-stains made by the unfortunate animals which were compelled to slip and shuffle awkwardly over its rough, cutting rocks. I have never known an animal, either mule or horse, to make its way through the canon, either in going up or down, without losing more or less blood from wounds on the legs. Occasionally one is killed outright -falling headlong and rolling over precipices like a boulder. But such instances are far rarer than from the terrible appearance of the trail one would be led to expect; the more experienced when driven loose find their way over the most dangerous places with a caution and sagacity that is truly wonderful. During the gold excitement it was at times a matter of considerable pecuniary importance to force a way through the canon with pack-trains early in the spring, while it was yet heavily mocked toward the head with snow; and then the mules with their loads had sometimes to be let down over the steepest drifts by means of ropes. A good bridle-path leads from Yosemite through many a grove and meadow up to the head of the canon, a distance of about thirty miles. Here the scenery undergoes a sudden and startling condensation. Mountains, red, gray and black, rise close at hand on the right, whitened around their bases with banks of enduring snow; on the left swells the huge red mass of Mount Gibbs, while in front the eye wanders down the shadowy canon, and out on the warm plain of Mono, where the lake is seen gleaming like a burnished metallic disk, and clusters of lofty volcanic cones, with blue mountain" ranges in the distance. When at length

we enter the mountain gate-way, the somber rocks seem conscious of our presence, and seem to come thronging close about us. Happily the ouzel and old familiar robin are here to sing us welcome, and azure daisies beaming with trustfulness and sympathy, enabling us to feel something of Nature's love even here, beneath the gaze of her coldest rocks. The effect of this expressive outspokenness on the part of the canon-rocks is greatly enhanced by the quiet aspect of the alpine meadows through which we pass just before entering the narrow gate-way. The forests in which they lie, and the mountain-tops rising beyond them, seem hushed and tranquil. We catch their restful spirit, yield to the soothing influences of the sunshine, and saunter dreamily on through flowers and bees, scarce touched by a definite thought, then suddenly find ourselves in the shadowy canon, closeted with Nature in one of her wildest and most secret strongholds. After the first bewildering impression begins to wear off, we perceive it is not altogether terrible; for, besides the reassuring birds and flowers, we discover a chain of shining lakelets hanging down from the very summit of the pass, and linked together by a silvery stream. The highest are set in bleak, rough bowls, scantily fringed with yellow sedges. Winter storms blow snow through the pass in blinding drifts, and avalanches shoot from the heights, rushing and booming like waterfalls. Then are these sparkling tarns filled and buried, leaving not a hint of their existence. In June and July they begin to blink and thaw out like sleepy eyes, the carices thrust up their short brown spikes, the daisies bloom in turn, and the most profoundly buried of them all is at length warmed and summered as if winter were only a dream. Red Lake is the lowest of the chain, and also the largest. It seems rather dull and forbidding at first sight, lying motionless in its deep, dark bed. Its real character, however, will not long be hidden from those who have the love to see it. The canon wall rises sheer from the water's edge on the south, but on the opposite side there is sufficient space and sunshine for a fine sedgy garden. Daisies star the sod around the margin, and the center is brilliantly lighted with lilies, castilleias, lark-spurs and columbines, while broad, leafy willows shelter them from the wind, the whole forming a most joyful outburst of plant-life keenly emphasized by the chill baldness of the on-looking cliffs. After indulging here in a dozing, shimmering lake-rest, the happy stream sets forth again, warbling and trilling like an ouzel, ever delightfully confiding, no matter

how dark the way, leaping, gliding, hither, thither, clear or foamy, manifesting the ravishing beauty of its young virgin wildness in every sound and gesture. One of its most beautiful developments is the Diamond Cascade, situated a short distance below Red Lake. In the formation of this charming fall, the tense, crystalline water is first dashed into a mass of coarse, granular spray mixed with dusty foam, and then divided into a diamond pattern by following the diagonal cleavage planes that intersect the face of the precipice over which it pours. Viewed in front, it resembles a strip of embroidery, varying through the seasons with the temperature and the volume of water. Scarce a flower may be seen along its snowy border. A few bent pines look on from a distance, and small fringes of cassiope and rock-ferns are growing in fissures near the head, but these are so lowly and undemonstrative that only the attentive observer will be likely to notice them. On the north wall of the canon, a little below the Diamond Cascade, a glittering side stream makes its appearance, seeming to leap directly out of the deep sky. It first resembles a crinkled ribbon of silver hanging loosely down the wall, but grows wider as it descends, and dashes the dull rock with foam. A long rough talus curves up against this part of the cliff, overgrown with snow-pressed willows, in which the fall disappears with many an eager surge and swirl and plashing leap, and finally beats its way down to its confluence with the main canyon stream. Below this point the climate is no longer arctic. Butterflies become larger and more abundant, grasses with imposing spread of panicle wave above your shoulders, and the warm summery drone of the bumble-bee thickens the air. *Pinus albicaulis*, the tree-mountaineer that climbs highest, and braves the coldest blasts, is found scattered in dwarfed wind-bent clumps from the summit of the pass about half-way down the canyon. Here it is succeeded by the hardy two-leafed pine, which is speedily joined by the taller yellow and mountain pines. These, with the burly juniper, and shimmering aspen, rapidly grow larger as the sunshine becomes richer, forming groves that block the view; or they stand more apart here and there in picturesque groups, that make beautiful and obvious harmony with the rocks and with one another. Blooming underbrush becomes abundant, - azalea, spiraea, and the brier-rose, weaving rich fringes for the streams, and shaggy rugs to relieve the stem, unflinching rock-bosses. Through this delightful wilderness, Canyon

Creek roves like an Arab without any constraining channel, throbbing and wavering, now in sunshine, now in thoughtful shade; flashing from side to side in weariless exuberance of energy. A glorious milky-way of cascades is thus developed, whose individual beauties might well call forth volumes of description; but to those already described we have space here for only one more, the

BOWER CASCADE,

which, though comparatively inconspicuous, ranking among the smallest as to size, yet perhaps the most surpassingly beautiful of them all. It is situated in the lower region of the pass, just where the sunshine begins to mellow between the cold and warm climates. Here the glad creek, grown strong with tribute gathered from many a snowy fountain, sings richer strains, and becomes more human and lovable at every step. Now you may find the rose and yarrow by its side, and small meadows filled with grasses and clover. At the head of a low-browed rock, luxuriant dogwood bushes and willows arch over from bank to bank, embowering the stream with their leafy inches; and waving plumes, kept in motion in by the current, fringe the brow of the cascade in front. From this leafy covert the stream leaps vigorously out into the light in a fluted curve thick sown with sparkling crystals, and falls into a pool filled with brown boulders, out of which it creeps gray with foam-bells and disappears in a tangle of verdure like that from which it came. Hence, to the foot of the canon, the metamorphic slates give place to granite, whose nobler sculpture calls forth expressions of corresponding beauty from the stream in passing over it, - brighttrills of rapids, booming notes of falls, solemn hushes of smooth-gliding sheets, all chanting and blending in glorious harmony. When, at length, its impetuous alpine life is done, it slips through a meadow with scarce an audible whisper and falls asleep in Moraine Lake. This water-bed is one of the finest I ever beheld. The azure sky makes its canopy, evergreens wave soothingly at head and foot, and the breath of flowers floats over it like incense. Here our blessed stream rests from its rocky wanderings, and its mountaineering done, - no more foaming rock-leaping, no more loud-resounding song. It falls into a smooth, glassy sleep, stirred only by the night wind, which, coming down the canon, makes it croon and mutter in ripples along its broideder

shores. Leaving the lake, it glides quietly through the rushes, destined never more to touch the living rock. Henceforth its path lies through ancient moraines and reaches of ashy sage-plain, which nowhere afford rocks suitable for the development of cascades or sheer falls. Yet this beauty of maturity, though less striking, is of a still higher order, enticing us lovingly on through gentian meadows and groves of rustling aspen to Lake Mono, where, spirit-like, our happy stream vanishes in vapor, and floats free again in the sky. Bloody Canon, like every other canon in the California Alps, was recently occupied by a glacier, which' derived its fountain snows from the adjacent summits, and descended into Mono Lake, at a time when its waters stood at a much higher level than now. The principal characters in which the history of the ancient glaciers is preserved are displayed all through the canon in marvelous freshness and simplicity, furnishing the student with extraordinary advantages for the acquisition of knowledge of this sort. The most striking passages are polished and striated surfaces, which in many places reflect the rays of the sun like smooth water. The darn of Red Lake is an elegantly modeled rib of metamorphic slate, brought into relief because of its superior strength, and because of the greater intensity of the glacial erosion of the rock immediately above it, caused by a steeply inclined tributary glacier, which entered the main trunk with a heavy down-thrust at the head of the lake. Moraine Lake furnishes an equally interesting example of a basin formed wholly, or in part, by a terminal moraine dam curved across the path of a stream between two lateral moraines. At Moraine Lake the canon proper terminates, although apparently continued by the two lateral moraines of the vanished glacier. These moraines extend unbrokenly from the sides of the canon into the plain, a distance of about five miles; curving and tapering in lines of exquisite beauty; while in magnitude they are truly sublime, being over three hundred feet in height where they are joined to the mountain, Their sunward sides are gardens, their shady sides are groves; the former devoted chiefly to eriogonae, compositae, and grammae; a square rod containing five or six profusely flowered eriogonums of several species, about the same number of bahias and linosyris, and a few grass tufts; each species planted trimly apart, with bare gravel between, as if cultivated artificially. My first visit to Bloody Canyon was made in the summer of 1869, under circumstances well calculated to heighten the impressions that are the peculiar offspring of

mountains. I came from the blooming tangles of Florida, and waded out into the plant-gold of the great central plain of California, when its flora was as yet untrodden. Never before had I beheld congregations of social flowers half so extensive or half so glorious. Golden compositae covered all the ground from the coast range to the Sierra like a stratum of curdled sunshine, in which I reveled for weeks, watching the rising and setting of their innumerable suns; then gave myself up to be borne forward on the crest of the summer wave that sweeps annually up the Sierra flank and spends itself on the snowy Alps. At the Big Tuolumne Meadows I remained more than a month, sketching, botanizing, and climbing among the surrounding mountains. The mountaineer with whom I was camping is one of those remarkable men one so frequently meets in California, the hard angles and bosses of whose characters have been brought into striking relief by the grinding excitements' of the gold period, until they come to resemble glacial landscapes. But at this late day, my friend's activities had subsided, and his craving for rest caused him to become a gentle shepherd and literally to lie down with the lamb. Recognizing the unsatisfiable longings of my Scotch Highland instincts, he threw out some hints concerning Bloody Canon, and & advised me to explore it. "I have never seen it myself," he said, "for I never was so unfortunate as to pass that way. But I have heard many a strange story about it, and I warrant you will at least find it wild enough." Next day I made up a bundle of bread, tied my note-book to my belt, and strode away in the bracing air, full of eager, indefinite hope. The plushy lawns that lay in my path served to soothe my morning haste. The sod in many places was starred with daisies and blue gentians, over which I lingered. I traced the paths of the ancient glaciers over many a shining pavement, and marked the gaps in the upper forests that told the power of the winter avalanches. Climbing higher, I saw for the first time the gradual dwarfing of the pines in compliance with climate, and on the summit discovered creeping mats of the Arctic willow over-grown with silky catkins, and patches of the dwarf vaccinium with its round flowers sprinkled in the grass like purple hail; while every direction the landscape stretched sublimely away in fresh wildness—a manuscript written by the hand of Nature alone. At length, as I entered the pass, the huge rocks began to close around in all their wild mysterious impressiveness, when suddenly a drove of gray hairy beings came in sight, lumbering toward me

with a kind of bone-less, wallowing motion like bears. I never turn back, though often so inclined, and in this particular instance, amid such surroundings, everything seemed singularly unfavorable for the calm acceptance of so grim a company. Suppressing my fears, I soon discovered, that although crooked as summit pines, the strange creatures were sufficiently erect to belong to our own species. They proved to be nothing more formidable than Mono Indians dressed in the skins of sage-rabbits, nicely sewed together into square robes. Both the men and the women begged persistently for whisky and tobacco, and seemed so accustomed to denials that I found it impossible to convince them that I had none to give. Excepting the names of these two products of civilization, they seemed to understand not a word of English; but I afterward learned that they were on their way to Yosemite Valley, to feast a while on fish, and procure a load of acorns to carry back through the pass to their huts on the shore of Mono Lake. Occasionally a good countenance may be seen among the Mono Indians, but these, my first specimens, were mostly old and ugly, and some of them altogether hideous. The dirt on their faces was fairly stratified, and seemed so ancient in some places and so undisturbed as almost to possess a geological significance. The older faces were moreover strangely blurred and divided into sections by furrows that looked like cleavage joints, suggesting exposure in a castaway condition on the mountains for ages. Viewed at a little distance they appeared as mere dirt specks in the landscape, and I was glad to see them fading down the pass out of sight. Then came evening, and the somber cliffs were inspired with the ineffable beauty of the alpenglow. A solemn calm fell upon every feature of the landscape. All the lower portion of the canyon was in gloaming shadow, and I crept into a hollow near one of the upper lakelets to smooth away the burrs from a sheltered spot for a bed. When the short twilight faded I kindled a sunny fire, made a cup of tea, and lay down with my face to the deep clean sky. Soon the night-wind began to flow and pour in torrents among the jagged peaks, mingling its strange tones with those of the water-falls sounding far below; and as I drifted toward sleep I began to experience an uncomfortable feeling of nearness to the furred Monos. Then the full moon looked down over the edge of the canon wall, her countenance seemingly filled with intense concern, and apparently so near as to produce a startling effect as if she had entered one's bedroom. The whole

night was full of strange sounds, and I gladly welcomed the morning. Breakfast was soon done, and I set forth in the exhilarating freshness of the new day, rejoicing in the abundance of pure wildness so close about me. The stupendous rock walls stood forward in the thin light, hacked and scarred with centuries of storms; while down in the bottom of the canon grooved and polished bosses heaved and glistened like swelling sea-waves, telling a grand old story of the ancient glacier that once poured its crushing floods above them. Here for the first time I met the Arctic daisies in all their perfection of purity and spirituality, -gentle mountaineers face to face with the stormy sky, kept safe and warm by a thousand miracles. I leaped lightly from rock to rock, glorying in the eternal freshness and sufficiency of Nature, and in the ineffable tenderness with which she nurtures her mountain darlings in the very fountains of storms. Fresh beauty appeared at every step, delicate rock-ferns, and groups of the fairest flowers. Now a lake came to view, now a water-fall. Never fell light in brighter spangles, never fell water in whiter foam. I floated through the canon enchanted, and was out in the Mono levels before I was aware. Looking back from the shore of Moraine Lake, my morning ramble seemed all a dream. There curved Bloody Canon, a mere glacial furrow 2,000 feet deep, with montoned rocks proceeding from the sides, and braided together in the middle, like rounded, swelling muscles. Here the lilies were higher than my head, and the sunshine was warm enough for palms. Yet the snow around the Arctic willows was plainly visible only four miles away, and between were narrow specimen zones of all the principal climates of the globe. On the bank of a small brook that comes gurgling down the side of the left lateral moraine, I found a camp-fire still burning, which no doubt belonged to the Gray Indians I had met on the summit, and I listened I instinctively and moved cautiously forward, half expecting to see some of their grim faces peering out of the bushes. But these silly fears were speedily forgotten. I gave heed to the confiding stream, mingled freely I with the flowers and the light, and shared in the confidence of their exceeding peace. Passing on toward the open plain, I noticed three well-defined terminal moraines Irving gracefully across the canon stream, and joining themselves by long splices to the too noble laterals. These mark the halting places of the vanished glacier when it was retreating into its summit shadows on the breaking-up of the glacial winter. Five

miles below the foot of Moraine Lake, just where the lateral moraines lose themselves in the plain, there was a field of wild rye, growing in magnificent waving bunches six to eight feet high, bearing heads from six to twelve inches long. Rubbing out some of the grains, I found them about five-eighths of an inch long, dark-colored, and deliciously sweet. Indian women were gathering it in baskets, bending down large handfuls, beating it out, and fanning it in the wind. They were quite picturesque, coming through the rye, as one caught glimpses of them here and there, in winding lanes and openings, with splendid tufts arching above their heads, while their incessant chat and laughter showed their heedless joy. Like the rye-field, I found the so-called desert of Mono blooming in a high state of natural cultivation with the wild rose, cherry, aster, and the delicate abronia, and innumerable gillias, phloxes, poppies, and bush-compositae. I observed their gestures and the various expressions of their corollas, inquiring how they could be so fresh and beautiful out in this volcanic desert. They told as happy a life as any plant-company I ever met, and seemed to enjoy even the hot sand and the wind. But since these notes were written the vegetation of the pass has been in great part destroyed, and the same may be said of all the more accessible passes throughout the range. Immense numbers of starving sheep and cattle have been driven through them to Nevada, trampling the wild gardens and meadows almost out of existence. The lofty walls are untouched by any foot, and the falls sing on unchanged; but the sight of crushed flowers and stripped, bitten bushes goes far toward destroying the charm of wildness. The canyon should be seen in winter. A good, strong traveler, shod with Norwegian snow-shoes and led by a cautious guide, might easily make a safe excursion through it from Yosemite Valley during some tranquil time, when the storms are hushed. The lakes and falls would be buried then; but so, also, would be the traces of destructive feet, while the views of the mountains in their winter garb, and the ride at lightning speed down the pass between the snowy walls, would be truly glorious. There are no deserts, as we understand them. Nature's love is universal, and in no other place have I heard this doctrine proclaimed in plainer terms than in the storm; beaten solitudes of the Mono pass.