







IMPRESSIONS OF LONG ISLAND.

A soft choir joined from the other musicians at the triumphal refrain:

"Hosanna! Glory to God!

Blessed is he who comes bearing Salvation!"

It was music's invocation to those heathen protegés of Christianity whom Columbus found on our shores, and who have never since been perfectly at one with our religion. Its significance was perfectly felt by the listener, and melody, by its own eloquence, was acting as no mean missionary. Few

Christian churches, we fancy, have heard the song sung with such breadth, nobility and inspiration, as this lonely Indian on the windy, sea-washed moor. His eyes closed as the delicious persuasion concluded, and the visitors filed silently and respectfully out of his house.

The king died a few days after the visit of the Tile Painters. His title was worn not quite in vain, since the tribe he governed have really a right of occupancy on their promontory,—a right which Judge Dykman decides must be looked upon as an incumbrance to real title. The late king expressed a wish to see Sag Harbor before he died, was driven thither while in an expiring state, and succumbed on his return that evening. His cousin, Stephen Pharaoh, the sportsman, soldier, and finest pedestrian on Long Island, succeeds him.

The tourists, soon after this visit, resumed the habits of civilization at the great hotel on Shelter Island. The "Owl" threw his London walking shoes away, and it was noticed that a diamond on his hand, carefully worn inward to the palm through the trip, now sparkled on a knuckle. The "Gaul" enriched a boot-black; and "Sirius" was suspected of putting on bear's-grease. The Tilers were re-absorbed into the relentless tide of commonplace.

## THE GLACIER MEADOWS OF THE SIERRA.

What I regard as the typical glacier meadow, is formed by the filling in of a glacier lake, and is found only in the alpine region of the Sierra, at a height of from about eight thousand to nine thousand five hundred feet above the level of the sea.

The general surface is nearly as level as the lake which it has replaced, and is perfectly free from rock-heaps and the frowsy roughness of rank, coarse-leafed, weedy, or shrubby vegetation. The sod is close and silky, and so complete that you cannot see the ground; warm also, and everywhere free from mossy bogginess; and so brilliantly enameled with flowers and butterflies that it may well be called a garden-meadow, or meadow-garden; for the plushy sod is in many places so crowded with gentians, daisies, ivesias, and various species of orthocarpus that the grass is scarce noticea-

ble, while in others the flowers are only pricked in here and there singly, or in small ornamental rosettes.

The most influential of the grasses composing the sod is a delicate calamagrostis, with fine filiform leaves, and loose airy panicles that seem to float above the flowery lawn like a purple mist. But, write as I may, I cannot give anything like an adequate idea of the exquisite beauty of these mountain carpets as they lie smoothly outspread in the savage wilderness. words are fine enough to picture them?—to what shall we liken them? The flowery levels of the prairies of the old West, the luxuriant savannahs of the South, and the finest of cultivated meadows are coarse in comparison. One may at first sight compare them with the carefully tended lawns of pleasure-grounds; for they are as free

from diversifying weeds as they, and as smooth, but here the likeness ends; for our wild lawns, with all their exquisite fineness, have no trace of that painful, licked, snipped, repressed appearance that pleasure-ground lawns are apt to have even when viewed at a distance. And, not to mention the flowers with which they are brightened, their grasses are infinitely finer both in color and texture, and instead of lying flat and motionless, matted together like a dead green cloth, they respond to the touches of every breeze, rejoicing in pure wildness,—blooming and

fruiting in the vital light.

Glacier meadows abound throughout all the alpine and subalpine regions of the Sierra in still greater numbers than the lakes. Probably from 2,500 to 3,000 exist between latitude 36° 30' and 39°, distributed like the lakes,—in the woods and canons, and along the main dividing ridges, in strict concordance with all the other glacial features of the landscape. On the head-waters of the rivers there are what are called "Big Meadows," usually about from five to ten miles long. These occupy the basins of the ancient ice-seas, where many tributary glaciers came together to form the grand trunks. Most however are quite small, averaging perhaps but little more than three-fourths of a mile in length. One of the very finest of the thousands I have enjoyed lies hidden in an extensive forest of the two-leafed pine, on the edge of the basin of the ancient Tuolumne Mer de Glace, about eight miles to the west of Mount Dana.

Imagine yourself at the Tuolumne Soda Springs on the bank of the river, a day's journey above Yosemite Valley. You set off northward through a forest that stretches away indefinitely before you, seemingly unbroken by openings of any kind. As soon as you are fairly into the woods, the gray mountain-peaks, with their snowy gorges and hollows, are lost to view. ground is littered with fallen trunks that lie crossed and recrossed like storm-lodged wheat; and besides this close growth of pines, the rich moraine soil supports a luxuriant growth of ribbon-leaved grasses, chiefly bromus, triticum and agrostis, which rear their handsome spikes and panicles above your waist. Making your way through this fertile wilderness,-finding lively bits of interest now and then in the squirrels and Clark crows, and perchance in a deer or bear,—after the lapse of an hour or two vertical bars of sunshine are seen ahead between the brown shafts of the pines, and

then you suddenly emerge from the forest shadows upon a delightful purple lawn lying smooth and free in the light like a lake. This is a glacier meadow. It is about a mile and a half long by a quarter of a mile wide. The trees come pressing forward all around in close serried ranks, planting their feet exactly on its margin, and holding themselves erect, strict and orderly like soldiers on parade; thus bounding the meadow with exquisite precision, yet with free curving lines such as nature alone can draw. With inexpressible delight you wade out into the grassy sun-lake, feeling yourself contained in one of nature's most sacred chambers, withdrawn from the sterner influences of the mountains, secure from all intrusion, secure from yourself, free in the universal beauty. And notwithstanding the scene is so impressively spiritual, and you seem dissolved in it, yet everything about you is beating with warm, terrestrial, human love, delightfully substantial and familiar. The rosiny pines are types of health and steadfastness; the robins feeding on the sod belong to the same species you have known since childhood; and surely these are the very friend-flowers of the old home garden. Bees hum as in a harvest noon, butterflies waver above the flowers, and like them you lave in the vital sunshine, too richly and homogeneously joy-filled to be capable of partial thought. You are all eye, sifted through and through with light and beauty. Sauntering along the brook that meanders silently through the meadow from the east, special flowers call you back to discriminating consciousness. The sod comes curving down to the water's edge, forming bossy outswelling banks, and in some places overlapping glacier bowlders and forming bridges. Here you find mats of the curious dwarf willow scarce an inch high, yet sending up a multitude of gray silky catkins, illumined here and there with the purple cups and bells of bryanthus and vaccinium.

Go where you may, you everywhere find the lawn intensely beautiful, as if nature had fingered and adjusted every plant that very day. The floating grass panicles are scarce felt in brushing through their midst, and none of the flowers have tall or rigid stalks. In the brightest places you find three species of gentians with different shades of blue, daisies pure as the ether, silky leafed ivesias with warm yellow flowers, several species of orthocarpus with blunt, bossy-headed spikes, red and purple and yellow; the Alpine golden-rod, pedicularis and clover,

fragrant and honeyful, and with their fine colors massed and blended like those of the rainbow. Parting the grasses and looking more nearly you may trace the branching of their shining stems, and note the marvelous beauty of their mist of flowers, the glumes and pales exquisitely penciled, the yellow dangling stamens, and feathery pistils. Beneath the lowest leaves you discover a fairy realm of mosses,—hypnum, dicranum, polycatchers come and go in fitful flights from the top of dead spars, while woodpeckers swing across from side to side in graceful festoon curves,-birds, insects, and flowers all telling a deep summer joy.

The influences of pure nature are as yet so little known, that it is generally supposed that complete pleasure of this kind, permeating one's very flesh and bones, unfits the student for scientific pursuits in which



SEEKING PASTURAGE BELOW THE GLACIERS

trychium, etc.,—their precious spore-cups poised daintily on polished shafts, curiously hooded, or open, showing the richly ornate peristomas worn like royal crowns. Creeping liverworts are here also in lavish abundance, and several rare species of fungi. Caterpillars, black beetles, and ants roam the wilds of this lower world, making their way through miniature groves and thickets like bears in a thick wood, while every leaf and flower seems to have its winged representative overhead. Dragon-flies shoot in vigorous zigzags through the dancing swarms, and a rich profusion of butterflies-the leguminosæ of insects—make a fine addition to the general show. Many of these last are comparatively small at this elevation, and as yet almost unknown to science; but every now and then a familiar vanessa or papilio comes sailing past. Humming-birds too are quite common here, and the robin is always found along the margin of the stream or out in the shallowest portions of the sod. Swallows skim the grassy lake from end to end, flycool judgment and observation are required. But the effect is just the opposite of this. Instead of producing a dissipated condition, the mind is fertilized and stimulated and developed like sun-fed plants. All that we have seen here enables us to see with surer vision the fountains among the summitpeaks to the east whence flowed the glaciers that ground soil for the surrounding forest; and down at the foot of the meadow the moraine which formed the dam which gave rise to the lake that occupied the basin ere the meadow was made; and around the margin the stones that were shoved back and piled up into a rude wall by the expansion of the lake-ice during long by-gone winters; and along the sides of the streams the slight hollows of the meadow which mark those portions of the old lake that were the last to vanish.

I would fain ask my readers to linger a while in this fertile wilderness, to trace its history from its earliest glacial beginnings, and learn what we may of its wild inhabitants and visitors. How happy the birds are all summer and some of them all winter, how the pouched marmots drive tunnels under the snow, and how fine and brave a life the slandered coyote lives here, and the deer and bears! But, knowing well the difference between reading and seeing, I will only ask attention to some brief sketches of its varying aspects as they are presented throughout the more marked seasons of the

year.

The summer life we have been depicting lasts with but little abatement until October, when the night-frosts begin to sting keenly, bronzing the grasses, and ripening the creeping heathworts along the banks of the stream to a reddish purple and crimson; while the flowers disappear, all save the golden-rods and a few daisies, that continue to bloom on unscathed until the beginning of snowy winter. In still nights the grass panicles and every leaf and stalk are laden with frost crystals, through which the morning sunbeams sift in ravishing splendor, transforming each to a precious diamond radiating all the colors of the rainbow. The brook-shallows are plaited across and across with slender lances of ice, but both these and the grass crystals are melted before midday, and, notwithstanding the great elevation of the meadow, the afternoons are still warm enough to revive the chilled butterflies and call them out to enjoy the late-flowering golden-rods. The divine alpenglow flushes the forest every evening, followed by a crystal night with hosts of lily stars, whose size and brilliancy cannot be conceived by those who have never risen above the lowlands.

Thus come and go the bright sun-days of autumn, not a cloud in the sky, week after week until near December. Thencomes a sudden change. Clouds of a peculiar aspect with a slow crawling gait gather and grow in the azure, throwing out satiny fringes, and becoming gradually darker until every lake-like rift and opening is closed and the whole bent firmament is obscured in an equal structureless gloom. Then comes the snow, for the clouds are ripe, the upper meadows are in bloom, and shed their varied blossoms like an orchard in the spring. Lightly, lightly they lodge in the brown grasses, and in the tasseled needles of the pines, falling hour after hour, day after day, silently, lovingly,-all the winds hushed,-glancing and circling hither, thither, glinting against one another, rays interlocking in flakes large as daisies; and then the dry grasses, and the trees, and the stones, are all equally abloom again. Thunder-showers occur here during the summer months, and impressive it is to watch the coming of the big transparent drops, each a small world in itself,—one unbroken ocean hurling free through the air like poised planets through space. But still more impressive to me is the coming of the snow-flowers, falling stars, winter daisies, giving bloom to all the ground alike. Rain-drops blossom gloriously in the rainbow, and change to flowers in the sod, but snow comes in full flower direct from the dark, frozen sky.

The late snow-storms are oftentimes accompanied by strong winds that break up the crystals, when the temperature is low, into single petals and irregular dusty fragments, but there is comparatively little drifting on the meadow, so securely is it embosomed in the woods. From December to May, storm

succeeds storm, until the snow is about fifteen or twenty feet deep, but the surface is always as smooth as the breast of a bird.

Hushed now is the life that so late was beating warmly. Most of the birds have gone down below the snow-line, the plants sleep, and all the fly-wings are folded. Yet the sun beams gloriously many a cloudless day, casting long lance shadows athwart the dazzling expanse. In June small flecks of the dead, decaying sod begin to appear, gradually widening and uniting with one another, covered with creeping rags of water during the day, and icy by night, looking hopeless and unvital as crushed rocks just emerging from the darkness of the glacial period. Walk the meadow now! Scarce the memory of a flower will you find. The ground seems twice dead. Nevertheless, the annual resurrection is drawing near. The life-giving sun pours his floods, the last snow-wreath melts, myriads of growing points push eagerly through the steaming mold, the birds are heard again singing and building, the air fills with new flies, and fervid summer life comes surging on, seemingly yet more glorious in all its attributes than before.

This is a perfect meadow, and under favorable circumstances exists without manifesting any marked change for many centuries. Nevertheless, soon or late it must inevitably grow old and die. During the calm Indian summer, scarce a sand-grain moves around its banks, but in flood-times and storm-times soil is washed forward upon it and laid in successive sheets around its gently sloping rim, and gradually ex-

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tended out to the moist, level center, making it constantly drier. Through a considerable period the meadow vegetation is not greatly affected thereby, for it gradually rises with the rising ground, keeping on the surface like water-plants rising on the swell of waves. But at length the elevation of the meadow-land goes on so far as to produce too dry a soil for the specific meadowplants, when of course they die out and give up their place to others fitted for the The most characteristic new conditions. of the new-comers at this elevation above the sea are principally sun-loving gilias, eriogonæ, and compositæ and finally, forest trees. Henceforward the obscuring changes are so manifold that the original lakemeadow can be unveiled and seen only by

the geologist.

Generally speaking, glacier lakes vanish more slowly than the meadows that succeed them, because unless very shallow a greater quantity of material is required to fill up their basins and obliterate them than is needed to render the surface of the meadow too high and dry for meadow vegetation. Furthermore, owing to the weathering to which the adjacent rocks are subjected, material of the finer sort susceptible of transportation by rains and ordinary snow-floods is more abundant during the meadow period than during the lake period. many a fine meadow favorably situated exists in almost prime beauty for thousands of years, the process of extinction being exceedingly slow, as we reckon time. This is especially the case with meadows circumstanced like the one we have describedembosomed in deep woods, with the ground rising gently away from it all around; for the net-work of tree-roots in which all the ground is clasped prevents any rapid torrential washing. But, in exceptional cases, beautiful lawns formed with great deliberation are overwhelmed and obliterated at once by the action of land-slips, earthquake avalanches, or extraordinary floods, just as lakes are.

In those glacier meadows that take the place of shallow lakes which have been fed by feeble streams, glacier mud and fine vegetable humus enters largely into the composition of the soil; and, on account of the shallowness of the soil, and the seamless, water-tight, undrained condition of the rockbasins, they are usually wet, and therefore occupied by tall grasses and sedges, whose coarse appearance offers a striking contrast to that of the delicate lawn-making

species described above. These shallowsoiled meadows are oftentimes still farther roughened and diversified by partially buried moraines and uprising montoneed bosses of the bed-rock, which, with the trees and shrubs growing upon them, produce a very marked effect as they stand out in full relief like islands in the grassy level or sweep across in rugged curves from one forest wall to the other.

Throughout the upper meadow region, wherever water is sufficiently abundant and low in temperature in basins secure from flood-washing, handsome bogs are formed with a deep growth of brown and yellow sphagnum picturesquely ruffled with patches of kalmia and ledum which ripen masses of intensely beautiful color in the autumn, and between these cold, spongy bogs and the dry, flowery meadows there are many interesting varieties which are graduated into one another by the varied conditions already alluded to. Every one of these forms a delightful study, but anything like a full description of a single specimen of each would require the space of a whole volume.

## HANGING MEADOWS.

THERE is a very marked and interesting species of Sierra meadows, not at all related to the lake meadows we have consideredthat is, in so far as their origin is concerned. They are distinguishable at once from all the foregoing, even by position alone; for they are always found lying aslant upon some moraine-covered hill-side, trending in the direction of greatest declivity, waving up and down over rock heaps and ledges, like rich green ribbons brilliantly illumined with flow-They occur both in the alpine and sub-alpine regions in considerable numbers, and never fail to make very telling features in the landscape. They are often a mile or more in length, but never very wide, -usually from thirty to fifty yards. When the hill or cañon side on which they lie dips at the required angle, and other conditions are at the same time favorable, they frequently extend from above the timber-line to the bottom of a cañon or lake-basin, descending in fine, fluent lines like a broad cascade, breaking here and there into a kind of spray on large bowlders, or dividing and flowing around on either side of some projecting islet. Sometimes a noisy stream goes brawling down through their midst, and again, scarce a drop of water is in sight. They always owe their existence, however, to

streams, whether visible or invisible, the wildest specimens being found where some perennial fountain, as a glacier or snow-bank or moraine spring sends down its waters across a rough sheet of soil in a dissipated web of feeble, oozing currentlets. These conditions give rise to a meadowy vegetation, whose extending roots still more fully obstruct the free, concentrated flow of the waters, and tend to dissipate them out over a wider area. Thus the moraine soil requisite for the better class of meadow plants and the necessary moisture are at times combined about as perfectly as if smoothly outspread on a level Where the soil happens to be composed of the finer qualities of glacial detritus and the water is not in excess, the nearest approach is made by the vegetation to that of the tropical lake-meadow. But where, as is more commonly the case, the soil is coarse and bowldery, the vegetation is correspondingly rank and flowery. Tall, wideleafed grasses take their place along the sides, and rushes and nodding carices in the wetter portions, mingled with the most beautiful and imposing flowers, -orange lilies and larkspurs seven or eight feet high, lupines, senecios, aliums, painted-cups, many species of mimulus and penstemon, the ample boatleafed veratrum alba, and the magnificent alpine columbine, with spurs an inch and a half long. At an elevation of from seven to nine thousand feet flowers frequently from the bulk of the vegetation; then the hanging meadows become hanging gardens.

In rare instances we find an alpine basin the bottom of which is a perfect meadow, and the sides nearly all the way round, rising in gentle curves, are covered with moraine soil, which, being saturated with melting snow from encircling fountains, gives rise to an almost continuous girdle of down-curving meadow vegetation, that blends gracefully into the level meadow at the bottom, thus forming a grand green mountain nest with a flowery border.

But commonly the hanging meadows come sweeping down through the woods into the lake levels in ribbony strips, leaving the trees along their margins beautifully revealed. It is in meadows of this sort that the water-rat makes his curious homes, excavating snug chambers beneath the sod, digging canals, and turning the gathered waters from channel to channel to suit his convenience, and harvesting the gay vegetation for food, cutting it off, and gathering it in bunches with the heads all one way, like handfuls of culled flowers.

Another species of hanging meadow or bog is found upon densely timbered hillsides, where small perennial streams have been dammed at short intervals by the fall of trees.

Yet another species is found depending from moist tablets down sheer granite precipices, pricked full of bright houstonias; while corresponding vertical meadows rise from the feet of the precipices to meet them, like stalactite and stalagmite.

And there are three species of pot-hole meadows, one found along the sides of the main streams, another on the summits of ridges, and the third out on bare, shining glacier pavements; all of them extremely interesting in every way. But enough has been said, perhaps, to give a hint of the fine beauty that lies hid in the wildernesses of the California Alps.

## "TO THE CLERGY."

I had but just finished writing an article in the November number of this magazine, concerning "Parsons and Parsons"; the ink was not dry on the hopeful sentences with which I had endeavored gracefully to round off some playful discussions, when a circular came to me through the mails, addressed "To the Clergy." Now, when a document begins with this respectful, flattering, and even reverent, expression,—"to the clergy,"—I infer that I am about to be called on to offer prayers for something, to

preach on some popular reform, or—what is more likely—to take a collection for some charity whose merit is only surpassed by its impecuniosity. But this circular inclosed a sample of black tricot, and begged to call my attention to the full line of ready-made "clerical suits" offered by a well-known merchant-tailor house in New York. This house is ready to put you into a suit that shall say to every man who sees you: "I am not a common man, but a man of God,—a kind of Burmese sacred white elephant to