

"Climb the mountains and get their good tidings. Nature's peace will flow into you as sunshine flows into trees. The winds will blow their own freshness into you, and the storms their energy, while cares will drop off like autumn leaves."—JOHN MUIR.

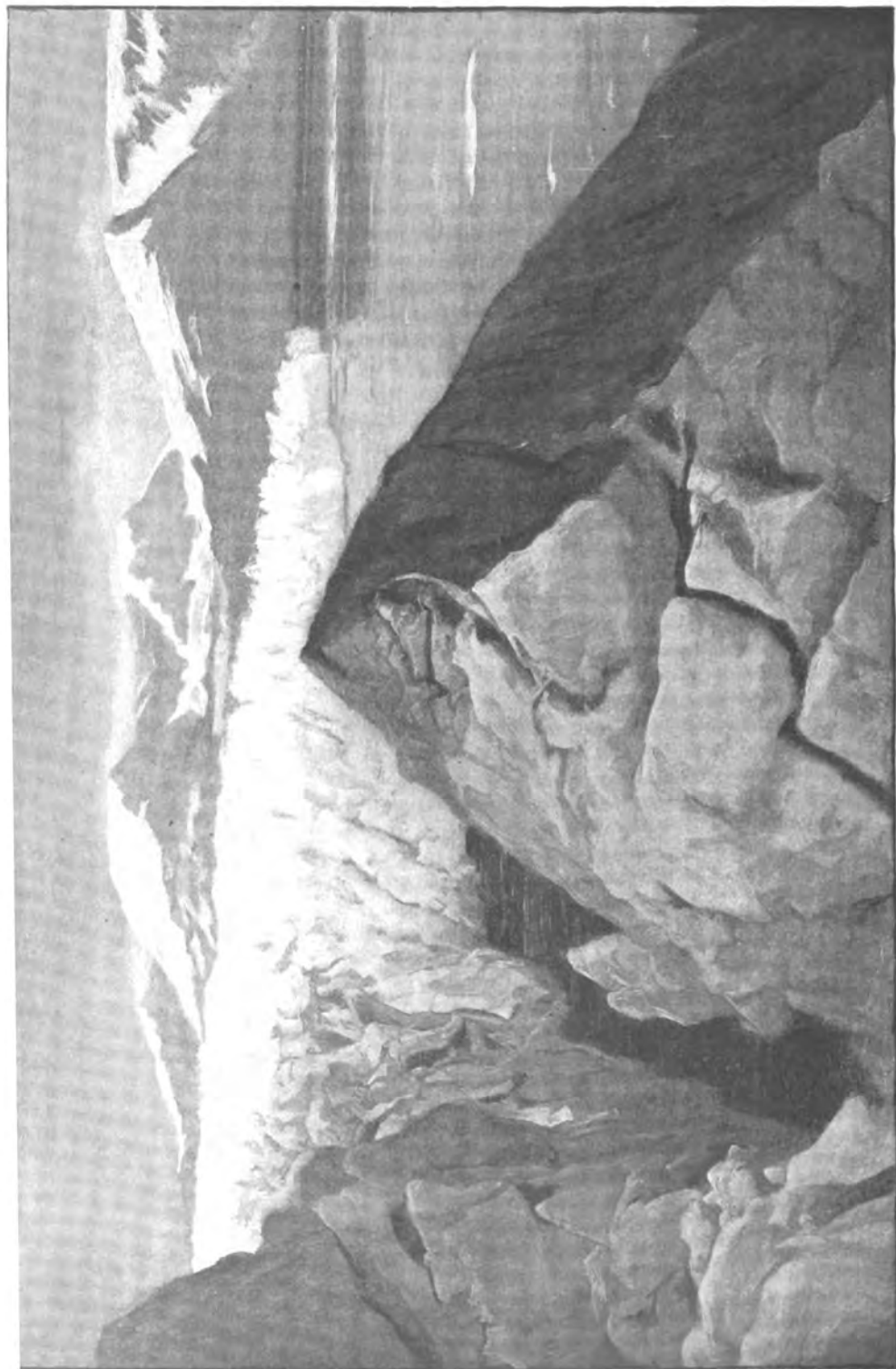
A DICTIONARY of biography, in giving us John Muir, "geologist, botanist, and lover of Nature," illustrated the futility of attempting to define a man of genius with mere names. For when his various eminences have been set down one after another, fairly and exactly, we discover that the man, after all, is not there. Geologist John Muir certainly is, for no man is more eminently an authority than he on the work performed by glaciers in sculpturing the mountain landscape. One of the greatest of Alaskan glaciers, first explored by him, bears the name Muir Glacier; and no scientist is better informed than he on the geological wonders of the great valleys and mountains of Western North America—the "grand side of the continent," he calls it. Botanist he is, too, the recognized authority on the flora of the Sierras, especially the pines, to which he has devoted years of study. Two universities have attested with honorary degrees the value of his work in these branches of science. And, truly, John Muir is a lover of Nature. Emerson said of him, "He is more wonderful than Thoreau." Few men, indeed, have ever

given themselves to Nature so freely as John Muir.

Still other names might be added to those of the dictionary of biography. John Muir is also an author, who has written with rare literary and poetic charm of his mountains and glaciers and trees; he is a traveler, a "wanderer," he would call it, for he has explored the jungles of Cuba and Central America, the glaciers of Alaska, Siberia, Norway, and Switzerland, the deserts of Utah, the forests of Canada, and, best of all, he knows the valleys and peaks of his own Sierras; he is an inventor, having won his earliest successes in devising curious and ingenious mechanical devices; and, finally, he is a rancher, the master of a fruitful valley in central California, with wide-spreading vineyards and orchards and a house set on a hill.

But even these added names, though they indicate some of the diverse activities of a remarkable man, fail in giving us John Muir. We are interested, not so much in what John Muir has done, though he has done much, as in what he is—the man of rare personal charm, of ripe philosophy, of gentle humor, of deep, even mystical, appreciation of natural beauty, the friend of the wild things of the woods, the poet of trees and waterfalls.

John Muir's life appeals to us because



DRAWN BY SIGMUND HANOWSKI AFTER A COPYRIGHTED PHOTOGRAPH BY E. H. HARRISMAN

THE MUIR GLACIER. DISCOVERED BY JOHN MUIR

it is a complete expression of a deep human instinct which we have often felt, and throttled—the instinct which urges us to throw off our besieging restraints and complexities, to climb the hills and lie down under the trees, to be simple and natural. John Muir not only felt that impulse, but he really escaped. "Going to the mountains," he believed, "is going home." And the fact that he dared to follow his impulse, and that now, after a long life devoted with singular fidelity of purpose to winning the loving confidences of mountain and glacier, forest and flower, the ardor of the impulse is in no wise dimmed, gives us a sense of completeness, shows us in projection, worked out with joy, an instinct of our own. And we want to know more of John Muir, and to hear some of the new and strange things he must have to tell us.

John Muir's career may be said to have had its beginning on the day that he set forth, a raw country boy, to conquer the world, hope in his heart and an odd bundle of whittled wooden machinery on his shoulder. He had made a thermometer out of the end rod of his father's wagon, so fastening it to the side of the house that the expansion of the iron in varying degrees of heat was indicated on a large dial. He had invented and built an automatic sawmill, and several wooden clocks, one of them in the form of a scythe hung on a burr-oak sapling, representing the scythe of old Father Time—a good timekeeper, indicating the days of the week and month, and having attachments for other inventions—for lighting fires and lamps, a bedstead that set the sleeper on his feet at any desired time, and so on. He had also invented an automatic arrangement for feeding horses, a bathing-machine, barometer, pyrometer, hydrometer, safety locks, etc., all original, even the clocks, he never at that time having seen the works of any sort of timekeeper. For he had grown up on a backwoods farm in what was then the wilderness of Wisconsin, near Fox River, twelve miles from Fort Winnebago. His father was a sturdy, hard-working Scotchman of the old school, deeply and sincerely religious, with stern notions concerning the training of his boys and girls. Daniel Muir had been a grain merchant in Dunbar, on the Frith of Forth, Scotland,

where John was born (April 21, 1838) and spent the first eleven years of his life, and he had come to America that he might own land and make a place for himself in the world. It was pioneer work of the hardest kind—chopping trees, clearing land, and building barns—and the hours were long, so that when supper was eaten and the Bible read it was time for bed. But one of the boys of the Muir family was ambitious, often taking his mathematical problems with him to the fields and working them out on chips from the trees that he felled; and though he knew that his father's rules were like those of the Medes and Persians, never changeable, and that he could not hope for more time to read in the evening, he was finally told that he might get up as early as he liked in the morning. Though accustomed to sleep ten hours every night, he now broke off sharply to five hours by sheer force of will.

"It was winter," he said; "a boy sleeps soundly after chopping and fence-building all day in frosty air and snow; therefore I feared I would not be able to take any advantage of the granted permission. For I was always asleep at six o'clock when father called, the early-rising machine was not then made, and there was no one to awake me. Going to bed wondering whether I could compel myself to awake before the regular hour and determined to try, I was delighted next morning to find myself early called by will, the power of which over sleep I then for the first time discovered. Throwing myself out of bed and lighting a candle, eager to learn how much time had been gained, I found it was only one o'clock, leaving five hours all my own before the work of the farm began. At this same hour all winter long my will, like a good angel, awoke me, and never did time seem more gloriously precious and rich. Fire was not allowed, so to escape the frost I went down cellar, and there read some favorite book or marked out some invention that haunted me."

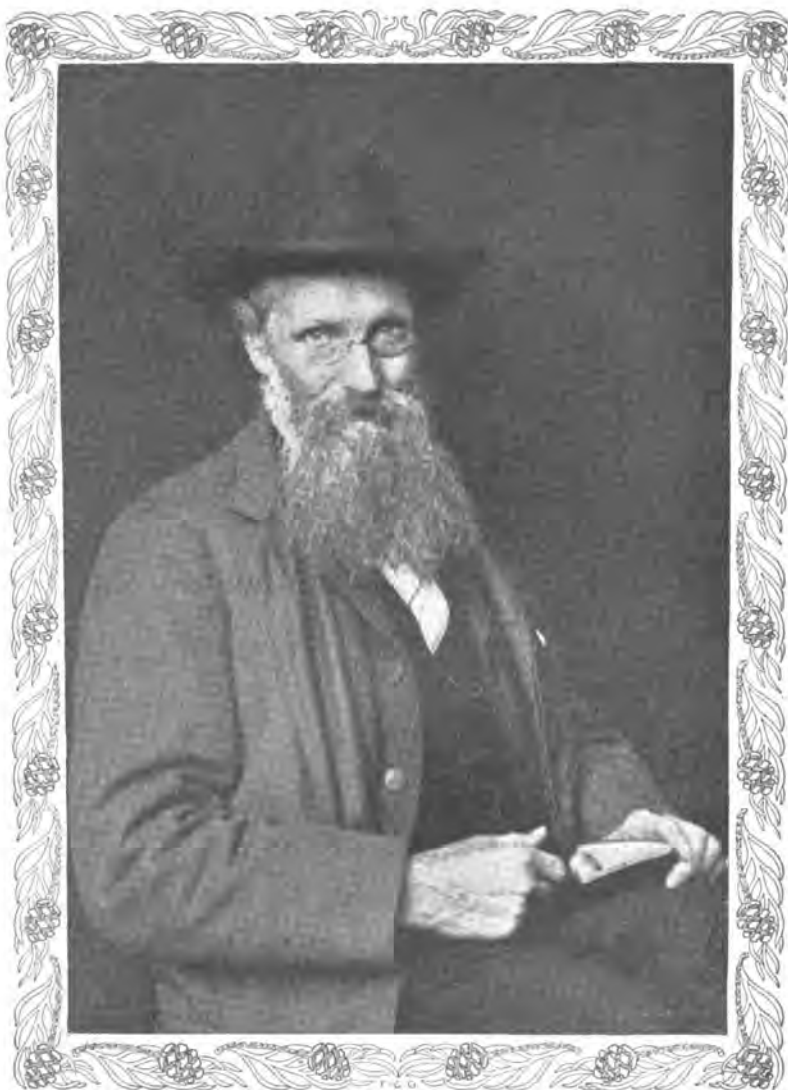
And in those long, quiet hours, robbed of sleep, he not only invented machines but he read many books—all he could buy or borrow from neighbors, the best of them, after the Bible and Shakespeare, being "Pilgrim's Progress," "Plutarch's Lives," Josephus, Milton, Burns's poems,

Hugh Miller's works, and Scott's novels. The novels were forbidden and most of the others frowned on as leading away from the Bible. Daniel Muir believed that the Bible and the Latin grammar should be the chief if not the only books in the library, and before he was eleven years old John had learned in the hard yet effectual school of the birch switch to recite from memory the entire New Testament and the greater part of the Old; and at that age he knew the Latin and French grammars almost as well. All this seemed hard training to a boy fond of the fields, but in later years it was a precious possession, for there is no school in literary style to equal King James's Bible. John Muir tells with delightful humor how his father frowned on these early risings, but that, having once given his word, Scotch-like, he would not go back on it, even though he felt that his permission had been interpreted quite too faithfully according to the letter. How he trembled lest his father should discover his inventions and deem it his duty to burn them up! After the spare hours and minutes of a year or more had been spent in secret on the construction of one of his curious clocks, his sister came to him whispering, "Feyther kens what yer doin', John." But, fortunately, Daniel Muir had not the heart to destroy the invention, satisfying his conscience by solemnly condemning the wicked waste of time on nonsense which should be given to study of God's Word. Nevertheless, when the great machine for getting up in the morning was finally completed and set to ticking in the parlor, Daniel Muir stepped in quietly, watch in hand, when he thought he was alone, to see if the wooden clock struck exactly on the second.

In 1860 John Muir's neighbors, who regarded him as a great genius, advised him to take some of the most portable of his inventions to a State fair about to be held in Madison, assuring him that they would enable him to enter any sort of machine-shop he liked. But surely, he objected, among such grand machinery as will be there nobody will look at my poor wooden things. Yes, they will, said his encouraging friends, because they are original; there's nothing like them. Go ahead and don't be afraid; a Marquette County farm is no place for you, you're

dead sure to get on in the world and be whatever you like.

Since coming to Wisconsin he seldom had been more than a dozen miles from his father's farm, and yet he started out with barely six dollars in his pocket, full of vague hope and innocent ignorance, never expecting that anything wonderful would be seen in any of his whittled machines, and he was greatly surprised to find that they opened all doors to him. When the train that was to carry him to Madison came in, the conductor showed so much interest in his curious bundle that he was emboldened to ask permission to ride on the engine, although he had not been on a railroad train since coming from Scotland. He did not know that it was against the rules; he was completely fascinated in the locomotive as a marvelous mechanism; and, astonishing as it may seem, a momentary glance at his strange bundle so interested the conductor and the engineer that he was actually allowed to ride on the tender, except when nearing stations, all the way to Madison. Next to a trip on a mountain avalanche, which he took quite involuntarily years later, he says it was the most exciting ride he ever had. When he reached the Fair grounds, he found the superintendent only too pleased at the prospect of exhibiting such marvels, and they soon occupied a prominent place in the fine arts hall, where young Muir, too shy to pose as the inventor, mingled with the crowd and heard the admiring comments of the spectators. Though suddenly finding himself a celebrity, he refused, quaintly enough, to read the accounts of his inventions which appeared in the newspapers, because his father had always warned him of the deadly poison of praise. After various adventures in Madison and Prairie du Chien, studying mathematics, drawing, pattern-making, etc., he learned from a student he chanced to meet that he could attend the State University at a cost of a dollar a week or even less; and for four years he was a student, supporting himself largely by working in the harvest-fields, by teaching school, and doing all manner of odd jobs. He was especially interested in mathematics, geology, chemistry, and botany, taking the same course in chemistry year after year, and spending much time besides in exper-



PHOTOGRAPH BY HOLLINGER

JOHN MUIR

iments, caring comparatively little for the languages, or for the usual rewards of a college career. At the end of his irregular four years' course he departed, without a diploma, though years later his Alma Mater felt honored in making him a doctor of laws and Harvard University conferred on him the degree of Master of Science.

Though he found himself becoming more and more interested in the natural sciences, he did not lose his enthusiasm as an inventor. His room at the University must have been a place of wonders.

Besides the getting-up machine, young Muir built a desk so operated by clockwork that it brought his books before him, each in its turn, and exactly at the time when he should begin its study. After the time-arrangements had been made at the beginning of the term for each study, the machine continued to operate whether he was on hand or not. Another invention registered the growth of plant stems during each of the twenty-four hours. It is related that where he once taught school he fitted up a machine which lighted the fire for him every morning, so



JOHN MUIR'S CABIN IN THE YOSEMITE

that he did not have to reach the school-house so early.

It was during his college course that his deep love for wandering afield and studying out-of-door life first began to manifest itself in botanical rambles around the Madison lakes. After leaving the University he vanished in the northern wilderness about the Great Lakes to study the plants and rocks. When his bread-money was spent, he worked on a farm, and again in a mill on the Georgian Bay, where hand-rakes, broom and pitchfork handles were manufactured, and where he invented an entirely new set of automatic machinery, which saved about half the labor formerly involved; he spent all his spare hours in the adjacent woods. But he was not ready yet to give himself fully to outdoor scientific work, which, in those days especially, would not have yielded him bread, to say nothing of butter. Next he went to Indianapolis, where he found employment for a time in a carriage-material factory, and where an unfortunate, or perhaps fortunate, accident deprived him for a time of the sight of one eye, and probably changed the course of his whole career. Writing of this accident to his friend Mrs. Carr, the wife of one of his professors at Madison, he said:

"I felt neither pain nor faintness, the thought was so tremendous that my right eye was gone, that I should never look at a flower again." Escaping from his dark room, he set out on yet longer walks, determined to lay in as great a store as possible while light lasted.

In 1867 he started from Louisville, with a plant-press on his back, a small bag, and three books—the New Testament, Burns's poems, and Milton's "Paradise Lost." Thus free and glad, he made his way, afoot and alone, over a thousand miles to Florida, where he reveled for a time in the deep flowery swamps and jungles, crossing then to Cuba. During most of this journey he slept on the ground out-of-doors, both by preference and because he had no money to pay for other lodgings. He did not avoid human habitation, nor did he seek it, finding his deepest pleasure in winning the secrets of the woods. Even at this early day he revealed the rare sensitiveness toward what may be called the personality of trees and flowers, which finds such delicate and

poetic expression everywhere in his later writings. He writes to Mrs. Carr:

"The dear little conservative green mosses have elevated their smooth shining shafts and stand side by side, every cowl properly plaited and drawn down just far enough, every hood with its dainty slant, their fashions unchanging because perfect."

Though originally intending to explore the Amazon River from its highest source to the sea, Muir found himself so racked with fever contracted in the Florida swamps that he departed for California by way of the Isthmus of Panama. It is significant of his great love for the mountains that he should have remained just one day in San Francisco, though it must have been at that time, April, 1863, a most fascinating city, brilliant with the color of the new Western life. He set his face eastward, where the white Sierra, which he was soon to know so well, rose in the distance. In his accounts of this trip on foot through the wonderful San Joaquin valley, then in its virgin glory of plant and flower, mostly untouched as yet by plows and "hoofed locusts," one is conscious in every line of a fine note of exultation. He was free in a pure wilderness; he had escaped.

"Sauntering in any direction," he writes, "hundreds of these happy sun-plants brushed against my feet at every step, and closed over them as if I were wading in liquid gold. The air was sweet with fragrance, the larks sang their blessed songs, rising on the wing as I advanced, then sinking out of sight in the polleny sod, while myriads of wild bees stirred the lower air with their monotonous hum—monotonous, yet forever fresh and sweet as every-day sunshine. Hares and spermophiles showed themselves in considerable numbers in shallow places, and small bands of antelopes were almost constantly in sight, gazing curiously from some slight elevation and then bounding swiftly away with unrivaled grace of motion.

"The great yellow days circled by uncounted, while I drifted toward the north, observing the countless forms of life thronging about me, lying down almost anywhere at the approach of night. And what glorious botanical beds I had! Oftentimes on awakening I would find several new species leaning over me and

looking me full in the face, so that my studies would begin before rising."

A few months after leaving San Francisco Muir reached the Yosemite Valley, and there, in the midst of all that was glorious in nature, he decided to renounce all his inventions and devote his life to the study of the inventions of God. Though he could live on little enough—he has said fifty cents a week—that little was necessary, and one season he herded sheep, and then he made his mechanical knowledge serviceable in building a small sawmill in Yosemite, to be used for cutting fallen trees. The hotel-keeper who employed him was somewhat doubtful of his ability, for Muir had earned the title of "one of them botany fellers," but, business having called the owner away for a few months, he was glad on his return to find the mill running. Out over the water-wheel Muir built himself a little cubby of a den, hanging like a swallow's nest to the gable of the building, with one window opening to the grandeur of the valley. It was approached by a steep, narrow plank ladder, making it rather difficult of access to careless visitors. Here he kept his treasures, his collections of cones and plants, here he filled some of his voluminous note-books with sketches and closely written memoranda, and here he entertained Emerson, though he must have trembled when he saw the tall, angular, awkward form of the poet climbing his perilous ladder. Undoubtedly he showed Emerson his treasures with the same unconscious enthusiasm with which he exhibits them to-day. "Man," he says, with a quaint bit of Scotch in his voice, "but that's a grand tree," or, "Isn't that an awful queer muggins of a cone!" Anyway, we know that Emerson enjoyed Muir, and insisted on seeing much of him, and that when he returned he told Asa Gray about him, and when Gray visited the Sierras he searched Muir out and made a friend of him. Muir paid his highest compliment to Emerson by comparing him with the grandest of trees. "He is the Sequoia of the human race." Afterwards other botanists besides Asa Gray came to the Yosemite—the famous Torrey, Sir Joseph Hooker, and others—and they all sought out Muir, not only for his extraordinary knowledge of the plant-forms of his valley, but for himself,

his quaint philosophy, and his abundant humor. More than once Muir was tempted by his friends to quit his life in the mountains, which they looked upon as a hardship, but he with joy, and take up a professorship somewhere in the East; but he replied that there were plenty of professors in the colleges and few observers in the wilderness. Nothing, indeed, has ever tempted him far from the mountains.

In order to see something of the deserts and mountain ranges of the Great Basin, Muir joined the United States Coast and Geodetic Survey in 1876 and worked for three years, mostly in Nevada and Utah. He tells with humor of his experiences with the Mormon pioneers of what was then an almost undiscovered country; for Muir, though most deeply interested in mountains, glaciers, and trees, was never a recluse, never unsocial; his sympathies were broad enough to include the human species, and his vision seems all the clearer for his having come to men fresh from the hills. His writings abound in nice bits of characterization of miners, pioneers, Indians, bee-hunters, and others of the wandering sort whom he met on his travels. Having completed his work with the Geodetic Survey, Muir set out for Alaska in 1879 to study the work of glaciers; and there he discovered Glacier Bay and the magnificent river of ice which has since borne his name—Muir Glacier. Indeed, he traversed vast stretches of the ice-country between the coast and the head-waters of the Yukon and McKenzie Rivers, nearly always alone or with a few Indians as his sole companions, braving dangers and difficulties and enduring hardships which to an ordinary man must seem wholly insuperable. In 1881, as a member of the Arctic relief expedition which sailed in the *Corwin* to search for De Long and the lost Jeannette, he was able to extend his study of glaciers far up in the Behring Sea and along the coast of Siberia. No scientist, indeed, was ever better informed on the world's glaciers than John Muir. After exploring the most notable ice-rivers of North America and the action of ancient glaciers about the coast of Behring Sea and the adjacent Arctic regions, Muir was able in 1893 to gratify a long-cherished scheme of visiting Norway and Switzerland and seeing for himself the

fjords and mountains already famous to science, so that he could compare them with those of western America that he knew most intimately, and draw with more certainty the great conclusions which his studies now suggested.

To Muir, a glacier, indeed, is almost a living and toiling presence, a mighty world-force which in the hand of God has fashioned the mountains, carved out the valleys and lake basins, and given us most of that which is beautiful in new mountain landscapes. He tells of going forth to "see God making landscapes," and explains how the "features of the mountains" were developed and polished into beauty by the patient action of the iceriver. Indeed, one who talks long with John Muir cannot help feeling the very personal presence of the mountains. He speaks of the "landscape countenance" and the "expressive outspokenness of the cañon rocks" as he might speak of the countenance or the voice of a friend. Before Muir's time science declared that the great valley of the Yosemite and other similar gorges were formed by terrific cataclysms of nature during which a portion of the earth sank in, leaving behind awful chasms and gulches; but Muir discovered that these glorious mountain temples and palaces were the result of the slow, orderly, grinding action of glaciers working through thousands of years on rocks of peculiar physical structure. He traced out the courses of scores of these ancient glaciers, and, what was more, he discovered no fewer than sixty-five small residual glaciers in the high Sierras, where some of the best-informed scientists asserted with confidence that no glaciers existed. So enthusiastic was he in his studies that he once braved the sublime and awful spectacle of an earthquake in Yosemite Valley, which shook down, with solemn thunder, from cliff and precipice, uncounted thousands of tons of rock, in order to assure himself that the talus or rocky refuse at the sides of that great valley was the result of earthquakes. It is significant of Muir's absorption of interest in these great natural wonders that when he first heard the rumblings of the earthquake, waking him from sleep, his scientific enthusiasm should instantly have risen uppermost, and that, instead of flying in terror for safety, he ran out

exclaiming, "A noble earthquake!" and sought the spot where he could best behold the awful spectacle of the falling rocks. Muir has himself written a graphic account of this extraordinary experience.

While John Muir's greatest interest has always been centered in glaciers, and it is on this subject that he has added most to the world's knowledge, he has lost no opportunity to study the trees, flowers, squirrels, and birds of his mountains, nor to take account of the varying rock formations, so that he has contributed to many departments of scientific knowledge. Without Muir the splendid Sierras would still be comparatively little known to the world.

John Muir's methods of exploration are characteristic of his peculiar genius. Had his interest in the mountains been merely the dry curiosity of the scientist in quest of facts, many of his most notable expeditions would never have been made. While he possessed a voracious appetite for everything of scientific significance, he was forever drawn and thrilled by the beauties and splendors of forest and chasm. He would climb as far for the magnificent spectacle of a wind-storm in the tops of a noble forest, or to behold a rare sunset, or a snow-storm, as he would to discover a new glacier. Indeed, it was always the poet who led and the scientist who followed. "A perfectly poetic appreciation of nature," says Walter Bagehot, "contains two elements—a knowledge of facts and a sensibility to charms. Everybody who may have to speak to some naturalists may be well aware how widely the two may be separated. He will have seen that a man may study butterflies and forget that they are beautiful, or be perfect in the 'lunar theory' without knowing what people mean by the moon." Both of these elements of poetic appreciation are united in John Muir, and he shows us nature "tinged by the prismatic rays of the human spirit."

So Muir has always gone forth seeking beauty as well as knowledge, and ordinarily he has gone alone, not only because this method best suited his purposes, but because few men could endure the hardship and fatigue which were his daily portion. A wiry man, of slight build, all muscle and sinew, he was able to traverse great distances on foot, climb precipices

and the walls of glaciers with steady nerves, subsist on the smallest possible allowances of food, and sleep where night found him, with no covering but the light clothing which he had worn during the heat of the day. His needs were of the smallest—a bag of bread, a little sack of tea, and a cup in which to steep it—that was the only outfit he carried, beyond his note-book and his four scientific instruments—a thermometer, a barometer, a clinometer, and a watch. Sometimes, when he had nearly reached the top of a mountain and expected to return the same way, he would leave his bag of food and trust to finding it on his return. No matter how wild and rough the country, nor how far he had gone, nor how stormy the weather, he never lost his way, nor failed to find the particular gorge among a thousand where the bread-bag was hidden. Sometimes he missed three or four or even a greater number of meals without special inconvenience. And it was always something of a cross to him to be compelled, when the bag was empty, to return from his heights to what he called the "bread line." He has himself described one of his camping-places in the high Sierras:

"I chose a camping-ground on the brink of one of the lakes, where a thicket of hemlock spruce sheltered me from the night wind. Then, after making a tin cupful of tea, I sat by my camp-fire reflecting on the grandeur and significance of the glacial records I had seen. As the night advanced, the mighty rock-walls of my mountain mansion seemed to come nearer, while the starry sky in glorious brightness stretched across like a ceiling from wall to wall, and fitted closely down into all the spiky irregularities of the summits. Then, after a long fireside rest, and a glance at my note-book, I cut a few leafy branches for a bed, and fell into the clear, death-like sleep of the tired mountaineer."

The hardships, indeed the adventures, of his work seem to have left comparatively little impression upon him. Adventure, he says, is usually misadventure, and a skilled mountaineer is too careful to have many misadventures. Seemingly he became so absorbed in the wonders which were constantly opening before his vision that he was unconscious of his own dis-

comfort and danger. All his writings are singularly and charmingly free from any evidence of self-consciousness in the matter of hardships, though here and there a remark, dropped as if by accident, gives one a glimpse of the tremendous difficulties which he was constantly surmounting. It is a source of humorous mystery to him how one of his friends, a well-known Western explorer, could write so voluminously on his experiences.

"Why," he said, "he had one chapter on how he went up a mountain and another on how he came down again."

And yet it has fallen to the lot of few men to have had more thrilling, and often terrible, experiences than John Muir. At one time, owing to his desire to complete some important observations for the Government, he was caught in a tremendous wind and snow storm on the summit of Mount Shasta, where he lay for seventeen hours in his shirt-sleeves over the jets of sulphur steam from fissures beneath the ice and snow, with the thermometer below zero. Dry, mealy snow, driven by a fierce wind, hissed over him, sifting under his clothing, and yet he escaped from what must have been death to one less hardy than he with nothing more than a few frost-bites. At another time his endurance and will-power saved a surveying party which was traversing the great desert in Utah from perishing by thirst on the sand. Once he became exhausted in attempting to scale a fearful precipice, once he was carried down a mountain-side on an avalanche, and once—and it was one of the few times when he varied his rule of making solitary expeditions—a companion fell on a crumbling spire of a mountain summit, dislocating both arms, and it was only with the most fearful exertion that Muir was able to effect his rescue. But he has himself told the story of what was perhaps the most remarkable of all his experiences. With his little dog Stikeen he was caught one stormy evening on one of the great unexplored glaciers of Alaska, and in returning to camp he found it necessary to cross a crevasse on a narrow and dangerous bridge of ice. The account not only thrills with adventure, but it is one of the most charming of dog stories, showing Muir's rare insight into dog character.

To his own danger in those expeditions

he never seemed to give a thought. Death he looked upon with calmness. "I never have had contempt of death," he writes, "though in the course of my explorations I oftentimes felt that to meet one's fate on a mountain, in a grand cañon, or in the heart of a crystal glacier, would be blessed as compared with death from disease, a mean accident in a street, or from a sniff of sewer gas."

Though his expeditions carried him constantly among the haunts of wild creatures, Muir was never a hunter, not even killing for food, nor does he believe in fishing.

"Hunting," he once said, "is a healthy natural instinct, but one should outgrow it."

He would almost as soon think of killing a friend as he would of killing the wild things of the woods. A visitor once asked him why he did not kill the butcher-birds around his home.

"Why should I kill them?" he asked. "They are not my birds."

Of snakes he says, "Poor creatures, loved only by their Maker." To him all the woods are full of friends. "How many hearts with warm red blood in them," he writes, "are beating under cover of the woods, and how many teeth and eyes are shining! A multitude of animal people, intimately related to us, but of whose lives we know almost nothing, are as busy about their own affairs as we are about ours. Beavers are building and mending dams and huts for winter, and storing them with food; bears are studying winter quarters as they stand thoughtful in open spaces, while the gentle breezes ruffle the long hair on their backs; elk and deer, assembling on the heights, are considering cold pastures where they will be farthest away from the wolves; squirrels and marmots are busily laying up provisions and lining their nests against coming frost and snow foreseen; and countless thousands of birds are forming parties and gathering their young about them for flight to the southlands; while butterflies and bees, apparently with no thought of hard times to come, are hovering above the late-blooming goldenrods, and, with countless other insect folk, are dancing and humming right merrily in the sunbeams and shaking all the air into music."

No more beautiful tribute was ever paid to a bird than his chapter on the "Water Ouzel," in the closing lines of which he suggests how clearly these birds of cataract and storm interpret, "throughout the whole of their beautiful lives," "all that we, in our unbelief, call terrible, in the utterances of torrents and storms, as only varied expressions of God's eternal love." Out of sheer joy of friendship we find him singing and whistling merrily to his friend the Douglas squirrel, which he calls "a bright chip of nature:"

"I sang or whistled 'Bonnie Doon,' 'Lass o' Gowrie,' 'O'er the Water to Charlie,' 'Bonnie Woods o' Craigie Lea,' etc., all of which seemed to be listened to with bright interest, my first Douglas sitting patiently through it all, with his telling eyes fixed upon me, until I ventured to give the 'Old Hundredth,' when he screamed his Indian name, Pillilloveet, turned tail, and darted with ludicrous haste up the tree out of sight, his voice and actions in the case leaving a somewhat profane impression, as if he had said, 'I'll be hanged if you get me to hear anything so solemn and unpiny.'"

Though never a moralizer, John Muir is thus constantly teaching gentleness and sympathy. Indeed, he is by nature too sensitive to the personality of all living things to be less than friendly. He is a very poet for personifying. Coming once on a somewhat rare and bright-colored insect-devouring plant in the woods, he started back, exclaiming: "Hello, who are you? snake, I guess." Similarly, the familiar pepper-tree of California, with its green-yellow foliage, is to him a threatening and unpleasant personality, as the pines are noble or beautiful personalities.

Muir's attitude toward Nature is that of one who stands with bared head. Speaking of him who goes to Nature, Muir once said: "He must be humble and patient, and give his life for light; he must not try to force Nature to reveal her secrets, saying proudly, 'I'm a great man. Trot out your wonders; I'm in a hurry.'" Muir is not one of the scientists who first forms a theory, and then, falling in love with it, reads all nature as its proof, but, recording every detail of fact, storing it up, and "letting the blood circulate around it," he awaits the slow coming of

his conclusions. Scores of note-books filled with careful drawings and notes put down in the most painstaking manner indicate the thoroughness of his method. And yet he is no idolater of minute details, believing that science has a much wider sphere than the discovery and tabulation of isolated facts. "Dry words and dry facts," he says, "will not fire hearts. . . . In drying plants, botanists often dry themselves."

To him the details are the A B C's from which the great words and sentences of science are to be formed. Thus he is no believer in the painfully fine distinctions with which science sometimes dallies, much less in those controversies which have their rise in scientific jealousy over priority of discovery, nomenclature, and so on. Having so much beauty to see and so many sweet sounds to hear, the poet in him says we have not time here for controversies and jealousies. "While we are disagreeing over the final letter in a name," he said, "we are possibly forgetting that the tree is beautiful, and that it is here for us to enjoy."

At one time our conversation turned to the subject of evolution, particularly with reference to the views of Professor Haeckel, with whom I had recently been talking. His comment was, firmly: "Some scientists think that because they know how a thing is made, that therefore the Lord had nothing to do with making it. They have proved the chain of development, but the Lord made the chain and is making it." Speaking at another time, he said: "We sometimes hear the Lord spoken of as if He were a little, cranky, old-fashioned being, fastened and sealed in by well-established rules, and that the parsons are on confidential terms with him and know just what he intends." And yet, though brought up in the strict Scotch faith, he said: "I would go down on my knees and barefoot to learn something more about how the Lord works." All through Muir's writings, indeed, one feels the mood of reverence toward the great things of nature, the pervading presence of a powerful and loving Creator.

In the course of his long life John Muir has written much, mostly for the best American periodicals, and he has published two books, "The Mountains of California" and "Our National Parks."

Authorship was not among the ambitions of his earlier years, his first published article being a letter which he wrote to a friend. Later, he conceived the idea of earning a little money to pay the small expenses of his expeditions, and he wrote a long series of letters for the San Francisco "Bulletin," including twenty-one articles during his trip to the Arctic in the ship *Corwin*. He also wrote for the "Overland Monthly," and for a time he edited and wrote extensively for "Picturesque California." He was always deeply interested in the preservation of the wild beauty of the West in parks and forest reservations, and through the influence of Mr. Robert Underwood Johnson, of the "Century," who made an expedition with him in the Yosemite country, he began writing for the "Century," and some years later for the "Atlantic," on the need of governmental protection for our forests—a work of love which has borne rich fruit. "Wildness," he wrote, "is a necessity," and "soon we may have to go further than Nansen to find a good sound solitude;" and that this "wildness" is being preserved to the country by a wise Government is due in no small degree to Muir's efforts.

Muir writes with rare charm and simplicity, his descriptions of natural beauty abounding in delicate sentiment and poetic feeling. He will tell you that writing is the most difficult of his tasks. He composes slowly, often recasting his sentences, rewriting and polishing, seeking always to reach the height of his taste and yet never quite doing it to his own satisfaction. Indeed, he has always more than half begrudged the time spent in writing, feeling that while he was tied to his desk fine things were being done outdoors.

John Muir was married in 1879, the year of his first Alaskan trip, to the daughter of Dr. John Strentzel, of California, and for a time he devoted much of his energy to the management of an extensive vineyard and fruit ranch inherited by his wife. He has two daughters, who are his constant companions and friends. His home, a large, comfortable wooden house, set on a knoll, is in a beautiful valley among the Contra Costa hills, some thirty miles east of San Francisco. A station on the railroad a few hundred yards from

his house is named after him. Here, surrounded by his extensive vineyards and, nearer at hand, by some of the wild trees and flowers that he cherishes, he lives and works; and yet he will tell you, "This is a good place to be housed in during stormy weather, to write in, and to raise children in, but it is not my home. Up there is my home"—pointing toward the Sierras. He works in a little upper front room, surrounded by a busy litter of books, pictures, and botanical specimens, cones each of which has a history, twigs of pine yet fragrant of the forest, though dry and brown. Now past sixty-four years old, he is still full of vigor and enthusiasm, a fascinating talker and story-teller, interested in the great outside world of men and yet having no desire to touch it more closely. It is very rarely indeed that he is persuaded to leave his home, and he has an especial dread of attending any sort of "function" where he may be called upon to speak. He has been President since its organization of the Sierra Club, and in the summer of 1901

he went for a trip to the Yosemite with a party of its members. Of late years he has not done so much mountain-climbing, though he is still a great traveler; as a companion of the Forest Commission of the American Academy of Sciences, with Professor Sargent, of Harvard, and others, he traversed much of the mountain country of the coast and visited Yellowstone Park, and later, as a member of the Harriman exploring expedition of 1899, he returned once more to the scene of his discoveries in Alaska. And it was only a few years ago that he had the pleasure of visiting his old home in Scotland. It is now his purpose to give the world as much as possible of the results of his long years of exploration, drawing upon the riches of his note-books, and to that end he is confining himself much to his desk.

A rare man, poet and scientist, we have to be thankful that John Muir stands out, though almost alone in a world of money-makers, a quiet exemplar of the simpler life.

The Age of Abel

By Alice Ward Bailey

"**K**I-YI-YI, wow-wow!" The yelp of anguish became a bark of defiance. Aunt Phebe hurriedly opened the front door. "If you touch my cat, Sandy Griswold—" she began indignantly, adding, "I should thought you'd know better than to ha' brought him, Lois."

"I didn't bring him," protested the small, bent old lady, in a mourning veil, who followed the dog and did her gentle best to restrain him. "He would come in spite of me."

"Well, if I couldn't manage a *dog*—" cried her sister, scornfully. "Come, Tom, he sha'n't touch ye." The large tiger cat, blown up to twice his natural size by fear and anger, stiffly allowed himself to be lifted to his mistress's shoulder, where he clung and glared at his enemy from a position of safety. "You'll have to shut him up in the woodshed chamber," persisted Phebe; "I won't have Tom tormented."

Lois agreed, but there was a tenseness

about her meek little mouth, as she stooped to pat her companion before locking him in, which did not relax while she removed her bonnet and shawl.

"I hear Silas an' his wife are goin' to spend the summer on the old place," suggested Phebe, dropping Tom and his quarrel, but Lois made no reply. "They say he's made consid'able money out West and is goin' to fix up the homestead for Eliza to be comfortable in the rest of her days," pursued Phebe.

"He's goin' to do more 'n that," exclaimed Lois, beguiled in spite of herself by this opening for the display of superior knowledge. "I was over to Eliza's yesterday."

"Did you see Silas?"

"That's what I went for. They come for me; they wanted to see me about something partic'ler."

It was Phebe's turn to be silent now, but her attitude was one of close attention.

"Silas is goin' to make over the meetin'-