John Muir : little stories of his boyhood and university years. 1938

Brown, Charles E. (Charles Edward), 1872-1946
Madison, Wisconsin: [s.n.], 1938

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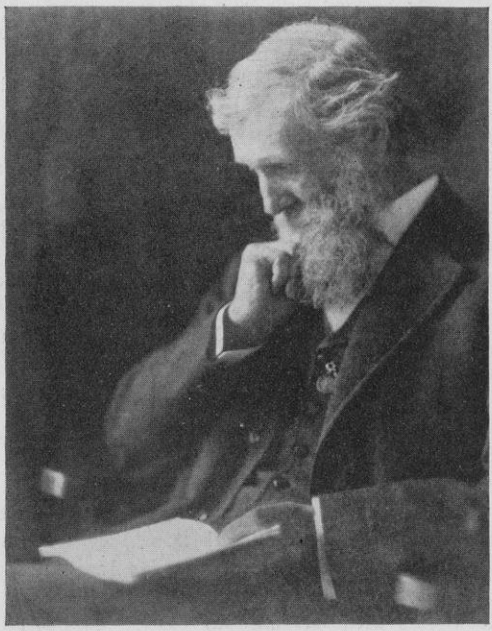
JOHN MUIR

LITTLE STORIES OF HIS BOYHOOD AND UNIVERSITY YEARS

Prepared for the Use of Students of the
University of Wisconsin
Summer Session



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Madison, Wisconsin

1938

JOHN MUIR

John Muir, who became famous as an author, naturalist and inventor, was born in Dunbar, Scotland, April 21, 1838. In 1849 his father, Daniel Muir, emigrated to the United States with his family. The ship upon which the family sailed required over six weeks to cross the ocean. The other children were his sister, Susan and his brother, Dan. They came to Milwaukee and traveled with a farmer by ox-team and covered wagon through one hundred miles of wilderness to a settlement called Kingston. The father located and settled on a small farm at Ennis Lake ten miles from Portage. John, the oldest boy, was then eleven years of age. Within a short time the family acquired another small tract of land, the so-called Hickory Hill farm, located six miles from Portage.

A bronze bust of John Muir by C. S. Pietro is on the staircase landing in the University Biology building, his famous desk clock is in the State Historical Museum and some of his letters and mechanical drawings are preserved in the Manuscript Department of the State Historical Library. One of the locust trees which he knew during his University years, still stands in the rear of North Hall on the edge of Muir Knoll.

For the use of persons interested in John Muir we present a few of the interesting little stories of his youth in Wisconsin. Some of these are printed in his book, *The Story of My Boyhood and Youth*, published by him in 1914.

A RAIL SPLITTER

Being the oldest boy of the Muir family it fell to the lot of John to do most of the hard work of both farms. The fields had to be fenced. He wrote, "I had to split rails for long lines of zigzag fences. The trees that were tall enough to afford one or two logs ten feet long were used for rails, the others, too knotty or cross grained, were disposed in log and cordwood fences. Making rails was hard work and required no little skill. I used to cut and split a hundred a day from short, knotty timber, swinging the axe and heavy mallet, often with sore hands, from early morning until night. I rather liked it for I was proud of my skill and tried to believe I was as tough as the timbers I mauled, though this and other heavy

jobs stopped my growth and earned for me the title "Runt of the family." John's father was not successful as a rail-splitter. He left this work to the boy. John had many other heavy, back-breaking jobs to do, such as guiding the heavy breaking plow, cutting the ripened grain with a cradle, raking and binding the sheaves, stacking and threshing, and making hay for the cattle. His father was a hard task master, but John seems to have made little or no complaint.

HIS BOYHOOD INVENTIONS

John early began to experiment with various inventions. As his father objected to his studying or working late at night he arose as early as one o'clock in the morning. His workshop was in the cellar below his father's bedroom. There were in the farmhouse only a few tools he could use (a vice, hammer, chisels and files). He was obliged to make his own tools from materials at hand. A fine-tooth saw he made from a piece of steel from an old corset stay. He also made his own bradawls, punches and a pair of compasses, out of wire and old files. One of his first inventions was a self-setting saw-mill. He dammed a stream in a meadow and put it in operation. Other inventions followed—"water-wheels, curious door locks, and latches, thermometers, pyrometers, clocks, a barometer, an automatic contrivance for feeding the horses at any required hour, a lamp-lighter and fire lighter, an early-or-late rising machine, and so forth."

One of the best of these was a clock which he whittled and sawed out of pieces of wood. He had "never seen the inside of any sort of watch or clock. The time laws of the pendulum he learned from a book." The weights were stones. A second hickory clock was shaped like a scythe and intended "to symbolize Father Time." The clock works were on the blade, the pendulum "was a bunch of arrows symbolizing the flight of time." This curious clock hung from a leafy oak snag ("showing the effect of time") in the house yard. On the snath was written "All flesh is grass." It ran well and pleased the entire family. This curious clock indicated the days of the week and month and awakened him at any given hour in the morning. Parts of it are in the State Historical Museum.

DIGGING THE WELL

As there was no spring, stream or lake on the Hickory Hill farm (the second Muir farm) a well had to be dug. This well was ninety feet deep. All but the first ten feet of it was fine-grained sandstone.

Blasting the rock was not successful so John had the tedious job of cutting it with mason's chisels.

In the morning his father and his brother David lowered him into the shaft in a wooden bucket by means of a windlass. All day long he chipped away at the rock with a hammer and chisels. At noon they hoisted him out for dinner. After dinner he was lowered again to his work and left until night. One day, while engaged in this weary work he was overcome and his life all but lost by the fumes of deadly choke-damp carbonic acid gas. He managed to call to his father of his condition and was hauled out in the bucket. After this dreadful experience the hammer and chisel work in the well continued as before. At last, at a depth ninety feet, he struck a fine hearty gush of water. The well was a fine job, straight and plumb. John built a covered top over it and "swung two iron-bound buckets in it from which we all drank for many a day."

THE STARS

John was fond of gazing at the stars. He thought that the winter stars surpassed those of Scotland in their brightness. He had ideas of his own concerning them. No books on astronomy were to be had. "Oftimes the heavens were made still more glorious by auroras, the long lance rays, called "Merry Dancers" in Scotland, streaming with startling tremulous motion to the zenith. Usually the electric auroral light is white or pale yellow, but the third or fourth of our Wisconsin winters there was a magnificently colored aurora that was seen and admired over nearly all the continent. The whole sky was draped in graceful purple and crimson folds glorious beyond description." John's father called all of the children out into the yard in front of the house to see it, crying "Come, mother! Come, bairns! and see the glory of God. All the sky is clad in a robe of red light. Look straight up to the crown where the folds are gathered. Hush and wonder and adore, for surely this is the clothing of the Lord Himself, and perhaps He will even now appear looking down from his high heaven." John thought this celestial show most glorious. The Muir children spoke about it all through the winter.

AT THE STATE FAIR

An interested neighbor urged John to take some of his inventions to the State Fair. He was sure that his curious wooden inventions

would there attract attention. One day he started; all of his baggage being his two clocks and a thermometer "made of a piece of old washboard" all tied together and "with no covering or case of any sort. His brother drove him to the railroad station at Pardeeville. There his curious machines immediately attracted the attention of the greater part of the population. The next morning he took the train to Madison. He put his inventions in the baggage car and persuaded the engineer to let him ride on the engine. This was a great experience for a young man interested in mechanics. He rode on the cow-catcher platform. At Madison he shouldered his clocks and walked to the fair ground.

There he told the ticket seller he had something to exhibit and was admitted. He was given space for his humble exhibits in the Fine Arts Hall. There he set his clocks to working. During the fair these attracted more interest than any exhibit in the hall. The local press printed articles about him and his clocks and there were copied by Eastern papers. It was "considered wonderful that a farm boy could invent and make such things. He received a prize of ten or fifteen dollars and a diploma. His inventions opened all doors for him." He was given a job in a small machine and foundry shop at Prairie du Chien. Here he was able to devote his spare hours to mechanical drawing, geometry and physics. After a few months stay he returned to Madison.

COLLEGE ASPIRATIONS

The young man's desire for knowledge was keen. He read every book he could borrow in a neighborhood where books were not plentiful. Thoughts of going to college to increase his learning came to him. He once said, "I should like to go to college, but then, I think, you will die 'ere you can do anything else. I should like to invent useful machinery, but the thought comes—you do not wish to spend your life among machines, and you will die 'ere you can do anything else. The only real remedy he could think of was to be allowed to live a million years, and to spend a couple of thousand years or so at each kind of occupation that most interested him. Even this impossibility did not discourage him.

John became a student at the University of Wisconsin in 1860. He was then twenty-two years of age. During his student years (1860-64) he paid his way by harvesting and teaching school.

HIS ROOM

The room which John used as a study and living room was on the first floor of the northeast corner of the old North Dormitory, now North Hall. It has been described by the late Charles E. Vroman, his room mate in 1862.

"We entered the northeast corner room on the first floor without a rap or signal. A young man of about twenty-two years of age was busily at work sawing boards. The room was a strange looking place for the room of a college student. It was my impression that the tutor was showing me a branch of the College museum. The room was lined with shelves one above the other, higher than a man could reach. These shelves were filled with retorts, glass tubes, glass jars, botanical and geological specimens and small mechanical contrivances. On the floor around the sides of the room, were a number of machines of larger size; whose purposes were not apparent at a glance but which I came to know later. The floor was covered with boards, sawdust and shavings.

THE BIG TOE ALARM

Before he completed his early-rising clock, John adopted another plan for awakening himself in the morning. As he kept late hours it was not easy to rouse when he was enjoying his sleep. Before going to bed at night he tied a cord to his big toe and let the free end hang out of the window of his North Hall room. He had arranged with Pat, the janitor, to pull the string at a certain hour in the morning. Pat performed this duty very faithfully for he liked John. All went well until a group of his classmates discovered the cord and nearly pulled John out of the window. This the students thought a real lark but it was agony for their victim. This act hastened the completion of the early-rising clock.

THE EARLY RISING CLOCK

At the University he continued to indulge in his love for mechanical inventions. One of the most famous of these was his early-rising clock. It was a strange affair and resembled in its structure the framework of a saw-mill. It did many wonderful and uncanny things, such as dumping John out of bed in the morning and at a pre-determined time picking a cap off a fluid lamp and lighting it while he was on the floor rubbing his eyes. The bed was made of

pine boards with three legs, two near the head on which the bed hung on a pivoting device and the third in the middle. On this last leg was an elbow-jointed support on the top of which the foot of the bed rested. A peg at the elbow kept it upright and firm. A strong cord fastened to the peg led through a door into another room and to an escapement device on a clock. At the proper time in the morning, usually about five o'clock, the clock would pull the peg and John would be dumped on the floor. Stones attached to the ceiling by cords would also drop at the same time. The falling bed and the stones made John's getting up a very noisy affair. Everyone in the building knew of it.

This clock became very popular and neighborhood children visited him to have the experience of being "spilled" by his early-early-rising clock. There is a little story that the chancellor of the University once had as a guest a distinguished educator. He told this man of John Muir and sent him to his room to be entertained by this favorite student. When he later went in quest of his guest he found him just rising from the floor. John had put him in the bed and dumped him by clockwork. Of course chancellor was mortified, but the guest thought it a rare experience which he would not have missed.

DESK CLOCK OR STUDY TABLE

This famous clock, now preserved in the Wisconsin Historical Museum, at Madison, was made entirely of wood with the help of a jack knife, chisel and saw. It is nine feet tall and is without question one of the most curious clocks in America. This queer specimen looks very little like either a clock or a desk. The floor of the desk has the shape of a large cog-wheel. John's text books were kept in a moveable partitioned wooden box beneath it.

When John was ready to study he climbed on a high stool in front of the desk. Almost immediately a plunger would push the desired book from the box through an opening in the desk floor. When this book had been studied it would be placed on the shelf above the desk and the plunger would push up the next book. The front legs of this desk clock are in the form of two tall compasses their points slightly spread. The rear legs are carved to represent a row of books standing one on top of the other.

In talking to him about this clock, a lady once said that his invention did not go far enough; that he ought to have arranged it

that if he had not properly studied a lesson, a hand would come up and box his ears.

Separate dials on this clock recorded the time of the day, and the day of the month and the months of the year.

OTHER INVENTIONS

"In the summer time, when the sun rose early, John dispensed with his clock and made use of sunbeams instead." This he did by simply taking a lens and fixing it on a frame on the sill of his bedroom window pointed to the sunrise. The sunbeams falling on a thread burned it through and released the bed machinery and put him on his feet.

He also invented a machine to make visible the growth of plants and the action of sunlight. This was a very delicate contrivance and was enclosed in glass.

He also invented a barometer and a lot of scientific apparatus. An invention in a lighter vein was his "loafer's chair." When anyone sat in it and leaned back a spring was pressed which fired a heavily charged pistol directly under the seat while the frightened sitter jumped toward the ceiling or away.

John's room "was regarded as a sort of show place" by the University faculty who frequently brought visitors on Saturdays or holidays.

CIVIL WAR DAYS

During Muir's early University years the country was preparing for the Civil War. At Camp Randall, now largely occupied by University athletic fields and buildings, thousands of Wisconsin men were being drilled for service at the front. John visited the camp and was impressed with the need of good medical service for the soldiers. He decided to become a doctor but later changed his mind. Birds, flowers and trees had after all a much greater attraction for this young man, who was to become one of the great naturalists of America, than pills, powders and surgery.

FIRST BOTANY LESSON

While at the University John received his first lesson in botany from a student by the name of Griswold, who later became the county judge at Waukesha County. One day in June, when the

two were standing on the stone steps of old North Hall, Griswold reached up to a branch of a locust tree and plucked a flower from it. He explained to John the construction of the flower and the relationship of the locust to the pea family.

The lesson which he received so enthused John that he immediately began to study of botany going to the surrounding woods and fields in search of specimens. He had always been very fond of flowers and this opened up a new world to him. He made long excursions around the Madison lakes gathering specimens. A favorite collecting ground of his is said to have been the region on the south shore of Lake Wingra where is now located the University Arboretum and where it is proposed to establish a Muir Forest in honor of his memory. These specimens he kept fresh in a bucket in his room and studied them at night. The old locust tree, from and beneath which he received this lesson, still stands near the wall.

TEACHES SCHOOL

One winter while attending the University Muir taught in a district school in a log school house located near Lake Harriet about a mile west of Oregon, a village south of Madison.

He received $20.00 a month for his services. Here he used one of his hickory clocks for keeping time (he had no watch) and for starting a school fire in the morning. As the winter was very cold he had to go to the schoolhouse at eight o'clock to attend to the fire. This he considered a rather trying job, especially as school did not begin until nine.

Every evening he filled the heavy box stove with kindling and pieces of oak wood. Near a few shavings on the stove hearth he placed a teasponful of chlorate of potash and sugar. He set the clock to drop a little sulphuric acid on the chemical at the desired time. This inflammable mixture set the shavings and wood on fire. When Muir got to school the stove was red-hot and the school room comfortably warm.

He also had in this school a device of wooden paddles, clock-operated, which called up a class for recitation, dismissed it when the period was completed and summoned the next class.

Muir was, because of his thoroughness and assorted knowledge, a very popular teacher. It was then a custom of the teachers in neighboring districts to trade schools for a week now and then and

John Muir became as well liked by the school children in these schools as he was in his own.

STUDENT MESS

The students in North Hall boarded themselves most of them living on a very simple and restricted fare. Their daily repasts they supplemented with such food as they could bring from their homes. When he entered the University John was told that he could live on $1.00 a week. This he once cut down to 20 cents a week. John roasted his potatoes on the coal shovel in the furnace in the basement of the Hall and boiled his porridge on the hot coals.

He and two other boys once formed a mess. Each of the three contributed a certain small sum of money. One of the boys was chosen as treasurer and steward. This mess had continued for some time when one of the boys wrote to his parents informing them that he had withdrawn from it. According to his letter John Muir had become the steward, and he had invested in a keg of oysters and a box of crackers. This was too much for his messmate who said that John could exist on such food but he could not.

A WHITTLER

Anyone who has ever seen any of Muir's wooden clocks or other mechanical labor saving devices would readily acknowledge his prowess as a whittler. Even when walking down the streets of Madison his hands were never idle. With his jack-knife in hand he was likely to be fashioning from a piece of wood a cogwheel or some other interesting or intricate part of some of his many machines. Meanwhile he kept his eyes always open for other chance pieces of wood which would be cut or carved to serve some useful purpose.

HIS STUDIES AND DEGREE

While at the University (1860-1864) John Muir did not take a regular course of studies. He pursued those of greatest interest and use to him, particularly chemistry, mathematics, physics, a little Greek and Latin, botany and geology. He had no thought of getting a diploma or of making a name for himself.

Of his departure from the University he wrote "From the top of a high hill on the north side of Lake Mendota I gained a last wist-

ful, lingering view of the beautiful University grounds and buildings where I had spent so many hungry and happy and hopeful days. There with streaming eyes I bade my blessed Alma Mater farewell. But I was only leaving one University for another, the Wisconsin University for the University of the Wilderness."

In June 1896, John Muir came to Madison and during his stay called on Mrs. J. W. Sterling, wife of his beloved friend, John W. Sterling, first professor and acting chancellor of the University. He was on his way East to receive a degree at one of the Eastern universities. In speaking of it he said, "I don't know why those fellows want to give me a Degree, but since they do I suppose I'll have to go and receive it." (Grace Sterling Lindsay). He received honorary degrees from Wisconsin, Harvard, Yale and California universities.

CLOSING REMARKS

Nature lovers throughout the nation are honoring the birth centennial of John Muir, world famed nature lover and illustrious adopted son of Wisconsin, who became the father of our national park system and national forests. Throughout the United States schools and organizations are holding appropriate Muir programs and observances.

John Muir was the author of a considerable number of very interesting books. These include "The Story of My Boyhood and Youth", A Thousand Mile Walk to the Gulf", "My First Summer in the Sierras", "Travels in Alaska", "The Mountains of California" "The Yosemite", "Steep Trails", "Our National Parks", "The Cruise of the Corwin", "Letters to a Friend" and "Stickeen, the Story of a Dog."