Features

4
Major General Lew Wallace: Savior of Washington, D.C.
Ray Boomerower

16
The William Conner House, 1823-1993
I. Between Two Worlds: William Conner of Indiana
Timothy Crumrin

II. New Life: Eli Lilly and the First Restoration
Stephen Cox

III. Back to the 1820s: The Re-restoration
Stephen Cox

36
"A Genius in the Best Sense":
John Muir, Earth, and Indianapolis
Catherine E. Forrest Weber

Osgood, Smith & Co. in Indianapolis was one of the state's largest businesses; in 1870 the company reorganized under the name of the Woodburn Sarven Wheel Company. It was while he was working for Osgood and Smith that John Muir, the subject of Catherine E. Forrest Weber's article in this issue, suffered the accident that would change forever his life's work.

BIB 5555
Front cover: William Conner, painted by Jacob Cox.

Front cover: William Conner, painted by Jacob Cox.
"AGENIUS
JOHN MUIR
IN THE
EARTH, AND
BEST
INDIANAPOLIS
SENSE"
CATHERINE E FORREST WEBER
I wandered afoot and alone, from Indiana to the Gulf of Mexico, with a plant-press on my back, holding a generally southward course, like the birds when they are going from summer to winter.

—John Muir,
The Yosemite
the curiously hesitant knock. When Merrill was grown, an eminent lawyer and congressman from Indiana, he recalled that first time he, his aunt, and his mother met John Muir: "A tall, sturdy man with blue eyes and a clear ruddy complexion as well as handsome hair and beard. . . . He had a marked Scotch accent and was obviously a working man, but was plainly and neatly dressed; and he at once impressed me as the handsomest man I had ever met."

Muir’s characteristic shyness dropped away before Miss Merrill, as his old professor had assured him it would. According to Muir, Butler “took pains to tell me how rare and good she was in heart and mind, and to assure me that at first sight all bashful misery would vanish, for none better than she knew that ‘a man’s a man for a’ that.’ And so it proved.” In the parlor of the gracious Indianapolis home a strong, loving friendship that would last their lifetime took root between the Moores, the Merrills, and John Muir.

Muir, who had written his sister Sarah that in social situation “a mud turtle upside down on a velvet sofa was as much at home,” found confidence to tell his story to these eager listeners. For starters, why had he come to Indianapolis at twenty-eight years of age when he could have gone anywhere? The experienced sawyer and inventor had chosen Indianapolis sight unseen, reasoning that this important railroad center was sure to have machine shops. He also wanted Indianapolis for its oak, ash, and walnut trees, “being in the heart of one of the very richest forests of deciduous hard wood trees on the continent.” Here, using his mechanical skills to earn his daily bread, he would have time left over to botanize in field and forest, giving substance to his secret dream of becoming another Alexander von Humboldt, explorer of the Cosmos.

In Indianapolis, Muir was a quick success. Hired by the prestigious firm of Osgood, Smith & Co., one of the largest manufacturers of carriage parts in America, he advanced in a single week from his job in charge of a circular saw to supervisor of all the circular saws. His salary advanced too during those six days, from ten to eighteen dollars a week. He designed a device to produce automatically wooden hubs, spokes, and felloes (exterior rims) for the Sarven wheel, the firm’s most distinctive product, so that only the metal tire had to be attached by hand. Judson Osgood and Samuel Smith gave their new sawyer a free hand in the shop and a raise to twenty-five dollars. His good fortune betrayed no hint of the “time of trouble” that would soon be upon him, a dreadful time that would lead directly to the turning point in his life.

In his belief that inventions should be the property of the human race, Muir did not take out a patent. His novel ideas were, he said, “inspired by the Almighty.” He had been inventing ever since as a child in Scotland he had barked in his grandfather’s praise of his “improved” wheelbarrow.

After the Muir family emigrated to America in 1849 when John was eleven, the inventions became the springboard for his escape from the drudgery of the Wisconsin farm, where his self-righteous father worked him like a horse from four in the morning until nine at night. Winters, of course, were the worst time of the year. John pleaded to stay up after the family went to bed in order to have time for himself, but his father forbade any activity that did not directly profit farm labor. Eventually, importuned to exasperation, father Muir told John he could get up as early as he liked, provided he did not fall asleep on the job next day.

That winter evening, John went to bed at nine. He woke suddenly at one o’clock in the morning. “In the glad, tumultuous excitement of so much suddenly acquired time-wealth,” the teenage boy ran down to the frosty cellar. He wanted to make a self-setting sawmill.

In the parlor of the gracious Indianapolis home a strong, loving friendship that would last their lifetimes took root between the Moores, the Merrills, and John Muir.
John Muir in Yosemite. In the background are Royal Arches and Washington Column. This photograph is thought to have been taken by one of the Carr family, Wisconsin friends of John Muir, ca. 1908.
Scotland, ten dollars from the sale of a few bushels of grain he raised in a back field, and from his father not a penny, nothing but the dour advice, "Depend entirely on yourself." Later, Muir wrote, "I was naturally extremely shy and had been taught to have a poor opinion of myself," but that day he carried with him proof of his genius: two extraordinary clocks and a small thermometer made from a piece of washboard that was sensitive enough to register on a dial the body heat of a person approaching within four feet.

Riding on the cowcatcher platform of the local train, resulting in the wind that tangled his red beard and almost blew the hair off his head, John went to the fair. He set up his machines in the Fine Arts Hall, and soon the children were lining up to try out the trick catapulting bed with its hidden alarm clock. Adults, drawn by the creaking bed, the thumps and giggles of excited children, stayed to listen to John Muir's spiel and to marvel at the invention and the inventor.

Inventor John Muir was twenty-two years old, and naive. Of a photo (his first) taken around that age, he would comment, "I did look kind of innocent." His thick, ill-fitting clothes were all too obviously homemade. He spoke with a broad brogue; his hands were rough and reddened; his gait was that of a farmer. His beard was so unkempt that a friend teased him, "Burn it off."

A well-muscled five foot ten, he saw himself as short, the runt of the family of six-footers. Others saw a strikingly handsome man. Within a few years, British writer Thérèse Yelverton would make Muir the hero of her novel *Zanita, A Tale of Yosemite* (1872), describing him in this way: "His open blue eyes of honest questioning and glorious auburn hair might have stood as a portrait of the angel Raphael."

The Madison fair judges, having no category for John's inventions, awarded him a prize of $15.00, with the comment: "The Committee regard him as a genius in the best sense, and think the state should feel a pride in encouraging him."

Jeanne Carr, youthful wife of the University of Wisconsin professor Ezra S. Carr, was the judge who suggested the special prize. Attractive, with haunting dark eyes and abundant tawny hair, a person of wisdom and understanding, she was passionately devoted to the study of plants and wild nature. Jeanne Carr arrived in Muir's life at the beginning of his venture into the world, when he most needed a trusted confidante and mentor.

"Happy indeed they who have a friend to whom they can unmask the workings of their real life," he told her. The likelihood is that Muir was the great love of Jeanne Carr's life and that he loved her too, but we will never know for sure. In letters he called her "my Carr" and "my ain [own] Jean," and in old age he culled the correspondence, striking out sentences and paragraphs, and left instructions to destroy several of Carr's letters.

Thrilled with Madison and the university on the hill, Muir was determined to stay on, "desperately hungry and thirsty..."
for knowledge and willing to endure anything to get it." He was told that with twenty dollars a semester for tuition and expenses, fifty cents a week for his frugal meals of graham crackers and an occasional baked potato, he could be a student. His father sent him ten dollars.

Since he had only two months of schooling in America, Muir was put in the preparatory department. Soon it was obvious that his intellectual training, if spotty, was wide-ranging.

His formal schooling began when he was three; he recalled, my "mother hanging a little green bag with my first book in it around my neck ... and its blowing back in the seawind like a flag." The small scholar already knew his letters, taught by his proud, loving grandfather to read the shop signs on their daily strolls. Grammar school included intensive study and memorization of French, Latin, and English literature. The boy also had lessons assigned by his father, reinforced by applications of the unsparing rod: "By the time I was eleven years of age I had about three fourths of the Old Testament and all of the New by heart and by sore flesh." At home on the Wisconsin farm in moments sneaked from the relentless grind of work, he read Shakespeare and the Romantic poets, Milton's *Paradise Lost*, Sir Walter Scott's novels, Scottish explorer Mungo Park, and Humboldt. Within a few weeks, John was enrolled in the freshman class of "the glorious University—next, it seemed to me, to the Kingdom of Heaven."

Muir's dorm room became a laboratory for his scientific experiments and inventions. Students, professors, the janitor crowded in to examine the desk that automatically pushed up books by a device like a hand, threw them open, and clutched them back down when the prescribed minutes of study were over. The Loafer's Chair concealed a spring attached to a pistol with a blank cartridge that went off with a Bang! when the victim sat down. An apparatus to register plant growth stood on a sunny windowsill. A needle threaded with another student's long hair, attached to the plant, recorded the growth of the stem hour by hour on a paper disk. Jeanne Carr especially was captivated by this magic, delicately enclosed in glass. The Carrs invited the student-inventor to their home, where he spent many evenings visiting and reading in their large library.

John Muir was popular. Even the student who shared his laboratory-cum-museum bedroom in 1862, who put up with the jostling, chattering visitors, the rasp of the saw, the litter of wood shavings, would not have traded roommates. Years later, he praised Muir, the "most cheerful, happy-hearted man I ever knew."

Since he did not take the usual course of studies, Muir was listed in the catalog among the "Irregular Gents." He picked and chose, chemistry, mathematics, physics, Greek, Latin, geology, and botany. He thought botany "the most exciting thing in the form of even amusement, much more of study, that I ever knew."

Muir spent part of four years at the university, but he did not graduate. He was nearly fifty years old before he got a degree.
John Muir's father reluctantly admired this clock, shaped like "the scythe of Father Time" with a pendulum of arrows.

Diagram of a barometer.

STAIR HISTORICAL SOCIETY OF MILWAUKEE
Muir's motto, "Never be dowy [downhearted]" was sorely tried among strangers in the unfamiliar city. "I never before felt so utterly homeless," he wrote to his sister Sarah in early May after his first working weeks in Indianapolis. Nature was his only consolation. "I have found wild flowers for more than a month now. I gathered a handful about a mile and a half from town this morning before breakfast. When I first entered the woods and stood among the beautiful flowers and trees of God's own garden . . . I could not help shedding tears of joy."

And now, on that spring evening in the Merrill family home, John Muir was meeting kindred souls. Now Miss Merrill read Professor Butler's letter: "If you walk the fields with [Muir], you will find that Solomon could not speak more wisely about plants."

Catharine Merrill was as deeply interested in plants as she was in the literature she had been teaching since she was a girl. She quickly gathered her adult friends and her nephews and nieces of the Merrill, Moores, Graydon, and Ketcham families for a nature walk with Muir as guide. Soon Muir was roped, willingly, into teaching Miss Merrill's Sunday school class for the children of workingmen. Out into the woods the children trooped to learn their lessons from "God's posies" and noble trees; on stormy Sundays they crowded into Muir's rooming house bedroom to learn elementary chemistry and play with his trick bed.

To a friend, he wrote that one night he had a tantalizing dream "about walking by a deep, pellicid stream that flowed through a hayfield. Ringed by extravagant wildflowers, the hay waved in the wind and shifted colors in the sunlight." He chafed; he was too much indoors.

Six days a week he was at work in the factory. He said he liked "the earnest rush and roar and whirl." He took satisfaction in his talent for invention, in the bosses' praise, in the admiration and warm comradeship of his fellow workers. "I generally whistle when I do my chores. I guess I am happy." Yet he worried, "I was in great danger of becoming so successful that my botanical and geographical studies might be interrupted."

In the fall of 1866, Osgood and Smith commissioned Muir to do a time-and-motion study. In December the newly designated efficiency expert, perhaps the first of his kind in America, handed in his report, complete with charts and graphs.

"Gentlemen," he began, "the belt system of your shop is in a bad condition and as belting is at once the nerves and sinews of factory life the greatness of the importance of having it kept in good order need scarce be urged." He sketched devices to adjust the belts to varying temperature and friction.

He scolded his bosses for allowing waste: "It seems preposterous to me, Gentlemen, that . . . you cast your big greenbacks in bundles to the moles and bats!" Rearrange stock for quicker, easier handling. Use discarded wood for fuel. Profits could be increased "by the exercise of half the forecast of a harvest mouse."

In language that recalls the King James Bible he knew almost by heart, he summarized "the grand central difficulty," lack of unity, "in . . . good factories no man or machine worketh to itself."
Muir drew this clock in his boyhood; the star hand rose and set with the sun throughout the year.

Timesaving chart for one day's labor in a sawyer's shop presented to Muir's Indianapolis employers.
The ten-hour clay work was inefficient, and he drew a chart to prove it. Production dropped precipitously after five o'clock. "Lamp-lighted labor is not worth more than two-thirds day-light labor," an innovative idea in 1866, and one that the factory owners might have thought foolish, considering the need to compete with other firms.

Osgood and Smith, however, realized their foreman sawyer's outstanding administrative talent. They would use his recommendations in the extension of the factory; they might offer him a partnership.

Then disaster struck.

On 6 March 1867, working late, Muir was unlacing a belt, using a file to take out the stitches, when the file slipped and pierced his right eye on the edge of the cornea. "After the first shock," he wrote later, "I closed my eye, and when I lifted the lid of the injured one the aqueous humor dripped on my hand—the sight gradually failed and in a few minutes came perfect darkness. 'My right eye is gone,' I murmured, 'closed forever on all God's beauty.'... Very soon by sympathy the other eye became blind."

His landlord's family doctor gave him little hope. For a long week, he lay ill in bed. "My days were terrible beyond what I can tell, and my nights were if possible more terrible. Frightful dreams exhausted and terrified me."

On a scrap of paper, he wrote Jeanne Carr: "The sunshine and the winds are working in all the gardens of God, but I—I am lost.... I am shut in darkness."

And then, amazing grace, "like an angel of light," Catharine Merrill came to his room with the specialist. Dr. Parvin "of large experience both here and in Europe" did a careful examination and told his patient that, although the iris was permanently injured, the crystalline lens was untouched. John Muir would not be a blind man.

All that month in the darkened room, he thought deeply about what he would do with the rest of his life. The conflict must be resolved. He must now choose between the factory where his genius for invention would lead to worldly, material success, and the risky alternative, escape into the wilderness, to fulfill his heart's desire.

In his affliction, Muir was blessed with friends. Catharine Merrill, mindful of his love for children and the comfort their presence would bring, arranged for relays of his Sunday school boys and her nieces and nephews to read to him. He recognized each child by the sound of the footsteps outside his door. As he slowly recovered his sight, the window blind was raised inch by inch. He beguiled the children with stories; they watched him whittle wooden toys.

In April he wrote to Jeanne Carr that he believed his sight was improving, he had been "groping" among the flowers. On 9 June, the news was that he was leaving Indianapolis for Madison the next day "accompanied by Merrill Moores, a little friend of mine." They would botanize for a few weeks on the way, "thankful that this affliction has drawn me to the sweet fields rather than from them." He had resigned from his job: "I bade adieu to all my mechanical inventions, determined to devote the rest of my life to the study of the inventions of God."

Jeanne Carr must have been relieved and happy. God "gave you the eye within the eye," she encouraged. "He will surely place you where your work is."

At the end of August, Muir brought Merrill Moores back to Indianapolis. He said good-bye to his friends, in the certainty that they would not forget each other, that they would meet again.

This then was the turning point of John Muir's life. The crisis that threatened his sight enabled him to see at last his true destiny. On Sunday, 1 September 1867, he set forth from Indianapolis on a thousand-mile walk to the Gulf of Mexico. "Joyful and free," he would travel "in a general southward direction by the wildest, leafiest, and least trodden way." He took out his journal and wrote his name and his new address: "John Muir, Earth-planet, Universe."

Throughout their lives, Muir and his Indianap-
olis friends kept in touch. In 1871 and 1872 he was asking Catherine Merrill to “Come to Yosemite!” After a year’s rest in the mountains, she would return to her students “with fresh truth gathered & absorbed from pines & waters & deep singing winds.”

The whole summer of 1871, Merrill Moores, now a teenager, camped in the mountains with Muir. His aunt wrote often: “Your time in the Yosemite is very precious. Live it. Live it. Live it.”

In 1880 Katharine Merrill Graydon, Catherine Merrill’s niece, renewed acquaintance with her old friend in a letter: “The three children you knew best . . . who long ago in the dark room delighted to read to you and bring you flowers, are now men and women. Merrill is a young lawyer with all sorts of aspirations. Janet is at home, a young lady of leisure. Your ‘little friend Katie’ is a teacher in a fashionable boarding-school.”

“My Dear Frail, Wee, Bashful Lassie and Dear Madam,” Muir answered, “The sweet blooming underbrush of boys and girls—Moores, Merrill, Graydons, etc.—was very refreshing and pleasant to me all my Indiana days, and now that you have all grown up into trees, strong and thrifty, waving your outreaching branches in God’s Light, I am sure I shall love you all . . . I mean to come to you in a year or two, or any time soon, to see you in all your new developments.”

In 1896 on his way home from receiving an honorary degree at Harvard, Muir stopped off in Indianapolis to see his friends. In 1897 Catharine Merrill traveled to California and visited with John Muir on his ranch. In July 1900 he wrote a letter of consolation to Merrill Moores’s mother, Julia Merrill Moores, on Catharine’s death, “had she lived a thousand years she would still have been mourned.” In the last year of his life, Muir answered a letter from Mina, Catharine’s younger sister: “Through all life’s wanderings you have held a warm place in my heart, and I have never ceased to thank God for giving me the blessed Merrill family as lifelong friends.”

From his setting forth from Indianapolis, almost fifty years of abundant life were allotted to John Muir. He carried on as gleefully as he began: “On my first long walk from Indiana to the Gulf of Mexico I carried a copy of Burns’s poems and sang them all the way. The whole country and the people, beasts and birds, seemed to like them.” Eventually, he taught his children and grandchildren to sing along with him the old Scotch songs.

On his walk to the Gulf, Muir had climbed the Cumberland in Tennessee, “the first real mountains my foot ever touched or eyes beheld.” In 1868 he strode across California’s San Joaquin Valley through golden flowers toward his first sight of the Sierra Nevada. “The mighty Sierra, miles in height, and so gloriously colored and so radiant, it seemed not clothed with light, but wholly composed of it, like the wall of some celestial city.” He would be a skilled mountaineer to the end of his days, traveling light in his nailed shoes, with a chunk of dry bread and a notebook tied to his belt. In his vest he might have pocket lens and pocket-knife, compass, measuring instruments, spectacles against the glare. “As long as I live,” he said, “I’ll hear waterfalls and birds and winds sing. I’ll interpret the rocks, learn the language of flood, storm, and the avalanche. I’ll acquaint myself with the glaciers and wild gardens, and get as near the heart of the world as I can.”

By 1871 he had discovered living glaciers in the Sierra and formulated his then controversial, now generally acknowledged, theory of the glaciation of Yosemite Valley. In his botanical and geological studies, “John of the Mountains” was engaged in his useful life’s work.

His career as a writer (of three hundred articles and ten major books) was launched in 1874 with his “Studies in the Sierra.” In Alaska in 1879 he discovered Glacier Bay and Muir Glacier. In a series of articles in Century magazine...
(associate editor, Robert Underwood Johnson, graduate of Earlham College), Muir warned about the destruction of mountain meadows and forests by grazing sheep and cattle. In 1890, mainly due to the efforts of Johnson and Muir, Yosemite National Park was created by an act of Congress. Muir was involved too in the creation of Sequoia, Mount Rainier, Petrified Forest, and Grand Canyon national parks.

In 1892 Muir, Johnson, and their supporter founded the Sierra Club, an association of citizens concerned about protecting the boundaries of Yosemite Park, and, Muir added, "to do something for wildness and make the mountains glad." Sam Merrill of Indianapolis, a guest at Muir's home, recalled that the very night the club was founded Muir "regaled them all with an account of it at the supper table . . . he was hilarious with joy." Muir was president until his death in 1914. (One hundred years later, the Sierra Club has 625,000 members, the Hoosier Chapter, 6,000.)

In 1880 John Muir married Louie Wanda Strentzel. For the next ten years Muir ran his father-in-law's fruit ranch in Martinez, California. Successful at ranching, as he had been in the factory, he made a small fortune for the family, but he felt penned in, ravenous for the mountains. Louie understood. When he was on a short camping trip, she told him to stay in the mountains until he was rested and relaxed. "A ranch that . . . takes the sacrifice of a noble life . . . ought to be flung away beyond all reach and power for harm."

"You need to be your own self," she wrote him again. "There is nothing that has a right to be considered beside this except the welfare of our children." The children, the darlings of their father's heart, were Wanda (born 1881) and Helen (1886).

Theodore Roosevelt read Muir's Our National Parks (1901) and had an aide write: "[The president] wants to know the facts . . . from men like yourself who are not connected with the Government service and at the same time are known and esteemed by the people." In May 1903, when Roosevelt came to the Yosemite, Muir actually bought a suit for the occasion, a yellow suit, short in arm and leg.

"I do not want anyone with me but you," Roosevelt assured Muir, and they had a "bully" time sleeping out on beds of fir branches and ferns warmed by a crackling bonfire of a tall dead pine. "God has cared for these trees . . . but he cannot save them from fools,—only Uncle Sam can do that," Muir told the president. His persuasive campfire talk was a strong influence upon Roosevelt's creation of 150 national forests.

John Muir never stopped. He worked, and played, enthusiastically until pneumonia claimed his life at the age of seventy-six. "The whole universe appears as an infinite storm of beauty," he had written in the unfinished manuscript of his Alaska book that lay beside the bed in which he died on Christmas Eve, 1914.

"Longest is the life that contains the largest amount of time-effacing enjoyment—of work that is a steady delight," John Muir believed. "Such a life may really comprise an eternity upon earth."

Catherine E. Forrest Weber wrote about Fanny Van de Grift Stevenson in the last issue of Traces.
Known primarily as a naturalist and conservationist whose work centered on the Yosemite Valley of California, John Muir began his career as an inventor and factory foreman. The turning point in his life, as chronicled by Catherine E. Forrest Weber in this issue, came during a period he spent working in Indiana in the 1860s.