# The Open Court

#### A MONTHLY MAGAZINE

Devoted to the Science of Religion, the Religion of Science, and the Extension of the Religious Parliament Idea

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RUDOLF VIRCHOW.

(1821-1902.)

Frontispiece to The Open Court.

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#### JOHN WESLEY POWELL.

BY MRS. M. D. LINCOLN (BESSIE BEECH.)

I. BOYHOOD AND YOUTH.

Mount Morris, New York, on the 24th of March, 1834. His father, Joseph Powell, while in England, had been a preacher of the Wesleyan Church, and after reaching America he continued to preach. A diligent reader, a terse speaker, a sound thinker; honest, precise, and devout, the stern morality which he taught in the pulpit was exemplified in all his social relations and particularly in the government of his household. The severity of the father's discipline was, however, softened by the gentle influence of the mother. Remarkable alike for her womanly graces and rare gifts of mind, she shone like an angel of light in the home, planning a thousand pleasures for her children and judiciously managing her domestic affairs while her husband itinerated through the country on his ministerial labors.

Even as a child young Powell evinced his investigating tendencies. He instinctively gathered every curious shell and pebble within his reach, and read a lesson in every leaf and flower. Yet, judging from the interest he took in his Biblical studies, it would have been more reasonable to predict for him future eminence as an ecclesiastic than the brilliant career as a scientist upon which he was destined to enter. He early committed to memory the entire Gospels of Matthew, Mark, Luke, and John, much to the delight of his father. When he was about seven years of age, the family moved from Mount Morris to Jackson, Ohio. At this time the Anti-Slavery agitation was extending over the country, and in it the father took an active part. Associated with him in this work

were Doctor Isham, Mr. Montgomery, and Mr. Crookham, residents of the same place. He was also on intimate terms with other men identified with the movement throughout the State, and the boy frequently saw Professors Finney and Williams, then of Oberlin College, Salmon P. Chase, afterwards Chief Justice of the United States, Joshua R. Giddings, and other distinguished abolitionists. To the people of southern Ohio, many of whom had originally emigrated from Virginia and other slave States, anti-slavery sentiments were extremely obnoxious. For several years an aggressive agitation was kept up; meetings were held in various portions of the State, and pamphlets in the interest of the cause were published and distributed. At one time Wesley's Thoughts on Slavery were issued in pamphlet form and widely circulated by a coterie of men living in Jackson. This publication led to a great uproar in the town, and four of the leading agitators were mobbed, and soon afterwards one of the professors of Oberlin College was assaulted on the street while on his way to the Powell residence. These years constituted a very exciting epoch in the boy's life. He was now old enough to appreciate the character of his father's course, and keenly felt the terrorism in which the family was constantly held.

But these circumstances led to events which profoundly influenced his subsequent life. A short distance from Jackson, on a large farm, lived Mr. Crookham, a man of some means. He had a grown family, in which were several sons who took charge of the farm and relieved their father of the cares of business. He was now an old man, and reputed to be a great scholar. To John he seemed a man of miraculous wisdom. He had built for himself two large log-houses, connected by a shed. In one he had his library, museum, and laboratory; the other was arranged as a school-house, and in this he taught gratuitously such young men as desired instruction.

As the son of an abolitionist it was at one period difficult for John to attend the village school. The boys considered that he had no rights which they were bound to respect, and his mother came to the conclusion that it was not safe for him to go to the school any longer. About this time Mr. Crookham came to see his father and mother, and the kind old gentleman proposed that John should come and study with him in his log school-house. The lad was shy and embarrassed, and it was quite a while before Mr. Crookham, although a constant visitor in the family for several years, could overcome his timidity. At last, addressing Mr. Powell, he

said; "Great Britain, I will take the boy and make a scholar of him." To this the father consented, and that day completed the arrangements for his guardianship of the lad until the excitement should subside.

There were but three or four other pupils and their attendance was rather irregular; all but John were grown men. Mr. Crookham devoted himself largely to his own studies, especially those in natural history. With him there were no "set" lessons; he gave his pupils books to read and occasionally talked with them and asked them questions.

Within a few months, matters became quiet in the village and John returned to the common school, but Mr. Crookham took great pains to direct his reading. He brought him *Hume's History of England* and other historical works and talked with him on the subjects of which they treated. While giving him no books in natural history, he made him quite familiar with a few plants, insects, and birds, and also with some minerals, and by frequent conversations upon these various subjects, interested him in the characteristics of plants and animals, and the properties of minerals, and at the same time taught him many of the elementary facts of chemistry.

Mr. Crookham, who was a large-framed, corpulent man, often asked John to read to him, but such readings were usually interrupted by his own explanations and by general conversations, which so thoroughly illuminated the subject in hand that the boy, in his youthful imagination, came to regard his tutor as a giant of learning and benevolence. Sometimes he took John into the woods, where every step seemed to suggest something of interest. He would sit down on a rock, stump, or log and describe to his pupil what he had found. Naturally, as the youth grew into manhood, he looked back with great pleasure to those days, also with wonder that a man so absorbed in his books should have taken such interest in a boy so young. The old gentleman's warm friendship for the parents was not the only influence which stimulated this devotion. He saw in his protégé that genius which the father failed to discover, and watched its development with affectionate anxiety.

John's father and mother were Methodists; Mr. Crookham was a Calvinist. For hours the boy would listen to their conversations on religious subjects, and in this way acquired a good many ideas,—rather large ones, too, for one of his age,—on a variety of theological questions. He came to understand that his mother

<sup>1</sup> Mr. Crookham always called John's father "Great Britain."

was not so entirely orthodox as his father; her opinions were perhaps slightly tinted with Swedenborgian mysticism. Be that as it may, her theology seemed to his boyish perceptions a great deal better than that of his father or Mr. Crookham. When the two were discussing their relative opinions, it was John's habit to wait for and expect his mother's final exposition of the subject. He thoroughly believed that she knew exactly the truth, and he used to wonder why the men argued over these matters so long, and why they did not at the outset ask his mother to explain to them just what was right.

One day the old Calvinist came puffing up the steps of neighbor Powell's house, walked through the sitting-room, and sitting down in the kitchen where John's mother was busy, asked for "Great Britain." He was evidently greatly agitated, and after a time explained that some rowdies had burned his school-house, library, and cabinet, and that all was lost. He seemed not to care so greatly on his own account, but to mourn chiefly because the means with which to teach his "youngsters" had been destroyed. After that he came more frequently to his father's house, and if possible took more minute direction of the boy's studies. Although by reason of the latter's extreme youth, it was scarcely to be expected that he should have made great advance in natural history, yet the two or three years thus spent under the guidance of Mr. Crookham were of real importance in giving to his thoughts that inclination which carried him eventually and permanently into the profession of science and of letters.

During these years, it had been the father's ambition to place his family in such a position that they could live comfortably, and to devote himself exclusively to the ministry. Finally, when John was twelve years old, Mr. Powell moved further west, making the journey across northern Indiana, through Chicago, to Walworth County, Wisconsin. This was accomplished with an emigrant wagon loaded with household goods, and two carriages, one of the latter being driven by John. His father had previously bought some land, but upon reaching it decided not to settle on it, but to purchase a partly improved farm. The next summer he commenced preaching regularly, leaving the Methodist Church, however, and joining the Wesleyan, on account of his anti-slavery sentiments. He knew nothing about farming, did not work on the farm, and took no part in its management. All this devolved upon John, and, aided by two or three farm employees, the schoolboy

became a farmer, with all the responsibilities of the position, heavy indeed for a lad of his years.

The farm was in burr-oak woods, and but a small tract was cultivated the first year. During the second winter a large area was cleared and fenced, and in the course of a few years about sixty acres of land were brought under cultivation. John worked continuously summer and winter: clearing the land, sodding, ditching, ploughing, planting, building, adding an annex to the house and making the barn larger, constituted only a small part of the work planned or executed. He labored through the long days and studied far into the night, eagerly perusing all the books he could procure.

Following the plough did not suit him. While he turned the soil, his thoughts were far away amid the rocks and woods of his old home, where Mr. Crookham first opened the volume of Nature to his wondering eyes. Yet he toiled faithfully. His home was fifty miles from what was then called Southport (now Kenosha), and sixty miles from Racine, and these places were the markets of the country. In the late fall and early winter months his time was usually occupied in hauling wheat to one or the other of these towns. With the money obtained from the sale of grain he had to make the purchases for the family,—groceries, clothing, lumber, and such other things as were needed on the farm. It was a five or six days' journey, and from twelve to fifteen trips were made each year. Those were the pioneer days of our country, when oxen drew the plough and hauled the produce of the farms to market. Southern Wisconsin was at that time a great wheat producing region, and all farmers in the country were on the road during the fall and winter. He did not then realise how perilous was the promiscuous company of travellers in his goings to and from the market towns in these years of his life. He was associated with hardy, jovial, and often very hilarious frontiersmen, and there were temptations on the road and in the city to which a country boy might have readily yielded. But there were circumstances which protected him from the bad influences by which he was surrounded. He had a sense of great responsibility, especially so because the family purse was in his custody. His father and mother so completely trusted him that they never asked him to account for his transactions.

In one of the earlier years of his pioneer life, he fell in company with one William Wheeler, several years his senior, who took great interest in him, and whom the boy, recognising as a supe-

rior, soon came to regard with sincere esteem and affection. Mr. Wheeler said nothing about morality, but his general conduct and noble example were such as to make a deep impression on the lad. He was far superior in education to his young companion,—had at one time been in college and now occupied himself very much in reading, letting his team follow the others while he poured over some entertaining volume. John was quick to follow his example. His wagon-box became a receptacle for books, and while his reading was desultory, it was nevertheless valuable. Histories and biographies pleased him the most. On these trips he re-read Hume's History of England, Gibbon's Rome, a history of the United States, and finally Dick's philosophy and some works in Mental Philosophy. He never read a work of fiction or a volume of poetry, although his mother had frequently urged him to read Milton. Now he became interested in Bunyan's Pilgrim's Progress, and no matter what other books he selected for companions on these long journeys, that one was sure to be found in his wagonbox, for he could read it when he was tired of all others. He never, by the way, considered Bunyan a work of fiction.

In the winter of 1850, when he was sixteen years old, his discontent with farm work impelled him to leave home, and he went to Janesville, determined to attend school. Janesville was about twenty miles distant, and he walked the first day to a farmhouse within about two miles of the town. He had but a few cents in his pocket, and stopping at the farmhouse to stay over night, he asked for work. The farmer engaged him for two weeks, and at the end of that time, with six dollars in his pocket, John proceeded to Janesville and visited the school. He returned to the outskirts of the town and made arrangements with a farmer to work nights and mornings for his board, stipulating that he should have his time during school hours for study.

The family lived in a log house. John's business was to feed and water the cattle and sheep, and to care for them generally; and, at night, after his work was done in the farmyard, he sat by the chimney-side rocking the cradle and studying his books by the fire-light as best he could. The next year Joseph Powell sold the farm at South Grove and moved to another on Bonus Prairie, in Boone county, Illinois.

In the fall of 1852, when John was eighteen, it was decided by his mother that he should commence his school life. The first thing to be done was to earn the necessary money. Early in the month of October he put the farm in as good shape as possible and turned

it over to his younger brother, W. B. Powell, and commenced studying at home. For six weeks his school was in the garret, where he remained almost day and night, studying grammar, arithmetic, and geography. He then set out for the southern part of Wisconsin, about thirty miles distant, and had no difficulty in securing engagement as a teacher. The school engaged, the next task was to procure the necessary certificate of proficiency. One day in the latter part of November he went to the township superintendent to be examined. A feeling of dread possessed him lest he should fail on examination.

As he approached the Superintendent's house a fierce wind blew the snow in his face. All aglow with the excitement of a walk of twenty miles in a sharp gale, he knocked at the door. The lady of the house, with a cheerful reassuring voice, invited him in, but he had to wait two or three hours for the return of the Superintendent. At last he came, and insisted that John, now the dignified School-Master, Mr. Powell, should stay all night. As the family sat together at the supper table, the Superintendent conversed with the young man about the school he was to teach, and about various subjects that would engage his attention, in so kind and skilful a way, that during the evening he drew out such knowledge as his visitor possessed without giving him an idea that he was passing the dreaded ordeal. Just before going to bed, and greatly to the surprise of his visitor, he filled out a certificate, signed it and handed it to the young man. The superintendent was a man of fine culture; his advice was always good, and during the winter he gave the young teacher much valuable aid.

The school over which Powell was to preside was on the north side of Jefferson Prairie, and a little stone school-house was his first college. At least half of his pupils were older than himself, and several of them were quite as far advanced in their studies. This compelled him to work very hard, and certainly no pupil in the school made such progress as did he. He provided himself with several school arithmetics and worked through them all. He studied elementary algebra, and took the class about half as far as he went himself. He read three or four grammars, and made decided progress in geography, and on this subject gave a lecture one night in the week to the most advanced pupils. The other young people of the neighborhood, as well as pupils from adjoining towns, came to these lectures. For this work Powell prepared himself by systematic study and vigorous consultation of books of ref-

erence; he also made excellent use of his limited knowledge of history, weaving it deftly into his account of the lands of the world.

By contract the teacher was to "board around," but one of the trustees, Mr. Little, took Mr. Powell to his home and insisted that he should stay the greater part of his time with him. His wife had been a New England school-teacher, and she had what seemed to the young man a marvellous library. She took great interest in his geographic work and always kept him supplied with abundant material from which to prepare his lectures, and he always gave her an outline of his discourse before delivering it in public.

In the following summer (1853) he worked on a farm at Bonus Prairie. In the meantime his father became interested in the founding of a school at Wheaton, Illinois, under the auspices of the Wesleyan Methodists. Near the village he bought a small tract of land of forty acres, on which stood a little farmhouse. He had also bought five acres of land close by the new building erected for college purpose, and was himself one of the trustees of the college. Early in the fall John's mother and sister journeyed with him from Bonus Prairie to Wheaton. On reaching that place he had the little frame moved from the forty-acre lot to the five-acre lot near the village, a distance of about half a mile, and with the help of two or three men it was soon fitted up in comfortable style for the winter. Here John studied and taught until summer, when he returned to the farm.

Early in the fall of 1854 he went south to Macon County, and taught a County school, and the following spring went into business with his brother-in-law, Mr. Davis, who had married his eldest sister. A nursery and stock farm, the latter for sheep, was the business venture in which he engaged, hoping that at the end of two or three years he would make sufficient money to enable him to take a college course.

When the news of his undertaking reached his father, and with it the alarming statement that John had run into debt, he wrote his son a very bitter letter, saying that he considered the debts which he had assumed to be dishonorable and that his course in the matter was not a whit better than highway robbery. His mother also wrote advising him to withdraw from the business, although she treated the matter with leniency. The combined opposition of his parents made him relinquish the enterprise, and he then fully determined never to commence again until he had completed a course of study. Accordingly he went to Decatur and rented a little house with a single room, which had previously been

used as a shoe-shop. In this humble tenement he boarded himself, purchasing bread, milk, and such other things as did not need cooking; and occasionally his sister, who lived in the country, would send him a joint of meat ready for the table, or would in other ways add to his little store.

On going to Wheaton, he expected that the school would furnish all the educational facilities needed, but as it was just organised he soon found himself in advance of any of its classes. He then formed the resolution of studying by himself. The persevering and indomitable student may not have judiciously selected his studies; but his work in algebra, geometry, and trigonometry was successful and satisfactory. His studies in mental and moral philosophy and his general reading in history were less profitable, perhaps; but his progress in Latin compensated for the deficiency.

During the winter of 1856 he taught school in Clinton, De Witt County, Illinois, and received sixty dollars per month. At the little stone school-house he had received fourteen dollars per month, and in the school near Decatur, thirty dollars per month, and his increased salary of sixty dollars per month seemed to him a large amount. The next year he attended classes in Jackson-ville College, Illinois, studying Latin and Greek, reviewing trigonometry and attending lectures in chemistry.

His father had always desired that his son should go to Oberlin, and at last in deference to that strongly expressed wish, he entered Oberlin College in 1857. Being far advanced in the scientific branches of study, he now devoted himself chiefly to Greek and Latin, studying botany also during the spring term. There was no winter school at Oberlin at that time, as the faculty believed the interests of the pupils were subserved by a vacation which would enable them to teach during the winter months. Consequently Mr. Powell returned to Wheaton, entered school there, and remained a year. During all this time his studies had been irregular, but he was in a position where he could graduate in any western college by a few months' application.

For several years he had given all his attention to botany and zoölogy. He had an herbarium of many thousand plants, and a large collection of lacustrine river and land shells, and quite a large cabinet of the reptiles found in Illinois, Iowa, and Michigan. One spring day he went through the village of Wheaton with a basket containing some glass fruit-cans, to be used as specimen jars, on his way to the woods for the purpose of collecting snakes. As he passed a group of men they asked him where he was going. His

reply was that he needed another rattlesnake in his collection. As it happened he found a rattlesnake that day, and on his return through the village at night, with the live reptile in a glass jar, he chanced to meet the same gentlemen with whom he had been talking in the morning. This mere accident led to a curious and rather fabulous story, to the effect that he was acquainted with the homes of all the animals, knew their habits, and could at any time find any animal he desired. This reputation clung to him for years; the incident got into the country papers and was repeated until the story became greatly exaggerated. When last repeated, the young naturalist learned for the first time that he had appropriated the upper story of his father's house for a museum, and had it full of all sorts of reptiles; and that he could go to the woods and fields any day and find any reptile, mammal, or bird that pleased his fancy, and that he lived in a house full of them and was constantly employed in studying their habits. To be sure he had a large collection, and was very familiar with it; but the story was much larger than the collection.

About this time he was probably more interested in mollusks than in any other department of natural history. He had a very large collection made by himself from the Great Lakes, the small interior lakes of Wisconsin and Illinois, the Mississippi River, and from most of the rivers of Iowa, Illinois, Missouri, Indiana, and Kentucky, besides a good representation of the land shells of all that region of country. His greatest difficulty was in obtaining books to enable him to identify species. There were many specimens which he was never able properly to identify, but he gave them names according to the locality where they were collected, and from the characteristics of the shells. He had collected some fossils, also, and had studied minerals sufficiently to become familiar with the use of the blow-pipe.

During the summer of this year he continued his travels, especially along the Ohio River and across to the lakes, and then through Michigan. In the fall he went to the Iron Mountain region, south of St. Louis, Missouri, for the purpose of collecting minerals. He found the country so interesting that he continued his stay in the field until he barely had the funds necessary to take him to St. Louis, where he hoped to earn enough to pay his expenses home. Not finding work at once, he pawned his watch and went to Decatur where he had previously lived. Later he engaged to teach at Hennepin, Illinois, and continued teaching for six months, receiving one hundred dollars per month.

It was his intention at the time to earn a sum of money sufficient to enable him to study in some Eastern college one or two years and graduate, but when the spring time came the old fascination for natural history studies predominated, and he made geology a specialty.

The town of Hennepin standing on a bluff of the Illinois River, was of itself a study. The underlying country for miles around was a deep accumulation of drift-like material. A great valley or basin had been filled and the carboniferous rocks which came near the surface were here marked to the depth of about two hundred feet. During the winter Powell became greatly interested in this body of drift material and the peculiar characteristics of the country, and early in the spring he commenced a more thorough examination of it and the adjacent county of La Salle. He devoted several weeks to this work, and then extended his examination farther and farther away, up and down the valley of the Illinois, and finally through the valley of the Mississippi and along the Des Moines River in Iowa and thence into southern Wisconsin.

His geological studies interested him deeply, and he continued out late in the fall. On returning to Hennepin he decided to teach again and postpone for another year his trip to the East. During these scientific trips he had formed the acquaintance of many scholars interested in natural history and geology, and was elected Secretary of the Illinois Natural History Society. In this capacity, and through the kindness of many devoted friends, he was enabled to journey, by rail or boat, for several years, without expense; and being a good walker, his expenses as a travelling student were always trivial. He could sleep at night on the ground under a tree with impunity, for he had perfect health and was an athlete.

Thus young Powell's student days were not all passed in the school-room, though he had diligently applied himself to study under the direction of various teachers. Much of his study was made privately, as he was impelled by a desire to acquire material for successful instruction. The teacher thus became the more careful student. To a large extent his school-room was in the forest and the field, on the prairie and the mountain, and along the river bank and the lake shore; for he early became a student of nature, and studied in the solitudes of nature.