

## Dr. John T. Plummer (1807-1865), Pioneer Scientist of Richmond, Indiana

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More than a century ago in the "American Journal of Science" for 1844, a young physician of Richmond wrote:

"To know the bareness of a locality in reference to geographical distribution is as desirable to a naturalist as the knowledge of the fruitfulness of another district. Especially has it appeared to me to be desirable that lists of the reptiles, insects, fishes, plants, etc., of the newly settled sections of the country should be made out, not only for present purposes, but for the future student of nature who may traverse the same regions when highly populated and improved, and the influence of terrestrial cultivation on wild organic nature be determined. Impressed with this view, I have for years past directed my attention to the animal and vegetable kingdoms around me, and have been endeavoring to perfect catalogs of their several subjects."

Such was the introduction to a list of the Mollusca of the vicinity of Richmond by Dr. John Thomas Plummer. The paper was the first regional list of molluscs for the state of Indiana and was the last one in the series of "catalogs" published in that journal. The author makes clear here, with remarkable foresight, the plans and purposes of his studies in the natural history of the county.

In the published histories of Indiana science little attention has been given to the life and work of Dr. Plummer. His pioneer researches in the natural history of Wayne County and the investigations in many other phases of science and scholarship have long remained hidden in now obscure publications. An extensive search into the leading scientific and agricultural journals of that period has revealed a long series of writings, a bibliography of which comprises some one hundred fifty-two titles.

Though Dr. Plummer was widely known among his contemporaries, his pioneer efforts have lacked recognition generally. In 1916, in connection with the Indiana State Centennial, the Indiana Academy of Science published several histories of the development of the sciences within the state, including botany, geology and zoology. In these accounts, Dr. Plummer's contributions were almost entirely overlooked.

Probably the major portion of his published writings have now been located; and while they have revealed many facts of his life, the biographical details are all too few. Memorials published after his death and in particular the excellent account by Dr. James F. Hibberd (*Lancet-Clinic*, 8:384-389, 1865), have been the major sources of biographical data. Aside from the one notebook referred to later, none of the unpublished writings, letters, etc. of Dr. Plummer have been located. The present account deals more specifically with his scientific contributions, since they are best known to the writer at the present time.

Dr. Plummer was a descendant of one of the early colonists, Thomas Plummer, of Prince George County, Maryland, born about 1772. The

former was born in Montgomery County, Maryland, March 7, 1807, the son of Joseph Pemberton Plummer and Susannah Husband Plummer. Born into the Society of Friends (Quakers) he was placed after his mother's death in 1816 in Nine-Partner's Boarding School in New York. In 1819 Joseph Plummer, his second wife, Lydia Husband, and four children, Sarah, Mary, Joanna, and John, moved to Cincinnati. In 1823 they moved to Richmond, Indiana, where Joseph Plummer established a general store.

The great beauty of the Whitewater country, with its vast tracts of virgin forests and native wild life and the massive beds of exposed rock, representing eons of geological history, undoubtedly made deep impressions on young John, then sixteen years of age. In that first year of residence in the community he noted down his observations on weather, etc., which were published many years later. Thus began a long and distinguished scientific career.

During those first years he was employed as a clerk in his father's store. He was not successful as a clerk, for "he was constantly found with a book in his hand in which he was profoundly absorbed, while the patrons of the store came and went with a minimum of attention, or none at all." One amusing story has come down to us from his granddaughter, Frances Rachel Anderson, who has written, "It is recorded that when a woman customer asked to see some calicoes, Grandfather, without looking up, handed her a foot or yard rule and said, 'If thee will point out which one thee wants, I will be glad to get it down.'"

From work in the store he turned to the study of medicine, "reading" with Dr. Thomas Griffith, a prominent practitioner of Richmond. We have his own note concerning his entrance into the profession of medicine: "I commenced reading medicine on the 20th day of Tenth Month, 1825; may my principal aim be the good of my fellow man; let not fame nor wealth be desired." In 1827, after two years of study with Dr. Griffith, he entered the medical school of Yale University, graduating from there in 1828 at the age of twenty-one.

The course of study pursued for the medical degree was of such a generalized nature that he surveyed practically all the sciences. The greatest single influence in the development of his scientific career was probably that of one of his teachers, the eminent scientist, Dr. Benjamin Silliman, professor of chemistry and natural history at Yale from 1802 to 1853. Dr. Silliman founded the *American Journal of Science*, to which Dr. Plummer contributed a number of articles in later years. A friendship began there which was to last for many years. In 1828 Dr. Plummer learned his chemistry, pharmacy, mineralogy and geology from Dr. Silliman and his botany and materia medica from Dr. Eli Ives.

While he was at Yale he met the distinguished Noah Webster, whom later he was to aid in the preparation of his dictionary of the English language. Still in existence is one of Dr. Plummer's notebooks used in medical school, entitled, "Necessaria, Richmond, Ia. 1827 Jno. Tho. Plummer." While the book is miscellaneous in nature, it contains a rather detailed account of his trip from Richmond to New Haven, Conn., in 1827; an expense account of the trip and of his stay at New Haven; together

with lecture notes in botany, chemistry, geology, medicine and law. His habit of meticulous note-taking and keen observation are very evident in this notebook. This is perhaps the first of a series of notebooks kept throughout the remainder of his life, and, unfortunately, is the only one still known to exist. We can only surmise as to the contents of the others from the several accounts which were published.

On the basis of his broad training in medicine and the sciences and his contacts with great scientists, he was well prepared when he returned to Richmond in 1828 to practice medicine and to attempt an understanding and an interpretation of the natural history of the region. As it has been to many others since, the great region of the upper Whitewater indeed presented a challenge to this young physician. While his first years were spent in devotion to his medical practice, he nevertheless kept records of the weather, the seasons and vegetational changes, bird migrations, etc., as early as 1823. According to present knowledge his first writings probably appeared in the "Family Schoolmaster" in 1839. His first technical article, "The Effects of Light on Vegetation," was published in the *Indiana Farmer* in 1840.

Richmond in 1833, with a population of 1,740 (3,000 in 1840) had six physicians. Among the physicians of that early period two personalities stand out—Dr. Ithamar Warner and Dr. John T. Plummer. Both made notable contributions to the life of the community. Dr. Plummer served for thirty-seven years and established a reputation as a learned and skilled physician. Because of his training and experience in chemistry and pharmacy, he was often consulted as an analyst in medico-legal cases. In 1838 he was a member of the Richmond Board of Health. In all his activities he was rather reserved and did not seek prominence nor fame; and it is recorded that he declined several offers of teaching positions in medical schools. He belonged to few organizations, neither to the Indiana State Medical Society nor to the American Medical Association. He was, however, made an honorary member of the Cincinnati Horticultural Society in 1844 and in late years a correspondent of the Boston Society of Natural History.

Dr. Plummer was stockholder and the first president of the Richmond Gas, Light and Coke Company in 1855. The *Interstate History* states, "Being so thoroughly devoted to scientific and literary studies, he took but little part in public business. He had decided views on political questions, but always declined to participate in any political movements, or to cast a vote for any candidate, who, if elected, might be required to use force in the discharge of his official duties."

Dr. Plummer was a keen observer and rather meticulous in noting down observations and bits of information he encountered. His notebooks were filled with accurate and extensive observations and from these he prepared many articles for publication. He also seems to have kept rather complete medical records. His medical writings are clearly expressed and are models of accuracy and good English usage. According to present records he published about seventeen articles of a strictly medical character in the journals of the time. His first article, "Animacula discovered in the dejections of cholera patients," was published in the *Western*

Lancet in 1849. His last contribution was one of a series entitled, "Diseases of Richmond, Wayne County, Ind." and was published in the Cincinnati Medical Observer for 1856. Some of these medical journals, inscribed with his name and bearing corrections in his handwriting, are preserved in the John Crerar Library in Chicago.

In addition to medical writing he also contributed twenty-seven papers on chemistry and pharmacy, the latter appearing in the Journal of Pharmacy from 1851 to 1859. Dr. Plummer's knowledge of pharmacy, chemistry and botany were put to good use, for he grew some of his medicinal plants and prepared many of his medicines. For many years Dr. Plummer's residence and office in Richmond were located on Fort Wayne Avenue, between Cliff and Sassafras Streets. In 1852 Dr. Plummer and Dr. W. P. Waring were associated in joint practice. In the same year they opened a drug store.

While maintaining a practice in the city for many years, with the purchase of a farm in 1834 by Joseph Plummer, John Thomas seems to have spent considerable time at the farm, which was located in the area now known as Reeveston. This life offered many opportunities for study and experimentation in the many new methods then being developed in agriculture. His many views and observations on prevailing methods and his experiments with plants and insects are to be found in several of the leading agricultural periodicals, mostly between 1840 and 1847, in the *Indiana Farmer*, *Indiana Farmer and Gardner* and the *Western Cultivator*.

Several early articles on the botany of the county and of the state appeared during these years in the agricultural journals. In 1842 he published a list of twenty-one species of grasses growing in the vicinity of Richmond, giving their technical names together with data on their habitats and distribution. This seems to be the first paper on grasses for any region in the state of Indiana and one of the very earliest contributions to the flora of the state. His next list, published in 1845, contained fifty-two species of the more "ornamental" shrubs and trees of the vicinity of Richmond. His more extensive list of the trees and shrubs of the county comprising nearly 200 species was that included in 1847 in his review of Emerson's book. These are only a few of his many writings on plant life; the others include studies on germination and the influence of light and temperature on crop plants, fruits, etc. Additional plant records are to be found in Dr. Plummer's copy of John Torrey's "A Compendium of the Flora of the Northern and Middle States" (New York, 1826). Here he has checked 536 species as occurring in the Richmond area and 251 are indicated as being found on the Plummer farm.

His finest scientific writings, however, were the series of "catalogs" published in the *American Journal of Science*. The first, "Suburban Geology, or Rocks, Soil and Water, about Richmond, Wayne County, Indiana," a paper of thirty-three pages, published in 1843, was the first contribution to the geology of the county. Aside from T. A. Conrad's description of some Richmond Fossils in 1842, Dr. Plummer's is the first known list from the Richmond area. He discussed the geography and geology in some detail, with lists of some forty species of fossils. There

were fourteen figures, including maps, diagrams and drawings of fossils. He was first to observe and describe glacial striations in this region, finding them on limestone at Thistlethwaite's Falls, north of Richmond. He found seven mounds near Richmond. In 1823 he opened one, finding a human skeleton, with fragments of wood, coal, Indian corn, a smooth piece of ivory and the bones of some animal. He concluded that the mounds were of human origin, not geological formations, as was then currently believed.

His study of the mammals of the county, the second in the series of "catalogs," was a paper of fourteen pages, published in 1844, is of special interest because of its descriptions and historical data of animals no longer found in the county. He lists forty-three species of mammals. An elk was killed near Richmond in 1811. Horns were still found in the woods. Elkhorn Creek was named because of the number of these horns found on its banks. A black bear was killed very near Richmond in 1824. Porcupines and gray foxes were still found. A new species of mouse, *Arvicola riparius*, was described. Some of these observations were noted by M. W. Lyon in his "Mammals of Indiana," 1936.

His third paper, of four pages, published in 1845, the last of his "catalogs," surveyed the molluscs of the county. The list of animals was extended in 1851 by the publication of a recording of twenty-two species of fishes.

These early papers on the fauna and flora of the county are invaluable as records of many species existing a century ago, but no longer found. These records would have increased value if specimens from his extensive museum and herbarium had been preserved. About the time that the Plummer family moved to Chicago, it is probable that the plant collection was given to Purdue University. One specimen, that of the Seneca snake-root, *Polygala Senega*, is still a part of the Stanley Coulter Herbarium at Purdue University. It is the oldest known plant specimen from Wayne County.

Dr. Plummer was a leader in the Society of Friends (Quakers), holding many important positions of responsibility. He was especially interested in the education of young Friends, having been a teacher of botany and astronomy in Green Mount Boarding School. He founded and edited *The Family Schoolmaster*, the earliest literary paper printed in Richmond, a small quarto, begun in 1839, to "amuse and interest the young." It was discontinued with the thirty-fourth number. No copies are known, though articles were reprinted in the *Richmond Palladium*, including one reviewing the photographic work of Daguerre, of Paris.

He helped to found the Richmond Athenaeum, concerned with the study of art, literature and the sciences. The rooms of the society housed a library and museum. In 1839, he was critic and curator of the museum. He noted in 1841 the discovery near Richmond of a mastodon tooth and huge tusk, which were placed in the museum of the society. He also had his own private collection.

The work for which Dr. Plummer is best known locally is his "Reminiscences of the History of Richmond," a part of the *City Directory of*

1857. From his personal experiences and from records then current he compiled significant information that would otherwise have been lost.

In his work in Quaker education he prepared three Readers for children, selecting material conforming to the principles of the Society of Friends. Copies of the First and Second Readers are known to exist.

In 1833 Dr. Plummer married Hanna Wright, of Springboro, Ohio. They had one son, Jonathan Wright Plummer (1835-1918). After the death of his first wife, he married Sarah O. Pierce, of Portsmouth, N. H. They had three children, all of whom died relatively young. Sarah Plummer died in 1877. Joseph W. Plummer became a minister in the Society of Friends and actively promoted the work of the group. He was a wholesale druggist in Chicago, later moving to Glencoe, Ill. A daughter, Mary W. (1856-1916), was a well-known author of verse and of books for children and prominent in the American Library Association and the New York Public Library. A son, John Thomas Plummer II, lived in Denver, Colo., until his death in 1943. A daughter, Frances Plummer Anderson, lives in Dorset, Vt.

After much suffering from acute rheumatism, Dr. Plummer died on April 10, 1865. Of the many tributes published at the time, the one in the Richmond Palladium of April 13, 1865 is here quoted:

"With the citizens of Richmond, Dr. Plummer has been closely and familiarly identified for the past forty years. In all that time he has gathered to himself lasting friends. As a physician, skilled in his profession, few were his superiors. He was always a hard worker, mentally, and whatever his mind prompted him to do he did with all his might. We believe he was a true Christian, full of kindly charity. He was a consistent and life-long member of the Society of Friends. On Wednesday last his remains were followed from the Friends Meeting House by one of the largest processions of sorrowing relatives and friends we have witnessed for years."

As a devoted Friend, as a skillful physician and as a naturalist and scholar of the first rank, Dr. Plummer deserves recognition as one of the most distinguished of Richmond's public servants and as one of the great pioneer scientists of the state of Indiana.