MEMORIAL OF PROF. BENJAMIN F. MUDGE.

BY JOHN D. PARKER, KANSAS CITY, MO.

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Prof. Benjamin Franklin Mudge was born at Orrinton, Maine, Aug. 11, 1817, and died at Manhattan, Kansas, Nov. 21, 1879, in the sixty-second year of his age. When two years old, his father's family moved to Lynn, Mass., which place numbered his ancestors among its first white settlers. His parents were eminent for their piety, charity and hospitality. They encouraged studious habits among their children, providing them with good reading, and stimulating them to literary attainments and knowledge.

Three of Prof. Mudge's older brothers entered the Methodist Episcopal Conference, the oldest of whom died early in his ministry. The second was distinguished as a linguist, particularly in the Greek and Hebrew languages, and the youngest, and only one now living, has an enviable reputation as an author of historical Sunday-school books.

Prof. Mudge graduated at Wesleyan University, Middletown, Connecticut, in 1840, from which institution he received his degree of Master of Arts several years later. During his vacations and at odd moments, he diligently pursued his studies in natural history; and although two years after he graduated he entered the legal profession, yet he never relaxed his interest in science, and for many years the Lynn Natural History rooms contained a large cabinet of his collecting, which was afterward removed to the Kansas Agricultural College, and became the nucleus of the Mudge cabinet.

In childhood he exhibited the same simplicity of life, unselfishness and genuine love of nature, which grew and strengthened with age. Some incidents of his boyhood are illustrative of growing traits of character. When twelve years of age, he was sent with his three older brothers to hoe in a very weedy corn-field. As usual, the outside row, which the plow had scarcely touched, was much the hardest. A momentary query arose among the brothers who should take this row, when Benjamin said, "I will take that." This was characteristic of his life. In after years he cheerfully remained at the parental home, discharging home duties, though it imposed upon him several years of service at the shoe business longer than his brothers had performed, in order that they might secure the advantages of the higher education, although his thirst for study was developed as early in life and as intense as theirs.

An inquisitive mind with regard to natural objects seems to have been born in him. The features

of nature in and about Lynn, the home of his youth, are unusually fine and beautiful. The locality is rich in minerals, and the sea-shore is lined with pebbles, polished by the friction of the waves. These were the attractive toys of his childhood, and minerals, incrusted moss and sea-shells became the ornaments of the home of his youth. This collection grew by the accumulation of years into that noble cabinet at Manhattan - a monument worthy of any geologist. To sit on some cliff, and watch a stormy sea as it lashed the rock-bound shore, was the joy of his boyhood recreations. Once, after a great tempest, he stood near the edge of a rocky elevation, below which the mighty waves broke, throwing their spray high in the air. Re was so much absorbed in the wild scene that he did not observe the spray sometimes shot somewhat above the rock on which he stood. Suddenly, as if angry at his seeming indifference, the sea sent a column of water into the air far above him, which descending, drenched him and his brother from head to foot. Benjamin enjoyed the mishap very much, and spoke of the sea as a friend who could not do him any real harm.

After practicing law for sixteen years, during which he attained a wide reputation for uprightness and fair dealing, and was honored by the mayoralty of Lynn, closing during his administration many saloons, thus creating quite a reform in the liquor traffic, he removed to Cloverport, Kentucky, where he was connected with the Breckinridge Coal and Oil Company.

On the breaking-out of the Rebellion, he removed to Kansas, a State he had been greatly interested in from its beginnings. Relocated in Wyandotte county, and his natural love for geology soon becoming known, he frequently delivered lectures on his favorite study through the country. In 1864, although a comparative stranger in the State, through the influence of Ron. I. T. Goodnow, the Superintendent of Public Instruction, he was invited to deliver a course of lectures before the Legislature, whereupon that body conferred upon him the office of State Geologist, an honor entirely unsought, yet thoroughly enjoyed. While the State appropriation provided for the office but a short time, he was subsequently elected State Geologist under the State Board of Agriculture, which office he held during life. During all these years he was constantly receiving specimens from all parts of the State, and many a little fortune has been saved to its owner from hazardous ventures for coal, lead or precious metals, by the truthful and always kindly advice from one who knew well how to read "sermons in stones."

In 1865, he was elected to fi]l the chair of Natural Sciences in the Kansas Agricultural College, to which institution, with a royal munificence, he donated his entire cabinet. It was during one of his summer excursions that he discovered *Ichthyornis dispar*, a bird with bi-concave vertebrae and teeth - an anomaly to science. In severing his connection with the college, the students were deeply grieved, at his departure, and presented him with a valuable watch, which he always carried-an ever-loving reminder of the mutual affection between students and professor.

The last years of his life he spent chiefly in making collections for Prof. Marsh, of Yale College; and thus brought before the scientific world many new and rare discoveries in palæontology.

On Friday evening, Nov. 21, 1879, Prof. Mudge sat at home with his wife, reading the fifth act of Shakespeare's "King Lear" - the wail over the dead Cordelia - when, feeling a pressure in his head, he stepped out of the door to walk in the cool air. A few moments afterward his wife heard a groan, and hastened "to his side, but found him unconscious from a stroke of apoplexy. A

physician was hastily summoned, but, by a painless transit, Professor Mudge almost immediately passed to his reward.

On Sunday, November 23d, all Manhattan came to look upon his loved form. Scientific, friends from various portions of the State and Missouri came to pay warm tributes of praise to the deceased scientist. To his bearers were added four of his scientific friends, Professors Snow, Popenoe and Parker, and Mr. Joseph Savage, all of whom have been intimately associated with Prof. Mudge in his scientific pursuits. The day was beautiful, and the scene, as the immense procession wound its slow and sad way up Cemetery Hill, will not soon be forgotten, And, as the sprigs of evergreen were thrown lovingly into his open grave, we looked forward to the time when he will possess that blessed immortality of which this is a beautiful emblem.

In the summer vacation of 1867, the writer first became personally acquainted with Prof. Mudge. Called to Lincoln College in April of that year, the writer set himself at work to organize a State Scientific Association. For three months he tried to enlist the people of Topeka in such an organization, without the least success. He then wrote to Prof. Mudge, who thought the time had not yet come in the State for such an enterprise. During the summer vacation, the writer, by special invitation, spent three royal weeks with Prof. Mudge, at his home in Manhattan; and during this visit was matured the plan for organizing the Kansas Natural History Society, which afterward grew into the Kansas Academy of Science. Of this organization Prof. Mudge was elected the first President, and was again President at the time of his death. During these twelve years, he was unwearied in his labors, always cherishing plans for the development of the Academy, whose success formed one of the most joyous experiences of his life. His papers are the results of his own observations and experiments, and are real and substantial contributions to knowledge. While professor at the Kansas Agricultural College, he spent his summer vacations in making collections on the Plains, to enlarge his cabinet - the richest and best in the West; and he would often enrich the private collections of his scientific friends with boxes of specimens. By mutual agreement, Prof. Frank H. Snow, of the State University, and Prof. Mudge had divided scientific work between themselves, in order to accomplish the largest possible results for the new State - the former giving most of his time to living forms, the latter to fossil forms. While at Topeka, at one time, the attention of Prof. Mudge was elicited by seeing impressions on the flagging stones of the sidewalks, and this led to the valuable discovery in science of the socalled bird tracks of the Osage valley. He did much original work in science, and several species which he discovered bear his name.

But Prof. Mudge did not confine his whole attention to scientific pursuits. He was a keen observer of events, and was essentially a man of the people. There was an earnestness and enthusiasm which glimmered in all he said, like sunshine on a beautiful day. All who knew him were charmed with the truthfulness and simplicity of manner which he possessed. He was the most companionable of men, and people everywhere were attracted to him. He was not afraid of the truth, no matter where it might lead him. No road was so rugged he would not follow it in the pursuit of truth. He would give up the most cherished opinions unhesitatingly, when newly-discovered facts did not sustain them. Still, with all his enthusiasm, he was conservative and prudent, and seldom made mistakes. Those who were intimate with him during our civil war, remember how cheerfully he awaited unfolding events, with a supreme faith in the darkest hours that the right would be triumphant. With him there was no cloud that did not have a silver lining.

He manifested the deepest interest in educational progress, and in the growth of the State institutions. He was the life of teachers' associations, and was a favorite lecturer at teachers' institutes. Prof. Mudge was an earnest temperance worker, and a permanent member of many temperance organizations, both in Massachusetts and Kansas. While living at Quindaro, during the war, one of the border towns of Kansas, there was great excitement on the slavery question. Some runaway slaves from Missouri came to Prof. Mudge for work and protection. Their masters offered a large reward for their recovery, and his home and life were threatened in a midnight attack. He would not yield to threats, however, but protected the refugees, and saved them from being dragged back into slavery.

Prof. Mudge possessed fortitude, or passive courage, which is characteristic of great minds. While living in the West, his sensitive nature suffered many things incident to a formative condition of affairs. But as a pioneer in laying the foundations of society, he moved calmly forward in the discharge of duty, regardless of personal consequences. He possessed great benevolence of being, and always took the most charitable view of human actions. He worked harmoniously with his associates, and as far as possible lived peaceably with all men.

As a teacher, Prof. Mudge was loved and revered by all his pupils. His pleasant and genial manner encouraged the timid, his unfailing knowledge and warm memory served to quicken the ambitious, and his tact and practical insight into personal things developed many a dull scholar to a prominent place in his class. His studies were attractive, and his methods of teaching were characterized by originality. As a teacher, Prof. Mudge was not bookish, although he always prized books for what they are worth. He was truly an original investigator, and nature was the great volume ever placed before him. His love of nature was unbounded, and he seemed to live in the field. His thoughts naturally ran back "to his experiences in the field rather than to books, and he drew very largely for his scientific knowledge from original observations. He was the hero of all scientific parties going out from the Agricultural College, and none were considered complete without him as a leader.

In 1871, in speaking of fossil flora, Prof. Mudge mentioned eighteen new species which he had discovered. At another time, a few years later, he spoke of thirty-six new species. On the day of his death he spoke of eighty which he had discovered, and there are probably many more, for he was always very modest in speaking of his own work, while he was ever glad to notice that of others.

Prof. Mudge was the prince of collectors in the West, and possessed all those qualities of body and mind that made him truly successful. As a platform lecturer on scientific subjects, he was a general favorite with all classes. In a graceful and easy manner his ample stores of scientific knowledge would flow forth in rich, spontaneous utterances, and he was able to throw a peculiar charm around the facts of science. The University of Kansas lately honored herself by placing him upon her corps of special lecturers. He was wholly absorbed in his college duties, and was the student's best friend. He opened doors in the temple of science, and inspired his pupils to enter and explore for themselves. As a friend and companion, he was always true and genial. His friendships were remarkably warm and lasting. He was greatly beloved by all his neighbors, and this is a sure test of a good man. He possessed a native purity and refinement of soul, more akin to the refined nature of woman, which never forsook him in his most social hours. He seemed to

be born without fear, and his scientific friends relate instances in their western explorations when he would lie down without fear, and sleep till morning, surrounded by hostile Indians. He possessed great simplicity of life, and always felt as if he was a young man. He was always giving public lectures without compensation, and studying methods of conferring favors upon his friends. He feared God and loved righteousness, and those who knew him best believe that he possessed a deep religious nature.

As long as science has a name and place in the great central plains of the North American continent, Prof. Mudge will not be forgotten as a scientific explorer and discoverer.