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Wm. F. E. Gurley

MEMORIAL TO WILLIAM FRANK EUGENE GURLEY

BY ROLLIN T. CHAMBERLIN

When the Society celebrated its Semicentennial at the New York meeting in 1938, every effort was made to have its few surviving founders all present as honored guests. Only six Original Fellows were still living, but happily five of these were able to make the journey and grace the anniversary with their presence. One of them was William Frank Eugene Gurley. For 20 years he had been totally blind and deprived of the normal contacts with fellow geologists, although retaining in full his natural sociability and great capacity for friendship. To participate thus again in a meeting of the Society with old friends was indeed a special occasion for him, more pleasing probably than anything else could have been.

William Frank Eugene (Reed) Gurley was born in Oswego, New York, on June 5, 1854, the son of Benjamin Franklin Reed and Leonora Hall Reed. His father was a printer but died suddenly when young William was a year old. In 1858 his mother married Daniel Gurley, a blacksmith, who adopted William and changed his name to Gurley. In early life Daniel Gurley had become associated with the leaders in the anti-slavery movement and for 25 years before the Civil War maintained a station in the "underground railway" for negroes on their way to Canada. At one time he had owned and operated several sawmills, general stores, and a bank, but these he was compelled to liquidate as a result of the panic of 1857. After redeeming his bank's "wild-cat" money and paying his debts, he went back to his blacksmith's shop. But as business continued depressed, he sought better conditions in "the far west," as it was then called, moving in 1863 to Quincy, Michigan, and the following year to Danville, Illinois. Here William Gurley grew up and later became a leading citizen.

Misfortune came very early to young William. When about 7 years old an attack of measles rendered him completely blind for several months, and, although he recovered partially from this, his sight thereafter was never more than about half of normal. Worse still, the weakened vision was destined to fail again in 1897, from proofreading by strong electric light, and to vanish altogether in 1918.

The boy began to collect postage stamps, embossed trade marks, coins, stone Indian relics, and curios. By 1868, when he was 14, his interest had spread to geology, and he read everything he could find on the subject. In the black shale capping the coal seam exposed along the banks of the Vermilion River in Danville he found beautiful pyritized fossils. The supply seemed unlimited, and so attractive were the fossils that before long he was trading them to other collectors for fossils from different localities and horizons. Finding that most collectors of that period were not so much interested in the fossils found in their own neighborhoods as in showy minerals, relics, and attractive marine shells, he corresponded with Greenleaf in Boston and Nickerson in New Bedford and got mixed varieties of shells in barrel lots at reasonable prices. In exchange for selections of these, and with what he himself collected, he

acquired many fine fossils. Invariably he sent his part of the exchange first, leaving it entirely to the other party to make such returns as he saw fit; thus the exchanges were nearly always satisfactory to both parties. That there were some exceptions, however, may be inferred from a letter from Phoenixville, Pennsylvania, dated October 10, 1870 (when Gurley was 16 years old):

"Dear Sir: The shells you sent me smelt so bad I had to throw them away for they were covered with lime incrustation common species and not worth the labor of cleaning. The Fossils I did not want as I don't collect them. I gave them away. I send herewith a return for them begging you not to send me any more at present, except *good* species and clean and free from *odor!*"

Gurley's record of exchanges, always carefully kept, shows 35 made in 1871, including trades with A. H. Worthen, E. T. Cox, F. B. Meek, James Hall, Charles Wachsmuth, E. O. Hovey, A. S. Packard, Jr., Robert Damon of Weymouth, England, and the Imperial-Royal Geological Museum in Vienna. The collection sent to Vienna was so highly appreciated that very soon the high-school lad was elected a corresponding member of the Imperial-Royal Geological Society of Austria. As the only other American members at that time were Agassiz, Hall, Hayden, and Worthen, the Austrians evidently did not suspect that it was a mere boy whom they were honoring. Rapidly his contacts with paleontologists in various parts of Europe widened, and in the summer of 1873 he was welcomed into a group about to organize the Swiss Paleontological Society. At home he helped start the Vermilion County Historical Society, Danville, Illinois (1877), and was one of the founders of the State Historical Society of Illinois (1879).

Graduating from the Danville High School he entered Cornell University in the fall of 1873, not as a candidate for a degree, but as a student in the "Optional Course" that he might thereby equip himself for a geological and paleontological career. Professor Charles F. Hartt arranged his course. Among his fellow students during his 2 years at Cornell were Orville A. Derby, Theodore B. Comstock, John C. Branner, Richard Rathbun, Frederick W. Simonds, and Herman L. Fairchild. Not infrequently they, and sometimes Professor Hartt, drifted into his room in the dormitory where the framed certificate of membership in the Geological Society of Austria hung on the wall. This impressive ornament, plus his membership in the Swiss Paleontological Society, often touched off the conversation. Should we not have similar societies in this country? Eventually it came to be understood among the group that, at the first opportunity, Professor Hartt would confer with geologists who might be interested in the promotion of such an organization. But in 1875 Professor Hartt went to Brazil where he died a few years later. Henry S. Williams succeeded him and considerably later played an important part in the launching of The Geological Society of America, finally consummated at Ithaca in 1888.

Travel always appealing to Gurley, he took his fling in the gold rush to Colorado in 1876. Outfitting with a burro at Pueblo, he packed over the range via La Veta Pass and on to Lake City where he worked as a weighmaster, road builder, carpenter, and printer, while prospecting extensively in the San Juan Mountains. He examined the upper Uncompahgre valley near Ouray and the San Miguel stream deposits over the divide, locating placers which unfortunately had to be abandoned because of an Indian uprising. So he returned east with little gold but many more specimens for his collection.

At Danville he engaged in many different activities. Professionally he was a civil engineer, helped in locating railroad lines in the coal area of eastern Illinois and adjacent Indiana, and was city engineer of Danville in 1885-1887 and 1891-1893. But as his ambition was to place himself in a position financially where he could settle down and devote himself entirely to geology, with characteristic energy he also carried on a real-estate and building-association business and entered the insurance field, all the while actively assembling the great Gurley collection of Paleozoic fossils.

Gurley's first paleontological publication appeared in the Proceedings of the American Philosophical Society for the year 1878. This was a *Notice of the discovery of the position of the crural processes in the genus Atrypa*, and it must have been a bitter disappointment to the young scientist to find his first contribution to the literature appearing, through an error, under the name of Ginley. Possibly as a result of this experience, Gurley's next contributions were privately printed brochures on "new Carboniferous fossils." In 1889 there appeared in Report 16 of the Indiana Department of Geology and Natural History the first of that long series of publications in collaboration with Samuel A. Miller of Cincinnati which was destined to make "Miller and Gurley" a familiar phrase with all students of Paleozoic paleontology.

Illinois had already had a strong geological survey under Worthen, but this had come to an end in 1875 when the legislature discontinued the necessary appropriation. Two years later, however, a State Museum was established at Springfield, and before long its curator was "required to perform such duties as may be by law required of the State Geologist." Accordingly in July 1893 Governor Altgeld appointed Gurley Curator of the State Museum of Natural History and State Geologist of Illinois, in which dual capacity he served for the 4 remaining years of his active scientific career.

In spite of the severe financial depression then gripping the country, Gurley was able to secure funds from the legislature and with them between December 1, 1893, and January 25, 1897, he published Bulletins 3 to 12 of the Illinois State Museum. These 10 publications, by Miller and Gurley, were all concerned with the description of new species and genera of Paleozoic fossils of Illinois and adjoining States. They comprised a total of 663 pages and 51 plates and include descriptions of some 435 new species and 8 new genera. Most of the new forms were crinoids, there being no fewer than 110 species of the single genus *Batocrinus*. In addition several other classes of the echinoderms were represented, and important additions were made to the knowledge of late Paleozoic cephalopods. Of these contributions Carey Croneis says:

"Although many of Miller and Gurley's 'new species' have been reduced to the synonymy, a surprising number has stood up under the scrutiny of the many subsequent workers on the taxonomy and morphology of Carboniferous invertebrates. This speaks well for the general excellence of the paleontologic work of Miller and Gurley, lawyer and civil engineer".

The year 1897 was Gurley's last as State Geologist, and it witnessed also the publication of his last paleontologic paper. In the spring of that year a celebrated English specialist informed him that total blindness would be only a matter of time and that he should get his affairs in shape to handle them without the use of his eyes. Philosophically he faced the destruction of many of his life's ambitions. He was

then only 43 years old, but his collection of fossils had reached a total of 15,000 species and several hundred thousand specimens, he had a nearly complete library of North American geology, a comfortable home, and he had accumulated property producing an income sufficient for his needs.

Along about the turn of the century, President Harper and others raised the question of his coming to the University of Chicago. Receiving their proposals favorably, he became Associate Curator of Paleontological Collections, and through an arrangement—largely generosity on the part of Mr. Gurley—the University acquired his fossils. Appointed in 1900, Gurley continued as a member of the Department of Geology until his death on June 27, 1943—a longer span of years than has fallen to any other member.

The acquisition of the Gurley collection was an important step in the rise of geology at Chicago. Not only was it probably more valuable than any other private collection of fossils in the country and surpassed by few in public institutions, but its prestige and the influence exerted by Mr. Gurley were instrumental in bringing the James Hall and other collections to Walker Museum. Especially notable are its exceptionally perfect representatives of Paleozoic forms, for Gurley was indefatigable in pursuing particularly desirable specimens. One collection of unusually fine crinoids from the Coal Measures of Kansas City could be gotten only by exchange for a certain Indian pipe in the possession of a resident of Indiana. After repeated trials this pipe was secured and in turn exchanged for the coveted crinoids. Other treasures were obtained after years of patient waiting. Illustrative of his remarkable mental grasp of the details of the collection is an incident told by Stuart Weller (University of Chicago Record, March 9, 1900).

"In 1876 Mr. Gurley found an incomplete fish tooth in the Permian (Pennsylvanian) bone bed near Danville, which was sent for description to the late Professor Cope of Philadelphia, by whom the specimen was described as a new species, and an illustration made in which the lost portion was restored in outline. More than ten years later the collector with his wife was again at the same locality, and Mrs. Gurley picked up a fragment of a tooth and handed it to her husband. It crossed his mind that this fragment was the remaining part of the tooth he had found so many years before, and on reaching home the two fragments were placed together and were found to join perfectly, together making a nearly complete specimen, which is less than an inch in length, and about one fourth of an inch in width. During the period intervening between the finding of the two parts of this little tooth the locality had been visited many times, but the minute this little fragment was observed by Mr. Gurley it was recognized as the missing portion of the specimen already in his possession."

Ever present in Gurley was an eager desire to advance constructive efforts in scientific, cultural, and humanitarian lines. In various ways he was a helpful alumnus of Cornell; was prominent at Danville in all campaigns to raise funds for civic enterprises, industrial foundations, or charitable purposes; served as President of the Illinois Society, Sons of the Revolution, for 22 years, editing its organ, *The Minute Man*, with the assistance of Mrs. Gurley; and in 1921 he presented his collection of over 5000 original drawings by old masters to the Chicago Art Institute. Fond of his fellow man, he was a Knight Templar, Knight of Pythias, a 33rd degree Mason, and a member of other fraternal organizations.

Mr. Gurley was twice married. His first wife was Anna Graham Barnes of Maumee, Ohio, who died in 1918. In 1921 he married Katharine Eberly Beard of

Muscatine, Iowa, who survives him. Only their close friends know how much her understanding, encouragement, and constant help have meant to him in his years of dependency.

Strong character, catholic interests, and very genuine friendship made Gurley a most lovable man. A seemingly inexhaustible supply of interesting experiences and anecdotes, which he related with a peculiar sparkle of wit, or shrewd understanding, never failed to entertain. Till his last year or two, he made it a point to attend the University homecoming dinners and those given by the Trustees for the faculty; always, well in advance, some faculty friend was making arrangements with him to be his companion for the evening. Even on his eighty-ninth birthday he reminisced with his charm of old.

For years he had composed short poems, some of which, with the help of Mrs. Gurley, appeared in print or were recited by him over the radio. In his own words, expressed for one of his friends,

Another friend has cast aside
His earthly dust.
Another soul will now abide
With Him we trust.
Another spirit is enshrined
In realms above.
Another memory is entwined
With all we love.

WILLIAM F. E. GURLEY, 1936

BIBLIOGRAPHY OF WILLIAM FRANK EUGENE GURLEY

1878

(Ginley in error for Gurley.) Notice of the discovery of the position of the crural processes in the genus *Atrypa*. American Philosophical Society, Proceedings, volume 17, pages 337-338.

1883

New Carboniferous fossils. Bulletin 1, 9 pages (private publication).

1884

New Carboniferous fossils. Bulletin 2, 12 pages (private publication).

1889

(With S. A. Miller.) Description of some new genera and species of Echinodermata from the Coal Measures and Subcarboniferous rocks of Indiana, Missouri, and Iowa. Indiana Department of General Natural History, Annual Report, number 16, pages 327-373.

1890

(With S. A. Miller.) Description of some new genera and species of Echinodermata from the Coal Measures and Subcarboniferous rocks of Indiana, Missouri, and Iowa. Private publication, 59 pages.

(With S. A. Miller.) Description of some new genera and species of Echinodermata from the Coal Measures and Subcarboniferous rocks of Indiana, Missouri, and Iowa. Cincinnati Society of Natural History, Journal, volume 13, pages 2-25.

1893

(With S. A. Miller.) Descriptions of some new species of invertebrates from the Paleozoic rocks of Illinois and adjacent states. Illinois State Museum of Natural History, Bulletin 3, 81 pages.

1894

- (With S. A. Miller.) Upper Devonian and Niagara crinoids. Illinois State Museum of Natural History, Bulletin 4, 37 pages.
- (With S. A. Miller.) New genera and species of Echinodermata. Illinois State Museum of Natural History, Bulletin 5, 53 pages.

1895

- (With S. A. Miller.) Description of new species of Paleozoic Echinodermata. Illinois State Museum of Natural History, Bulletin 6, 62 pages.
- (With S. A. Miller.) New and interesting species of Paleozoic fossils. Illinois State Museum of Natural History, Bulletin 7, 89 pages.

1896

- (With S. A. Miller.) Description of new and remarkable fossils from the Paleozoic rocks of the Mississippi valley. Illinois State Museum of Natural History, Bulletin 8, 65 pages.
- (With S. A. Miller.) New species of crinoids from Illinois and other states. Illinois State Museum of Natural History, Bulletin 9, 66 pages.

1896

- (With S. A. Miller.) New species of Echinodermata and a new crustacean from the Paleozoic rocks. Illinois State Museum of Natural History, Bulletin 10, 91 pages.
- (With S. A. Miller.) New species of Paleozoic invertebrates from Illinois and other states. Illinois State Museum of Natural History, Bulletin 11, 50 pages.

1897

- (With S. A. Miller.) New species of crinoids, cephalopods, and other Paleozoic fossils. Illinois State Museum of Natural History, Bulletin 12, 69 pages.