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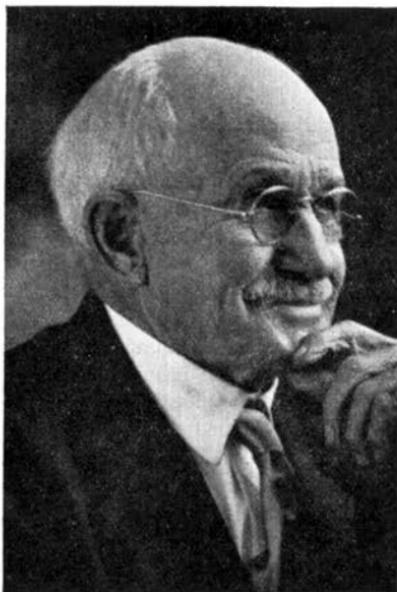
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**In Memoriam: Robert Irwin Cratty; John James Bushnell; Edward Jacob Petry;
Winifred Gilbert; Ross W. Harris; Edward K. Putnam; Mary Louise Sawyer**

Authors

Ada Hayden, T. C. Stephens, Mrs. Edward J. Petry, Roy L. Abbott, William H. Pfeffer, U. A. Hauber, and H. S. Conrad

IN MEMORIAM



ROBERT IRWIN CRATTY
1853-1940

Robert Irwin Cratty, teacher, farmer, writer, botanist, died at his home in Algona, Iowa, February 29, 1940. Mr. Cratty had been identified with the Iowa Academy of Science as a fellow since the third year of its organization in 1895 and served as its president in 1925-26. During the greater part of Mr. Cratty's residence in Iowa, he was engaged in teaching and farming but pursued botany as an avocation. He was largely self-instructed through reading, observation, and correspondence. Articles were contributed quite regularly by him to botanical magazines during the years 1892 to 1934, and many discussions appeared in the local papers concerning problems in education and pioneer life.

R. I. Cratty was born in Butler County, Pennsylvania, February 5, 1853. At the age of ten he moved with his parents to Rochelle, Illinois, where he later became a teacher in the public schools. In 1877, he came to Algona, Iowa, but soon located near Armstrong where he met Lovena Estelle Cannon, whom he married in 1878 in Algona. To them were born four children: Mabel, now a teacher in the Minneapolis schools; Edna, now Mrs. C. B. Murtagh of Algona; Alta, now Mrs. C. W. Moore of Evanston,

Illinois; and Ralph of Coleraine, Minnesota. Mrs. Cratty died in 1896. In 1910 Mr. Cratty married Mollie E. Webster of Minneapolis, Minnesota, who survives him.

In the vicinity of Armstrong Mr. Cratty lived for forty years. During the earlier part of this time he taught in neighboring schools and from 1880 to 1884 was superintendent of the Estherville schools. Later he worked intensively improving his farm, though he also taught the Armstrong Grove school in winters while engaged in farming. An excerpt from a letter of a former student and resident of the Armstrong Grove neighborhood, Mrs. Thyrza Horswell Johnson, will give an impression of the regard in which Mr. Cratty was held as a teacher:

"The small white school house where Mr. Cratty taught was halfway between his farm and ours. To this day I can see the blue of the early pasque flower and the brilliant red of the tiger lily that almost covered the native quarter section in which this schoolhouse stood. Mr. Cratty never failed to call our attention to the flowers in their seasons.

"While living in the community he cultivated his land, raised stock and milked cows as well as taught the district school every year. While others rested on the Sabbath he roamed the fields and prairies, waded the ponds and lake shores in search of the specimens which he sent to Ames. I must not give the impression he was not a church leader, for he not only led the choir, but was superintendent of the Sunday School and was the leading spirit in the Presbyterian church, the meetings of which were held in the little schoolhouse, and later in the fine building in Armstrong which he helped to build. With all this he found time to read and my impression was that he was a scholar. That was the secret of his success as a teacher which enabled him to bring so much to us. As I think of the days in school, what I recall most frequently was his love of music. Every child who had an ear for music learned to sing by note. He was happiest, it seemed to me, when conducting singing schools. I have no recollection of his punishing or scolding his pupils, but I can to this day see how pained he was when we failed to measure up to his expectations.

"He was equally good as an instructor in mathematics, history, grammar, geography, and spelling and reading, and had that rare ability to inspire a feeling of rivalry among the pupils of the class as to who could be at the head of the class. No one had a library which compared with his. He was also generous with his books and brought them to school to share them with us.

"Mr. Cratty was vitally interested in the betterment of the new community in which we lived and was liberal with his time and his money. Any project which he backed was assured of success. It would be interesting to know the number of pupils that went to college from the Cratty school. I recall a considerable number. As his children did, we did, for he held the importance of an education before our parents as well as ourselves."

Mr. Cratty was active in many ways in the community where he spent most of his life. He was a charter member of the Presbyterian church in Armstrong where he served as an elder for twenty-five years and participated in other ways already mentioned. For twenty years he held the office of school treasurer of the independent district and was the township clerk for a similar term.

At length, having given up the pursuit of farming, Mr. Cratty was drawn to the library and laboratory facilities of Iowa State College, where the Botany Department was then under the leadership of the late Professor L. H. Pammel. In 1918 Mr. Cratty was offered the post of curator of the growing herbarium for he was by then becoming well known as a student of Iowa flora. He presented his personal collection of about 8,000 specimens to the college. That collection is the record of a luxuriant native plant cover now vanished or lingering only in secluded spots not penetrated by the plow.

Mr. Cratty is probably best known for his observations of Iowa flora over a period of 60 years. As a member of the botanical staff, Mr. Cratty was a genial and helpful co-worker—a person of many interests. While a member of the faculty of Iowa State College, Mr. Cratty served the Iowa Academy of Science as president in 1925-26, was a member of the Iowa Conservation Association, the local Osborne Research Club, the national honorary society of the Sigma Xi, the American Association for the Advancement of Science and the Collegiate Presbyterian church in Ames. He was a delegate to the International Botanical Congress in Cambridge, England, in 1930.

Soon after his retirement in 1932, Mr. and Mrs. Cratty returned to Algona to live. It was in this town that Mr. Cratty began and finished his days spent on the Iowa prairies. He now rests near his former home at Armstrong, where as a young man he studied the flora while he wrestled with the problems of shaping a new country from the virgin sod.

ADA HAYDEN

PUBLICATIONS OF ROBERT IRWIN CRATTY

(Compiled by the Reference Service, Iowa State College Library.)

- Cratty, R. A. 1882. Notes from Northern Iowa — *Psoralea esculenta*, Pursh. Botanical Gazette, 5:85-86.
- . 1884. *Grapheporum festucaceum*, Gray. Botanical Gazette, 9:27-28.
- . 1886. Specimens and specimen making. Botanical Gazette, 11:132-133.
- . 1896. Notes on the aquatic phenogams of Iowa. Iowa University, Laboratory of Natural History, Bulletin, 3:136-152.
- . 1898. The Iowa sedges. Iowa University, Laboratory of Natural History, Bulletin, 4:313-375.
- . 1904. Flora of Emmet County, Iowa. Proceedings, Iowa Academy of Science, 11:201-251.
- . 1904. Some interesting grasses of Northwestern Iowa. Iowa Naturalist, 1:3-6.
- . 1905. The flora of Emmet County, Iowa, II. Iowa Naturalist, 1,36-38.
- . 1905. Forestry notes for Emmet County. Iowa Geological Survey. Annual Report, with Accompanying Papers, 15:260-276.
- . 1905. The Juncaceae of Iowa. Iowa Naturalist, 1:71-74.
- . 1906. Notes on the Iowa sedges I. Iowa Naturalist, 2:4-5.
- . 1918. Notes on an introduced woodland flora. Proceedings. Iowa Academy of Science, 25:411-412.
- . 1919. The genus *Lactuca* in Iowa. Proceedings. Iowa Academy of Science, 26:239-248.
- Pammel, L. H. and ———. 1920. Notes on some plants of the Arapahoe National Forest and Rocky Mountain National Park. Proceedings. Iowa Academy of Science, 27:51-73.
- . 1920. *Ranunculus Purshii* in Iowa. Rhodora, 22:183.
- . 1921. Dr. Rudolph Gmelin and his collection of Minnesota, Wisconsin, and Iowa plants. Proceedings. Iowa Academy of Science, 28:247-255.
- . 1921. Two additions to our list of Cruciferae. Proceedings. Iowa Academy of Science, 28:256-261.

- Pammel, L. H., and ———. 1923. Some notes on the plants of Whitehall, Michigan. Proceedings. Iowa Academy of Science, 30:279-285.
- . 1924. The Genus *Rumex* in Iowa. Proceedings. Iowa Academy of Science, 31:213-216.
- . 1924. Iowa plant notes. Proceedings. Iowa Academy of Science, 31:189-192.
- . 1926. The address of the president. The ministry of science. Proceedings. Iowa Academy of Science, 33:49-57.
- . 1926. Iowa plant notes II. Proceedings. Iowa Academy of Science, 33:125-128.
- Pammel, L. H., Melhus, I. E., and ———. 1927. Report on the herbarium of Iowa State College, 1927. Iowa State College, Ames, Iowa. (Mimeographed.)
- . Iowa plant notes III. Proceedings. Iowa Academy of Science, 35:105-109.
- . 1929. The immigrant flora of Iowa. Iowa State College Journal of Science, 3:247-269.
- Pammel, L. H., and King, C. M., with the collaboration of Hayden, Ada; Martin, J. N.; Sipe, F. P.; Cook, W. S.; Pammel, E. C.; Clark, Clarissa; Yocum, L. E.; Kenoyer, L. A.; Park, O.W.; Hoffman, C. A.; ———; and Lounsberry, C. C. 1930. Honey plants of Iowa. Iowa Geological Survey. Bulletin No. 7.
- . 1930. Iowa plant notes IV. Proceedings. Iowa Academy of Science, 37:87-90.
- . 1930. New weed is given name of sicklewort. Des Moines Register. November 23, 1930, Sec. 10, p. 7.
- . 1932. Iowa plant notes V. Proceedings. Iowa Academy of Science, 39:85-88.
- . 1933. The Iowa flora. Iowa State College Journal of Science, 7:177-252.
- . 1934. Notes on the immigrant flora of Iowa, I. Iowa State College Journal of Science, 8:309-311.



JOHN JAMES BUSHNELL
1875-1939

Doctor J. J. Bushnell's death occurred on April 22, 1939, at Ames, Iowa, while in attendance at the meeting of the Iowa Academy of Science. While Dr. Bushnell's chief field of activity was in philosophy and religion, yet he had a strong interest in the natural sciences, and was a constant reader in them. He often came to the library in the biology department to draw out

some recent book in that subject. He was recognized by his colleagues as a man of broad vision and varied sympathies, reaching far beyond the limits of his official field.

He anticipated his attendance at the Academy meeting with great pleasure. Following the Friday afternoon program he discussed several of the general papers with keen discernment, indicating that he had listened intently and thoughtfully to discussions far removed from his specialty. At the close of the evening dinner there was no indication of any distress, and the writer took him from the campus to his hotel. In the morning at breakfast word was received of a heart attack, and the end came at nine o'clock.

John James Bushnell was born at Marshall, Michigan, on July 31, 1875. His parents moved to Iowa, settling on a farm near Manchester, when Bushnell was seven years of age. In this neighborhood the boy went through the public schools. During these years he became acquainted with Wilson Seeley Lewis (later Bishop Lewis), who was then Principal of Epworth Seminary. As a result of this acquaintance Mr. Bushnell entered Epworth in the fall of 1893, and graduated in 1895. He then taught school for a year at May City. Friends discovered certain talents which were to lead him into the ministry, and during the year 1896-97 he preached at Arthur, Iowa.

The two years following, 1897-99, were spent at Upper Iowa University, from which he received the degree of A.B. in 1899. This institution also conferred upon him the honorary degree of D.D. in 1919. An eagerness for more training now led him to matriculate in Boston University, where he remained for three years, 1899-1902, maintaining himself throughout the time by preaching in a suburban pulpit. At the end of this period he received the degree of S.T.B.

He now felt prepared to enter upon his career. An immediate call took him to Mapleton, Iowa, where he filled the Methodist charge for three months, or until the Conference met in the fall. He was then given a regular appointment at Charter Oak. From this time on he was a member of the Northwest Iowa Conference of the Methodist church, for thirty-eight years, not all of which time was spent in pastorates. For six years, 1920-1926, he was superintendent of the Algona District of this Conference. For five years, 1928-1933, he was Dean of Extension in Morningside College. And for six years, 1933-1939, he was professor of Philosophy and Religion in the same institution. Boston University conferred upon him the degree of Ph.D. in 1911. He was a Rotarian, Mason, and Knight Templar.

Dr. Bushnell was progressive in his thinking, though not radical. He seemed to be able to look upon the world as a changing reality and to recognize the impact upon his philosophy of other fields of learning. He was a leader and a friend among his students.

T. C. STEPHENS



EDWARD JACOB PETRY

1880-1939

Dr. Edward Jacob Petry, biologist, biochemist, teacher, research worker, died of a sudden heart attack in Kansas City, Missouri, October 8, 1939.

He was a native of Ohio, born on a farm near Gnadenhütten, Ohio, June 24, 1880. His early school-life was in this neighborhood; and, during his whole school life, he was an honor student.

Dr. Petry's undergraduate work was done at Ohio State University, where he received the degree of B.Sc., in Agriculture in 1907, serving as assistant in chemistry and botany during his senior year, under Dr. W. A. Kellerman. For many years he alternated part-time or full-time teaching with graduate study. By temperament he was a laboratory research man. He did part-time graduate study at Cornell University from 1907-11, while serving as Assistant in Botany under Professor G. F. Atkinson.

Then there came an opening as Instructor in Agronomy at Purdue University in 1911, where he continued his part-time graduate study under Dr. J. C. Arthur, receiving his M.Sc. degree in 1914. Here he was promoted to Assistant Professor of Agricultural Botany in 1916, which position was held until 1918. During the summer he served as Field Assistant for the U. S. Department of Agriculture. He pursued some more part-time graduate study from 1918-20 at the University of Michigan, while serving as Instructor in Botany under Dr. F. C. Newcombe. By this time, a much better opening came as Professor of Botany, and Head of the Department of Botany and Plant Pathology, at the South Dakota State College (Brookings), which he served from 1920-23; the following year he was Consulting Botanist here. He served as Collaborator of the U. S. Department of Agriculture from 1920-29, and Survey Botanist for the South Dakota Geologic and Biologic Survey in 1924-25.

By this time, the urge for another degree became more insistent, and he devoted full time to study at Michigan State College (Lansing), under Dr. E. A. Bessey; this study culminated in the Ph.D. degree with "summa cum laude" in 1925.

He was Professor of Biology, and Head of the Department, at Hendrix College, Conway, Arkansas, from 1926-29; the same at Central College, Fayette, Missouri, from 1929-31; Professor of Botany and Associate in Physiology at Coe College, Cedar Rapids, Iowa, 1931-33; Consulting Biologist at the Cedar Rapids Water Works, 1933-35; Consulting Biochemist since 1933; Chief Chemist at Consumers' Co-operative Association, Kansas City, Missouri, in 1937; also Chemist at Ebony Paint Co. in Kansas City, Missouri, from 1937 to the time of his death. By January 1939, the urge for another degree was again upon him. He had had an undercurrent of interest in medicine for over thirty years, and this was finally coming to fruition in his studies for a Doctor of Osteopathy degree. He was Professor of Chemistry and Medical Technologist at the Central College of Osteopathy, Kansas City, Missouri, while pursuing his osteopathic studies. He was within a year of attaining his new goal, a D.O. degree, when a sudden heart attack ended his career of further service to mankind. Previously, his health had always been good; therefore, his sudden death came as such a surprise and shock to everybody.

Dr. Petry held memberships in many leading organizations: American Association for the Advancement of Science, American Botanical Society, American Society of Agronomy, American Society of Plant Physiology, American Phytopathology Society, Ecological Society of America, American Genetic Association, American Eugenics Society, Indiana Academy of Science, Michigan Academy of Science, South Dakota Horticultural Society, South Dakota Academy of Science, St. Louis Academy of Science, American Association of University Professors, Iowa Academy of Science. He held the office of Botany Curator, Arkansas Museum of Natural History, Little Rock, Arkansas, 1928-29; President, Iowa Memorial Arboretum Association, since 1933. He was elected to Theta Chi Delta, an honorary Chemical Fraternity in 1930. He was a Moravian and a third degree Mason. He has been listed in American Men of Science since 1927, Who's Who in America since 1930, International Address Book of Botanists since 1931, and Leaders in Education since 1932.

Dr. Petry was untiring in his efforts to instruct correctly, and was exacting in accuracy of details. As a teacher he tried to let the student find the answer to his question for himself. In the laboratory, he had few equals in imparting knowledge and methods of technique. He invented many of the pieces of equipment used in his laboratories, to enable his students and himself to do research work more easily and effectively. He collected and prepared much of the material used for instruction and exhibits, and made most of his own slides, charts, and teaching devices. Summer vacations usually found him making field trips to the Black Hills of South Dakota, where he also collected plant breeding material for Dr. N. E. Hansen, horticulturist and plant breeder of South Dakota State College. Botanizing wherever he went, particularly for fungi, in which he specialized at Cornell University under Professor G. F. Atkinson, he collected most of the fungi listed by Professor Atkinson in "Mushrooms." If some fungi seemed unattainable near the top of a high tree, he would use his "Colt" and shoot

them down; many weighing up to 10 lbs. The edible fungi were eaten, the surplus canned.

In whatever college or university he taught, economy always seemed to be the watchword. Funds for equipment and instructors were low, or lacking altogether. Lack of funds naturally handicapped his research work. Though teaching schedules were heavy, he never shirked his part of the load. In spite of the heavy burden of his work, he kept pace with the most important advances in pure and applied biology and chemistry, and many other sciences as well.

Dr. Petry was unusually well versed in Chemistry, which he combined so well with Biology, that he became an excellent Biochemist. He stood for scholarship among biologists, winning the coveted * among botanists in the 4th edition (1927) of the American Men of Science. He was elected a "Fellow" in the American Association for the Advancement of Science in 1930.

He was never too busy to stop his work, to talk with others upon things worth while, to give advice and encouragement, and to help. An enthusiastic and conscientious teacher himself, he was always sympathetic and generous toward the efforts of others. His attitude was a source of inspiration and encouragement to younger men entering the teaching or research profession. His interest in special students and graduates continued long after their graduation, as the many letters received from them in later years attested to his fairness and generosity in dealing with them.

Nature had endowed him with an intense interest in all growing, living things, and a mind which demanded to know how and why they responded as they did to their environment, thus making him an ideal biologist and research worker. In his investigational work, no procedure was too detailed or laborious to be followed thru, once he was convinced that it offered the best means of getting accurate results. His personality still inspires good cheer, sympathy, helpfulness, and lofty ideals of service and citizenship, which only time can erase. He was a Sunday-school teacher in most of the communities in which he lived.

He had a love for music, especially the violin—and friendships, and all that is good in life.

In 1909 he was married to Dora M. Plueddemann of Cincinnati, Ohio, who survives him. He is also survived by a son, Ralph Aurelius Petry, who is at present a student in the Aeronautical Engineering College of the University of Cincinnati. Dr. Petry was buried near the old homestead at Gnadenhütten, Ohio. Mrs. Petry was closely associated with her husband in both his work and play during most of their thirty years of married life.

His knowledge of out-door life, gained from books and observations, was astonishing. To listen to his discussions was an inspiration, to work with him was a privilege. He is gone, but his influence lives on, and a record of his many good deeds is deeply engraved on the grateful memories of his friends and associates. This world is better for his having lived in it. By his death, the nation loses the services of a scientist of recognized ability and standing in his field of research; a man of the very highest character and ideals, interested in the most worthwhile things in life; an asset to the civic and religious life of the college community; and a valued friend and counsellor.

MRS. EDWARD J. PETRY.

BOTANICAL RESEARCH PROJECTS AND PUBLICATIONS

by

EDWARD JACOB PETRY

1. Relation of Amount of Anthocyanin to Salability in Lettuce (1905) (not published — under Dr. Kellerman, Ohio State Univ.)
2. Sterile and Inoculated Pea and Soy Bean Seedlings (1906) (not published — under Dean Alfred Vivian, Ohio State).
3. Salts in Soil Percolates — colorimetrically determined (1906) (not published — under Prof. A. G. McCall, Ohio State).
4. Soil Bacteria spp. Isolated and Determined (1906) (not published — under Dr. Morrey, Ohio State).
5. Chemistry in Agriculture (1907), published in Ohio Agriculturist.
6. *Nutrients in Shoots of Trees (B.Sc. Thesis, 1907) (under Dr. Weber, Ohio State). Published: Indiana Acad. Sci., 1912.
7. Coprinae of Cayuga Basin — Histology, Cytology, Morphology (1910) (not published — under Prof. G. F. Atkinson, Cornell Univ.).
8. Toxic Salts, in Culture Solutions (1910.) (not published — under Dr. B. M. Dugar, Cornell Univ.).
9. Overwintering of *Cronartium ribicola* — Uredospore Life. (with Dr. J. C. Arthur). Published: in Geneva, N. Y. Bull. No. 374, 1914: by Stewart.
10. Propagation and breeding of a Sport Arctium (1915) (not published).
11. Wintering of Rusts and Smuts (M.Sc. Thesis, 1914, unpublished) (under direction of Dr. J. C. Arthur).
12. *Correlation of Resin Content in *Podophyllum peltatum* L. with Habitat. Published: Mich. Acad. Sci., 1919.
13. (1) Plant Breeding; (2) Plant Taxonomy: in Agriculture (General Surveys). Published in Purdue Agriculturist, 1913-1915.
14. Syllabus of Agricultural Botany; begun 1915 — incomplete (parts printed and copyrighted).
15. New Family Tree of the Plant Kingdom (incomplete — not published).
16. *Germination and Further Growth of *Ceanothus americanus* (with Dr. F. C. Newcombe). Published: Mich. Acad. Sci., 1920.
17. Potato Certifications in South Dakota in 1921. Published: Proc. So. Dak. Hort. Society, 1923.
18. *Yellow Dwarf of Potato in South Dakota: Proc. So. Dak. Acad. Sci., 1922.
19. *Rhizoctonia on Potatoes in South Dakota (Cultures). Proc. So. Dak. Acad. Sci., 1921.
20. Plant Treasures of the Black Hills (semi-popular). So. Dak. Hort. Soc., 1924.
21. Orchard Sanitation in South Dakota (Technical). Proc. So. Dak. Hort. Soc., 1924.
22. **Psidia* in *Bryophyllum proliferum* — experimentally produced. Proc. So. Dak. Acad. Sci., 1923.
23. *Dicaeoma distichlidis* — Cytology and Histology of Aecium of: (M.Sc. Thesis, in part, of L. D. Hutton; under direction and collaboration of E.J.P.). Abstract in Phytopathology, 1924.
24. Wild Breeding Stock of Ribes, Rubus, Prunus, etc., Procured in Black Hills and Adjacent Parts of South Dakota, for Dr. N. E. Hansen's Breeding Work. Published in part, in Proc. So. Dak. Hort. Soc., 1924.
25. *Weed Control (84 illus). So. Dak. Exp. Sta. Bull. No. 211, 1924.
26. The Composition of Cherry Gum. Proc. So. Dak. Acad. Sci., 1926.
27. South Dakota Flora (First Vascular). Nearing completion — 2,000 species keyed and described. (With geological, migrational, exploratory, and taxonomic foundations). Portions published in Proc. So. Dak. Acad. Sci., from 1921-26.
28. Physiological Studies on *Ceanothus americanus* (Root Nodules and Nitrogen Relations — first proof of free nitrogen synthesis in non-legume flowering plants). (Ph. D. Thesis — under direction of Drs. E. A. Bessey and R. P. Hibbard of Mich. State College). Summary in Proc. So. Dak. Acad. Sci., 1926.
29. Description of South Dakota and Its Biota. (In NATURALISTS' GUIDE TO THE AMERICAS: V. E. Shelford, editor; pp. 549-556, 1926).

* Separates available.

30. Isolation of Micro-symbionts from Tissues on Non-leguminous Plants. (Two new species of bacteria—about ready for publication).
31. Factors Affecting Production and Stainability of Flagella (Practically Ready for publication).
32. Addition to the Flora of Linn County (Abstract). Proc. Iowa Acad. Sci. (1933).
33. Observations on the Staining of Bacterial Flagella (Abstract). Proc. Iowa Acad. Sci. (1933).
34. A New Reservation Area in Iowa (Abstract). Proc. Iowa Acad. Sci. (1933).
35. *The Biota of the Cedar River as Related to Odor and Taste Production: Proc. Iowa Acad. Sci. (1936).
36. Nerve Action in Vorticella. Kansas Acad. Sci., March 1939.

WINIFRED GILBERT
1893-1939

With the passing of Dr. Winifred Gilbert whose untimely death occurred June 17, 1939, the Iowa State Teachers College lost one of its ablest instructors. For Professor Gilbert loved to teach and had the happy faculty of making other people like the subjects which she taught. She made no pretense to brilliance as a lecturer, but her fine, orderly mind, could arrange and present subject matter in such a way that even her poorest students felt they could grasp it.

Miss Gilbert was born April 3, 1893, at Garner, Iowa. She spent her childhood in that vicinity, graduating from the Garner High School in 1911. Her first college work was done at Grinnell College in 1912-1914, but she completed her B.S. degree at Iowa State College in 1919. She also took her M.S. from Iowa State College in 1921, and her Ph.D. from the State University in 1936.

Miss Gilbert first came to I.S.T.C. in 1926 as instructor in Natural Science, having previously taught in high schools at Corwith, Wesley, and Des Moines, Iowa, and at Walla Walla, Washington, at each of which she established a fine record as a teacher. At the time of her death she held the position of Associate Professor of Natural Science.

Although a teacher of Nature Study, Miss Gilbert was keenly interested in the more technical phases of Zoology, and her Doctor's Thesis, Amphisexuality and Sex Determination in *Amblystoma*—a work performed under the guidance of Dr. Emil Witschi—has done much to illuminate this difficult problem of sex. Also, with Dr. Witschi, she published an interesting paper on the Sex of Parabioc Twins (*Amblystoma maculatum*) in 1936.

It was my privilege and pleasure to share the same office with Miss Gilbert for several years, and I can say that I have never met a person with a finer philosophy of life or one possessed of more courage. Even when she knew that she was in the hard grip of an incurable disease, she faced the situation calmly, meeting her classes almost to the very end. The Iowa State Teachers College, prospective teachers of the state, and all the outdoor life of the state which she loved and befriended—each and all of these are bereft at her passing.

ROY L. ABBOTT



ROSS W. HARRIS
1897-1939

Ross W. Harris, teacher, conservationist and first Junior Councilor of the Junior Academy of Science of Iowa, died at his home in Dubuque, Iowa, May 31, 1939. He was but 41 years of age, and had been absent from his classes at Dubuque Senior High School for just one school day. On the Monday and Tuesday of the week before his death he took his Spring semester geology classes on field trips.

All of Ross Harris' life was characterized by the manner in which he lived his last few months upon this earth. We know now that Ross Harris learned several months before his death that he had but a very short time to live. Tired and racked with terrible pain but determined to finish out the school year, he drove himself on and on until his death just two weeks before the close of the semester.

Mr. Harris was born in Viroqua, Wisconsin, July 22, 1897, and spent his boyhood on his parents' farm there. He attended the Viroqua High School, and in 1923 he received the degree of Bachelor of Arts from Wheaton College, Wheaton, Illinois. In 1925 he received a Master of Arts degree from the University of Wisconsin. After this he taught for one year in a Detroit, Michigan, high school, and in 1926 accepted the position he held at the Dubuque Senior High School until his death. The summer of 1931 he spent in study at the Yosemite Field School of Natural History, Yosemite National Park, California.

On August 5, 1930, Ross Harris married Miss Ada Hartman of Lancaster, Wisconsin, who survives him with two little daughters, Barbara Jean and Ruth Ann.

"Prof" Harris, as all of his students and close friends knew him, was a man of deep personal convictions. His whole life was a perfect—yes, a

very perfect—living evidence of the convictions he held above all else in the world, and his daily life was a wonderful example of the things he taught his young friends. His record as a teacher stands very high. Ross Harris labored many years to build up well balanced courses in high school biology, geology and physiology. His colleagues and students well remember the courses he had so well organized that he knew weeks in advance what material was to be covered on a certain day and what laboratory arrangements were necessary.

The conservation of our youth and of our human race as well as other of our national resources held every moment of Ross Harris' life from college days until his death. A few more shallow-minded students may have misconstrued some of "Prof's" lectures on the use of youth's leisure, but his approach was constructive and the emphasis was always on the positive rather than on the negative aspect. He believed that the out-of-doors and the conservation movement provided a wonderful channel into which youth's leisure might be successfully and profitably drawn.

Shortly after coming to Dubuque "Prof" organized the Senior High School Nature Club. Here his affection for young people and for their welfare began to evidence itself. In 1932 Mr. Harris was, as usual, on the job 100 percent when the Junior Academy of Science of Iowa needed willing and capable hands to work out the new organization's constitution and program. As the new organization's first Junior Councilor and as Senior Councilor the following year he did much to shape the course which the Junior Academy was to follow in years to come.

Late in the year 1932 Ross Harris began work on a project which was to occupy him until his death. With a group of young people he began work on the Pine Hollow program. A cabin was begun in this beautiful wooded area in the northwest corner of Dubuque County with a two-fold program in mind. First, the cabin was to serve as a headquarters for a nature school through which the youth of the community might come to realize more fully the value and wholesomeness of outdoor recreation and the urgent need for conserving our fast disappearing natural resources. Secondly, he proposed through the building of this cabin to stimulate enough public interest in the Pine Hollow area to assure its preservation as a public land. At the time of Mr. Harris' death the State of Iowa owned over 600 acres in this area, the large cabin was well on the road to completion and plans were being made for the first nature study group to begin a summer at Pine Hollow. Ross Harris lived more in his short span of years than two or three average men, but the things he undertook were of Gargantuan proportions and he died before they could be fully realized. It is a splendid tribute to his leadership and vision that the Pines Nature Club, which he organized in the summer of 1936 to provide continuity for his Pine Hollow program and whose activities he directed until his death, is carrying on the work with "Prof's" dreams their dreams, and that they wish to dedicate the now almost completed cabin to the memory of Ross W. Harris.

Mr. Harris and the Pines Nature Club have always looked, and still do look forward, to the time when the nature school program for young people might be expanded throughout the state via the Junior Academy of Science.

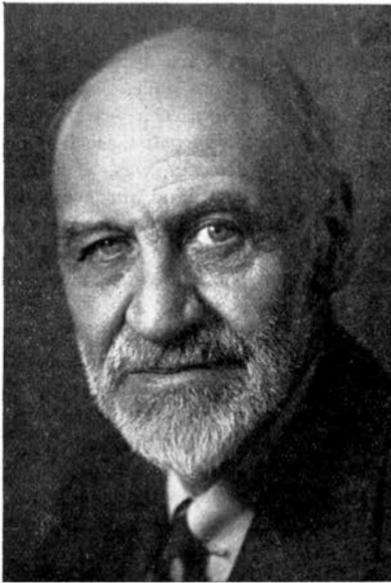
In 1933 Mr. Harris founded the Dubuque County Conservation Society to, among other things, lend adult financial support to his beloved young people's efforts at Pine Hollow. He headed this organization until 1938

when ill health forced him to relinquish active leadership. He was, however, on the board of directors of the Conservation Society at the time of his death as well as being Chairman of the Dubuque County Branch of the National Wild Life Federation.

The death of Ross W. Harris was a great loss to his family, his friends, his colleagues and his community. Those of us who knew him intimately feel that his country lost a great potential asset. Had good health and long life been his, we feel that his name would one day have had national recognition and respect. He was a fine citizen, a thoroughly democratic American, a great dreamer with the ability to put his dreams into action and see them through to a successful finish. His place can never be taken in the hearts of those who knew him well and loved him deeply.

WILLIAM H. PFEFFER.

President, Junior Academy of Science of Iowa, 1936.



EDWARD K. PUTNAM

1868-1939

Edward Kirby Putnam was born on November 17, 1868, in the city of Davenport. His father, Charles E., was one of the founders in 1867 of the Davenport Academy of Science, an institution that is flourishing today under the name of the Davenport Public Museum. His mother was Mary L. Duncan Putnam, daughter of Joseph Duncan, one-time governor of Illinois.

Edward was educated in the public schools of Davenport and in Illinois College at Jacksonville, where he earned the B.A. degree in 1891. After that he was a newspaper man in Detroit and Chicago for a few years, did

graduate work at Chicago University, traveled and studied in Europe for a year and a half, and finally took his M.A. from Harvard in 1899. From 1901 to 1906 he was instructor in English at Leland Stanford University. In 1906 he married Hilma Sandberg of Swedish ancestry and more recently of London, England. In the same year he returned to Davenport and became acting director of the Davenport Public Museum, which post he held until 1928. His brother, the late W. C. Putnam, left a considerable estate, part of the income from which has helped to finance the Davenport Public Museum.

Mr. Putnam was a fellow of the American Association for the Advancement of Science, a member of the American Association of Museums, of the American School of Prehistoric Research, of the American Ethnological Society, of the American Anthropological Association, and of the Iowa Academy of Science. He was affiliated with the Unitarian church, a member of the Davenport Contemporary Club, and many other local organizations. In 1918 and 1919 he worked with the Red Cross in France.

He was better informed on the history of Davenport and its environment than anyone else in the city. He was always an active promoter of good schools, art enterprises, public parks, and the like. His Museum was a real live movement up to the very day of his death, and the seed sown by him is bearing fruit freely now after he has gone. Something like 12,000 visitors go through the exhibits at the Museum each year.

Mr. Putnam, so well known as a journalist, teacher, builder and developer of a city, patron of the arts and sciences, was, as a man, of a retiring and self-effacing disposition. He was very kind and sympathetic to all, even the poorest, always cheerful and helpful, so that every one who came to know him found him a true friend. His devotion to duty, his love of good books, but especially his true love for his fellowmen, stamped him as an extraordinary citizen of our state and country.

Mr. Putnam enjoyed fairly good health until the last year of his life, and he remained active until within a few minutes of his death. He died of a heart attack in his office on May 22, 1939.

The Iowa Academy of Science is indebted to Mr. Putnam in many ways. He showed his special interest very definitely when in 1931 the Academy met at his invitation as a guest of the Davenport Public Museum and St. Ambrose College. Along with his many duties he found time to keep up in most branches of modern science, and in his death the Academy has lost a valuable friend and promoter.

U. A. HAUBER

ARTICLES PUBLISHED BY E. K. PUTNAM

- Linné and the Love for Nature—*Popular Science Monthly*, Oct. 1907.
 Skansen and the Outdoor Museums of Europe. *Proc. Amer. Assn. of Museums*, 1914.
 Brief Survey of American City Museums. *Proc. Amer. Assn. of Museums*, 1914.
 The Educational Work of the Davenport Museum. *Proc. Amer. Assn. of Museums*, 1908.

The following papers published by the Contemporary Club of Davenport:

- Spelling Reform and Authority in Language, 1908.
 Good Old Davenport, 1910.
 A Study of Fire Waste, 1912.
 Constructive Civic Consciousness, 1916.
 Museums Passive and Active, 1925.
 Defossilizing Fossils, 1929.
 An Open-minded View of Art, 1933.



MARY LOUISE SAWYER
1876-1939

Mary Louise Sawyer was born September 1, 1876, at Lake Geneva, Wis., the first child of Albert Alvah and Frances Caroline Sawyer. From 8 to 12 years of age she lived with her parents in a sod house at Gandy, Neb. Here she enjoyed the prairie flowers, the butterflies and the beetles. Louise and her sister and brother collected flowers and insects. In 1893 the family removed to Chicago in order to provide better schooling for the children. This reveals the parental interest in education. Mr. Sawyer was an ardent gardener. While living in Forest Park, Ill., he originated the "astermum," a fine strain of China aster. His mother was known for her skill in arranging cut flowers. Louise's sister, Grace, was a commercial florist in Chicago for thirty years.

Dr. Louise Sawyer was a biologist in high school, and developed then an ambition to teach in an outstanding woman's college. At Beloit College she worked her way, but still had time for the early morning bird class. She received the B.S. from Beloit in 1902, M.S. and Ph.D. from the University of Chicago in 1915 and 1922. Her master's thesis was on *Equisetum*. She was elected to Sigma Xi in 1921. Her doctor's thesis on *Iris* is cited below. She passed her examinations August 18, 1922 *magna cum laude*. She was elected to Phi Beta Kappa by the Beloit Chapter in 1932. She was a member of A.A.A.S. and Botanical Society of America. Her teaching appointments show a steady drive toward the goal of her early ambition: Lancaster, Wis., High School 1902-05; Elgin, Ill., High School 1905-12, Head of Biology Department; Maywood, Ill., High School 1912-13; Beloit College, Instructor in Botany 1913-17; Grinnell College, Instructor in Botany 1917-19; Knox College, Assistant Professor of Botany 1919-22; Wellesley College, Assistant Professor 1922-31, Associate Professor 1931-32.

The following years were spent mostly at home in Forest Park, with her mother and sister. Dr. Sawyer traveled in Europe in the summer of 1912, where she found the art galleries as interesting as the fauna and flora. Later she traveled in Cuba, in Mexico, and in all but two of the United States. At home she was an earnest member of the First Presbyterian church of Oak Park, having joined the church at an early age in Nebraska. She was active in the League of Women Voters and in the study of social problems generally, so that the expected leisure for botanical research never materialized. In the midst of these activities Dr. Sawyer was stricken by cancer, and died at her home September 23, 1939.

Dr. Sawyer's decisive personality and strict discipline, of herself as well as of her pupils, left strong impressions for good wherever she worked. She was as dependably kind and helpful and good-humored as she was firm and precise — a very powerful combination.

"It seems to me," writes one who knows, "that without doubt there has been no other woman graduate of Beloit who has reached such a high standing as a teacher of science as she has attained." Says another who knew her well, "There was coupled with her deep passion for fact a fine sensitive appreciation of the ideal, of things that are produced by the imagination, as we think from what is and what appears to that which may be and ought to be and shall be. She was thus not a mechanic or a slave to materials, but had in her the creative element that fashions out of the things we touch and see, the crumbled clay, something fine, something spiritual."

H. S. CONARD

LIST OF PUBLICATIONS

- Pollen tube and spermatogenesis in *Iris*. Bot. Gaz. 64:159-164. 1917.
 Hybridization in *Iris*. Proc. Iowa Acad. Sci. 26:363-364. 1919 (1920).
 Crossing *Iris Pseudacorus* and *I. versicolor*. Bot. Gaz. 79:60-72, pl. v-x, 1925. (Dissertation).
 Carpeloid stamens of *Podophyllum peltatum*. Bot. Gaz. 82:329-332. fig. 1-5. 1926.
 Illustrations for "General Botany for Universities and Colleges" by H. D. Densmore. Ginn & Co. 1920.