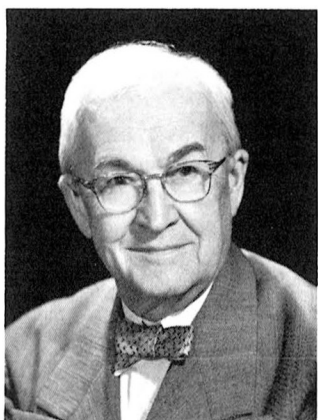


Memorial to Gilbert Haven Cady 1882—1970

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Gilbert Haven Cady, pre-eminent coal scientist and outstanding gentleman, passed away quietly on December 25, 1970, after a short illness. His passing was mourned by many friends and colleagues throughout the world. He was affectionately called “Doc” by his peers and the large number of coal scientists whose lives he touched. He was born in Chicago, Illinois, on December 18, 1882, the son of the Reverend Martin Everts Cady and Helen Louise (Howard) Cady. He reflected by the dignity of his life and faith his gentle and scholarly background.

He attended Lewis Institute in Chicago and received the A. B. degree from Northwestern University in 1905, with majors in geology and English, and the M. S. degree in geology in 1911. He was a student and geography instructor at Yale University, 1909–1910; a University of Illinois student, 1911–1912; an instructor in geology at Northwestern University, 1913–1914; and he received his doctorate at the University of Chicago in 1917. During the summer of 1904 he served as a field assistant with the Wisconsin Geological Survey, from 1905 to 1907 was a professor of English at Southwestern University, and from 1908 to 1909 taught chemistry and geology there.

The modern Illinois State Geological Survey was founded in the late fall of 1905. Gilbert Cady was appointed to the staff in 1906 and worked during summers and other periods from 1907 to 1915, attaining the rank of full geologist in 1913. He became a full-time staff member of the Illinois Geological Survey in 1915 and served until 1919. From 1919 to 1920 he was a consultant in China, returning to this country to be Professor and Head of the Department of Geology at the University of Arkansas and State Geologist of Arkansas from 1920 to 1926. During this time he continued part-time affiliation with the Illinois Geological Survey. In 1926 he rejoined the full-time staff of the Illinois Geological Survey, then under the leadership of Dr. M. M. Leighton, as Senior Geologist and Head of the Coal Division, a position he held until his retirement in 1951. He then served at various times as a coal consultant to the Illinois and Ohio State Geological Surveys, the Anthracology Laboratory of Pennsylvania State Univer-

Acknowledgment is made to George E. Ekblaw and James M. Schopf for use of written material prepared by them some years ago in connection with honors paid to Dr. Cady.

sity, and many coal and oil companies. He was still going to his office for a full day's work until only a few days before his death.

Gilbert Cady was married to Marian Adelia Denmark on July 26, 1906. They met while both were volunteer teachers in the Sunday School of the Halsted Street Mission on the south side of Chicago. The spirit of service and concern for others that brought about their meeting continued during their many years of marriage. Throughout their lives, they demonstrated deep feeling for many of the problems of mankind.

Dr. Cady's influence on American geologists has been compared to that of David White and Marius R. Campbell, all three having had a profound effect on coal geology. Although Dr. Cady's influence was for the most part later, all three men greatly stimulated research on coal. Most of two succeeding generations of coal geologists in the United States and a number abroad, many of whom are still active in the field, came under Dr. Cady's influence, and many subsequently attained positions of leadership in the science of coal geology. Except for young geologists just entering the field, very few American coal geologists have not been directly influenced in their work by Dr. Cady.

From his earliest days, Dr. Cady established a relationship with the personnel of the coal mining industry of Illinois that was unique. Their very high professional regard for him and their recognition that he exemplified the highest levels of dedication and integrity resulted in their voluntarily furnishing to the Survey a wide variety of data that proved of great value in coal geology research. In recognition of his outstanding contributions, the Illinois Mining Institute awarded him an Honorary Life Membership in 1958.

Although most widely known for his leadership in work on coal, Dr. Cady was versatile. His first assignment at the Illinois Geological Survey was an investigation of the cement-making materials in northern Illinois, principally in the vicinity of La Salle. In 1908 he started his work on southern Illinois when, with Frank W. DeWolf, he studied the geology of the West Frankfort Quadrangle. From 1910 to 1918 he worked on the geology of several other quadrangles, in both northern and southern Illinois. In a study of the La Salle Anticline in 1915 and 1916, he first recognized the major structure later to be designated the Kankakee Arch. In this period he also directed an inventory of Illinois pyrite to aid wartime industry. Outside the Survey he wrote the geology and geography chapters for a comprehensive report on Starved Rock State Park that was published by the University of Chicago in 1918.

Meanwhile, he was also preparing several reports that were to stamp him as the authority on coal geology in Illinois. These were published in the Cooperative Mining Investigations series. Five of them, issued between 1915 and 1920, dealt with coal resources of Illinois, and another was about the Illinois mines producing low-sulfur coal.

Most of the work on the foregoing contributions was completed prior to 1919. After his return to the Illinois Geological Survey full time in 1926, he was responsible, aside from his own contributions, for initiating a variety of research programs related to coal geology. Research on the use of spores for correlation of coal seams was started at his instigation in the early 1930s, about 15 or 20 years before the value of such work was widely acknowledged in this country. His interest in paleobotany had preceded this research by a number of years. Although it was after his official retirement

in 1951 that coal petrology claimed most of his attention, his interest and stimulation of research in that field dated back to 1930. Dr. Cady was one of the first in this country to sponsor the Rosiwal analysis procedure for polished surface sections of broken coal. Within months after acquisition of electronic data-processing equipment at the University of Illinois in 1936, Dr. Cady had members of his staff using this equipment for coal resources studies. Results were first published in 1938 and have had a wide variety of applications more or less continuously ever since.

In days before the existence of an acknowledged standard of coal classification, Dr. Cady worked actively from 1930 to 1935 as a member of committees of the American Society for Testing and Materials and the American Institute of Mining, Metallurgical, and Petroleum Engineers to establish a satisfactory classification that could be mutually respected by both science and industry. The principles that were incorporated in this classification are still valid, and the basic classification system is essentially unchanged. They have achieved recognition and acceptance to a degree no one would have considered possible when they were promulgated more than 30 years ago. Dr. Cady's discussion of these principles in his volume "Classification and Selection of Illinois Coals" (1935) is certainly one of the most lucid ever produced on this highly technical subject and is widely used and quoted in text and reference books. This publication was dedicated to the memory of S. W. Parr of the University of Illinois, with whom Dr. Cady had shared mutual interests.

The work done by Dr. Cady and his associates on mineral matter in coal also has had continuing value. The studies were soundly fundamental, and until very recently no comparable studies had been made. The same thoroughness characterized Dr. Cady's studies of coal resources, which he continued throughout most of his association with the Illinois Geological Survey and climaxed by the comprehensive report on minable coal reserves of Illinois, published in 1952, which has served as a model for similar reports elsewhere.

Dr. Cady pioneered in the use of geophysical logs of oil tests for mapping the structure of coals. In Illinois, coal structure maps, beside being useful in coal prospecting, have been an important guide in oil exploration. Programs Dr. Cady initiated in coal preparation and utilization made significant contributions to both fields of study.

The extensive bibliography at the end of this note represents Dr. Cady's wide range of interests in coal geology for more than 60 years. It does not, of course, fully show the influence Dr. Cady had in promoting other coal-related research. Impressive though this list of publications is, his greatest contribution may actually have been the inspiration of other coal geologists.

A little-known but notable contribution that does not appear in the list of publications tells much of the character of the man. Professor A. C. Noé, renowned paleobotanist at the University of Chicago, undertook the translation from German to English of the classic reference on coal by Otto Stutzer. Dr. Noé died before completion of his task. At the urgent request of the University of Chicago Press, Dr. Cady accepted the responsibility of completing this work, essentially anonymously, and spent many

hours outside his regular duties to see the project through. Only those very close to him were aware of what he had done, and this from observation only.

The close personal relationship between Dr. Cady and Dr. Noé was cemented by Cady's bringing to Noé perhaps the first coal ball material recognized in North America. Dr. Noé had been searching for coal balls in America similar to those which had been described in Europe and with which he was familiar.

After retirement, Dr. Cady immersed himself more intensely in the field of coal petrology—work that he had engaged in only sporadically for a number of years previously. He had been an American representative to the International Committee for Coal Petrology since its establishment in 1951, and he participated at meetings in Europe in 1953, 1955, 1956, 1960, and 1963. In 1963 during meetings of the International Congress for Carboniferous Stratigraphy and Geology in Paris, France, the committee awarded him the Reinhardt Thiessen Medal for outstanding contributions in coal petrology. This was the second such award made and is to date the only award that has been made to an American. In 1964, about 50 geologists, including most North American coal petrographers, met for a testimonial dinner and presented a signed, illuminated document with the following inscription:

You have for more than half a century made many contributions to Coal Geology in general and for nearly four decades have had an active interest and have been a leader in the science of Coal Petrology.

By this instrument, your North American colleagues in Coal Petrology express their sincere pride and appreciation, as well as their gratitude for your inspirational leadership, and their deep affection.

Your initiative in bringing into existence the Coal Geology Division of The Geological Society of America has made this phase of geology a more widely recognized branch of geological science. Your outstanding leadership in international deliberations on Coal Petrology has helped achieve for American petrologists and their work an elevated position of respect in the field.

The bestowing of the Reinhardt Thiessen Medal on you by the International Committee for Coal Petrology in France in September 1963 has brought much deserved distinction to you, but pride in this award is shared by all of your North American colleagues.

We wish you many happy and productive years and thank you for the honors you have brought us all.

Dr. Cady's personal and professional vigor in his retirement years was a source of inspiration to his colleagues and friends. Much of his consulting carried him into the mountains of Colorado and into the western Kentucky hills. In his early 80s he was still mounting his ancient Studebaker and driving alone from Urbana, Illinois, to western Kentucky to engage in field work for a week at a time. He continued to walk regularly the two miles between his home and his office until he entered the hospital in early December.

About six weeks before his death, Dr. Cady attended the Milwaukee meeting of The Geological Society of America and there had the opportunity to greet many old friends. He originally had been scheduled to chair a symposium but had asked to be

relieved of the assignment because of the uncertainty of his being able to attend. The remarks that he had prepared for use at this GSA meeting were found in rough draft among his papers after his death. The main portion of his brief introduction reviewed the character of the symposium program. The concluding statement which he intended to make is presented here to demonstrate that his thoughts at 88 years of age were still pointing to the future.

However, I have one other general comment concerning participants in coal geology study and research. This concerns the relatively small extent to which women in North America occupy an important status in coal research as compared with the relative frequency with which women are important in Europe. The following list consists of names of women who have contributed in outstanding ways to various aspects of coal geology, even though few if any of them have been field geologists:

M. C. Stopes, England; Marlies Teichmüller, M.-Th. Mackowsky, M. Wolf, U. Otte, West Germany; S. Leclercq, Belgium; E. Sontag, East Germany; L. I. Bogoliubova, U.S.S.R.

These eight, all but one of whom are still active, have all made important contributions to coal geology in various countries, particularly since the organization of the International Committee for Coal Petrology and the Subcommittee dealing with various phases of coal nomenclature. It is an aspect of coal geology, particularly coal petrography, to which coal geologists in North America should give serious thought.

Dr. Cady was a long-time active member of the Society of Economic Geologists. In the late 1940s, he was chairman of the Coal Research Committee, charged with development of a proposed comprehensive program of coal research. The comprehensive report developed by the committee was not implemented, but the committee and other interested geologists convened annually and first organized coal geology programs in conjunction with annual meetings of the SEG. Later, there being no suitable organization structure within SEG, the group became the Coal Geology Division of the GSA. In 1957, Dr. Cady was elected president of the SEG and in 1968 was honored as the 17th Penrose Medalist of the Society for "unusual work in the Earth Sciences and more specifically for outstanding accomplishments in the profession of economic geology."

He was a member of many professional, technical, and honorary societies and was usually a contributor to those programs that related to coal. Principal scientific organizations to which he belonged are: The Geological Society of America (Fellow, Councilor, and principal organizer of GSA Coal Geology Division); Society of Economic Geologists (Councilor, Past President 1957–1958, Chairman of the Coal Research Committee, 17th Penrose Medalist 1968); American Association for the Advancement of Science (Fellow); American Institute for Mining, Metallurgical, and Petroleum Engineers (Senior Member); Illinois State Academy of Science; Illinois Mining Institute (Honorary Life Member); Illinois Geological Society; Illinois Society of Coal Preparation Engineers and Chemists; Institute of Fuel (London); International Committee for Coal Petrology (American representative, Reinhardt Thiessen Medalist 1963); International Committee of Coal Petrology Nomenclature (American representative); Phi Beta Kappa; Sigma Xi.

For about a year, during 1919–1920, Dr. Cady served as a consultant to the New York Orient Mines Company in the Ming Kwang mining area in western Yunnan province, China. Notes, maps, diary, and miscellany of this trip, which had originally been arranged by John W. Finch and H. Foster Bain (first Director of the Illinois Geological Survey), are now housed in the library of the Western History Research Center of the University of Wyoming.

Dr. Cady was the object of profound professional respect by colleagues and associates and of deep affection by those who knew him well. This affection had one tangible expression in 1940, a gift of an oil painting of Dr. Cady, presented to him by former colleagues, associates, and friends.

His frequently gruff manner could not conceal his deep personal concern for all with whom he was associated. The few stormy professional issues in which he was involved never resulted in loss of respect on either side. He was frequently a keen professional adversary regarding new ideas but was receptive to presentation of sound scientific data. And what a joy it was to colleagues who did battle with him in a scientific discussion to receive his approval.

He was a prodigious reader, devouring monthly a wide variety of technical, social, and general magazines, as well as a varied selection of literature, both fiction and non-fiction. Beside reading, an important diversion was his classical music collection. He loved the arts and was a frequent concert-goer. In his travels, he went to great lengths to visit any art museums within range. Although not a hobbyist in the usual sense, he had a great weakness for cameras. He was deeply religious and personally charitable in the noblest sense. His benefactions were private matters and not even his closest associates could know their extent. He was a member of the Wesley United Methodist Church of Urbana, Illinois, and the Exchange Club of Urbana.

Dr. Cady was devoted to his wife and their two daughters, Ruth and Mary, and two sons, Gilbert and Allan. Both boys died within three years of each other, in 1937 and 1940. The strength of character and faith displayed by the parents during this tragic time has been a source of inspiration to many close friends. His beloved wife Marian died in 1968 after an extended illness. Ruth (Mrs. George Adams), of Urbana, Illinois, and Mary (Mrs. Elmer F. Johnson), of Las Vegas, Nevada, and two grandsons, Cady and Derek Johnson, survive.

As a fitting and lasting memorial, North American colleagues have organized the Gilbert H. Cady Memorial Award within The Geological Society of America. The object of the award is to recognize scientific contributions to the advancement of North American coal geology by coal scientists throughout the world.

Dr. Cady enriched the field of coal geology and the world of man. His friends and colleagues are grateful that he passed our way and tarried long.

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unpublished manuscripts deal with areal geology, Pennsylvanian stratigraphy, cyclic sedimentation, coal reserves, strippable coal studies (reserves and reclamation), coal mining geology, coal classification, paleobotany, coal utilization, coal chemistry, and coal petrology. These manuscripts were prepared between 1914 and 1970.

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