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JAMES FURMAN KEMP

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BY

FRANK DAWSON ADAMS

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James Furman Kemp -

JAMES FURMAN KEMP

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BY FRANK DAWSON ADAMS

James Furman Kemp was born in the City of New York on August 14, 1859, and passed away at Great Neck, Long Island, N. Y., on November 17, 1926, in the sixty-seventh year of his age. He was stricken down suddenly and without any previous warning as he was about to enter the train leaving Great Neck, where he resided, for New York, to meet his morning classes at Columbia University. Only thirty-six hours previously he had been the speaker at a largely attended meeting of the New York Section of the American Institute of Mining and Metallurgical Engineers, where he described certain mines in Spain and Portugal which he had visited during the preceding summer when attending the 14th International Geological Congress which met at Madrid in 1926, to which he had been appointed an official delegate by the President of the United States, and at which he also represented several important scientific societies.

His great grandfather, Joseph Alexander Kemp, came to America from Perth in Scotland in 1797, and settled in Albany, where he married Elizabeth Jillson. Later this great grandfather left Albany and took up his residence at Newburgh-on-Hudson. Professor Kemp's father, James Alexander Kemp, was born in the City of New York in the year 1831 and became a partner in a firm of wholesale grocers in that city. He married Caroline Anna Furman and they had three children, of whom James Furman Kemp was the youngest, the two other children having died before his birth. While he was yet a young boy his parents moved to Brooklyn, N. Y., where they resided during the remainder of their lives.

When this boy James, who was destined to attain marked distinction in the world of science reached school age, he was sent by his parents to Lockwood's Academy in Brooklyn and later to Adelphi Academy, now known as Adelphi College, in the same city, from which he graduated in 1876. From the first he took a keen interest in natural history and was an industrious

collector, especially in the field of botany. From Adelphi College he went to Amherst, from which he graduated as Bachelor of Arts in 1881. To Amherst about this time came a notably large number of men who subsequently attained distinction in one branch or another of the geological sciences. Among these were George H. Williams, W. B. Clarke, Whitman Cross, John M. Clark and others, all of whom came under the inspiring influence of that excellent teacher, Professor B. K. Emerson, a man having a wide knowledge of many subjects as well as a thorough mastery of his own. Emerson's infectious enthusiasm and his magnetic personality were important factors in determining the course and current of the lives of these men, and of Kemp's among them. After leaving Amherst he entered the Columbia School of Mines where he followed a course of more technical training, graduating in the year 1884 with the degree of Engineer of Mines. Once again, at Columbia, he had the good fortune to come under the influence of an inspiring teacher, Dr. John Strong Newberry, the distinguished geologist and palaeontologist, and it was through Newberry's influence that his attention was directed definitely to the study of geology as his life's work.

He then took the wise course of going abroad to continue his studies and thus see the geology of other countries and the problems of geology from other viewpoints than those of his native land, excellent as these may be. He made a wise selection in choosing the German universities and spent the next two years at Leipzig and Munich, attending more especially the lectures of Von Zittel and Von Groth at the last mentioned university. He did not, however, proceed to a degree at either of these seats of learning.

F. G. Corning in his interesting little book on early student days at the Freiberg Royal Mining Academy, says that Professor Kemp was also at Freiberg and although not enrolled as a regular student there he visited the Academy and took part in the field excursions.

While in Germany he became acquainted with Henry Shaler Williams, Professor of Geology in Cornell University, who was

impressed by his character and ability. When Williams returned to Ithaca he requested the authorities of Cornell University to establish an assistantship in the department of geology and allow him to select the person who should be appointed to fill this position. The Trustees granted this request and Professor Williams selected young Kemp for the place. Kemp put his foot on the first rung of the ladder of success in this appointment to a junior position on the staff of the department of geology at Cornell University in 1886. He eventually rose to the position of assistant professor at Cornell, where he remained until 1891. In this year he received a call from Columbia University to the position of adjunct professor of geology under his former teacher, Professor Newberry. He accepted this and upon the death of Professor Newberry in the following year he became head of the department of geology, which position he continued to occupy until the time of his death.

His home life as a growing boy and a young man was not altogether a happy one. His parents were unsympathetic with his ambition to enter college and fit himself for a professional career, and it was only with great reluctance that they provided him with the scanty funds which, with such additions as he could himself secure by engaging in work during his vacations, would enable him to meet his college and university expenses.

It was therefore with especial pleasure that he received his first university appointment which provided him with adequate means for his support and thus enabled him to devote his undivided time to the work of his chosen profession, without an ever present consideration of the question of ways and means.

In 1889, during his professorship at Cornell University, he married Kate Taylor, daughter of John Nichols Taylor of Kingston, R. I. It was a very happy marriage and throughout the long course of their married life Mrs. Kemp gave to her husband such continuous and invaluable support and encouragement as to contribute in no small measure to the success which he achieved. Had it not been for her unremitting care during his long illness in 1915 and 1916 it is indeed doubtful whether he would ever have survived. To this marriage three children were

born, two sons—James Taylor Kemp, now technical adviser to the American Brass Company at Ansonia, Conn., and Philip Kitteridge Kemp, rector of St. Marks Episcopal Church at Glendale, Cal., and one daughter, Katherine Furman Kemp, who married Chase Donaldson, Esq., and who died in 1929.

Professor Kemp loved teaching and pursued his work at the University with a wholehearted enthusiasm which he communicated also to his students. He had, moreover, the power of presenting in a most lucid manner and in language which was readily understood, even the most difficult subjects with which he had to deal. His students were in consequence always deeply interested in their work and this interest was felt by Dr. Kemp to be a rich reward for all the care and trouble which the preparation for his work entailed.

At Columbia his university work, as years went on, became very heavy and exacting, for not only did the number of his undergraduate students increase rapidly from a few tens to several hundred, but the number of post-graduate students going forward to the degree of Doctor of Philosophy in geology and the cognate sciences, also grew rapidly, and such students working on difficult and advanced problems often in widely separated fields required an immense amount of individual attention and assistance. But his labors were not confined to the work of his department, for as his abilities, and what may be justly called his wisdom, became known to his university colleagues and to the officers of the many scientific societies with which he became associated, he was called upon to serve on a multitude of boards and committees, and was also chosen to fill many important executive positions. He was always interested in athletics and among the university committees of which he was a member at Columbia was that of the committee on athletics, the work in connection with which he found especially trying, presenting as it did year after year the everlasting problem of attempting to harmonize the ever increasing demands of competitive athletics with academic ideals. From its foundation he also served as a member of the board of managers and as a

scientific director of the New York Botanical Gardens. He was a member of the Columbia University Club, the Amherst Club, and of the Century Association of New York. He also took a very keen and active interest in many of the great scientific societies. He was one of the group of thirteen men who in the year 1888 organized the Geological Society of America. He was a charter member of this Society and was its secretary for many years and, having served in almost every capacity in it, was elected as its president in 1921. He was president of the New York Academy of Science, and of the Society of Economic Geologists, and vice president of the American Association for the Advancement of Science. In 1912 he was elected president of the Mining and Metallurgical Society of America and received its gold medal in 1914 and was made an honorary member in 1917. He became a member of the American Institute of Mining and Metallurgical Engineers in 1891 and was on its board of management from 1896 to 1898. He was vice president of the society in 1903 and 1904 and president in 1912. He was also a member of the American Philosophical Society and of the American Association of Petroleum Geologists. In 1911 he was awarded the blue ribbon of scientific attainment in the United States by being elected to membership in the National Academy of Sciences.

In addition to these he was elected a corresponding member of the Geological Society of London, the Geological Society of Stockholm, the Geological Society of Belgium, the Academy of Oslo, and the Canadian Institute of Mining and Metallurgy. His Alma Mater, Amherst, in 1906, conferred upon him the degrees of D.Sc. *Honoris Causa*, and in 1913 on the occasion of the meeting of the Twelfth International Geological Congress in Canada, McGill University awarded to him the honorary degree of LL.D.

He was an excellent after-dinner speaker and spoke very frequently at the banquets given by the various societies with which he was connected. For many years his former teacher, Professor B. K. Emerson of Amherst, was toast-master at the

annual banquet of the Geological Society of America and his brilliant talks on these occasions will long be remembered by the members of the Society who had the pleasure of being present on these occasions. When in the course of time he was no longer able to attend the meetings of the Society, Professor Kemp succeeded him and discharged the duties of this rather difficult position with admirable grace and remarkable ability.

Professor Kemp was a prolific writer. His work entitled "Ore Deposits of the United States" was published in 1893 and passed through many subsequent editions. Three years later, in 1896, his "Handbook of Rocks" was issued. But the result of his work and investigation appeared chiefly in papers presented to various scientific societies and printed in their proceedings, or in reports to the United States Geological Survey or to the New York State Survey. During a portion of each summer for a number of years he devoted his time to the geological mapping of certain areas in the mineral bearing portion of the State of New York, for the last mentioned Survey. He was one of the founders and an associate editor of *Economic Geology* and many articles from his pen appeared in this journal.

At the beginning of his career he took an especial interest in mineralogy but later, although he worked over a wide field in geological science, he devoted his attention more particularly to economic geology and especially to the science of ore deposits, in which subject he became one of the leading authorities in North America. He also took an especial interest in the geology of the great areas of pre-Cambrian exposed on this continent and devoted much close study to the pegmatites which occur so abundantly in many places in these ancient rocks.

The range of his studies can best be seen by an examination of the accompanying bibliography of his published writings, which has been prepared for the writer by Professor Berkey, the able successor of Dr. Kemp at Columbia University.

His advice was also sought in connection with the development of many important engineering works, and in the development of many mining areas where difficult problems presented

themselves for solution. He acted as consulting geologist to the Anaconda Copper Company, The Calumet and Heckla Consolidated Copper Company, the Spanish American Iron Company, The Port Henry Iron Ore Company (Mineville, N. Y.), and the New Jersey Zinc Company, also in connection with the new Croton Dam and to the Board of Water Supply of New York City in the selection of a route for the Catskill Aqueduct.

His opinion was also sought in connection with many important law suits relating to mines and mineral areas. His wide knowledge of these subjects, his absolute honesty and his power of clear exposition made his testimony of great weight and value. But the great strain which these intense and manifold duties and occupations entailed upon Dr. Kemp resulted in 1915 in a complete nervous collapse and for over two years he was obliged to give up work of every kind, spending most of the time in the open air on the coast of Florida. He eventually completely recovered his health and once again entered upon his work with the same vigor and carried it on with the same intensity as before. But while his brain withstood this renewed strain, his heart could not, and, as already mentioned, he was stricken down and died almost instantly in 1926.

It was very fortunate that during his prolonged absence from Columbia University he had in Professor C. P. Berkey a very able coadjutor, who together with the other members of the geological staff at Columbia, which by this time he increased from three to ten in number, carried on his work uninterrupted until he could resume it.

But while Professor Kemp was a man of very marked ability, wide knowledge, and widely recognized attainments, the outstanding characteristic which impressed itself at once on every one who met him, was his genial personality. Goodness and benevolence seemed to surround him like an aura and he met everyone with a display of interest which, as a matter of fact, he actually felt. Thus he made a friend of everyone he met. His students, who were naturally brought into close contact with him and who were often in especial need of help and en-

couragement, came to regard him rather as a father than a teacher and in after life, scattered as they were over every known part of the habitable world where mines exist or geological work is to be done, they retained for him a very special and peculiar affection. An excellent portrait of him, in oils, was presented to Columbia University by his former pupils, on the occasion of the celebration of the 250th anniversary of this University, and now hangs in the library of the department of geology in Schermerhorn Hall. Wherever he went engineers or mine managers, former students of his, appeared and welcomed him. A past president of the Geological Society of America in the course of a humorous address delivered at one of the annual dinners of this Society some years ago, remarked that it had been his fortune to travel through almost every part of North America and while in the course of his journeys he had visited many places which were "wild and woolly," he had never yet found one which was "un-Kempt"!

Possessing this essentially generous nature, his help was asked by many persons and freely given, as far as his time and means allowed. In the great majority of cases this was requited, but as tares are generally mingled with the wheat in the field of this world, in some cases it was not. In these as well as in other cases where his confidence had been abused, although he felt such things very deeply, he never expressed any resentment at such untoward acts but seemed to desire to sweep them from his memory as speedily as possible and pass on to other and more worthy things. It is very doubtful whether he ever used a harsh expression in his life.

And so in passing away, Professor Kemp has left a fine record of good work accomplished in the furthering of the knowledge of the science which he professed and in passing the torch of knowledge on to many younger men who are now carrying it forward imbued with his spirit. He has also left the very fragrant memory of a fine, good and noble life as an example and inspiration to everyone who knew him, each of whom will join the writer and say in the words of Hamlet, "He was a man, take him for all in all, I shall not look upon his like again."

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