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CALVIN WINSOR RICE

1868-1934

STRICKEN at his desk in the midst of his daily work, and in the building which his vision, enthusiasm, and energy had greatly helped to bring into being as a headquarters for the professional engineering societies of the United States, Calvin Winsor Rice, honorary member and for twenty-eight years secretary of The American Society of Mechanical Engineers died as a result of cerebral hemorrhage on October 2, 1934, a few hours after his removal to a nearby hospital.

Although he had won distinction as an electrical engineer in the practise of that profession prior to 1906, he will be most widely remembered for his services to The American Society of Mechanical Engineers as its secretary and for his vision and leadership in that office, which not only developed that society greatly in numbers and in virility, but the entire engineering profession as well. For the spirit of cooperation with which he worked brought together the numerous individually organized groups of engineers in joint activities for common purposes. Of this spirit, the Engineering Societies Building in New York is a substantial and glorious monument, the physical embodiment of that vision and idealism that were Dr. Rice's most abundant gifts.

HIS QUALITIES IN PROFESSIONAL-SOCIETY ORGANIZATION

At the time Dr. Rice was made an honorary member of The American Society of Mechanical Engineers, in December, 1931, Dr. Karl T. Compton, president, Massachusetts Institute of Technology, delivered an address on his work in professional-society organization and paid a splendid tribute to this phase of his career. In the address, which was published in the January, 1932, issue of MECHANICAL ENGINEERING, Dr. Compton listed six essential qualifications for leadership in engineering-society organization which Dr. Rice possessed to a marked degree: (1) The ability and desire to cooperate with others; (2) the ability and judgment to recognize a good project when it was suggested; (3) initiative and drive to carry a project through to completion; (4) daring to undertake an audacious project, once convinced of its merit; (5) originality of thought; and (6) ability to organize, to delegate authority, and to spur others on to take active part in the affairs of the Society. Dr. Compton listed in addition four principles that were basic to Dr. Rice's philosophy of society organization and operation: (1) Unselfish cooperation with related societies; (2) planning actively for the future, so that development might not be haphazard, and so that opportunities for development in the desired direction might be quickly and firmly grasped when they presented themselves; (3) giving the most effective service to the members of the profession; and (4) leading the profession in rendering the most valuable possible service to society. The great number of engineers who knew Dr. Rice were conscious of these elements of his character and these principles of his philosophy.

HIS INTERNATIONAL REPUTATION

One characteristic feature of his career, resulting from these personal qualities, brought distinction to him, to the society he served, to his country, and to the profession of engineering. This was his relationship with engineers in this and other countries. In Great Britain, in Europe, in Mexico and South America, and in the Orient, Dr. Rice was well known in engineering circles. He traveled frequently in the discharge of his duties, and his office in New York was a focal point upon which converged the paths of engineers, eminent and obscure, who came to the United States. He was never too busy to give letters of introduction to engineers from abroad, or to engineers of this country planning to travel in Europe. Members of the Society frequently found that letters from Dr. Rice were more effective in gaining for them admission to some foreign plant or factory than similar letters from business men and engineers in the country they were visiting. The bread of hospitality and service he continually cast upon the waters wherever he happened to be returned in abundant measure to him by way of courtesies shown all over the world to those for whom he bespoke consideration. In students coming to this country Dr. Rice had great interest, going out of his way to have arranged for them itineraries of plant visits and advising them on educational and professional programs. These active international relationships brought Dr. Rice into high esteem, both here and abroad, and year by year added to the list of those beholden to him for help, advice, and innumerable lesser courtesies.

SIGNIFICANT EVENTS IN HIS CAREER

Dr. Rice was born at Winchester, Massachusetts, on November 4, 1868, the son of Edward Hyde and Lucy J. (Staples) Rice. After attending public schools in Boston, New Haven, and Winchester, he spent four years as a student in the Massachusetts Institute of Technology, from which he was graduated in 1890 with the degree of bachelor of science in electrical engineering. He then held, successively, positions as assistant engineer in the power and mining department of the Thomson-Houston Company in Lynn; as engineer in the General Electric Company in Schenectady; district engineer for that company in Cincinnati; engineer with the Silver Lake Mines in Colorado; consulting engineer for the Anaconda Copper Mining Company in Anaconda, Montana; electrical engineer of the Kings County Electric Light and Power Company, and later with the New

York Edison Company and the Consolidated Subway Company; vice-president of the Nernst Lamp Company; consulting engineer with the General Electric Company in New York. It was from this rich and varied experience in electrical, hydraulic, and steam engineering, combined with managerial and administrative work, that Dr. Rice was called to the secretaryship of the A.S.M.E. in 1906.

THE ENGINEERING SOCIETIES BUILDING IN NEW YORK

Dr. Rice became a member of the A.I.E.E. in 1897, and was active in its affairs. In 1900 he joined the A.S.M.E. The story of his part in the bringing together of the engineering societies in a common headquarters building in New York and of the manner in which the funds were secured was told by Dr. Compton in his tribute to Dr. Rice previously referred to. Dr. Compton said:

In 1902, as chairman of the Building Committee of the A.I.E.E., he called a dinner meeting of the committee, together with the president of the A.I.E.E., Prof. Charles F. Scott, and several others, to discuss plans for a modest building for the Institute, primarily to house the Latimer Clark Library, which had been presented to the Institute by Dr. S. S. Wheeler on the condition that a fireproof building be secured to house it. The Committee had, at that time, definite prospects of only about $250,000. When President Scott suggested that consideration be given to the possibility of a building for housing the four National Engineering Societies, with a common library and a common auditorium and individual rooms for the headquarters of each society, doubts were expressed as to whether the four societies could be brought into such a cooperative project.

Strenuous efforts, which were at the last minute successful, were made to get Mr. Andrew Carnegie as a guest at the next annual dinner of the Institute. At this dinner President Scott outlined his ambitious plan and pointed out its fine features—including the library.

The next day Mr. Carnegie asked Dr. Rice to come to his residence at five o'clock, and Dr. Rice, with characteristic thoughtfulness for others, as well as admiration for the lofty character of his president. brought with him Professor Scott. There Mr. Carnegie asked them further about the work of the Institute, about the finances of the engineering societies, about the relation of the proposed building to the Engineers' Club (of which he was a member). Dr. Rice cleverly inferred that an obstacle in Mr. Carnegie's mind was the securing of the land, for the latter was not in the habit of buying the land on which the libraries which he donated were built. Dr. Rice then optimistically remarked that the Engineering Societies would be able to provide the land, whereupon Mr. Carnegie gave a cheerful smile and said, "If you can provide the land, I will put up the building." Dr. Rice was made chairman of the building fund.

Then the money had to be raised to buy the land; complications and difficulties in perfecting the organization and developing the plans had to be overcome. In the words of Professor Scott, "Mr. Rice's devotion to the idea of a building for the Institute and his skill in directing the early conference with Mr. Carnegie and his enthusiastic and faithful assistance in subsequent service to the Institute in carrying out the project were fundamental factors in the creation of the Engineering Societies Building and the separate building for the Engineers' Club."

THE KELVIN MEMORIAL

Among other incidents that illustrate Dr. Rice's faculty of initiating projects that bore fruitful results may be mentioned the Kelvin Memorial Window, in Westminster Abbey, told by Dr. Compton in the A.S.M.E. address, and the establishment of the Officers' Reserve of the United States Army, a brief account of which was contained in a letter by the late Gen. William Barclay Parsons published in *The Military Engineer* for March-April, 1931. Dr. Compton's account of the Kelvin Memorial Window is as follows:

In 1910 Dr. Rice had a most unique experience, an account of which has never before been published. That year the A.S.M.E. made a return visit to the Institution of Mechanical Engineers at their Birmingham meeting. Remembering that in a modest way the A.S.M.E. had contributed to the memorial window in Westminster Abbey to Sir Benjamin Baker, honorary member, A.S.M.E., Dr. Rice wrote to the Dean asking if it would be permissible for the members of the A.S.M.E. when passing through London on a certain Sunday, to visit the Abbey and view the window. Not only was permission granted but a special service was arranged, with a sermon on engineering by the Bishop of Lewes, and on this occasion the "Hallelujah Chorus" was rendered by the full surpliced choir. The event was further made memorable by having the A.S.M.E. audience arranged in a semi-circle about the memorial window, the movable pulpit having been placed beside it.

Dr. Rice noticed that every window in the entire Abbey, save one, was a memorial window. The unappropriated window was apparently an original plain-glass window and was very dull by comparison. The next day Dr. Rice called on the Dean to express gratitude, and in conversation commented on the unoccupied window. The Dean immediately responded that the Abbey would appreciate a gift of a memorial window. Dr. Rice thereupon sensed the situation and offered a window, knowing it would be an easy matter to collect from the entire English-speaking world an amount sufficient to install a window to an engineer.

Dr. Rice proposed a window to his friend Lord Kelvin as one mutually desired by the Abbey and by engineers. Consistently he arranged that this memorial be provided through the cooperation of the engineering bodies of Great Britain and the United States. Having obtained instant approval of influential persons in England, he used the same method in the United States, and, when the undertaking was assured, placed the whole proposition in the hands of the Institution of Civil Engineers, the oldest and most important engineering organization in the world, for announcement of the popular subscription.

The result was so successful that not only was the window provided but the Kelvin Medal was founded. This is probably the only joint undertaking of this nature by the English-speaking world.

THE OFFICER'S RESERVE

In a letter to General Parsons, Dr. Rice said that he had commenced agitation for an Officers' Reserve in 1902, when he went to Washington to take the matter up with Gen. Nelson A. Miles, then Chief of Staff. He was unsuccessful, but he kept repeating his suggestion up to 1914. From General Parson's letter in *The Military Engineer* the following passages are quoted:

By the end of the year 1914, there were some engineers who perceived that the world was in for a long period of war and that no matter what position of neutrality the United States might for a while assume, it would probably inevitably be drawn into the conflict. Mr. Calvin W. Rice, secretary of The American Society of Mechanical Engineers, had this view and became firmly impressed with the belief that the engineers should be organized for action.

After conferring with Major-General Leonard Wood, then commanding the Department of the East, Mr. Rice organized a luncheon in February, 1915, at which were present, besides Mr. Rice, Dr. Henry S. Drinker, President of Lehigh University, Mr. Elmer E. Corthell, Mr. Ralph Mershon, Mr. Bradley Stoughton, and a few others, with General Wood as the guest of honor. On being asked for advice, General Wood pointed out that for many years there had been established, as part of the Army, a Medical Officers' Reserve Corps, who were duly commissioned in the Army and who were subject to call to duty in case of war and in times of peace with their consent. This Reserve had been found to be most beneficial, as officers were drawn from it at times of emergency and then could return to private life when the stress was passed. He showed that engineers, like doctors, were always mobilized for the practise of their profession and that an Engineer Officers' Reserve, parallel to the Medical Officers' Reserve, might be established.

This suggestion of General Wood's was promptly taken up, and committees were appointed on behalf of the engineering societies. . . . These committees were immediately organized and began to work, but it was found more expedient to form a central executive and operating committee of the chairmen of the separate committees. . . . The Chairman of the Joint Committee [Arthur S. Dwight] proceeded to Washington to lay the proposed plan before the War Department. He went with some misgivings as to how such a radical suggestion, emanating from civilians, would be received. His misgivings, however, were quickly dispelled. The Secretary of War, Mr. Lindley M. Garrison, received him cordially and sympathetically and by him was presented to Major-General Hugh L. Scott, then Chief of Staff. General Scott, after hearing what the chairman had to say, introduced him to Major-General Tasker H. Bliss, Assistant Chief of Staff. General Bliss listened attentively and with much interest, and at the conclusion of a long interview sent for Major W. D. Connor, now Major-General Connor, an officer of the Corps of Engineers attached to the General Staff. General Bliss instructed Major Connor to confer with Mr. Parsons and to prepare a joint report for submission. When this was done, General Bliss studied it carefully and said, "You have proved your case for engineers, but why limit it to them? It has always been my wish that there should be established a general reserve as part of the Army of the United States." He then returned the report, asking them to make a plan for such a general reserve. . . .

The outcome was that the joint committee reported to the five societies under date of June 23, 1916, that "a bill, which recently passed the Congress, has been signed by the President and will become effective July 1, 1916. This bill, known as the Army Reorganization Act of 1916, contains provisions for the organization of an Officers' Reserve, including the engineers."

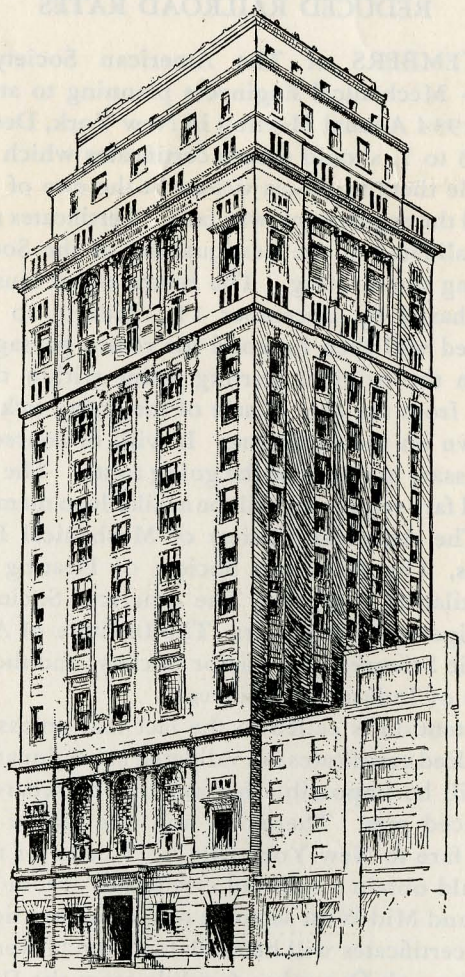
Thus a movement initiated by Mr. Rice, put into concrete form by General Wood, and carried into execution by the Committee of the Engineering Societies, was authorized by law.

Dr. Rice, in his modest manner, was very proud of the part he played in the establishment of the Officers' Reserve.

HIS EDUCATIONAL AFFILIATIONS

Inspired by the work and character of Dr. Oskar von Miller, distinguished director of the Deutsches Museum, for whom he had a warm affection and high regard, Dr. Rice became interested in the educational possibilities of exhibits of the industrial arts. This brought him into active working contact with a group of men of enthusiasm and vision who established what is now the New York Museum of Science and Industry. As honorary secretary and a member of the board of this institution he gave freely of his energy and advice up to the time of his death.

To his Alma Mater he gave his services as member of the Corporation of the Massachusetts Institute of Technology and chairman of the visiting committee of the department of mechanical engineering of that institution. His broad acquaintanceship among engineers brought him into close contact with other institutions, for his advice was frequently sought when a professorship, a deanship, or a presidency was to be filled.



ENGINEERING SOCIETIES BUILDING, NEW YORK, N. Y.

HONORS AND PROFESSIONAL CONTACTS

In addition to membership in the A.S.M.E. and the A.I.E.E., of which he was a former vice-president, Dr. Rice was a member of many other engineering and professional societies. He was an honorary member of the association of members in Argentina of the National Engineering Societies, of the Koninklijk Instituut van Ingenieurs, of Holland; of the Club de Engenharia, of Rio de Janeiro; of the American Society of Safety Engineers; of the Masaryk Academy, Czechoslovakia; and of the Deutsches Museum, Munich, Germany. He was corresponding member of the Instituto de Engenieros de Chile and of the Technisches Museum, of Vienna. In 1915 he served as a member of the Jury of Award of the Panama-Pacific Exposition. In 1922 he received a gold medal at the Centennial Exposition of Brazil. On him were bestowed the Order of the White Lion of Czechoslovakia, and the Golden Ring of Honor of Bavaria. He was a fellow of the American Association for the Advancement of Science, and a member of the Institution of Electrical Engineers, of London and of the New York Electrical Society. His well-known interest in research won for him membership in the division of engineering and industrial research of the National Research Council, and the position of National Counselor of the Purdue Research Foundation.

As a delegate of The American Society of Mechanical Engineers to the Seventy-Fifth Anniversary of the Verein deutscher Ingenieure, held in Cologne, in 1931, he was the recipient of a medal of honor "in appreciation of his services to technical-scientific achievement, particularly in promoting the mutual international interests of the engineers of the entire world." Among other honors in Germany he received the honorary degree of Doctor of Engineering (Dr.-Ing. E.h.), from the Technische Hochschule, of Darmstadt, Germany, in 1926.

Dr. Rice married Ellen M. Weibezahn, of Winchester, Mass., August 6, 1904, who, with his children, Edward Winslow and Marjorie Charlotte, survives him.