

Dexter Simpson Kimball

October 21, 1865 — November 1, 1952

Dexter S. Kimball was born in New River, New Brunswick, several months after the Civil War ended. A full account of his life would read like a typical American success story of a career during the post-war years of rapid industrialization and mechanization. He grew up in the lumbering districts of New Brunswick and western Washington, became a journeyman machinist, a designer of heavy machinery, a works manager, and finally a national reformer in the field of engineering education.

His family, part English, part Scottish, part Irish, swung between Maine where his grandparents lived and New Brunswick where he was born, as the occupations of millwright and ship carpenter beckoned them. When Dexter, the eldest of the four children, reached five the family moved to Marysville, a small mill town in the outskirts of Fredericton, capital of New Brunswick. There he spent ten happy years, and profited greatly from a grade school of exceptional quality and an excellent school library. When Dexter reached fifteen, family connections lured the Kimballs to an even richer lumbering district around Puget Sound. The family of eight spent a week on the railroad from Boston to the Pacific Coast and another in San Francisco waiting for the steamer from which they disembarked at Port Gamble on the Sound, where they were welcomed by residents most of whom had themselves come earlier from Maine.

Shortly after Dexter's arrival he secured employment as an apprentice in the machine shop of the Puget Mill Company. The resident engineers, machinists, millwrights, and blacksmiths at and around Port Gamble had to keep the machinery of the sawmills running. Dexter as the only apprentice was called upon to work at various kinds of jobs, some new, others emergency repairs. At nineteen he was substituting for engineers in the Port Gamble mills and made a number of trips as assistant engineer on the company's towboats. A year later he substituted for a short time as engineer and machinist in charge of the Port Ludlow mill, one of the largest and newest on Puget Sound. At twenty-two he left Port Gamble for San Francisco looking for work with a brighter future and found it with the Union Iron Works, then the most important engineering company on the Pacific Coast. It employed thousands in building ships, mining machinery, land and marine boilers and stationary and marine engines. For six years Kimball worked there as journeyman machinist gaining practical engineering experience of a varied kind. Then he resigned in order to get an engineering education. Stanford University had just opened only a few miles away. At the age of twenty-eight Dexter registered there, first as a special and later as a regular student. Three

years later he received the degree of A.B. in engineering. He was greatly helped and inspired at Stanford by the professor of mechanical engineering, A. W. Smith, who did much to shape Dexter's future career.

After graduating he returned to the Union Iron Works where the theoretical training he had acquired at the university gave him an advantage and brought rapid advancement. The 500 ton hydraulic press which he designed for shaping cold steel plates is still in use. When the two sets of hoisting engines he had designed were finished he moved with them to Butte, Montana, first to supervise their installation and then to run them. After a brief stay there he went to Cornell University to organize and offer a pioneer course in designing heavy machinery under Professor Barr and Director Thurston who had been for thirteen years at the head of Cornell's Sibley College of Mechanical Engineering and the Mechanic Arts, and as Kimball later declared had "raised the standard of entrance requirements and undergraduate instruction to the highest level ever attained in American engineering schools." After three years of teaching, however, Kimball's slow academic advancement combined with an alluring invitation from one of his former Stanford teachers, Dr. F. A. C. Perrine, who had gone into business as president of the Stanley Electric and Manufacturing Company, took him to Pittsfield, Massachusetts, to build and equip a new factory.

While he was there, Thurston died, Kimball's Stanford friend A. W. Smith succeeded him, and persuaded Kimball to return to Cornell as Professor of Mechanic Arts charged with modernizing the shops and shop courses. He introduced a course then unknown to the engineering world which dealt really with the economics of production, but which, in order to win the acceptance of a conservative faculty, had to be disguised under the less revealing title of Works Administration.

While Kimball was developing his courses in engineering at Cornell, Stanford University planned to offer a professional degree to graduates who had later achieved distinction and who submitted a thesis as evidence of what they had done. Stanford made Kimball and his career an exhibit on which to rest its case for creating the new degree, that of Mechanical Engineer, and it was conferred on him in 1913.

For thirty-two years Kimball was a member of the Cornell faculty and for a longer time a lecturer popular in many places. He was active also in many educational and professional societies and served twice as temporary president of the University. The honorary degree of Doctor of Laws was conferred on him by the University of Rochester, Doctor of Science by the Case School of Applied Science, and Doctor of Engineering by Kansas State College, by Northeastern University, and by Lehigh University. He was awarded four gold medals, one by an educational and

three by engineering societies. For two years during the Second World War he was Chief of the Priorities Section in the Machine Tool Division of the War Production Board.

Perhaps no other member of the faculty in recent years has had as much rich association as Kimball with alumni and undergraduates. When Willard Straight Hall, the student union, opened, he became one of the members of its first Board of Governors and was reappointed until his retirement eleven years later after a longer term of service than any other member, a service recognized by the student Board of Managers when it dedicated to him one of the special dining rooms and adorned its walls with photographs which he selected to illustrate the university's early years.

The most recent engineering building on the campus likewise has been named jointly for him and Thurston, Cornell's other great pioneer in engineering education.

The reputation of an administrator or teacher is ephemeral: what one writes in a scientific field lasts a little longer either in the writer's own words or as built into thinking of later scholars. Probably the most definable and durable part of Kimball's work is to be found in his books; of them the most important was *The Principles of Industrial Organization*, which appeared forty years ago, has run through six editions and is still standard. An authoritative review said of it:

"From the first page to the last, the reader is aware that he is being given the fruits of a wise and mature scholarship and the benefits of a broad experience. The book portrays and illuminates the influence of our developing mechanical arts upon our economic problems more adequately than any that has previously appeared."

In 1919 the Cornell Schools of Civil, Mechanical and Electrical Engineering were combined and Kimball became dean of the consolidated college, a position he retained for seventeen years. When he reached the retiring age, the Cornell Society of Engineers paid tribute to him in these words:

"We are proud of Dean Kimball's national fame as an engineer and leader in engineering education: we are mindful of his outstanding professional achievements which have contributed to the prestige of our College. Yet, in the intimacy of this Cornell group, our main desire is to record our respect and affection for one who in the discharge of his duties has evinced qualities of gentle humanity and gracious friendship adorning his technical skill and attainments.

"He has done perhaps his most important work for education in two fields, as Dean of the College of Engineering and as writer of successful books in a newly opened and most important field.

“By the breadth of his intellectual interests and by his literary and artistic knowledge and sympathies, he has set a lofty standard for his fellow engineers who wish to add to their scientific accomplishments something of his maturity and richness of understanding of the finer things of life.”

For seventeen years after he nominally retired and received this tribute, Kimball continued to render invaluable services to his university, his town, his country and mankind.

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