

active college work, when he was honored with the title of professor emeritus. He received from his alma mater the degree of A.M. in 1818, and S.T.D. in 1825. Dr. McVickar's wife was a descendant of Samuel Bard, one of the old New York celebrities, the physician of Washington, and in 1822 he published "A Domestic Narrative of the Life of Samuel Bard," which was written with great skill, and is valuable for its reference to the early history of the country. Dr. Bard deserves mention in the history of education for his service to Columbia College, in his lectures on natural philosophy and for his part in establishing the Medical School attached to the college, also for his service as professor of the theory and practice of medicine. In 1825 Dr. McVickar published "Outlines of Political Economy," and later a memoir of Bishop Hobart, entitled "Eighty Years," followed by "The Professional Years of Bishop Hobart." He was the author of numerous essays, addresses, reviews, and occasional publications. He held important positions in the church and in the diocese. As a college professor, Dr. McVickar pursued the higher interests of the subjects entrusted to him with original tact and ability. His course of instruction was eminently clear and practical, while he quietly led the pupil in the discipline of taste and philosophy. He died in New York, Oct. 29, 1868.

BARNARD, Frederick Augustus Porter, tenth president of Columbia College (1864-89), was born at Sheffield, Mass., May 25, 1809, son of Robert Foster and Augusta (Porter) Barnard. His father, a successful lawyer and for several terms a member of the Massachusetts state senate, was a descendant in the sixth generation from Francis Barnard of Coventry, Warwickshire, England, who settled at Dorchester, Mass., in 1636. After an unusually thorough preparatory training, begun at an early age under Rev. Orville Dewey, later distinguished as a preacher, and continued in the academies at Saratoga, N. Y., and Stockbridge, Mass., Dr. Barnard entered Yale College, where he was graduated A.B. in 1828. As an undergraduate, he attained high standing in mathematics and science, in addition to his proficiency in the classics and in literature. He began his active career as a teacher in the Hartford grammar school, and in the same year made his debut as an author with a school textbook on arithmetic, later adopted as a standard for entrance examinations in Yale. In 1830 he himself was appointed to a tutorship by his Alma Mater, a position in which he made the first of his many notable reforms in the methods of the higher education. To this time the custom had been followed in Yale of dividing all students below the senior class into groups, each of which was instructed in all branches by its particular tutor. Barnard suggested that better results could be achieved by substituting a system of tutor-specialists, each teaching some particular branch of knowledge to all students in a class; and this plan being put into effect resulted in better opportunities for both students and instructors. His own subjects were mathematics and the natural sciences. About this time his usefulness as a teacher was seriously threatened by increasing deafness, an hereditary malady against which the medical skill of the time could avail nothing. For a year he was an instructor in the deaf and dumb asylum in Hartford and thereafter for five years in Dr. Gallaudet's institution in New York city. Finally in 1837 he resumed college work by accepting the chair of mathematics and natural philosophy in the Uni-

versity of Alabama, then located in Tuscaloosa; continuing the connection for seventeen years, during the last six as professor of chemistry. In 1854 he was called to the chair of astronomy and mathematics in the University of Mississippi, Oxford, Miss., and two years later was elected to the office of president, later changed to chancellor. Although a native of New England, and an exemplar of its traditions, his tact and ability enabled him to maintain a position of influence, with the friendship and respect of all, even in the trying days immediately preceding the civil war. At the time of the secession of the southern states, he resigned his position in the university, and, although urged to accept a post as chemist under the Confederate government, returned north, residing in Norfolk, Va., until its capture by the Federals in 1862. While in the South, he had always manifested a lively interest in public affairs, even participating in the controversies of the period by contributing editorials to Whig newspapers, which were regularly answered by editors of the opposing parties. In 1855, he was ordained to the ministry of the Episcopal church, and until 1861 was rector of a parish at Oxford. For two years (1862-64) he was chief of the map and chart division of the U. S. coast survey, Washington, D. C., but continued also his activities in literature and public affairs, which won him wide recognition as a scientist and educational authority. The logical result was his unanimous election as tenth president of Columbia College, as successor to Pres. Charles King, recently resigned, and in this office he continued during the remainder of his life. Dr. Barnard's contributions to educational practice were conspicuous and of permanent significance. During the later years of his service in the South he devoted considerable attention to the organization of a graduate department and professional schools, and on his accession to the presidency of Columbia, he began to attack the problem of enlarging the institution and increasing its efficiency. Fully sensible of the disadvantages inherent in the theory of college education then in vogue, he proposed practical methods for overcoming them, becoming in fact one of the earliest advocates of the elective system of studies, as a means for adjusting the college to the demands of modern life, and the originator of the idea of uniform entrance examinations for all colleges, which led later to the organization of the College Entrance Examining Board. In the work of upbuilding Columbia and molding it into the great university which it became in later years, he early emphasized the claims of modern language and natural science courses; revised the rules of student discipline, so as to allow greater opportunities for personal honor and cooperation, and early gave careful attention to the enlargement and coordination of the graduate and professional departments, the School of Mines, and the medical and law schools. The removal of Columbia to a larger permanent location was first advocated by him in 1866, although the actual realization of the plan did not come until many years later. His recommendations regarding discrimination between pass and honor courses, and on rules governing the awarding of advanced degrees, scholarships and fellowships, constituted the basis for systems later widely adopted. His memorable agitation for the admission of women to college courses was begun in 1879, and in the following year he issued an argument on the subject, which was justly described as "a classic on education." Systematic provision to serve this object was made in 1883, when courses

identical with those given in the college were first offered to women students. The foundation of the women's department, since known as Barnard College, dates from a memorial presented to the trustees of the university in 1888, although Dr. Barnard did not live to see the full realization of his hopes and plans. Another Columbia department owing its inception to his persistent recommendations was the Teachers' College, afterward such an important adjunct to higher education. Dr. Barnard was a constant and voluminous writer on physics, astronomy, metrology and politics, principally in the form of papers contributed to the publications of learned societies and the current reviews. From 1872 he was editor-in-chief of "Johnson's Encyclopedia," to which he contributed many important articles. He was U. S. commissioner to the Paris exposition in 1867 and to the international industrial exposition, Vienna, being a member on both occasions of committees on instruments of precision and apparatus of the exact sciences, and rendering services recognized by the award of officership of the Legion of Honor of France in 1873. His memberships in learned societies were many, including the American Association for the Advancement of Science, of which he was repeatedly president; the National Academy of Sciences, of which he was corresponding secretary; American Academy of Arts and Sciences; American Philosophical Society; American Microscopical Society and American Geographical Society. He was a member of the board of experts of the U. S. bureau of mines; an honorary member of the Sociedade Auxiliadora da Industria Nacional of Brazil, and a corresponding member of the Royal Society of Liège, Belgium. Dr. Barnard was the recipient of many honorary degrees, including S.T.D. from the University of Mississippi; LL.D. from Yale University and Jefferson College; L.H.D. from the regents of the University of the State of New York, and D.C.L. from Kings College, Canada. He was justly rated among the leading scientists of America during his lifetime. His knowledge of several distinct branches was profound, and his published writings were accepted as authoritative. In addition to his great learning, he was a preeminent executive and organizer, the real founder of the greater Columbia University whose beginnings were contemporaneous with his accession to the presidential office. He assumed control of a college numbering no more than 150 undergraduates, and left a well-organized university providing educational advantages for over 2,000. He continued his labors until the beginning of his eightieth year, resigning from the presidency in May, 1888, completing twenty-four years of brilliant service. Dr. Barnard was married in 1849 to Margaret McMurray, a native of Ohio. He died in New York city, April 27, 1889, leaving his library and the bulk of his personal fortune to Columbia University.

LOW, Seth, ninth president of Columbia College, (1890-1901), was born in Brooklyn, N. Y., Jan. 18, 1850, son of Abiel Abbot and Ellen Almira (Dow) Low. His earliest American ancestor was Thomas Low, believed to have been a native of Suffolk, England, who settled at Ipswich and Chebaco, Mass., about 1636. From him the line of descent runs through Thomas and Martha (Boreman) Low; David and Mary (Lamb) Low; David, 2d, and Susannah Low; David, 3d, and Abigail (Choate) Low; David, 4th, and Hannah (Haskell) Low; Seth and Mary (Porter) Low, grandparents of Seth Low. Abiel Abbot Low, his father, was a

prominent importer and owner of a large fleet of clipper ships engaged in the China trade and was president of the New York Chamber of Commerce. Seth Low received his early education in the Brooklyn Polytechnic Institute and in Columbia College, where he was graduated A.B. in 1870. His college career was notable, both in scholarship and in athletics, evoking the tribute of Dr. F. A. P. Barnard, then president of Columbia: "the first scholar in college and the most manly young fellow we have had here in many a year." During his last year in college, he attended lectures in the Columbia Law School, but discontinued the course on accepting employment in his father's establishment. After occupying in turn several important clerical positions, he was admitted to partnership in his father's business in 1875, and subsequently was senior partner, until the dissolution of the firm, in 1887. In the New York Chamber of Commerce he served frequently on important committees, and was its president, in 1914. He organized, in 1878, and became first president of the Brooklyn Bureau of Charities, one of the earliest bodies formed to promote cooperation and prevent waste and imposition in charity service. About the same time, his activity in the politics of the old Fourteenth ward of Brooklyn resulted in forming the Young Republican Club, of which he was the first president. In 1881 he was independent candidate for the mayoralty of his native city and was elected by a large majority, and after a highly successful administration, was reelected in 1883. His endeavors to purify the city government by introducing the method of civil service examinations for municipal offices and other needed reforms won him an enviable national reputation. Besides the establishment of the merit system in the subordinate courts of the city service, the chief results of his administration were the reform of the tax collection system, the extension and improvement of the schools, the development of bridge facilities, and the improvement of public works. At the end of his second term as mayor he spent several years in travel and study abroad, everywhere receiving distinguished recognition as one of America's leading citizens. In 1890 he was elected to succeed Dr. Barnard as president of Columbia College, and although he had never been an educator in the technical or professional sense, he entered at once upon an administration that was both brilliant and memorable. From the beginning, his object was to instil new life into the venerable institution, and to bring it in all departments to modern standards. His business experience enabled him to manage its affairs with admirable prudence and judgment, while he furthered his plans for improvement, and added to the prosperity of the institution by personal gifts and by donations obtained through his influence. The several departments affiliated with the college, and controlled by their own faculties, were organically united and placed under the control of a university council created for the purpose. By an act dated March 24, 1891, the College of Physicians and Surgeons was made an organic part of the corporation. In the meantime, the rapid development of all departments rendered the old buildings on Madison Avenue far too contracted, and the plan of removing to the upper part of Manhattan island began to be seriously agitated. In 1892 a building committee reported favorably on the site of the Bloomingdale Asylum for the Insane on the heights of Morningside Park, which was valued at \$2,000,000. President Low secured the payment of this