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SKETCHES OF EARLY NORTH AMERICAN ACTUARIES

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ABSTRACT

This paper undertakes to give dossiers of essentially all the actuaries who entered our profession in Canada or the United States up to about 1872. It includes those who died or left our profession before the Actuarial Society of America was formed in April 1889, and those who, in due course, became Fellows of that Society when or after it came into being.

The paper also mentions some of the conditions under which the Actuarial Society was organized, and suggests that a yet fuller story of how our predecessors coped with circumstances and events of more than a century ago would be a desirable record to document.

Felix qui potuit rerum cognoscere causas.—Virgil
(Happy is he who has been able to search out the causes of things.)

INTRODUCTION

Those who consider it important that a profession understand its own beginnings will agree that this paper should have been written at least sixty years ago — early enough so that the facts would have been readily obtainable, yet late enough so that actions taken, or not taken, might be viewed dispassionately. Those who regard the lessons of the past to be worth studying will wish, as this chronicler does, to see more done than has here been undertaken by way of placing on record the major events and the turning points of the stormy period in which our pioneers lived. It may yet be possible — perhaps as preparation for our centenary — to set forth appraisals of how our professional ancestors tackled such thorny problems as gross versus net premium valuations, tontine dividend systems, and sharing discoveries and ideas in an era of widespread mistrust.

This present account of nineteenth century actuaries is the work of many able and enthusiastic researchers. My role has been to recruit willing workers and to compile their findings.

All of us recognize that gaps remain to be filled and errors have been made. We count upon readers to point out sources that we have not tapped and to correct our mistakes.

Sources

After obtaining data from actuaries and archivists in nineteenth century companies that are still now in business, actuarial and other literature was searched for additional names which were then looked up in reference books at libraries (with special attention to the Library of Congress). Historical and genealogical societies in Philadelphia, Boston and elsewhere have proved most helpful, as were librarians at the American College in Pennsylvania and The College of Insurance in New York. The National Underwriter Company's files filled some gaps for us also. An excellent source proved to be the alumni records of many universities. The resources of the world renowned genealogical collection in Salt Lake City were also tapped.

Qualifications

Lacking any formal designation such as membership in a recognized professional body, there often was room for doubt whether a candidate really was an actuary; and, if so, when, in his career, he first could be so described. Some seem to have been called actuaries when others were performing the normal duties of that position; others were doing actuarial work while having the title of secretary or the like. We have tried to restrict our listing to those who had mathematical training and who used it in a substantial degree.

In general, this paper does not cover the careers of actuaries who came into our profession later than 1872. The rationale was that more recent entrants would, unless their careers were brief, have in due course become members of the Actuarial Society, and therefore have been memorialized in the *Transactions*.

The Nineteenth Century Environment

As a general guide for readers to the state and maturity of the North American life insurance industry during the period covered in this paper, we show here the numbers of domestic life insurance companies operating in Canada and the United States up to 1889, the year in which the Actuarial Society of America came into being. The extraordinary contrast in company stability between the two countries may be attributed to differences in regulatory requirements and quality and in depths of management understanding of the essentials for survival. The vast numbers of fraternal and assessment companies that came into being in the U.S. from 1870 to 1889 are not in our figures.

NUMBERS OF LIFE COMPANIES FORMED, TERMINATED, AND EXISTING

	United States			Canada		
	Formed	Terminated	Existing	Formed	Terminated	Existing
Before 1800	7	3	4			
1800-1819	5	4	5			
1820-1829	2		7			
1830-1839	14	4	17			
1840-1849	27	6	38	1		1
1850-1859	27	27	38			1
1860-1869	115	26	127	1		2
1870-1879	25	91	61	6	1	7
1880-1889	17	18	60	6	1	12
Totals	239	179		14	2	

Delay In Launching The Actuarial Society

Two historical accounts tell us that a formal organization of American actuaries might have come into being much earlier than 1889:

J. Owen Stalson, *Marketing Life Insurance*, p. 781:

On Sept. 26, 1866, a convention of life insurers met at Hartford to form something like a "National Actuaries Institute" with a view to "securing . . . a uniform valuation of life insurance policies upon a certain basis. Those who started the movement (were) the Hartford Life offices . . . The plan was to have each company send an actuary or some qualified officer to the association with information on his company's policies so that when pooled, these data could be made the basis for working out "uniformity of legislation as well as . . . valuation" of policies.

This proposal eventually changed direction, resulting in formation of the American Chamber of Life Insurance which was short-lived.

David Parks Fackler, *TASA*, XI (1909), p.11:

A desire for an actuarial association was felt for over twenty years before it was gratified, and several abortive attempts were made. The first of these, I believe, was about the year 1868 when several actuaries of New York City met together one evening at the house of Mr. Sheppard Homans to consider the formation of some sort of club or society, and we had a very pleasant meeting, but without result. . . .

Those who could properly be called actuaries in those days considered that the proper time had hardly arrived to found a society satisfactorily. There were too many men officially or popularly entitled actuaries who were not actuaries in any proper sense of the word; we could hardly form a society without including them, and possibly would have to give some of them important positions, so rather than have an association which would not be a proper exponent of the actuarial profession we preferred to have nothing at all. Among the persons of deservedly high standing who nevertheless could not properly be entitled actuaries was Elizur Wright, the distinguished Ex-Insurance

Commissioner of Massachusetts, whose name will ever be associated with American life insurance. Though he was the author of many life insurance tables, he never had any practical experience inside a life insurance company. . . . Another similar case was that of Prof. Bartlett, Actuary of the Mutual Life Insurance Company, who though a fine mathematician had no practical knowledge of life insurance.

By the year 1888, however, the situation had changed in some important respects. Mr. Beers, who had the title of Actuary of the New York Life without actuarial qualifications, had given up his position to Rufus W. Weeks, and in the Mutual Life Prof. Bartlett had been succeeded by Mr. McClintock, so that with Mr. Phillips in the Equitable, the three largest life insurance companies on this continent at last had as actuaries men who were professionally entitled to their positions by many years of practical actuarial experience.

It is noteworthy that when the Actuarial Society did get started in April 1889, the charter membership was limited to chief actuaries. This restriction was gradually removed six months later and in subsequent years. Furthermore, the new Society apparently never did invite into its membership any of the more than a score of actuaries who had retired or moved into other fields (including life company presidencies) after having substantial experience as actuaries. Looking back, it seems a pity that the young body did not avail itself of the maturity of such accomplished persons as William A. Brewer, John B. Cherriman, Amzi Dodd, Levi W. Meech and Thomas W. Russell.

Arrangement of These Biographical Sketches

For readers' convenience, the 94 biographies are classified into five sections:

I. Actuaries In Philadelphia	15 actuaries, pages 355–60
II. Actuaries In New England	29 actuaries, pages 360–68
III. Actuaries In New York and New Jersey	34 actuaries, pages 368–79
IV. Actuaries Elsewhere in the United States	10 actuaries, pages 379–81
V. Actuaries In Canada	6 actuaries, pages 381–83

Of these 94 actuaries, 59 never became members of the Actuarial Society. The other 35 who did are designated "FAS-C" if they became charter members of the Society, otherwise by "FAS" followed by the date of election thereto. The college, if known, from which the actuary graduated, is displayed.

Acknowledgements

We thank, en masse, the many actuaries and others who combed their company histories and archives for names and career facts. The following

friends of the project walked an extra mile, sometimes a long one, in search of stories and dates:

John C. Angle	James B. Gardiner	Daniel W. Pettengill
Robert W. Batten	L. Timothy Giles	W. James Preble
Dwight K. Bartlett, III	Charles G. Groeschell	Murray Projector
J. Gordon Beatty	James E. Hoskins	Harry E. Richardson
Kathryn E. Beck	Toni Hustead	Charles E. Rickards
Dale B. Brimley	Richard A. Jessup	George Ryrie
Gary Chamberlin	Sheila I. Kelley	Donald R. Sondergeld
Michael J. Cowell	Edward A. Lew	Ann H. Sutcliff
Rowland E. Cross	David M. Lipkin	Kenneth W. Usherwood
Isabel Daly	Marshall H. Lykins	Betsy K. Uzzell
Thomas F. Eason	Donna Mereness	Robert A. Weimer
Samuel Eckler	Gordon G. Myer	Robert L. Whitney
Price Gaines, Jr.	Robert J. Myers	Charles A. Yardley
	Mary D. Nelson	

Of immense value has been J. Owen Stalson's *Marketing Life Insurance: Its History In America*, including its indispensable list of reference books on pages 654 et seq.

I. ACTUARIES IN PHILADELPHIA

Born	May 1743, Ulster, Ireland
Insurance Posts Held	1785-1824. Associated with Presbyterian Ministers' Fund, Philadelphia, Pa.
Died	July 1824, Philadelphia, Pa.

ROBERT PATTERSON came to the United States in 1768. From 1779 he was a mathematics professor at the University of Pennsylvania and at some time served as president of the American Philosophical Society. The 1961

annual report of the Presbyterian Ministers' Fund says that in 1792 he furnished the first actuarially supported premiums for American life insurance. Our various historical accounts do not recognize him as the dean of North American actuaries, although among his writings was "A Treatise on Practical Arithmetic," which is said to include a thorough discussion of the mathematics of annuities. Authoritative settlement of his rightful place in actuarial annals needs to be made.

Born	August 1758, Philadelphia, Pa.
Graduated	
Insurance Posts Held	1812-1822. Actuary of Pennsylvania Company for Insurance on Lives and Granting Annuities, Philadelphia, Pa.
Died	September 1822

JACOB SHOEMAKER was a Quaker and a substantial Philadelphia businessman. The Pennsylvania Company was at least his second pioneering venture into corporate finance. In 1803, he had taken part in founding what is now the Philadelphia National Bank. In 1809, he was the moving spirit behind,

and became temporary president of, what was to be the first successful United States life insurance company. Its earliest office was in his home. He calculated its first premiums on the Northampton Table with 5½ percent interest. Even as early as 1813, he had become well acquainted with works of British actuaries, particularly Richard Price and William Morgan. The Pennsylvania Company ceased to write life insurance in 1872 and merged with the Bank of North America in 1929. The merged organization's name is now The First Pennsylvania Banking and Trust Company.

Born	c. 1793
Graduated	
Insurance Posts Held	1829-1835. Actuary of the Pennsylvania Company, Philadelphia, Pa.
Died	August 1835, Philadelphia, Pa.

JOSEPH ROBERTS, JR. was the Pennsylvania Company's second influential actuary. The hiatus between Shoemaker's death and Roberts' appointment was filled by two men—Eugenius Nulty (1823-27) and Thomas T. Smiley (1827-29) about whom we

know nothing. The company's president during that hiatus was Robert M. Patterson, himself a mathematician and a son of the previously described Robert Patterson. Joseph Roberts seems to have been an effective and energetic incumbent.

Born	March 1805, Wilmington, Mass.
Graduated	1825, Harvard
Insurance Posts Held	1835-1845. Actuary of the Pennsylvania Company, Philadelphia, Pa.
Died	January 1853, Cincinnati, Ohio

SEARS C. WALKER had been a Philadelphia school teacher before succeeding Joseph Roberts at the Philadelphia Company. His major interest, however, was astronomy. He left the company to pursue that vocation at the National Observatory, becoming

a well known astronomer, and was the first to suggest using the electric telegraph to determine differences in longitude between cities. He ruined his health by working intensely to compute the orbit of the newly discovered planet Neptune.

Born	1802
Graduated	
Insurance Posts Held	1836-1871. Actuary of Girard Life Insurance, Annuity and Trust Company, Philadelphia, Pa.
Died	February 1871, Philadelphia, Pa.

JOHN F. JAMES was the only actuary that Girard Life had during its foray into life insurance. Described by J.A. Fowler, FAS, as "a mathematician of the highest rank," he was the earliest American actuary to face the problem of distributing surplus to policyholders.

Born	c. 1815 (?)
Graduated	
Insurance Posts Held	1845-1875. Actuary of the Pennsylvania Company, Philadelphia, Pa.
Died	May 1875

WILLIAM B. HILL had been a clerk under Sears Walker's supervision. Walker recommended that Hill be his successor. Hill and James had long and nearly contemporaneous actuarial careers.

Born	June 1809
Graduated	
Insurance Posts Held	1847-1872. Founder and first Secretary of Penn Mutual Life Insurance Company, Philadelphia, Pa. Served as actuary from outset, given that title 1862.
Died	May 1873

JOHN W. HORNOR had been a successful hardware merchant. After studying life insurance principles, he set out to organize Philadelphia's first mutual company. Although heavily responsible for its actuarial and administrative operations, he never aspired to its presidency. To increase his grasp of life company management,

he travelled to Europe. In 1859, he introduced a system of surplus distribution that had elements of the contribution approach.

Born	c. 1800, West Indies
Graduated	
Insurance Posts Held	1848-1849. Was secretary and actuary of newly formed Equitable Life Insurance Company, Philadelphia, Pa. 1852-1854. Editor of <i>Tuckett's Monthly Insurance Journal</i> , Philadelphia, Pa. 1981, printed, first time USA, British 1843 mortality table.
Died	January 1854. Philadelphia, Pa.

HARVEY GARNETT PHIPPS TUCKETT ranks as the most colorful personage to come to light in this study. A British army officer, he fought a celebrated duel with the patrician and paranoid Earl of Cardigan in 1840, which he lost, but which caused Lord Cardigan to be tried by his peers in the House of Lords. After recovering from his wounds, Tuckett prudently migrated to the United States where he

promptly established himself in the insurance business. A strong critic of prevailing life insurance practices, he founded his *Monthly Insurance Jour-*

nal which others continued for several years after his death. He is said to have been the first American actuary to quote separate annuity rates for men and women. His life in the United States is the subject of an 1868 *Atlantic Monthly* article, "The Sequel To An Old English State Trial."

Born	February 1819, Philadelphia, Pa.
Graduated	1839, University of Virginia
Insurance Posts Held	1852-1884. Associated with Presbyterian Ministers' Fund, with actuarial responsibilities. Became its actuary 1880.
Died	

ROBERT PATTERSON II, grandson of Robert Patterson (previously mentioned), made a study of required premiums for the Presbyterian Ministers' Fund in 1862 using the Carlisle Table with 5 percent interest. In 1884, he turned his duties over to Robert Patterson Field who later became a charter member of the Actuarial Society but withdrew after 1909.

Born	c. 1830
Graduated	
Insurance Posts Held	1856-1861. Associate editor of <i>Tuckett's Monthly Insurance Journal</i> , Philadelphia, Pa. 1862-1909. Founded and headed American Exchange and Review, Philadelphia, Pa.
Died	June 1911, Philadelphia, Pa.

JOHN A. FOWLER (FAS, 1890) was a leading insurance historian as well as an editor. His election to the Actuarial Society was perhaps largely a mark of respect after publication of his immense volume, *History of Insurance in Philadelphia For Two Centuries (1683-1882)*, from which came many of the facts in this section of this paper. He resigned from the Actuarial Society in 1894. Hence, he has no obituary in the *Transactions*.

Born	October 1834, New Berlin, Pa.
Graduated	1855, US Military Academy, West Point
Insurance Posts Held	December 1858. Appointed actuary of Penn Mutual Life. Probably served only until 1860.
Died	February 1896, Philadelphia, Pa.

LEWIS MERRILL had a long, distinguished United States army career, leading Merrill's Raiders in the Civil War and achieving the rank of General. His career in our profession was short but prominent. The *JIA*, 8, reported in May, 1859, that respect for him even at his young age was considerable at the "First American Life Underwriters Convention." Where he acquired his knowledge of actuarial matters has not been discovered, but he must have been a student of Prof. W.H.C. Bartlett (already mentioned) at West Point. In September 1859, he announced that his "American Life Agents Handbook" was about to be published in Philadelphia. His appointment to Penn Mutual was during a period of sick leave from the army which ended in 1860.

Born	October 1834, Euclid, Ohio
Graduated	1856, Amherst College
Insurance Posts Held	1864-1868. Agent, then superintendent of agencies for Mutual Life Insurance Company. 1868-1879. Secretary and actuary, later president, National Life of U.S.A. in Washington, D.C. 1872-1885. Actuary, Pennsylvania Insurance Dept. 1885-1902. General Agent, Mutual Life, St. Paul, Minn.
Died	April 1902, St. Paul, Minn.

EMERSON W. PEET had a varied career difficult to unravel, perhaps partly because for years he seems to have been in company and regulatory roles simultaneously. He began as a school teacher in Wisconsin. His company, National Life of the U.S.A., was a special breed. It was incorporated by an Act of Congress, allegedly empowering it to do business anywhere in the country without state license. However, it promptly applied for state licenses and moved to Philadelphia and

much later to Chicago.

Born	c. 1805
Graduated	
Insurance Posts Held	1865-1882. Was first actuary of Provident Life and Trust (now Provident Mutual Life Insurance) Company, Philadelphia, Pa. Retired in 1882.
Died	August 1890.

ROWLAND PARRY entered his then 4-month-old company at the age of 59, having been an editorial writer, a clerk to the Assistant Treasurer of the United States, and a Custom House official. He quickly overcame his lack of actuarial knowledge and was eulogized as "a profound student in the technique of life insurance."

of life insurance."

Born	January 1850, Sandwich, Mass.
Graduated	
Insurance Posts Held	1867-1931. Employed by Provident Mutual Life. Actuary, 1883. President, 1906.
Died	June 1931, Philadelphia, Pa.

ASA S. WING (FAS-C) served under, and then succeeded Rowland Parry (just mentioned). In the Society, he was active in writing papers and discussions and was a member of the Council, (1892-95). His obituary is in Volume 32 of the *Transactions*.

Born	1849
Graduated	Waynesburg College, Pennsylvania
Insurance Posts Held	c. 1870–1906. Employed by Penn Mutual Life. Actuary, 1880. 1874–1879. Part-time actuary of Pennsylvania Insurance Department.
Died	1915

JESSE J. BARKER (FAS-C) was one of several early actuaries who served simultaneously as a company officer and an insurance department official. At the Actuarial Society's organizational meeting in April 1889, he, by alphabetical accident, was called on to speak first about whether or not to launch that body. His expressed view was that it should be of a social rather

than a primarily professional nature.

II. ACTUARIES IN NEW ENGLAND

Born	1773, Salem, Mass.
Graduated	
Insurance Posts Held	1823–1838. Was actuary and chief executive of Massachusetts Hospital Life Insurance Company.
Died	March 1838

NATHANIEL BOWDITCH the renowned navigator and astronomer, also had been president of a nonlife insurance company in Salem, Mass. in 1804. His starting salary in 1823 (\$5,000 p.a.), far above prevailing levels, reflected his eminence and also

his full-time position. He is memorialized by a statue in Mt. Auburn Cemetery, Cambridge, and also by his immense book collection in the Boston Public Library. An account of his life by Dwight K. Bartlett, III appears in *The Actuary*, June 1979.

Born	December 1802, Boston, Mass.
Graduated	1821, Harvard
Insurance Posts Held	c. 1845. Advised organizers of State Mutual Life, Worcester, Mass.
Died	September 1883, Ocean Beach, N.J.

THEODORE RUSSELL JENCKS was an influential life insurance pioneer whose career facts have not yet fully come to light. He may have been a consulting actuary in New England. In 1843 he wrote an article, printed in *Hunt's Magazine*, entitled "Life Insurance In The United States."

In the 1850s, he was living in Boston but apparently had lost any connection with life insurance.

Born	February 1804, New Canaan, Conn.
Graduated	1826, Yale
Insurance Posts Held	1844-1856. Advised or employed by several life companies. 1856-1866. With Massachusetts Insurance Dept. Commissioner 1858. 1868-1875. Consulting actuary to many U.S. and Canadian companies.
Died	November 1885, Medford, Mass.

ELIZUR WRIGHT, as a young man, walked all the way from Ohio to New Haven in order to enroll at Yale. In later life, he exhibited the same brand of determination. During his original visit to England, he became acquainted with both the virtues and abuses of life insurance and was of a reforming cast from then on. Fackler's view that Wright could not appropriately be called an actuary is clearly at odds with the opinions of many companies

that sought his advice on actuarial matters. See H.H. Jackson's essay on Wright, *RAIA* 29, 103.

Born	April 1802, Simsbury, Conn.
Graduated	1825, Yale
Insurance Posts Held	1846-1869. Had actuarial and other duties in Connecticut Mutual Life which he founded. Elected its president, 1866. 1865. Organized Connecticut General Life.
Died	March 1869

GUY R. PHELPS was first a school teacher who became a practicing physician in New York and then Connecticut until his health deteriorated. Becoming interested in having a life company in Hartford, he founded Connecticut Mutual and later organized Connecticut General to specialize in substandard risks. He was a

strong leader and an influence for good life insurance practices.

Born	March 1812, Thompson, Conn.
Graduated	
Insurance Posts Held	1848. Became part-time actuary of State Mutual Life, Worcester, Mass. 1870-1903. Actuary of State Mutual Life.
Died	January 1903, Worcester, Mass.

WILLIAM E. STARR (FAS-C) was first a mathematics teacher, then treasurer of a small railroad. Interviewed on his eighty-seventh birthday, he said that probably no man in Worcester had made as many figures as he, and that he had "never used a counting machine, without which most actuaries

would consider themselves lost." When he died, en route to his company's annual meeting, he was said to be the oldest actuary in America and probably in the world.

Born	c. 1831
Graduated	
Insurance Posts Held	1849–1893. Was employed in actuarial and other capacities at New England Mutual Life. Elected secretary 1864, vice president 1888.
Died	January 1893, Boston, Mass.

JOSEPH M. GIBBENS, despite his long career in one company, has proved elusive as a subject for this history. Apparently, he was actuary of New England Mutual before Walter C. Wright took that post in 1866.

Born	1812, Boston, Mass.
Graduated	
Insurance Posts Held	1851–1870. Actuarial and other duties with Massachusetts Mutual Life, Springfield, Mass.
Died	July 1871, Springfield, Mass.

FRANCIS B. BACON had been in the railroad freight business before becoming “actuary and jack-of-all trades” for his then very young company. For several years he was its entire office staff, but later he was able to concentrate on mathematical duties.

Born	May 1824, Phillipston, Mass.
Graduated	
Insurance Posts Held	1856–1873. Was secretary, with actuarial duties, of Berkshire Life, Pittsfield, Mass.
Died	August 1889, Pittsfield, Mass.

BENJAMIN CHICKERING had been in mercantile pursuits before being chosen secretary and treasurer of his company. He took part in the first “Convention of Life Underwriters” in 1859, reported in *JIA*, 8. After his resignation from Berkshire Life, he was

employed outside the insurance business.

Born	1842, Dorchester, Mass.
Graduated	
Insurance Posts Held	1858–1866. In Massachusetts Insurance Dept. assisting her father. 1866–1867. Actuary of Union Mutual Life, then in Boston, Mass.
Died	May 1867, Medford, Mass.

LUCY JANE WRIGHT, Elizur’s daughter, mastered college mathematics without attending college, learned life insurance mathematics as assistant to her illustrious father, and became America’s first, and possibly the world’s first, woman actuary at age 24. Her career, sadly so brief, is described in *The Actuary*, June 1980.

Born	June 1821, Norwich, Conn.
Graduated	Brown, 1845
Insurance Posts Held	1859-1877. Mathematician of Charter Oak Life, Hartford, Conn. 1875-1882. Independent work supervising a mortality study published in 1881. Continued interest and possibly employment till end of century.
Died	April 1912, Norwich, Conn.

LEVI W. MEECH was originally a school teacher, then employed in the United States Coast Survey. During the 1360s, he constructed what was said to be the first general U.S. life table from the census data of 1830, '40, '50 and '60. In 1869, the editor of *JIA* called him a leading American actuary and a "familiar name." He became the first American actuary to supervise

a thoroughly organized intercompany mortality investigation, though apparently little was done with the resulting table. His company, Charter Oak Life, had been among early industry leaders but got into financial difficulties in the 1870s and failed in 1886.

Born	c. 1827
Graduated	
Insurance Posts Held	1864-1892. In Phoenix Mutual Life, Hartford, Conn. Was its actuary, at least between 1864 and 1869.
Died	October 1906, Hartford, Conn.

JAMES F. BURNS had many duties besides actuarial ones in his company. His career is not well documented. After leaving the company, he was on the accounting staff of a Hartford department store.

Born	March 1829, Montpelier, Vt.
Graduated	
Insurance Posts Held	1865-1897. With National Life, Montpelier, Vermont. Was its actuary till 1889.
Died	October 1900, Montpelier, Vt.

EDWARD DEWEY was a brother of Admiral George Dewey of the Battle of Manila fame. Also, he was son of the founder of his company. We have been given no details of his actuarial work.

Born	May 1824, Greenfield, Mass.
Graduated	
Insurance Posts Held	? - 1865. Nonactuarial posts in Charter Oak Life. 1865-1866. Actuary of Connecticut Mutual Life. 1866-1901. With newly formed Connecticut General Life. President 1876.
Died	April 1901, Hartford, Conn.

THOMAS W. RUSSELL, originally in the drygoods business, became a member of the Connecticut General Assembly and a nonactuarial employee of Charter Oak Life. He was chosen by Dr. Guy Phelps to do actuarial work for Connecticut Mutual and then to be actuary of Connecticut General when that company was organized to insure people in poor health.

Thus he was a pioneer actuary in the field of insuring substandard lives.

Born	August 1837, Waterford, Maine
Graduated	(Attended University of Michigan)
Insurance Posts Held	1866-1869. Assistant secretary at Berkshire Life, Pittsfield. 1870-1905. With Connecticut Mutual Life, Hartford, President 1878.
Died	March 1905, Hartford, Conn.

JACOB L. GREENE may or may not qualify as having been an actuarial practitioner. Evidently, he had a solid understanding and appreciation of life insurance mathematics and became an outstanding leader in our business. His stand against what he saw as bad industry practices in the 1870s and beyond was unyielding.

Born	April 1833, Windham, Conn.
Graduated	
Insurance Posts Held	1866-1874. Actuary of Travelers, Hartford. 1874-1876. Secretary and actuary of Hartford Accident Insurance Company.
Died	1894

GEORGE B. LESTER's perhaps promising career at Travelers ended abruptly when his involvement, though apparently not as the leader, in a plan to launch a competing company, came to light. After that new company failed, he seems to have left the insurance business.

Born	August 1846, Medford, Mass.
Graduated	
Insurance Posts Held	1866-1900. Actuary of New England Mutual Life, Boston. 1900-1917. Consulting actuary, Boston.
Died	1917

WALTER C. WRIGHT (FAS-C), Elizur's son, was active in exchanges of views on actuarial questions both before and after the Actuarial Society came into being. At the Society's fiftieth anniversary observance (TASA, XL), Robert W. Huntington described him as one of the most picturesque of our charter members, and "one who did not let convenience or business advantage interfere with theory." The illustration of this, given by Mr. Huntington, is entertaining: "The dividends of the New England Mutual used to be calculated by Mr. Wright on a formula of his own. . . even if the difference in total earnings from one year to another was only a few dollars, the dividend on every policy had to be recalculated."

Born	October 1839, New Haven, Conn.
Graduated	
Insurance Posts Held	1867-1897. Bookkeeper, then actuary, then chief manager of Hartford Life and Annuity Company. 1897-1899. President of National Life Association.
Died	February 1900, Hartford, Conn.

STEPHEN BALL held the post of actuary of his company as early as 1870. He was said to have brought his company to the front rank of kindred life companies. After thirty years, he was persuaded to help salvage another beleaguered company, but it was too far gone. His final illness was attributed to exposure at a well-remembered

sound-money parade in Hartford in October 1896.

Born	1833
Graduated	
Insurance Posts Held	1867. Actuary, Travelers, Hartford. 1868-1869. Actuary and assistant secretary, Connecticut Mutual Life. 1871 and again 1875. Actuary of New York Insurance Dept. 1872-1874. Actuary of Life Association of America, St. Louis, Mo.
Died	December 1896, New York, N.Y.

EDWIN W. BRYANT (FAS, 1890) turned up in a host of brief roles. Four years after being elected to Society membership, he withdrew because of illness.

Born	April 1834, Rhode Island
Graduated	1855, Yale
Insurance Posts Held	1867-1924. First actuary of Aetna Life, Hartford, Conn.
Died	September 1924, Hartford, Conn.

HOWELL W. ST. JOHN (FAS-C) comes through, by reputation and appearance, as a gentle actuary. His term as actuary of his company extended through fifty-seven years. His death resulted from being hit by a train at the age of 90. He was elected the third

president of the Actuarial Society.

Born	
Graduated	
Insurance Posts Held	Consulting actuary.
Died	

WILLIAM SHEFFLER (or SCHEFFLER) may have been one of Hartford's earliest consulting actuaries. His name has turned up several times in reports during the 1860s, but no collateral information has yet been uncovered. In the 1869 Hartford City

Directory, he is listed as a predecessor of Stephen Ball at Hartford Life and Annuity Company, but this was perhaps in a consulting capacity.

Born	February 1850, Prussia
Graduated	
Insurance Posts Held	1868. With William Sheffler in consulting firm. 1868-1932. With Aetna Life, Hartford, Conn. Actuary 1918.
Died	March 1938

MAXIMILIAN H. PEILER (FAS, 1890) came to the United States at the age of 18, went to Hartford almost immediately, and became associated with William Sheffler. He then began a seventy year career at Aetna, mostly in the shadow of Howell St. John. He is credited with having developed, in 1893, the original "Insurance With Life Income" policy.

Born	c. 1839, West Granville, Mass.
Graduated	
Insurance Posts Held	1868-1879. Actuary, then assistant secretary, Charter Oak Life, Hartford, Conn.
Died	June 1903, Meriden, Conn.

WILLIAM L. SQUIRE, successor to Levi Meech at Charter Oak Life, has left just isolated traces. While that company was in what proved to be its death throes, he moved to New York to become treasurer of the New York, New Haven and Hartford Railroad but continued as a director of the declining life insurance company.

Born	
Graduated	
Insurance Posts Held	1869-1878. With Union Mutual Life, then in Boston. Its actuary 1876.
Died	

DAVID L. GALLUP, of whom little is known, was successor to Lucy Jane Wright as actuary of Union Mutual Life, at that time a Boston company.

Born	June 1848, Hartford, Conn.
Graduated	1869, Yale
Insurance Posts Held	1869-1871. With Connecticut Mutual Life. 1871-1874. First actuary of Connecticut Insurance Dept. 1874-1926. With Phoenix Mutual Life. President 1904.
Died	January 1926, Hartford, Conn.

JOHN MARSHALL HOLCOMBE (FAS-C) had a distinguished career. He was first an early actuary in the regulatory field. He was then with Phoenix Mutual which he was instrumental in converting from a stock to a mutual company. He delivered a series of lectures on life insurance at his alma mater.

Born	April 1836, New York, N. Y.
Graduated	1855, College of City of New York
Insurance Posts Held	1869-1873. Actuary of Massachusetts Mutual after brief time as that company's agent. 1873-1879. Actuary of Penn Mutual Life, Philadelphia, Pa.
Died	January 1905, Easton, Pa.

JAMES WEIR MASON (FAS, 1889) first became a school teacher. In 1862, he was principal of the Yonkers High School. After his actuarial service with two companies, he returned to the College of the City of New York (CCNY) as professor of mathematics and, thus, became the first Society member in academia. He took little part

in Society discussions.

Born	August 1852, Boston, Mass.
Graduated	
Insurance Posts Held	1869-1873. Employed at New England Mutual Life, Boston. 1873-1894. Secretary and actuary at John Hancock. 1894-1923. At Metropolitan Life, New York City, first secretary then third and later second vice president.
Died	July 1923

GEORGE B. WOODWARD (FAS-C) delivered the briefest remarks at the organizational meeting of the Actuarial Society, and he appears to have maintained that tendency to reticence throughout his long Society career. He was a member of its Council in 1913.

Born	October 1840, New York, N. Y.
Graduated	1859, College of City of New York
Insurance Posts Held	1870-1872. In D.P. Fackler's consulting firm, New York. 1872-1914. Actuary of Massachusetts Mutual, Springfield, Mass.
Died	March 1914, Springfield, Mass.

OSCAR B. IRELAND (FAS-C), another CCNY graduate, was for some years in mercantile employment. He was the one who suggested that the Society's motto should be Ruskin's "The work of science is to substitute facts for appearances and demonstrations for impressions." During his career, he wrote, apparently in secret,

articles on life insurance for the *Springfield Republican* (daily newspaper) under the pseudonym "Samuel Sharkey." He was Society president from 1901 to 1903.

Born	c. 1827
Graduated	
Insurance Posts Held	1871-1887. Actuary of Continental Life Insurance Company, Hartford, Conn. 1891-1894. Actuary of Hartford Life and Annuity Company.
Died	February 1894

HENRY (OR HORACE) R. MORLEY, although in our profession for nearly a quarter of a century, has proved an elusive subject. His obituary maintains that "his advice was much valued in insurance circles all over the country," but no details have yet come to light.

Born	October 1852, Boston, Mass.
Graduated	
Insurance Posts Held	1872-1922. In Union Mutual Life. Actuary 1892.
Died	January 1930

SAMUEL S. BOYDEN (FAS, 1892) was in the actuarial department of Union Mutual when that company was a Boston company (until 1881) and after its move to Maine. If he contributed at all to Society discussions, his words were not recorded.

III. ACTUARIES IN NEW YORK AND NEW JERSEY

Born	April 1778, New York, N.Y.
Graduated	1797, Columbia College
Insurance Posts Held	1830-1843. Founder, first president and actuary of New York Life Insurance and Trust Company.
Died	October 1853, Staten Island, N.Y.

WILLIAM BARD, the first actuary in New York, had been in law practice. He, as early as 1803, had proposed founding a life insurance and trust company, which then would have been well ahead of the Pennsylvania Company. He was well-educated in many subjects including mathematics and was thorough in his study of life insurance matters, from English sources and from Nathaniel Bowditch. His career and views deserve fuller description in our literature.

Born	February 1798, Appenzell, Switzerland
Graduated	
Insurance Posts Held	1840-1872. Had consulting office, New York City, as accountant and actuary. Among major clients were: New York Life & Trust Company, Germania (now Guardian) Life, and Metropolitan Life.
Died	November 1872, New York, N.Y.

JOHN F. ENTZ, America's earliest consulting actuary, arrived in the United States in 1829. Originally in Charleston, SC, he then went into business in New York City as an accountant in 1840. By 1847, he had written a thorough essay on actuarial matters. By 1859, his prestige was such that he was elected an honorary member of the "First American Life Underwriters Convention." At that time,

he was consulting actuary to the New York Life Insurance and Trust Com-

pany. The last of many Entz papers, "The Mysteries and Blunders of Life Insurance," was published in the month he died. See the article by John C. Angle in *The Actuary*, October 1981.

Born	April 1798, Salem, N.Y.
Graduated	
Insurance Posts Held	1845-1863. Organized Nautilus Life (later renamed New York Life) Insurance Co. Served as its president and actuary. Resigned 1863. 1864-1879. Organized and led Globe Mutual Life Insurance Company, New York.
Died	May 1879, Ravenswood, N.Y.

PLINY FREEMAN was first a clerk in a country store, then entered retail business on his own and became a prominent New York City merchant. Before organizing, in 1845, the company that is now New York Life, he made an exhaustive study of life insurance. In 1849 he drafted, for New York state, the first general insurance law ever enacted in the United States.

It required a \$100,000 deposit with the Superintendent of Insurance. In his later years, he became a controversial character, resigned from his company under pressure and formed another company.

Born	October 1805, Staxton, Yorkshire, England
Graduated	
Insurance Posts Held	1849. Briefly, mathematician at Mutual Benefit Life Insurance Co., Newark, N.J. 1849-1855. Actuary of Mutual Life Insurance Company of New York.
Died	October 1855, New York, N.Y.

CHARLES GILL was a first class mathematician who greatly influenced our profession in his short actuarial career. Coming to the United States in 1830, he was first a schoolteacher, then a mathematics professor at Flushing Institute. In 1852, he produced a mortality table, precursor to the American Experience Table, derived from the Carlisle and Actuaries' Tables. A paper of his appears in the first volume of *JIA*, a sketch of his career in the sixth volume, and a full biography by Emory McClintock in *TASA*, XIV and XV.

per of his appears in the first volume of *JIA*, a sketch of his career in the sixth volume, and a full biography by Emory McClintock in *TASA*, XIV and XV.

Born	c. 1812, England
Graduated	
Insurance Posts Held	1852 (or earlier) - 1872 or beyond. Actuary of United States Life Insurance Company, New York City.
Died	Unknown, possibly c. 1885

NICHOLAS G. DE GROOT, son of a London actuary named Nicholas Grut, seems to have made his early home in Scotland. He probably crossed the Atlantic in 1849 and changed his name for the benefit of the Americans. He was active in cooperative work with other actuaries using actuarial skills presumably learned from his father. In

other actuaries using actuarial skills presumably learned from his father. In

1852, he was already established in New York and worked with Charles Gill "in improving valuations of policies."

Born	April 1823, Philadelphia, Pa.
Graduated	
Insurance Posts Held	1851-1892. In New York Life Insurance Company. Had title of actuary 1864-1885, though largely left duties to subordinates. Was president, 1885-1892.
Died	November 1893, New York, N.Y.

WILLIAM H. BEERS was originally employed in a Philadelphia firm, and then was a paymaster in the U.S. Navy. He started his New York Life Insurance Company career as an accountant. His post as actuary probably was only part-time. His resignation from the company presidency was under heavy insurance department pressure

and adverse publicity. He was one of the trio later named by Fackler as having unknowingly delayed the Actuarial Society's founding.

Born	March 1813, Berne, N.Y.
Graduated	1836, Rutgers
Insurance Posts Held	1851-1863. Mathematician at Mutual Benefit Life Insurance Company, Newark, N.J. 1863-1869. President and actuary of New Jersey Mutual Life Insurance Company.
Died	January 1892

JOSEPH P. BRADLEY was our most famous forebear. His early career was in teaching. He was admitted to the New Jersey bar in 1839; in 1870, President Grant appointed him a justice of the U.S. Supreme Court. In 1876, he umpired the Hayes-Tilden contest for the U.S. presidency. His is known, incidentally, for having declared, presumably from the bench, that women's mission and destiny are to fulfill the noble and benign offices of wife and mother, this, he said, being the law of the Creator.

the Creator.

Born	October 1818, Colchester, Conn.
Graduated	
Insurance Posts Held	1835- ? . Office boy in Mutual Life of New York. ? -1849. New York general agent for Connecticut Mutual Life. 1850-1861. First actuary of Manhattan Life Insurance Company, becoming its president, 1854. 1861-1874. Founded and became president, North American Life, New York
Died	September 1895, Cooperstown, N.Y.

NATHAN D. MORGAN, after his stint at Mutual Life, went to California, and is said to have been one of the founders of the city of Sacramento. In his personal study of actuarial science, he is known to have sought help and advice from Elizur Wright.

Born	April 1831, Baltimore, Md.
Graduated	(Attended Harvard)
Insurance Posts Held	1855-1871. Actuary, Mutual Life, N.Y. Resigned in dispute with president. 1871-1875. Consulting actuary, N.Y. 1875-1895, President, Provident Savings Life Assurance Society. 1895-1898. Again a consulting actuary.
Died	January 1898, New York, N.Y.

SHEPPARD HOMANS (FAS-C) left his vocation in astronomy to become Mutual Life's actuary when Charles Gill died suddenly. He was cordially received when he visited English actuaries in 1861 to study methods of surplus distribution, leading to his contribution system in 1868. His years at Mutual Life must have been hectic, with a volatile president (F. S. Winston) and a lively assistant (D. P. Fackler). Homans' departure from Mutual Life was involuntary. He

founded Provident Savings Life in the belief that life insurance could be successfully sold by salaried employees. He served as the Actuarial Society's first president. His death was from heart failure caused by running to catch a street car. (For Homans's work on the American Experience Table, see S.A. Joffe, *TASA*, XII and XIV.)

Born	October 1835, Boston, Mass.
Graduated	1854, Harvard
Insurance Posts Held	1857-1860. Employed in actuarial department, Mutual Life of New York. 1860-1904. Secretary and actuary of newly formed Washington Life Insurance Company of New York. Elected its president, 1879.
Died	December 1922, Orange, N.J.

WILLIAM A. BREWER, JR. was the earliest New York actuary to devote his entire business career to life insurance; he was just briefly a civil engineer after graduation. His company was among the nation's largest until the turn of the century but went out of business in 1908.

Born	April 1841, Kempville, Va.
Graduated	1859, College of City of New York
Insurance Posts Held	1859-1865. Assistant to Homans, Mutual Life of New York. 1865-1924. Founded and headed his own consulting actuarial firm in New York City.
Died	October 1924, Richmond, Va.

DAVID PARKS FACKLER (FAS-C), responsible more than anyone else for founding the Actuarial Society and its second President, was a man of self-confidence and singleness of purpose. A gold medallist in mathematics at CCNY, he, it was said, would rather solve a problem in calculus than eat his breakfast. He worked with Homans in developing the contribution

system of surplus distribution and suggested the accumulation formula that bears his name. He organized North America's first major actuarial consulting firm; his son, a Society member, merged it into the Wyatt Company.

Born	November 1827, Salem, Mass.
Graduated	1847, Harvard
Insurance Posts Held	1859-1898. Actuary of Equitable Life Assurance Society, New York.
Died	September 1898, Rocky Hill, N.J.

GEORGE W. PHILLIPS (FAS-C) was a civil engineer with the Illinois Central Railroad when Prof. Benjamin Pierce of Harvard recommended him to the Equitable Society then being organized. Phillips was described as being innocent of knowledge of actuarial

science, but he must have known something about the workings of life insurance since his older brother, Willard Phillips, had founded New England Mutual Life Insurance Company nearly a quarter-century earlier. George Phillips died just before he would have been president of the Actuarial Society.

Born	1821
Graduated	
Insurance Posts Held	1860-1877. Employed by the newly formed Home Life Insurance Company, then in Brooklyn, N.Y. Appointed its actuary in 1862. Was also consulting actuary to at least three small companies.
Died	September 1877, New York, N.Y.

WILLIAM J. COFFIN's background before he joined Home Life at the age of 39 has not yet been discovered. His death notice (he had died at his desk in the office) described him as a highly intelligent, thoroughly conservative, and strictly conscientious officer and gentleman.

Born	1819, Longmeadow, Mass.
Graduated	
Insurance Posts Held	1860-1889. Actuary of Manhattan Life Insurance Company, New York.
Died	Aug. 1889, Brooklyn, N.Y.

SAMUEL N. STEBBINS (FAS-C) had been in the wholesale drug business. His is the unhappy distinction of being the first Society member to die, only four months after the organizational meeting, at which he had said, "I do not think that any of us have the slight-

est conception of what can be accomplished by this Association in the future."

Born	March 1823, Bloomfield, N.J.
Graduated	1841, Princeton
Insurance Posts Held	1863-1902. Was mathematician of Mutual Benefit Life, New Jersey, until elected its president, 1882. 1902-1913. Served as counsel of his company.
Died	January 1913, Bloomfield, N.J.

AMZI DODD first taught school in Virginia. He was admitted to the New Jersey bar in 1848. He developed the subsequently controversial nonforfeiture plan adopted by his company in 1879. Because of his opposition to slavery, he was one of the founders of the Republican Party in 1856. He was a strong opponent of the tontine system.

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Born	April 1848, Philadelphia, Pa.
Graduated	
Insurance Posts Held	1865. Was office boy in National Union Life and Limb Insurance Company, later to become Metropolitan Life Insurance Company. 1872-1922. Actuary of Metropolitan Life.
Died	January 1922

JAMES M. CRAIG (FAS-C) became an actuary by self-study while in a junior post in Metropolitan Life's progenitor company. He was elected the Society's fourteenth President and was the first of three generations of Craigs to be Fellows.

Born	February 1844, Pa.
Graduated	
Insurance Posts Held	1865-1910. Employed in Equitable Life Assurance Society, New York. Appointed assistant actuary 1872, actuary 1898. Retired 1910.
Died	December 1918, Summit, N.J.

JOEL G. VAN CISE (FAS, 1890) was assistant to, and in the shadow of, George W. Phillips from the early days of the Equitable Society and into the era of the Actuarial Society. He was active in presenting Society papers and discussions.

Born	
Graduated	
Insurance Posts Held	1865 (?) - 1877 (?). Actuary of Universal Life Insurance Company, 69 Liberty Street, New York City.
Died	

GEORGE L. MONTAGUE was an actuary about whom we have no solid information. He is given listing here because his company is said, by the authoritative actuary Walter S. Nichols, to have been, during his incumbency, the first to print guaranteed cash

values in its policies. His company started in 1865, but lasted only until 1877. At the fourth International Congress (1903), D.P. Fackler said the company made a specialty of insuring impaired lives, had a very unfortunate

mortality experience in its first few years and then gave up this branch of the business. Fackler attributed its bad results to lack of judgment by its local medical examiners, particularly in small towns.

Born	April 1847, New York, N.Y.
Graduated	
Insurance Posts Held	1866–1929. Employed by Home Life Insurance Company, New York. Actuary, 1877, President 1919, Chairman of the Board, 1924. Retired 1929.
Died	September 1931.

discussion throughout forty-two years of fellowship. He was associated with his company for sixty-five years.

WILLIAM A. MARSHALL (FAS-C) had been a mathematics teacher. He is noteworthy for having become a charter member though having made no comment in the roundtable discussion at the Society's organizational meeting and then for having written no paper and presented no (printed) discussion throughout forty-two years

Born	August 1843, Westfield, N.J.
Graduated	1865, New York University
Insurance Posts Held	1866–1879. In actuarial departments of New York Life and Equitable Society. 1879–1905. Actuary of Washington Life Insurance Company, New York. 1905–1908. Consulting actuary and insurance journalist.
Died	September 1908, Plainfield, N.J.

ISRAEL C. PIERSON (FAS-C), a Ph.D., was appointed secretary at the Society's organizational meeting, and continued in that post for ten years. He was Society president from 1903–04. He presided over the fourth International Congress in New York in 1903. He held fellowships in the American Statistical Society, the New York Academy of Science and the New York Mathematical Society.

Born	April 1828, Boston, Mass.
Graduated	1847, Harvard
Insurance Posts Held	1867–1868. Employed as assistant to the actuary, Equitable Society, New York. 1868–1883. Mathematician of New York Life Insurance Company
Died	July, 1883, Wareham, Mass.

PRESTON S. LINCOLN had been an engineer engaged mainly in railroad building for eighteen years after graduation. George W. Phillips, a Harvard classmate, recruited him in 1867 to be his assistant, but only a year later, New York Life appointed him as their mathematician.

Born	September 1845, New York, N.Y.
Graduated	1864, College of City of New York
Insurance Posts Held	1867- c.1873. Actuary of Guardian Mutual Life Insurance Company (not present company of that name). 1896-1906. Actuary and counsel, Hartford Life Insurance Company. 1906-1913. Actuary, United States Annuity and Life Insurance Company, Chicago.
Died	March 1913, Chicago, Ill.

LUCIUS McADAM alternated between the actuarial and legal professions. After Guardian Mutual's failure, he qualified for the New York bar and in 1896, went to his second life company as both actuary and counsel. In his third company, he was actuary only. He never joined the Actuarial Society but was a charter member of the American Institute of Actuaries and its first president. His obituary (*RAIA* II) is possibly the least informative of any written about a leading actuary.

Born	1849, Newark, N.J.
Graduated	(Attended Rutgers)
Insurance Posts Held	1867-1905. In Mutual Benefit Life Insurance Company, Newark, N.J. Actuary, 1871; mathematician, 1882.
Died	April 1905, Newark, N.J.

BLOOMFIELD J. MILLER (FAS-C) was accorded this description by Robert W. Huntington at the Actuarial Society's half-century observances (*TASA*, XL, 125), "To my somewhat youthful imagination there was never a more charming man than he. He had lost

one arm and was so clever with the one that was left that his loss accentuated his fascination. He overflowed with kindness, and it seemed to me as if this feeling of charity towards all had overflowed into the dealings of the company toward their policyholders to a rather dangerous extent." Miller was the first among three of his surname to head the Society (1897-1898).

Born	1848
Graduated	1865, Union College
Insurance Posts Held	1867-1917. Employed in New York Insurance Department, Albany, N.Y. Appointed actuary, 1883.
Died	1917

JOHN S. PATERSON (FAS, 1890) shares with A. K. Blackadar (Dominion of Canada) and J. H. Sprague (Connecticut) the distinction of being the first insurance department officials elected Fellows of the Actuarial Society. Paterson, though, seems to have

been the least active of the trio in our affairs. His father, JOHN PATERSON (1801-1883), served as actuary of The New York Insurance Dept. in 1862-1874, and as consulting actuary to at least three small life companies.

Born	August 1846, Newark, N.J.
Graduated	
Insurance Posts Held	1867–1925. Employed in New York Life Insurance Company. Mathematician, 1885; actuary 1903. Ill health retirement, 1925, when served as company's consulting actuary.
Died	April 1930, Tarrytown, N.Y.

RUFUS W. WEEKS (FAS-C) was grandson of abolitionist Rev. William R. Weeks, and son of an actuarial clerk at Mutual Benefit Life, Robert D. Weeks. Rufus Weeks described himself as a "Christian Socialist." His company's obituary called him "a cloistered student, thinking and planning for the interests of his company

and the profession as a whole." He was president of the Actuarial Society in 1905.

Born	September 1840, Carlisle, Pa.
Graduated	1859, Columbia College of New Jersey
Insurance Posts Held	1868–1871. Actuary, Asbury Life Insurance Company of New York. 1871–1889. Actuary, Northwestern Mutual Life Insurance Company, Milwaukee, Wis. 1889–1911. Actuary, Mutual Life Insurance Company of New York.
Died	1916

EMORY McCLINTOCK (FAS-C) began as a mathematics instructor at Columbia College of New Jersey, studied chemistry in Germany, then was successively American Consul in Yorkshire and a bank official in Paris. He earned fellowship in the Institute of Actuaries, 1874. Throughout his long career, he was a prodigious writer on actuarial subjects. He was elected president of the Actuarial Society for 1895–96. A paper of his on annuitant mortality is in *JIA*, 18 (1874). He was

reported to be displeased with humor at Society meetings.

Born	February 1843, Bath, Maine
Graduated	
Insurance Posts Held	1868–1877. Employed in Metropolitan Life after experience with its predecessor company. Actuary, 1872. Resigned 1877, then associated with Mutual Life of New York.
Died	c. 1908

WILLIAM P. STEWART, at first an artist and inventor, was responsible for getting Metropolitan Life into tontine activity in 1872. In later life, his major activity was in instructing and training agents and writing textbooks for agents. Referred to as Prof. Stewart, his public addresses have been published in book format.

Born	February 1848, Cologne, Germany
Graduated	
Insurance Posts Held	1869–1925. Employed in Germania (later Guardian) Life Insurance Company, New York. Actuary, 1871; president, 1915; chairman of board, 1920.
Died	1925

HUBERT CILLIS (FAS-C) came to the United States from Germany in 1869 to do actuarial work for the then Germania Life. He seems to have been another of the few completely silent members of the Actuarial Society's early days.

Born	1841, London, England
Graduated	(Attended Cambridge University)
Insurance Posts Held	1879–1883. In actuarial department, New York Life Insurance Company. 1883–1911. In actuarial department, Equitable Life Assurance Society, New York City.
Died	1911

ROBERT G. HANN (FAS, 1890) had a previous actuarial career in England, being elected associate of the Institute of Actuaries in 1869. He was active in writing papers and contributing discussions to the Actuarial Society.

Born	November 1841, Newark, N.J.
Graduated	1863, Princeton
Insurance Posts Held	c. 1870–1921. Journalist with Insurance Monitor, New York City, with keen interest in mathematics and legal matters. Was also for some time a consulting actuary.
Died	February 1921, Newark, N.J.

WALTER S. NICHOLS (FAS, 1889) was highly respected in actuarial and insurance circles for many years. He had a paper in *JIA* in 1875, and a long list of contributions to the *Transactions*. He wrote "Annals of American Insurance, 1771 to 1876" for the 1876–77 issue of the *Insurance Blue Book*.

At the second International Congress (London 1898), he delivered a scholarly paper gracefully closing a controversy of nearly forty years duration between British and American actuaries on the merits of gross premium valuation. At some time he lectured on insurance at Yale. His accomplishments and his influence in our profession deserve a paper of their own.

Born	September 1804, Lancaster City, Pa.
Graduated	1826, U.S. Military Academy, West Point
Insurance Posts Held	1871-1888. Actuary, Mutual Life Insurance Company of New York. After retirement at the age of 84, held title of advisory actuary.
Died	February 1893, Yonkers, N.Y.

WILLIAM H. C. BARTLETT began a notable actuarial career after others would have retired. On the West Point faculty for thirty-seven years, his students included Robert E. Lee and Jefferson Davis. His most famous textbook appeared in 1853, *Elements of Analytical Mechanics*. It is said, and was borne out by the available record, that he "did not always see eye to eye

on actuarial matters with other actuaries." It was largely on his account that formation of the Actuarial Society was delayed. His appointment as actuary of Mutual Life was the direct result of his involvement in a dispute between that company's president, F. S. Winston and his actuary Sheppard Homans described by Ardian Gill in *The Actuary*, May 1984.

Born	September 1846, Boston, Mass.
Graduated	
Insurance Posts Held	1869-1877. Actuary, Continental Life Insurance Company, New York. 1877-perhaps 1885. Consulting actuary, Boston.
Died	December 1913, Wellesley Hills, Mass.

SETH C. CHANDLER, JR. was one of several famous astronomers who spent some time in the actuarial field. It is said that, needing money to get married, he "found his mathematical skills eagerly put to use in the life insurance industry." Although not a graduate of Harvard, he spent some time there as a teenager. Within a remarkably short time after entering our profession, he had two papers, one of them on constructing a mortality table from limited data, printed in *JIA*, 17 (1873).

Born	c. 1844, New York
Graduated	
Insurance Posts Held	1871-1910. Served, apparently intermittently, in New York Insurance Department. Held title of actuary between 1873 and 1882.
Died	

DAVID H. KEEFER had a lengthy career in insurance regulation, but facts so far are sparse.

Born	August 1832, Northampton, N.Y.
Graduated	1856, University of Michigan
Insurance Posts Held	1874-1877. Served as advisor during organizational and early operating years of Prudential Insurance Company, Newark, N.J.
Died	January 1921, Springfield, Mass.

JOHN EMORY CLARK is listed by Prudential as its first actuary. It appears, though, that their first and second (Fackler) were consulting actuaries only. We have no evidence that Prof. Clark, who taught mathematics at the Sheffield Scientific School at Yale, ever went to Newark unless it was to collect his honorarium that the infant company was slow to pay. He prepared tables for the company from experiences on ordinary life insurance, recognized later as unsuitable for the industrial business.

IV. ACTUARIES ELSEWHERE IN THE U.S.A

Born	March 1810, Danville, Pa.
Graduated	1829, Jefferson College
Insurance Posts Held	1848-1869. Was actuary of Southern Mutual Insurance Company of Georgia, and a consultant to other life companies. 1871-1889. Was the first actuary of Maryland Insurance Dept.
Died	March 1889, Baltimore, Md.

CHARLES F. McCAY was a professor of mathematics, first at Lafayette College, then at University of Georgia. He became a company actuary and then a consulting actuary. For four years, he was a mathematics professor at the University of South Carolina. He rose to hold a stormy and controversial presidency of that school. He was keenly interested in mortality table construction and is credited with ultimate mortality table in the United States.

having produced the first select and States.

Born	July 1823, New York
Graduated	1844, Hamilton College, N.Y.
Insurance Posts Held	1849. Opened office in Boston as "actuary and electrician." 1855-1861. Worked for Boston life companies and state of Massachusetts. 1861-1881. Employed by U.S. Sanitary Commission as actuary, then in Treasury Department. 1881-1888. Was the first U.S. Government Actuary.
Died	May 1888, Washington, D.C.

EZEKIEL B. ELLIOTT is famous as the first U.S. Government Actuary. (See Robert J. Myers, *TSA*, VI (1954), 488.) From his alma mater, we have a vivid description of his habits and physique. At five foot four he weighed three hundred pounds. John K. Gore, FAS said that Elliott had the title of Actuary for the Ninth Census of the United States (1870).

Born	April 1798, Portland, Maine
Graduated	
Insurance Posts Held	1864-1871. Employed at Northwestern Mutual Life Insurance Company, becoming its actuary in 1867.
Died	May 1886

EDWARD ILSLEY, an actuary only after the age of 69, may be the earliest actuary to have been forced out of office by his company's agency force. After that, he was employed as an accountant in a Milwaukee bank.

Born	April 1832, Northampton, Mass.
Graduated	
Insurance Posts Held	1864-1867. Performed statistical work for U.S. Sanitary Commission, Washington, D.C. 1868-1871. Was actuary of Hahnemann Life Insurance Company, Cleveland, Ohio.
Died	May 1920, Cleveland, Ohio

JOHN N. STOCKWELL was another astronomer who gave part-time service to the actuarial profession for financial reasons while he was pursuing his research. While in Washington at the U.S. Sanitary Commission, he must have met Ezekiel Elliott and learned from him about actuarial possibilities. He also met an influential Clevelander

there named Leonard Case. When Stockwell returned to Cleveland, Mr. Case gave him material encouragement which evidently included employment in the life insurance company that had recently started in that city. He seems to have constructed a mortality table for that company, which however went out of business by reinsuring its risks in 1871.

Born	October 1833, Leesburgh, Va.
Graduated	1854, University of Virginia
Insurance Posts Held	1866-1880. Actuary of Piedmont and Arlington Insurance Company. 1880-1890. Actuary of Life Insurance Company of Virginia.
Died	July 1890, Richmond, Va.

EDWARD B. SMITH (FAS-C) had taught mathematics at the University of Virginia, and then was a lieutenant-colonel in the Confederate Army (and a prisoner-of-war). Afterwards, he was a mathematics professor at Richmond College, becoming an actuary at the age of 33.

Born	August 1846, Massachusetts
Graduated	1863, Westfield Academy
Insurance Posts Held	1867-1881. Was secretary and performed actuarial and other duties for Union Central Life Insurance Company, Cincinnati, Ohio
Died	July 1916

NORMAN W. HARRIS had been the Cincinnati representative of an eastern insurance company. He was a self-trained actuary who also handled most of his company's administrative work and still managed to sell policies and recruit agents. When he left the company, he went to Chicago and formed

what is now the Harris Trust Company.

Born	August 1847, Baltimore, Md.
Graduated	
Insurance Posts Held	1868- ? . Assistant secretary, and later actuary, of Maryland Life Insurance Company. 1904-1916. Actuary, part time, of Maryland Insurance Department.
Died	1916

CLAYTON C. HALL (FAS-C) taught himself actuarial science with help from Sheppard Homans. He was one of the five actuaries whom history credits with having taken the initiative in early 1889 to launch the Actuarial Society. Known as Colonel Hall, doubtless from military experience, his qualities were warmly described by the Maryland In-

urance Commissioner.

Born	(A.F.H.) 1830, Watertown, N.Y.
Graduated	
Insurance Posts Held	(W.E.H.) 1871 (?)- ? . Actuary of Illinois Insurance Department and of St. Louis Mutual Life, St. Louis, Mo. (A.F.H.) 1870-1900. Actuary of Missouri Insurance Department and consulting actuary for companies.
Died	(A.F.H.) 1900

WILLIAM E. HARVEY and AUGUSTUS F. HARVEY (FAS, 1890) possibly were brothers. At least their insurance careers were strikingly similar, and it is sometimes hard to know which of them is being written about. Both served simultaneously in company and insurance department positions.

Born	June, 1845, Hamilton, Ohio
Graduated	1863, Farmer's College, Ohio
Insurance Posts Held	1869-1916. Employed at Union Central Life Insurance Company, Cincinnati, Ohio. Became its actuary in 1888.
Died	June 1916

ELBERT P. MARSHALL (FAS-C) entered life insurance after brief war-time service in the U.S. Navy. He was active in Society affairs. At the Society's twentieth anniversary observance, he spoke feelingly about how deeply he treasured the inspiration he

got from the men of high ideals and attainments who founded the Actuarial Society.

V. ACTUARIES IN CANADA

Born	1818, Ireland
Graduated	
Insurance Posts Held	1847-1859. Founder, first president and first actuary of Canada Life Assurance Company, then of Hamilton, Ontario.
Died	March 1859, Savannah, Ga.

HUGH C. BAKER came to Canada in 1832, and was a banker in Hamilton, Ontario when he decided to bring his country into the life insurance business. He himself had travelled all the way to New York to buy personal life insurance. In 1852, he became North America's first Fellow of the Institute

of Actuaries. It was ill health that took him to Georgia where he died of tuberculosis.

Born	January 1830, Scotland
Graduated	
Insurance Posts Held	1846-1859. In several U.K. insurance companies. 1859-1900. Manager of Canada Life. Elected president 1875.
Died	December 1915, Hamilton, Ont.

ALEXANDER G. RAMSAY (FAS, 1893) had already filled four posts, although only 29 years old when a delegation came to Glasgow to invite him to succeed the deceased Hugh Baker. At age 16, he was in the Colonial Life of Edinburgh, next he took charge of the London office of Standard Life of Edinburgh. Then he was briefly with the North British and Mercantile. When the Canadians arrived, he was secretary of the Scottish Amicable, Glasgow. By the time the Actuarial Society was formed, he had ceased to have close connections with actuarial work. If he was invited to the Society's organizational meeting, he did not respond. He joined four years later but in 1901 withdrew from both the Society and the Institute in which he had been a fellow since 1864.

Born	1834, Aberdeen, Scotland
Graduated	
Insurance Posts Held	1870-1897. Manager and first actuary of Ontario Mutual Life (now Mutual Life) Assurance Company of Canada, Waterloo, Ont.
Died	1917, Waterloo, Ont.

WILLIAM HENDRY (FAS-C) came to Ontario at age two. He came under the influence of one James McQueen, an educator who advocated life insurance by the mutual system. But that may not have been Hendry's first acquaintance with life insurance; a William Hendry, possibly of the same family, had in 1820 written a textbook on life annuities and assurances. After the younger William became Ontario Mutual's first actuary he visited Boston to obtain guidance from Elizur Wright.

Born	April 1823, Yorkshire, England
Graduated	1845, Cambridge University
Insurance Posts Held	1871-1874. Actuary of Confederation Life Association, of which he had been an incorporator. 1875-1885. Superintendent of Insurance of Dominion of Canada, Ottawa.
Died	June 1908, London, England

JOHN B. CHERRIMAN came to Canada in 1850 to join the mathematics faculty at the University of Toronto. From 1853 to 1875 he was professor of mathematics and philosophy there. After his brief part-time service with Confederation Life, he accepted federal appointment as Canada's first Superintendent of Insurance. (See Kenneth R. MacGregor's discussion, *TSA*, VI, 501.) In 1875, he was elected a Fellow of the Institute of Actuaries. In 1885, he retired on account of ill health and returned to England.

Born	1835, Picton, Ont.
Graduated	1863, University of Toronto
Insurance Posts Held	1871-1875. General Manager of Confederation Life Association, Toronto. 1879-1903. General Manager of North American Life Assurance Company, Toronto.
Died	1903

WILLIAM McCABE (FAS-C) had been a school teacher, then a high school principal, then a member of a Toronto law firm. In 1875, he became a Fellow of the Institute of Actuaries. At the Actuarial Society's organizational meeting, he said, "I think the more closely we follow the organization either of the Actuaries of Scotland

or of the Actuaries of Great Britain, the more successful our organization is likely to be."

Born	September 1846, Surrey, England
Graduated	1869, Cambridge University
Insurance Posts Held	1875-1884. Actuary of Confederation Life Association, Toronto.
Died	October 1894, Toronto, Ont.

CHARLES CARPMAEL was an eminent mathematician as well as a lawyer who had been admitted to the bar of London's Middle Temple and had been president of the Royal Canadian Astronomical Society. When appointed to succeed J. B. Cherriman at

Confederation Life, he was Deputy Superintendent of Canada's Meteorological Service. He attempted to combine his life insurance and governmental posts but eventually found the pressure too great and resigned from the former.

DISCUSSION OF PRECEDING PAPER

CHARLES G. GROESCHELL:

Mr. Moorhead has performed a great service for the actuarial profession in producing this paper. He has summarized his prodigious and exhaustive study most succinctly. It will certainly be referenced and enjoyed by actuaries and others for years to come.

The study is extremely authoritative. I doubt whether any worthy name has been missed. All anyone might do now is add a few interesting details here and there that might make the historical picture a little clearer.

One of these details can be found in *Things Agents Should Know*, written in 1900 by Miles M. Dawson, FAS (1904). Under the heading, "The First Actuary in the United States," he gives his personal thoughts and impressions on the subject. He also includes a quote by one of Mr. Moorhead's sketches who claims to be the first actuary:

The title was claimed definitely by N. G. DeGroot, who says in a letter to the American Life Assurance Magazine, dated December 9, 1872: "I am the oldest actuary in the United States, have acted professionally in London and elsewhere since 1826, and having been actuary of one of the New York companies from 1851 to 1868."

One might think that Mr. DeGroot's estimated date of birth (c. 1812) should probably be pushed back a little, but he probably did start his actuarial career at the tender age of fourteen as an apprentice to his father who also was an actuary.

Mr. Dawson also stated that Charles Gill performed the duties of the actuary "practically" for the Mutual Life Insurance Company since the beginning of the company in 1843. But, like many of us have also done, he implicitly gives the title to Elizur Wright:

. . . the fact remains that before Elizur Wright began his crusade, the country was without a person who actually achieved a high reputation on account of his actuarial attainments.

In the sketch for Elizur Wright, one would assume that Wright did consulting work before and after, but not during, the period 1856-67 when he was with the Massachusetts Insurance Department. Actually, there was at least one company that employed him as a consultant during this period—Northwestern Mutual Life (NML). In fact, one could say that he built NML's actuarial foundations in the 1860s. After several prior personal examinations of the company, in 1863 he "was induced to visit the offices, make a scientific investigation of the company and advise the officers." As a result,

he developed the company's first dividend scale which had three basic features:

1. It retained 10 percent of reserve for contingencies.
2. Each member shared in the remaining surplus in the ratio of his contribution thereto. (Probably the first use of a contribution formula.)
3. Dividends were paid in cash or used for premium reduction, application on loans, or to purchase additional insurance.

In fact, it was to help Mr. Wright in the resulting dividend calculations that Edward Ilsley was employed as Cashier early in 1864.

TONI S. HUSTEAD AND HARRY E. RICHARDSON:

Mr. Moorhead dedicated a lot of time and talent in his compilation of early North American actuaries. The depth of his research and the manner in which he presented the dossiers are extremely impressive. We are not only left with the genealogical statistics of the pioneers but with a glimpse of their personalities, alternate work duties, and in some situations, relationships with each other.

It was interesting to learn that the reason the actuarial association did not start earlier was a fear that nonactuaries would have to be recognized. Elizur Wright might find some humor in the fact that 115 years later this same type of fear still exists not only between organizations but, in some cases, within organizations. How did one determine actuarial qualifications and expertise in an era that had no Society, Academy, or Joint Board? What was an actuary in the 1800s?

The *Washington Post* contained an article on February 14, 1985, about a prominent church leader in Cape Town, South Africa, who held the second most senior position in the mixed-race branch of the Dutch Reformed Church. The title of this position of leadership was "Actuary."

This prompted us to search several old dictionaries in the Library of Congress for the meaning of the word "actuary." The following reveals the fruits of this research:

Barclay, English Dictionary (1841)

In law, the register or clerk who compiles the minutes of the proceedings of a court, particularly the clerk that registers the acts and proceedings of the convocation.

Boags English Dictionary (1850)

A registrar or clerk.

Clarke English Grammar and Dictionary (1855)

1. The computer of an assurance office.
2. A public officer.

Webster's Dictionary of the English Language (1867)

1. A registrar or clerk.
2. The computing official of an insurance company.

Allison's Webster's Counting House Dictionary (1883)

A registrar or clerk of a court; a copyist; one who certifies the correctness of a balance sheet and makes all the calculations connected with life insurance, etc.

Webster's Academic Dictionary (1895)

1. A registrar or clerk.
2. The computing official of an insurance company.

Conkeys American Encyclopedic Dictionary (1895)

1. A short-hand writer (from Latin Actuarius/Actuaries).
2. A clerk, bookkeeper, or registrar.
 - a. Civil law — A registrar or clerk of a court.
 - b. An officer of a mercantile or insurance company skilled in financial calculations, specially on such subjects as the expectancy of life. He is generally a manager of the company, under the nominal or real superintendence of a board of directors.

The Clarendon Dictionary (1898)

A registrar or accountant.

Webster's Everybody's Dictionary (1913)

A registrar or clerk of a court; one who is skilled in life assurance and similar computation.

American Universities Unabridged Dictionary (1916)

1. A registrar or clerk: A term of the Civil Law, and used originally in courts of civil law jurisdiction; specifically, in England, an officer appointed to keep savings bank accounts.
2. An official statistician and computer of an insurance company; one who calculates insurance risks and premiums.

Webster's Third International (1981)

1. Obsolete; a clerk or registrar, originally of a law court.
2. One trained in mathematics and statistics whose business is to calculate insurances and annuity premiums, reserves and dividends.

In summary, Mr. Moorhead cannot be thanked enough for his determination and professional compilation of the dossiers. It may interest the reader to know that his persistence even included talking to descendants of early actuaries. He has given us valuable insight into the problems, attainments, and implementation of our profession in North America.

RALPH E. EDWARDS:

Bacon has told us that we are debtors to our profession. Very few of us have paid off, with interest, to the extent that Mr. Moorhead has done in the past and now has done again with this exceptional paper. To conceive of this project, to take the initiative, to recruit the voluntary help, to devote the needed years, and to display the requisite energy so as to bring about this result bespeak an author as remarkable as his product. That so much information from so many years ago could be unearthed for so many individuals is a superb achievement.

There is a way to express our thanks to Mr. Moorhead with other than perfunctory sentiments. For some of us, this would be to develop Mr. Moorhead's desire for "a yet fuller story of how our predecessors coped with circumstances and events of more than a century ago." For others, it would be to build upon this far more than we now know about the years in between where only inadequate written records are readily available. Still more could and should be done to call upon unwritten memories of more recent times, particularly for the years when the *Actuary* was not available to serve as the profession's diary upon this continent. We cannot expect our own contributions to society to be given full credence when, because of our concentration on our own particular science, we neglect its history and treat so cavalierly those whose brilliance or doggedness made their part in it, as well as their personalities, worth recognition.

To call upon my own recent unwritten memory, I'd like to contribute to the record. I have always suffered a deficient memory for certain kinds of fact. In my studies, I was unable to master the three kinds of exposure formula until I devised the notation later reported in the prior Society's *Transactions* for 1948. A history of recorded exposure formula development might credit me with unusual talent when the converse would be the truth. The history might also credit me with being the originator of the notation when the credit should be shared with Harry Gershenson who, in another

city, had independently invented it and was starting to use it for his New York classes just about the time my paper was published.

This is just to set the written record straight. However, our research need not be limited to dry facts. For example, some years ago I came across a life policy issued by a small company a few decades earlier in which the detailed provisions page had been copied from another insurer's contract. It included the statement that the cash value would be paid by Metropolitan Life.

We now have an opportunity that should not be postponed when so substantial a base has been established. I have no firm conclusion about how this should be organized. The voluntary network system used by Mr. Moorhead might be ideal. A Society historian or History Committee might be needed. Perhaps space or extra pages for the *Actuary* could accommodate historical notes or comment. Local actuarial clubs might be used, even if for no more than to record their own part in this history. Coordination with the Academy (and probably the Conference) would be highly desirable, as I happen to know from a recent review of old Academy records. Let me close by asking each individual reader to let Mr. Moorhead or the *Actuary* know not only of your appreciation but also of what you can personally contribute.

SHEILA I. KELLEY:

Since Mr. Moorhead has demonstrated that Charles F. McCay was the earliest actuary to practice in the southern states, it is worth pointing out that substantial information about Mr. McCay is to be found in a 1983 biography by William Porter Kellam called *Episodes in the Life of Charles F. McCay—Academic, Actuary, Author and Businessman*. The library at the University of Georgia in Athens also houses an extensive Charles F. McCay collection.

JOHN C. ANGLE:

This solid piece of historical research by Mr. Moorhead cements his standing as our leading historian. The paper arrives at a time when many members of the Society seem more interested in futurism than in history. Mr. Moorhead's work may signal a mild reaction. His interest in our earliest actuaries has been contagious. I for one am delighted to have been among the thirty-nine volunteers so caught up in the enterprise as to haunt cemeteries and genealogical libraries around New York City.

Mr. Moorhead brings to life the stories of our ninety-four earliest North American practitioners. He concisely presents a great deal of vital information in an easy to read format. He has uncovered a wealth of information

formerly hidden from view. The pressing need for these biographies can be seen by referring to recent articles on nineteenth century actuaries which appeared in the *Actuarial Update* of the American Academy of Actuaries. I'm also certain that Robert B. Mitchell, author of "From Actuaribus to Actuary," our twenty-fifth anniversary history, would also have been grateful for the biographies so helpfully supplied by this paper.

I admire Mr. Moorhead for judging the first seventy-two years of the nineteenth century on its own terms. He is a genial admissions chairman who willingly certifies anyone who discharged actuarial responsibilities in these early years. He sensibly realizes that these pioneers should be honored for their courage and vision. Raising of standards and turning toward more abstract mathematical models could come once life insurance found its place in the United States and Canada.

Mr. Moorhead quotes the 1909 observations of David Parks Fackler on these nineteenth century actuaries. These trail blazers, in Fackler's view, were often unschooled in the calculus and dubious in life contingencies. Fackler notes that such prominent figures as Elizur Wright and William H. Beers lacked the education and experience for the pioneering roles they actually played in the early days of life insurance. Fackler, with the benefit of hindsight, knew how it could have been done much better.

I wish to record more of the story of William Bard and of John Frederick Entz—the earliest practitioners in New York City. These two men were among the seven born before 1800 who are included in the paper. (Bard, Bowditch, Entz, Freeman, Patterson, Roberts, and Shoemaker were all born in the late eighteenth century.)

William Bard's grandfather and father were leading physicians of the colonial era. His grandfather, Dr. John Bard (1716–99), completed his medical apprenticeship in Philadelphia, carried on a correspondence with Benjamin Franklin, and was first president of the New York State Medical Society when that body was formed in 1795. A Huguenot, Dr. John Bard married Suzanne Valteau, a Huguenot descendant, and bought from her family a Hudson River estate once owned by Edward Hyde, also known as Lord Cornbury, a man dismissed from his post as a colonial governor of New York. John Bard's family called the estate "Hyde Park," a name soon attached to a nearby village and later made famous by the Franklin Delano Roosevelt estate a few miles away. In 1828, William Bard sold "Hyde Park" to Dr. David Hosack. It later was bought by John Jacob Astor and then by the Vanderbilts. Today it is the National Historic Site of the Vanderbilt Mansion cared for by the National Park Service, though many of the Bard plantings are still there.

William Bard's father, Dr. Samuel Bard (1742–1821) has been called the

most distinguished member of the family. Henry Steele Commager once wrote that Dr. Samuel Bard "excepting the political arena . . . (was) to New York much what Benjamin Franklin was to Philadelphia."¹ Sir William Osler was to class Samuel Bard with Benjamin Rush and David Hosack calling these physicians "Brahmins all, in the language of the greatest Brahmin of them all, Oliver Wendell Holmes."²

Dr. Samuel Bard received his medical education at the Royal Medical School in Edinburgh, Scotland, and would have had a close bond with the forty other colonial doctors trained there. He was physician to George Washington during Washington's residency in New York as President. Dr. Samuel Bard was instrumental in founding New York Hospital, the first hospital in New York, the College of Physicians and Surgeons, and New York's first public library. He moved easily within the elite of colonial New York. He was, for instance, a member of a dancing club that elected John Jay its secretary.

This lineage meant that future actuary William Bard (1778–1853) grew up on speaking terms with the political, intellectual, and social leaders of New York City and of the great estates along the Hudson River. Since Samuel was a trustee, there was little doubt that William would attend Columbia College. The classic curriculum of the time included three years of mathematics. William then read law in the Wall Street offices of the husband of a first cousin and opened his own law office. There exists a letter written in those days from Dr. Samuel Bard to William Bard cautioning William to forgo the social whirl and to concentrate on business.³

In 1802, William married Catherine Cruger, the daughter of Nicholas Cruger. Nicholas is best remembered for giving work and a home to the young Alexander Hamilton in St. Croix and for sponsoring Hamilton as a student at Princeton and at Kings College (now Columbia). Hamilton later married the daughter of Philip Schuyler and thereby became brother-in-law to Stephen Van Rensselaer and to John B. Church.

William Bard drew on all of these family and social connections when he founded the New York Life and Trust Company and became its first President and Actuary. His board included such men as Stephen Van Rensselaer, John Jacob Astor, Gulian C. Verplanck, James Kent, Philip Hone, and Peter A. Jay, the son of John Jay. Historian Richard B. Morris has written that "a combination of High Federalists, like Hamilton, and former loyalists

¹ Henry Steele Commager in *Books*, September 6, 1942, as he reviewed John Brett Langstaff's *Doctor Bard of Hyde Park* (New York: E. P. Dutton, 1942).

² William Osler as quoted by Harvey Cushing, *The Life of Sir William Osler*, Oxford, 1925, Vol. 1, p. 459

³ Langstaff, John Brett, *Doctor Bard of Hyde Park*. New York: E. P. Dutton & Co., 1942.

headed up banking and insurance” after the American Revolution. He added that “these associations obviously were continued and extended in the following decades.”⁴

One suspects that William Bard’s share of the proceeds of the 1828 sale of “Hyde Park” went into the founding capital of the New York Life and Trust Company. The institution was formed to attract deposits in Holland and Great Britain that would be channeled into investments along the western frontiers of the United States. A network of offices made loans secured by mortgages on farms and town properties in New York state and in western Pennsylvania. Some of this was a “development” of holdings of the Holland Land Company, for which Hamilton served as counsel. The offices also sold life insurance—enough to make the company the leading life insurance company for the decade of the 1830s.

J. Owen Stalson⁵ credits Bard with having put in place the first system for selling life insurance through an agency system. It is noteworthy that this really was life insurance selling through a bank—a topic currently receiving much discussion.

Bard sensed a major change when the Mutual Life Insurance Company of New York was founded in 1843. He presented his Board in 1844 with a printed essay entitled “Mutual Life Insurance.”⁶ Bard, according to Stalson, told his Board that there was no special competitive advantage in mutual insurance and recommended against mutualization. What Bard could not see was the power of the full-time agency forces of the mutuals. By 1845 Mutual Life had twice the insurance in force of the New York Life and Trust Company. For the next twenty years, John F. Entz, successor to Bard as company actuary, tried without success to rekindle an interest in selling life insurance at the New York Life and Trust Company.

John F. Entz came to New York City in 1843 and opened an accounting office at 52 Wall Street not far from the New York Life and Trust Company. We can only speculate as to what quirk of fate brought the two together. It certainly was not the old boy network.

Born Johann Friedrich Entz in Herisau of the Swiss Canton of Appenzell, Entz applied for citizenship in Charleston, South Carolina, in 1829. He married Maria Martina Woods in 1832 and by 1840 was apparently prospering as a commission merchant in partnership with one Augustus Amey. A Charleston newspaper of the day contained several advertisements by Entz and Amey. One offered certificates of deposit issued by the Bank of North

⁴ Letter from Dr. Richard B. Morris to John C. Angle, January 28, 1984.

⁵ J. Owen Stalson, *Marketing Life Insurance: Its History in America*, Richard D. Irwin, 1969 for the McCahan Foundation (Reprint of edition first published in 1942), pp. 82 and 98.

⁶ William Bard, *Report to The Board of Trustees of The New-York Life Insurance and Trust Company on Mutual Insurance*, 1844.

America, a New York City institution of that era. Another offered baskets of French wines.

It seems likely that Entz and Amey were principally cotton brokers, buying cotton in the south and selling it to European buyers. There was a great shipping triangle in those days. Ships sailed with cotton from Charleston and other southern ports to Liverpool, LeHavre, and other European ports. Then they sailed back to New York with manufactured goods and finally sailed from New York to Charleston. Thus was Entz's connection with the Bank of North America, which undoubtedly financed some of the business done by Entz and Amey.

The New York Public Library contains a copy of Entz's 1840 work entitled "Exchange and Cotton Trade Between England and the United States." The work was published simultaneously by E.B. Clayton, Stationer, No. 6 Ton-tines Building, Wall Street, New York, and S. Babcock & Son of Charleston, South Carolina. The sixty-two page volume contains detailed tables showing the cost of shipping cotton to Liverpool from various southern ports. An introduction makes it clear that Entz often came to New York before his permanent move in 1843.

Entz's articles on "Annuities, Life Insurance, Tontines, etc." appeared in *Hunt's Merchants' Magazine* in the first half of 1847. These articles reveal a facility with algebra and the rudiments of life contingencies along with a knowledge of actuarial practices and mortality investigations in England, France, and Germany.

WALTER L. RUGLAND:

Mr. Moorhead presents evidence that formal organization of the Actuarial Society of America might well have been a number of years earlier except for the founding fathers' opinions as David Parks Fackler in 1909 said, that, "there were too many men officially or popularly entitled actuaries who were not actuaries in any proper sense of the word but who could hardly have been excluded." Elizur Wright was specifically included in this group.

Fackler's opinion had also been expressed earlier in a presidential address in 1891:

The first effort, some twenty years ago, resulted in only one meeting, after that there were two or more attempts that did not even go as far as that, for most of us saw that circumstances were not favorable to the formation of such a society as we wished. The trouble was there were too many persons with the title of Actuary, and some of them in prominent positions who had few or no professional qualifications as such. A society could not well be formed without them, but giving them full membership and possibly office in such a society, would be tantamount to dispensing with all requirements in the way of qualification.¹

¹ Presidential Address of David P. Fackler in *TASA II* (1891), 224-25.

For anyone in the leadership of our profession some twenty-five to thirty years ago during the founding of the American Academy of Actuaries, this sounds familiar.

In his address in 1891, Fackler went on to say:

Gradually, however, the increasing complexity of actuarial calculations compelled the companies to give the rank and title of Actuary only to those who were properly qualified, and when this proper condition of affairs was attained the natural instinct of co-operation caused us to come together into this Society as an essential factor of our professional life.²

And still further in his remarks, Fackler said:

It must not be supposed that a narrow exclusiveness is advocated; on the contrary, it is desired that the Society should gradually embrace in some way or other, as may be practicable, all the best life insurance men on the continent, whether employed in the practical or in the mathematical departments of the business. . . . When this Society was undergoing incubation, in the winter and early spring of 1889, it was strongly insisted by several that the invitations to the preliminary meeting should go forth only to those principally or solely employed as actuaries, so as to ensure a homogeneous nucleus of professional and responsible actuaries; since then we have had many valuable accessions to our membership from the legal, editorial and other professions, but we have been afraid to admit some other valuable men because of their occupation—a difficulty which would be entirely obviated by a classification of our future members. On the other hand, if we adopt a policy of indiscriminate liberality our standard of membership will fall beyond recovery, our best men will lose their interest, and the precious time of our meetings will be wasted by cranks, doctrinaires and ignorant critics.³

Elizur Wright died in 1885. Mr. Moorhead's paper leaves us in a quandary as to why Wright could not appropriately be called an actuary by Fackler. His whole career after his trip to England in 1844 was involved with life insurance and with actuarial matters in particular. He authored a number of articles and books and constructed many actuarial tables. As Commissioner of Insurance in Massachusetts he fought tenaciously for the policyholder and for legislation protecting the policyholder's interests, e.g., the earliest non-forfeiture laws.

Wright would no doubt fit Fackler's definition of a doctrinaire and ignorant critic. He carried on much of his criticism of the companies' treatment of policyholders in the public press such as the *Insurance Times* and *New York Tribune*. He also wrote a book titled *Politics and Mysteries of Life Insurance* which was published in 1873. In it, and in other writings, he championed what he called the "savings-bank" policy (not to be confused with Savings Bank insurance currently issued by savings banks in New York, Massachusetts, and other states) and severely criticized actuaries and other

² *Ibid.*, 225.

³ *Ibid.*, 227.

officials who would not accept his theories. He considered endowment policies to be largely self-insured by the policyholder (the rapidly increasing reserve being more properly considered nothing more than a savings deposit). He objected strenuously to the practice of loading net premiums simply on a basis of adding a percentage to the net premium for expenses and agents' commissions, the latter also being usually a percentage of the gross premium without much regard to the difference in plan of insurance.

In a letter to the editor of the New York *Tribune* he wrote:

The existence of life insurance in the country of its birth after more than a century of trial, and its remarkable prevalence in this country, are sufficient evidence of its vitality. Our country is specially proud of its success in this business; its buildings are the marvels of our cities; its accomplished work of endowing widows and orphans amounts already to more than twenty millions annually, with a fair prospect of increase. Yet there are clouds about it. More than any other business, probably, it professes equity, and often violates it, and almost always with impunity. It has always been covered with what bears about the same relation to its essence as leprosy does to the human organism, which a very little careful consideration will show.⁴

He wrote about what he called the "true method of keeping the books of a life insurance company."

If the premiums of every policy issued were properly analyzed into self-insurance deposit, normal cost of company's risk, and margin for expenses; if the various values, also, were pre-calculated for every year of the term, and all of these things were every year entered distinctly, each under its proper head, on receipt of the premium, a great part of the expense of what is called actuarial labor would be saved, since the books would then show by their footings, at the end of every year, the liability for reserve, as well as other liabilities. . . . The present method of keeping the insurance, self-insurance, and parts of the premium mixed up in the books, and then looking to some Sisyphus of an actuary to separate at the end of every year, and ascertain the liability for self-insurance, and the relation of the actual to expected losses, is very much as if the silver and gold paid into the United States Treasury should consist wholly of ingots composed of the two metals, mixed in ever-varying proportions, and should go on to the books in terms of *avoirdupois*, Mr. Boutwell having to employ a scientific expert, or a corps of them, every year to ascertain the value of each metal on hand, by taking the specific gravity of each ingot and applying the proper formula. Is such bookkeeping creditable in the last half of the nineteenth century?⁵

Under his proposed method of keeping the books, he held that "if any surplus appears a clerk will know how to divide as correctly and equitably on the contribution plan as any actuary in Christendom," and further that "the necessity of permanent life actuaries arises from the fact that the companies, making no analysis of premiums in advance, find at the end of every

⁴ Elizur Wright, *Politics and Mysteries of Life Insurance*, (Boston: Lee and Shepard, Publishers, 1873), 170.

⁵ *Ibid.*, 181.

fiscal year, the two businesses of insurance and self-insurance indistinguishably mixed up on their books, and it takes more than an ordinary clerk to disentangle them.”⁶

With these samples of the writings of Elizur Wright it is quite easy to conclude that, if he had been a bit less sharp of tongue and pen and more of a diplomat, he might well have been numbered among the founders of the Actuarial Society of America or at least a charter member, as was his son Walter C. Wright, and the Society’s birth may have occurred several years earlier.

(AUTHOR’S REVIEW OF DISCUSSION)

E.J. MOORHEAD:

Like David Copperfield, I feel fortunate to find my name connected with some praise—especially as my role was harvester of a crop raised by others. Six of the discussants had already contributed data to the paper itself.

Charles Groeschell quotes the eminent and prolific Miles Menander Dawson on the question of who was North America’s earliest practicing actuary. I believe those laurels belong to Jacob Shoemaker of Philadelphia. It seems odd that at the Actuarial Society’s May 1913 meeting neither Dawson nor any Philadelphia actuary rose to take exception to the title of Emory McClintock’s paper, “Charles Gill; The First Actuary in America.”

True, Robert Patterson was on the actuarial scene before Shoemaker was, and Patterson’s annuity premiums earned commendation in early editions of Joseph B. Maclean’s authoritative text, “Life Insurance.” But Shoemaker made his living as an actuary and took heavy responsibility for the financial stability of a pioneer stock life company venture.

Toni Hustead’s services to the project included introducing me to her helpful colleague Harry Richardson and her uncle, Professor Derral Mulholland, who had written a paper about Seth C. Chandler. Jarvis Farley, FCAS, then kindly pursued Chandler’s trail at Harvard and in Wellesley Hills, Massachusetts.

Ralph Edwards brings up the worthy question of what should next be done to bring the strands of our profession’s history on this continent together. I am pleased to say that this need has not been overlooked by today’s actuarial leaders as the Actuarial Society’s centenary approaches.

Mr. Rugland’s analysis of Elizur Wright, in the centenary year of that remarkable actuary’s death, takes its place in our literature along with that of Henry H. Jackson cited in my sketch. Other noteworthy pieces on Wright can be found in R. Carlyle Buley’s 1953 opus, *The American Life Convention*, and Stalson’s 1942 classic cited in my acknowledgments.

⁶ *Ibid.*, 168.

Sheila Kelley is one of several actuaries who first tasted the fascination of historical research while seeking facts about Robert Patterson and Charles F. McCay.

John Angle, whose personal example did much to keep this project moving, remarks on D.P. Fackler's disparagement of some of his contemporaries. Fackler was one of those brilliant people who could not easily see the good in those whose opinions differed sharply from his. The era in which Fackler flourished was hard; James D. Craig, the son of a charter member of the Actuarial Society, said in his presidential address in 1929:

The years preceding 1889 had been subject to such trying vicissitudes from the financial, agency and actuarial aspects that there was a tendency for secretiveness and distrust. . . . The founders of this Society lived through severe days. They endured the turmoil of failure, recrimination and discouragement. They struggled patiently and bided their time.

To the ninety-four subjects of this paper I now wish to add a ninety-fifth whose career as actuary of a small New York City life company in the 1850s has, belatedly and so far only fuzzily, emerged from the mists of time. He was Robert G. H. Huntington (1800- ?), a member of the same Huntington branch as 1894 FSA Robert W. Huntington (1866-1949), 1951 FSA Everett C. Huntington (1916-71), and present Fellows Henry S. Huntington and Curtis E. Huntington.

