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ELIZUR WRIGHT (1804-1885) COMMEMORATION

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MR. ERNEST J. MOORHEAD: In the 18th Century, a London actuary designed the level premium system, neatly solving the problem that renewable term premiums become more burdensome as the insured grows older. But in solving that one problem, he created two more: how much money a company offering level premium policies should have at any time to assure its ability to meet all claims at maturity, and how much a policyholder rightfully should receive when he withdraws from such a contract.

The latter two problems had been considered by a few but had not been settled authoritatively when Elizur Wright, an 1826 graduate in mathematics and a great believer in life insurance, made a voyage to England, and there heard life insurance described as the greatest humbug in Christendom. Witnessing for himself the cause of this denunciation--the regular sale at auction of policies whose premiums were in default--and presumably learning also that policyholders were falling victim to life company failures to meet their promises, Wright returned to the United States with reforming zeal to see life insurance made safe for its buyers and fair to those who could no longer pay their premiums.

When his crusade started in the 1850s, there were no organized actuarial societies here in the United States, and the Institute of Actuaries in Great Britain was newly formed and handicapped by divisions within the profession. None of today's biggest American life companies existed; largest by far was Mutual of New York (MONY), trailed by a few companies along the eastern seaboard. Some treatises but no textbooks on life contingencies were available to would-be actuaries. Such life insurance, as there was, performed its functions without national or state regulation worthy of the name. In the face of strong opposition from weak companies and, at most, lukewarm support from the strong ones, Wright succeeded in getting laws passed within the single jurisdiction of Massachusetts to prevent companies from selling life insurance unless their assets were sufficient to establish net level premium reserves and to require consistent surrender values. Within two years, he had made himself notorious on both sides of the Atlantic by exercising his powers as Insurance Commissioner to evict a British company from his state for failing to meet his reserve standard.

Our objective in this presentation is threefold: first, to call to mind the furor caused by Elizur Wright's eviction of that British company; second, to look at the 19th Century consequences of Wright's actions; and third, to ponder the great impact upon the actuarial profession today--not exactly of what Elizur Wright did in the mid-19th Century, but of his solutions to the problems of his era. Clearly, those solutions have become imbedded, rightly or wrongly, in today's United States valuation and nonforfeiture laws and practices.

We shall also appraise the man himself, a complex and even contradictory character.

Expulsion of International Life

The gulf between the policy reserves declared by the actuaries of the International Life Assurance Society of London and those required by the net level premium test in the Massachusetts law was large, not only in terms of actuarial method, but equally so when measured in dollars (or pounds sterling). Some writers have carelessly labeled that controversy, which drew in leading actuaries on both sides of the Atlantic, as an argument about the respective merits of net premium valuation and gross premium valuation. It seems to me that the British actuaries were well aware that they were not performing a gross premium valuation. Instead, they were making a calculation that took into account the fact that they guaranteed no surrender values whatsoever. Wright computed the required reserve at $1,683,000; the company's actuaries contended that less than 30 percent of that figure was sufficient. They reasoned that since the amount of any cash value was entirely at the company's option, the reserve could be the present value of the future death benefits reduced by the present value of all future gross premiums, with all future renewal expenses being offset by gains from surrender. For participating companies, whose policies receive dividends or bonuses, the present value of participating gross premiums could offset the present value of future death benefits to a considerable degree. Surely their logic was not in the realm of the absurd, although this British company's disregard for the rights of withdrawing policyholders is foreign to our thinking.

Anyway, ten years after that fight started, the International Life Assurance Society made the discussion moot by going into receivership.

Nineteenth Century Consequences

Elizur Wright was in the seat of supervisory power for only eight years, from 1859 to 1867. He was influential after that only as the result of other people's views of what he did in those crowded years. The first major consequence of Elizur Wright's dogged determination to have his way arose in the financial and economic debacle of the 1870s. Almost all of the Massachusetts domestic companies weathered that storm. Many life companies elsewhere collapsed, leading to widespread mistrust of the life insurance industry and a resulting public reliance on assessment systems that was demonstrated to have been misplaced only after decades.

The second consequence was described by an American actuary at the 1898 International Congress; he spoke sadly of "young companies strangled by misapplication of [the American system of net valuations],...fallacious tests of insolvency and relative strength by which the American public was often mislead in official reports, and...inequities forced upon the contribution plan of dividends."

But we must ask ourselves whether this was Elizur Wright's fault. Did the large well-established companies that could easily afford to set up net level premium reserves themselves encourage adoption of Wright's system as a solvency test (which he himself denied was his intention) because that system conveniently kept new companies from competing for a share of the market?

Twentieth Century Consequences

Within our profession, the American Institute of Actuaries was founded in 1909, largely by actuaries of companies that used modified forms of the level premium system. This was not the only root of that rival to the 20-year-old Actuarial Society of America, but it was an important contributing factor. That division happily eroded as years went by and was removed in the 1949 merger of those two bodies.

One of our most eloquent spokesmen of an era well within living memory, Henry H. Jackson, accused Elizur Wright in 1940 of the damnable heresy of splitting whole life policies into their savings and protection components. But I for one never heard an actuary of my generation raising objection to agents being trained to sell policies as savings plans or caviling at making the savings/protection split for the purpose of calculating dividends by the contribution method. It appears that the charge of heresy has been applied selectively.

A thoughtful actuary, writing in 1985, expresses the view that Wright's work has resulted in a virtual paralysis of thought among United States actuaries concerning life insurance reserves, with devastating effect in the current competition with other institutions seeking the public's savings dollars. The agony, he observes, can be seen in the discussion of the role of the valuation actuary. Elizur Wright had taken the major responsibility of defining adequate and sufficient provision for reserves out of the actuary's hands and put it into the laws. Here again, we must be sure to place the blame where it belongs, rather than to castigate Elizur Wright, who could not be expected to solve or to avoid the problems of five generations later than his own.

My two colleagues from Wisconsin, who have studied Elizur Wright's career, will now take up the thread of this narrative. One will appraise the man as he is revealed by his writings; the other will turn from Wright as a regulator to Wright as a consulting actuary. He consulted for many years, first because his pay as insurance commissioner was too small to support his large family, and later because his services were in demand by life companies on both sides of the United States/Canadian border.

MR. WALTER L. RUGLAND: Elizur Wright needed a forum. He did not really have a forum because there was no organization of actuaries, and therefore no Society of Actuaries meetings. As a matter of fact, there is indisputable evidence that the Actuarial Society of America might well have been organized 15 to 20 years earlier, but for fear of company actuaries that they might have needed to include Elizur Wright as a charter member.

But Wright created his own forum: in his pioneer work as the Insurance Commissioner of Massachusetts, he used the official annual report to the legislature to educate the public, the companies, and the actuaries of the time on the subject of elementary actuarial science. He used the public press effectively, in a manner of which we would be envious today. We should get the public press to listen to some of the problems with which actuaries are concerned. Finally, in 1873, he wrote a book which he titled Politics and Mysteries of Life Insurance. Describing the purpose of writing this book he said:

> The object of this volume is to show that all the real benefits of life insurance can be obtained under a policy which can be perfectly understood by both parties, without obliging the individual to submit to any wrong at the hands of an autocratic and pseudo corporation, a policy which provides fairly and equitably for the contingencies of the party's ceasing to need insurance, or being unable to pay for it, as well as that of his death.

He was a self-made actuary if there ever was one. Elizur Wright wrote in his book: "Commencing with a sound conviction of the usefulness of a policy to myself, and no knowledge of the principles of the business whatever, I assumed that science had done for it about all that it could, and for a long time took it for granted that what it had not done could not be worth doing." He soon became embroiled in questions of equitable treatment of policyholders and other considerations relating to the complexities of life insurance accounting. As to policyholder equity, the penalties incurred on discontinuance of premium payments became an obsession with him. This, of course, ultimately led him to obtain the nonforfeiture legislation in Massachusetts. First, he required paid up and extended-term features, and later, the actual cash surrender provisions.

Also, as to policyholder inequities, he was most sensitive regarding the distribution of surplus accumulated in mutual companies. He applauded the work of Sheppard Homans and David Parks Fackler in this distribution of surplus formulas. As a matter of fact, he was outspoken in his belief that stock companies should mutualize at the earliest possible time, which was consistent with his policyholders' equity philosophy.

During his tenure as Massachusetts Insurance Commissioner, companies began issuing endowment plans. He took issue with the practice, generally in effect, of loading for expenses as a simple percentage addition to the net premium. The payment of commissions as a percentage of premium regardless of age or the plan of insurance also came in for much criticism.

He believed strongly that endowment insurance was highly appropriate, but he had some sharp words about company practices:

> This sort of policy, which is the very perfection of life insurance, -- by applying to it the old blunder of putting expenses and commissions as a percentage of the premium was a swindle. It was a swindle not easily detected, immensely profitable to the agent, but intensely unsatisfactory to the policyholder after being found out.

In his book, Politics and Mysteries of Life Insurance, he wrote: "The headlong rush into endowment policies without correcting the British error in loading the premiums and assessing expenses without distinguishing between the insurance and self-insurance of a policy is what brought life insurance in this country to its present grief.

This philosophy led Wright into developing what he termed the "savings bank" theory of reserves and life insurance accounting. The theory was never adopted by the profession, but it bears rehearsing in light of developments in our business in recent years.

Before describing his "savings bank" theory, I should mention that the Massachusetts valuation law of 1858 required every company doing business in the state to submit complete data--age, plan, year of issue, and so on--on every policy in force, not only those on Massachusetts residents but on every policy. Using tables he prepared from existing mortality tables (Combined Experience) and interest rates (4 percent), Wright made a seriatim valuation of every policy in force for these companies.

This led him to conclude that there must be a better way, not only for this purpose, but to ensure better equity and more appropriate bases for paying agents' commissions. His "savings bank" theory of determining reserves, as described by Emory McClintock, who fully supported him, was simple:

> Every life contract in its nature comprises:
>
> (1) an agreement to hold in deposit at interest a portion of the premiums received, and
>
> (2) an agreement to insure a varying amount, so calculated that each year the amount on deposit and the amount at risk (which is really the insurance part of the policy) are together equal to the sum nominally insured by the terms of the policy.

Wright held that the amount on deposit was, in truth, the same as a deposit in the bank, hence the term savings bank, and should be treated on the books of a company as such.

Emory McClintock, in a series of papers published in the Insurance Times in 1871 and 1872, supported this theory fully and said, "It was generally adopted by American actuaries as at once the most equitable and most convenient for the various purposes of a mutual society." This does not seem to square with the facts of history in the years to come. However, he in fact did prove that Wright's "savings plan" theory and the traditional "term plus pure endowment" were the same.

Wright's "savings bank" theory and his tremendous needless work as Commissioner in computing reserves led him to make the following statement discussing the methods of keeping books:

> If the premiums of every policy issued were properly analyzed into self-insurance deposit (i.e. savings bank account), 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 these things were every year entered distinctly, each under its proper head, on receipt of 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 all other liabilities. There would then be no necessity or excuse for the multiplied and expensive State valuations.

He went on to say:

> The present method of keeping the insurance, self-insurance (i.e. "savings bank deposits"), and marginal parts of the premium mixed up in the books, and then looking to some Sisyphus of an actuary to separate them at the end of every year, and ascertain the liability for self-insurance, and the relation of the actual to expected loss, 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 every-varying proportions, and should go on 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 ignot and applying the proper formula. Is such bookkeeping creditable to the last half of the nineteenth century?

I had to look up the term Sisyphus because it is capitalized in that book. Mr. Moorhead can explain it after a bit.

It is of interest to consider some items that have caused stress in our professional lifetimes, and what differences might have resulted if Wright's "savings bank" theory had been in our syllabus instead of the "pure endowment plus term insurance" theory of determining premiums and values:

* George Sewall Boutwell was U.S. Secretary of the Treasury, 1869-73.

1. Would the phrase "buy term and invest the difference" ever have been born?

2. Would M. Albert Linton have had to write his book Life Insurance Speaks for Itself?

3. Would E. F. Hutton ever have entered the life insurance business?

4. Was Elizur Wright 125 years ahead of his time--or should universal life better be termed "The Wright Insurance Plan"?

MR. MOORHEAD: The instructions to moderators contain nothing requiring them to interpret words in the presentation of any of the speakers, but I will have a shot at Sisyphus. Sisyphus was a gentleman who, having annoyed the gods of old, was required to roll a large stone up a hill. Every time he pushed it up a few feet, it rolled down again, condemning him to an endless, heart-breaking job.

Mr. Rugland commented on the vast amount of work that Mr. Wright did in computing the reserve on every policy in force in Massachusetts companies. He had 18 children and had absolutely no compunction about putting them to work on these calculations. Two of his children, as a result, became actuaries. Walter C. Wright later became Actuary at New England Mutual Life Insurance Company; Lucy Jane Wright (TSA XXXVI, 362) became the first woman actuary on this continent, and probably in the western world, when she was appointed, in 1866, Actuary of the Union Mutual Life Insurance Company, then of Boston but now of Portland, Maine.

We move now from Elizur Wright, the supervisor of the companies, to Elizur Wright as the consulting actuary.

MR. CHARLES G. GROESCHELL: I would like to give a brief account of the great influence that Elizur Wright had in building the actuarial foundations of one company, the Northwestern Mutual Life (NML). The essence of this story has been given in several formal histories of the company, but I would like to add an actuarial flavor to show that Wright was an actuary in every sense of the word, even though he was never recognized as such by some of the members of our predecessor Society.

As background, NML was organized in 1857 but did not sell its first policy until late in 1858. Our founder was a former agent for the Mutual of New York. Naturally, we used their premium rates for our first policies, so we had no need for an actuary until the latter part of 1863, when our first dividend was to be calculated five years after issue.

Our first full-time employee and Secretary, A. W. Kellogg, met our honoree, Elizur Wright, in 1860 while in New York, and observed that "the noted abolitionist and the great actuary, Elizur Wright, was so simple and friendly as to make one forget his prominence and yet yield glad homage from the first moment."

When NML was faced with its first dividend calculation in 1863, Kellogg had this to say:

> In preparation for the dividend to be paid at the end of the year by the terms of the Charter, an arrangement was made with Hon. Elizur Wright (the most noted actuary of the time and the Insurance Commissioner of Massachusetts) to visit the office of the Company which he did in September. During his visit an agreement was made whereby he was to ascertain the amount of surplus and compute each policyholder's share thereof in proportion to his contribution thereto, and this was adopted at a meeting of the Executive Committee, September 23, at which he was present.

A further note by Kellogg in this regard is as follows:

> For the computation of the dividend the bulk of the data necessary for the valuation of the policies was sent to Mr. Wright November 17th and followed on the 8th of December with the remainder, with the suggestion of a hope that he would be able to give us by the last of the month such figures as would secure the policyholders a New Year's gift of this dividend.

This all took place at, or shortly after, the decision of the Mutual of New York to declare dividends by the contribution method, as described more than 25 years later by Fackler in his classic paper in the first issue of the Transactions of the Actuarial Society. At that time, though, in a letter to Sheppard Homans of the Mutual of New York (exact date not verified), Wright said, "It has appeared to me for several years that the usual methods of distributing surplus can no longer be equitably adhered to, but must give place to something which will be better adapted to the peculiar circumstances of our community."

On January 1, 1864, in his report to the Massachusetts Legislature, Wright wrote: "We cannot but greatly commend and congratulate those companies that have adopted the method of dividing surplus according to the contributions of the several policies." Finally, in a letter to NML on April 6, 1864, Wright mentions a number of ways by which the contribution method could be made even more equitable.

All of this doesn't necessarily mean that Elizur Wright was the first to develop the contribution method of distributing dividends. On the other hand, it appears that the contribution method was first used in 1863, at least by MONY and NML. It certainly should indicate that our hero, Wright was thinking like or was actually ahead of the other great actuaries of his period on this most uniquely actuarial subject of the calculation of dividends.

In order to determine the divisible surplus and calculate individual dividends in accordance with the formulas and procedures set forth by Wright, NML employed Edward Ilsley, the father of an NML trustee and a member of the company's Executive Committee. While he eventually was given the title of Actuary, Mr. Ilsley was never much more than a good bookkeeper. He did his job satisfactorily until the late 1860s, when he overstated surplus by not handling prepaid premiums correctly. As a result, the dividends allowed in 1868 and 1869 were greater than they should have been, and some remedy was needed.

Kellogg put it this way:

> After thorough consideration and consultation with Hon. Elizur Wright, who was sent for and came on from Boston and spent several days examining the Company's condition and advising upon the best course to pursue, the Executive Committee, acting on his advice, on the 17th of March passed the following resolution: "Resolved that the Northwestern Mutual Life Insurance Company adopt for its premium reserve...the Actuaries' Rate of Mortality at 4 percent interest."

This action required the passing of the 1870 dividend which was quite a bitter pill for the field force to swallow. Eventually, this led to the termination of Ilsey as Actuary, and the employment of a truly qualified actuary, Emory McClintock, who served for many years at Northwestern Mutual before returning to the East.

In conclusion, Wright justified this action of reserve strengthening at such an awkward time with this statement: "I am sure that they (the existing policyholders) would vote as their true interest dictate, to adopt the higher rather than the lower grade of reserve, and thus occupy in the future, as they have hitherto, a position not excelled in strength by any company upon the globe." He put us there, we stayed there, and we have done very well. Thank you, Elizur Wright.

MR. MOORHEAD: Some weeks ago I inquired about the extent to which Elizur Wright's name is even mentioned today in the Course of Reading for membership in the Society. Director of Education Linden Cole looked into this, and reported that only a single footnote in a Part 6 text acknowledges that great man's existence. Mr. Cole says that this can be interpreted in either of two ways: "Poor Elizur--reduced to a footnote!," or, "Wonderful Elizur--after all these years he's still hanging in there!"

Mr. Rugland, Mr. Groeschell, and I share the belief that it is fitting that we pause to commemorate the centenary of the death, at age 81, of a determined, courageous champion of public well-being, one who saw the need for a safe and scrupulously fair system of life insurance and who fought unremittingly against heavy odds to point the fledgling industry in the right direction. Some may feel that he went too far; none, surely, can justly accuse him of having done too little.

There will be some matters on which we all agree about Elizur Wright's career. We know that a great deal of his work has survived all the way from the 1850s to the 1980s. Perhaps we agree that some of what has survived is good and some, perhaps, is not so good--in fact, potentially dangerous to the smooth operation of the life insurance business. But even if we have the latter view, we also should ask ourselves if Elizur Wright is to blame for what has survived of his work. He was faced by a problem which he attempted to solve in the best way that he knew. The laws in Louisiana in the 1980s have been written by later generations, not by Elizur Wright. It seems odd that some actuaries who complained that Elizur Wright tied cash values too closely to statutory reserves were, at the same time as they were complaining, paying cash values higher than the legal minimums. And people who complained about his splitting the policy into its savings and protection components (which companies currently have done with universal life) never complained that their own agency departments were training agents to sell whole life policies as savings plans, which must surely have implied that the cash value element was divisible.

Whether our trio has presented a balanced description of Elizur Wright's career and his impact, we leave you to judge. I will admit, however, that having worked together on this for several months, exchanging phone calls, letters, and personal visits, we have grown rather fond of the dear gentleman and perhaps are inclined to look rather like the forgiving father upon the erring child, though in fact it is the other way around--he is the father, we are the children.

On one occasion Elizur said, "I'd rather be right than copy New York." At his life's end he might well have said, "I've done my damnedest; let those who can do better."

MR. ROBERT L. WHITNEY: Walter Rugland raised a number of provocative questions as to what would have happened if the Elizur Wright viewpoint had taken full hold. I have some opinions on that, but instead of answering his questions, I'm going to add one more: What form would Section 213 have taken if the Elizur Wright point of view had fully prevailed?

MR. MOORHEAD: You will not try an answer to that question yourself? It will go down into the Record and no doubt will be debated at some future session.

MR. PRICE GAINES*: I've been one of Mr. Moorhead's packrats, trying to find bits of information about dead actuaries, which is an enlivening pursuit. It we want to judge a man's success or failure, instead of going back to his contemporaries or his later-day erring children, we should go halfway between to see if people whom none of us knew or cared about wrote down anything that might be of interest or give us some insight. An editorial appeared in The National Underwriter on October 4, 1932:

> One of the most far-reaching and enlightening decisions was rendered by Judge C. T. Warner, Ohio superintendent of insurance, on a complaint brought by the Ohio Association of Life Underwriters protesting against the licensing, or continuing the licenses of five men who represented the Pure

* Mr. Gaines, not a member of the Society, is a Chartered Life Underwriter and editor for the National Underwriter Company.

> Protection Life of Cleveland. The Pure Protection Life is an assessment company and some of its agents were seeking to unseat legal reserve or investment policies.... The Ohio department decision is of major consequence and the principle enunciated might well be used by all departments. Certainly this is no time to permit attacks on a system of saving and safeguard that has proved more useful and secure than any other that has been devised. The state is right in upholding the legal reserve system and protecting it against unfair and malicious attacks.

And here is the punchline: "The assessment plan is equally licensed by the state, but agents must adhere to the truth in dealing with such an important matter as the protection of widows and children."

MR. MOORHEAD: It's true that I often have asked Mr. Gaines to hunt through old volumes of his trade paper and its predecessor The Western Underwriter for obituaries of actuaries in whom I was interested. Whenever he went down into those musty files, he not only found what I wanted, but he also gave me several other items which added to my general knowledge of the history of old times. It's because you did so well that you got so many requests, Mr. Gaines--and will get more as time goes on.

I most devoutly thank you all for taking part in this commemoration ceremony. All you need do is substitute Elizur Wright's name for the name of a Roman emperor in this quotation from Shakespeare: "But yesterday the word of Caesar might have stood against the world; now lies he there and none so poor to do him reverence."