

HISTORY AND PRESENT STATUS OF NONCANCELLABLE ACCIDENT AND HEALTH INSURANCE

BY

JOHN H. MILLER.

The subject of noncancellable accident and health insurance has received no more than brief reference in any paper published in the *Proceedings* since 1921. At that time it was a very live topic, and was discussed at length in several papers.* Since many developments have occurred in this line during the past fourteen years, it seems appropriate at this time to present a résumé of its history to the Society.

BRITISH EXPERIENCE

According to available information, the first policy of noncancellable accident and health insurance was written by the Century Insurance Company of Edinburgh in 1885. A recent discussion of disability insurance issued by this company appears in a paper by Mr. W. A. Robertson, printed in the *Transactions* of the Faculty of Actuaries, Volume XIV.

Other British companies have since commenced writing this type of coverage. The policies sold in Great Britain differ from the usual life income coverage issued in this country in that indemnity payments cease at the terminating age of 55, 60 or 65, regardless of the age at inception of disability. This is a much sounder form of coverage than the life indemnity form, since it is based on the principle that disability insurance represents indemnity for loss of earnings. Where income payments are available beyond the normal span of earning capacity, the coverage is likely to become a superannuation benefit rather than an indemnity for loss of time due to disability.

* Premiums and Reserves for Noncancellable Accident and Health Insurance, E. E. Cammack, *Proceedings*, VII.

Noncancellable Accident and Health Underwriting Problems, J. M. Laird, *Proceedings*, VII.

The types of policies offered by one British company include :

- (a) Immediate coverage, subject to a seven-day retroactive waiting period and a 50% reduction in indemnities after the first six months of disability. The latter provision, common among British friendly societies, has proved to be an effective deterrent to malingering.
- (b) Level protection, with a three-month or six-month waiting period.
- (c) The above forms are also issued with a provision for return of all premiums at the terminating age or prior death. After the policy has been in force for five years the insured is entitled to a cash surrender value or paid up endowment insurance, at his option.

Premiums charged for Form (b) are shown below in comparison with net premiums based on the 150% Modification of the Class III Disability Table and 3% interest, the basis being used currently by some companies in this country for waiver of premium disability benefits in connection with life insurance. The more stringent 165% Modification is used for income benefits.

TABLE I
ANNUAL PREMIUMS PER \$10 MONTHLY INDEMNITY
Benefits Terminating at Age 60

Age	Three Month Waiting Period		Six Month Waiting Period	
	Gross Premiums	Net Premiums 150% Modification of Class III	Gross Premiums	Net Premiums 150% Modification of Class III
20	\$1.85	\$2.35	\$1.38	\$2.13
30	2.61	2.74	2.01	2.49
40	3.84	3.20	3.03	2.87
50	6.01	3.39	4.85	2.92

It is apparent that the expected sickness rates on which these gross premiums are based are considerably lower at the younger ages, and perhaps higher at the older ages than have been experienced in this country.

The experience of the British companies with these policies appears to have been satisfactory. This is doubtless due in part to careful and strict underwriting, to the elimination of benefits

at the older ages, and to the use of the average earnings pro-rating clause, but the key to their success may lie in the following statement (probably incomprehensible to most insurance men in this country) quoted from Mr. Robertson's paper cited above.

"The Policyholder must have confidence in the Company with which he elects to place his insurance, just as the Company must have confidence in its insured. In this regard I might say that although the Office with which I am connected has been doing Continuous Disability business for forty-five years, no difficulty or dispute has ever arisen which required to be taken to the Courts. Moreover, the provision for arbitration usually contained in our Policy has never been resorted to by any Assured. *The practical significance of this seems to be that a person who on account of some illness or accident is unable to follow his own profession or occupation, but who nevertheless is in good health, does not expect to receive an annuity if he should be unwilling to take up an outside occupation.*"

ORIGIN OF NONCANCELLABLE ACCIDENT AND HEALTH INSURANCE IN THIS COUNTRY

The first noncancellable, guaranteed renewable, accident and health policy was issued by the Massachusetts Accident Insurance Company in 1915. Other companies followed until by 1921 there were at least thirteen companies actively writing this line. The following table indicates the number of companies commencing and withdrawing from the noncancellable field since its inception. Four companies doing a reinsurance business only, two life companies which write only a noncancellable accidental death benefit, and several assessment companies are excluded. The type of coverage, to which reference will be made later, is also indicated.

TABLE II

Year	Number of Companies			Number Writing	
	Commencing	Withdrawing	Active at end of year	Life Indemnity Coverage	Aggregate Coverage
1915	1	—	1	1	—
1918	1	—	2	2	1
1919	3	—	5	5	1
1920	4	1	8	8	1
1921	5	—	13	12	2
1922	1	1	13	11	3
1923	2	—	15	13	3
1924	2	2	15	13	3
1925	—	2	13	11	3
1926	1	2	12	10	4
1927	4	—	16	11	8
1928	2	1	17	10	10
1929	—	—	17	11	11
1930	1	1	17	10	13
1931	2	1	18	8	14
1932	1	—	19	7	16
1933	—	1	18	7	16
1934	—	1	17	6	15
1935	—	—	17	4	15
(1st qtr.)					
Total	30	13			

TYPES OF COVERAGE

In order to draw any conclusions from the results of noncancelable accident and health insurance in this country, it is necessary to recognize the great variety of policies which bear the same general name. These various types can be classified roughly in two groups:

- (a) Life Indemnity Policies—those which provide a disability income so long as the insured remains disabled. There are many variations within this group, such as the age to which the policy is renewable, the waiting period, and the extra benefits or “frills.”
- (b) Aggregate Indemnity Policies—those which limit the benefits in the aggregate to a designated period of disability or amount of indemnity. The policy terminates when the aggregate limit has been paid on a single claim, or on all claims collectively. Policies in this group also vary considerably as to the length of the aggregate limit, the waiting period, and other provisions.

HISTORY AND DEVELOPMENT OF LIFE INDEMNITY POLICIES

The first ordinary noncancellable policy, written in 1915, was of the life indemnity type. All disability, both total and partial following total, was covered after a two-weeks' waiting period. The rates for this policy were graded by age at issue. In 1918 another company offered a life indemnity policy renewable to Age 60. During the next two years several companies offered similar policies renewable to Age 65, usually with a waiting period of two weeks, at the same rate for all ages. Other companies, influenced by their own experience on commercial policies and by the Manchester Unity Sickness rates, adopted or retained the graded rates. The resulting difference in rates between the two groups of companies introduced a serious obstacle to the establishment of a new, but popular form of insurance.

Following a report of the Underwriting Committee of the Bureau of Personal Accident and Health Underwriters in 1921, the flat rate was soon abandoned by all companies. The committee recommended graded rates according to age at issue, and also recommended the elimination of partial indemnity, elective indemnities, hospital and nurse benefits, and other extras and frills. A waiting period of not less than two weeks was suggested. Some policies had provided immediate coverage on all claims, others for accident claims only. Few companies adopted all of the committee's recommendations, but a tendency toward more restricted coverage was started.

The early policies contained very liberal terms. Total disability was defined, in the first policy, as disability from accidental injury or disease which necessarily, wholly and continuously disabled the insured from the performance of any and every kind of duty pertaining to *his* occupation. In 1921 most policies applied this definition to the first year of disability but required that the insured be unable to perform the duties of *any gainful* occupation, to be eligible for indemnity thereafter. These policies were generally prorating in the event the insured changed to a more hazardous occupation, but were otherwise free of prorating provisions. Only a few essential restrictions were contained in the contracts, many not even conditioning the company's liability on regular medical attendance of the insured.

Since 1921 the tendency has been toward restriction of cover-

age, although the changes were gradual, and even today the few policies providing life indemnity are singularly free from restrictions and technicalities. However, waiting periods were increased, partial disability eliminated or restricted and more use made of the several types of prorating clauses. The average earnings prorating clause, a provision for reduction of indemnities if the coverage exceeds some percentage (usually 100%) of the average earnings during a stated period preceding disability, was introduced as early as 1922, but has never been adopted by all companies. At first this clause applied only to the indemnities under the policy containing the provision, but now the clause generally refers to all types of disability coverage in all companies.

The year 1921 witnessed the end of the initial rush into noncancellable business, and the beginning of the exodus that followed. Some companies had experienced heavy losses, others had met with underwriting difficulties. Several life companies turned to the total and permanent disability benefit in lieu of noncancellable accident and health coverage.

The companies which continued or subsequently commenced to write life indemnity generally experienced increasingly unsatisfactory results, and with four exceptions have either discontinued the noncancellable business entirely or changed to aggregate forms of policies. The four companies which are still offering life indemnity coverage wrote only about 2,200 new policies in 1934, less than 15% of the total 1921 production.

HISTORY AND DEVELOPMENT OF AGGREGATE INDEMNITY POLICIES

In 1918 one company commenced issuing a policy similar to the commercial accident and health policy, except that it was made guaranteed renewable to Age 70, and contained a provision limiting the aggregate indemnity period to sixty weeks. Three years later another company introduced a similar type of policy, except that each period of disability was subject to a specific limit, but no limit was imposed on all indemnities collectively. The latter type of coverage is included in the general term "aggregate indemnity policies," as used in this paper, although the coverage is broader than under the strict aggregate type. Both of the above companies have continued their original coverage to the present date with relatively little change in rates or provisions.

The aggregate indemnity plan was slow to take hold, however, and by 1925 only three companies were issuing it. Since then seven companies have abandoned the life indemnity coverage in favor of the aggregate form, and five of this number continue to write it. These companies have generally adopted a fairly long aggregate period, varying from fifty to one hundred months.

The popularity of the aggregate indemnity coverage is indicated by the volume of new business written in 1934, which was in excess of \$1,500,000 of annual premiums.

PREMIUM RATES

Although at least six companies never made any change in premium rates while active in the noncancellable field, most of the carriers found it necessary to make successive increases. It is difficult to make a direct comparison of the rate levels from year to year because of changes in coverage, but the following schedule of approximate average premiums set by several important companies writing the life indemnity form of contract illustrates the general trend.

TABLE III
AVERAGE RATES CHARGED IN YEAR INDICATED
FOR LIFE INDEMNITY COVERAGE OF \$10 PER MONTH
THREE-MONTH WAITING PERIOD

Age at Issue	1920 Renewable to 65	1930 Renewable to 60	1934 Renewable to 60	Net rate based on 150% Modification of Class III—3% Renewable to 60
20	\$2.00	\$2.50	\$3.50	\$3.07
30	2.00	3.00	4.10	3.92
40	2.00	3.75	5.30	5.27
50	2.00	5.00	7.15	7.52

Comparison of the above gross rates with the net rates according to the 150% Modification of the Class III Disability Table, indicates how inadequate the rates were in the light of current experience under total and permanent disability.

There has been less difficulty and more success in fixing a proper rate for policies with aggregate limits of two years or less. While rates for particular forms have been found to be

somewhat inadequate, the adjustments required have never been serious, and the losses have been absorbed without much difficulty.

EXPERIENCE TABLES FOR THE CALCULATION OF NET PREMIUMS AND RESERVES

Until the introduction of the noncancellable policy the only reserves carried on accident and health insurance were the unearned premium reserve and the reserve for outstanding losses. One company, however, set up special reserves on health insurance on the assumption that the contract would actually be renewed, in most cases, until Age 60.

The absence of any reserve similar to the life insurance reserve was justified chiefly by the cancellation privilege and also by the limited period of sickness covered. The necessity of additional reserves for noncancellable accident and health policies was recognized by most actuaries and underwriters. However, some insurance men, unimpressed by statistics based on the experience of American and British fraternal societies, felt that the unearned premium reserve was a sufficient measure of the liability.

In 1921 the Actuarial Committee of the Bureau of Personal Accident and Health Underwriters made a study of the available statistics which might be adopted as the basis for net premiums and reserves. Finding that there was no domestic experience that would furnish a reliable guide the Committee recommended the use of Cammack's adaptation of the sections of the Manchester Unity Experience (1893-1897) covering agricultural and non-hazardous workers. Objections to this basis were raised by some who pointed to the fact that this table was based on the experience of industrial and farm workers of a different period and of a different country and believed that the rates were higher than would be experienced under noncancellable policies issued to a select group after a rigid medical examination.

Others held an opposite view, and contended that because the Manchester Unity Experience was based on a small benefit that decreased with duration of disability, it did not furnish an adequate measure of the probable losses under noncancellable policies. The experience of the Metropolitan Home Office male employees was cited in confirmation of this theory. This experience covering the years 1915 to 1918 ran 73% of the Manchester Unity

Table for the first three months of sickness and 150% for sickness after three months.

Experience since compiled in this country confirms the opinion of the latter group that the Manchester Unity Table understates the sickness of long duration. As the experience has developed, Cammack's Table has been found a better guide to reserves than to premiums, in the case of life indemnity forms. However, it is quite unsuitable as a reserve standard for policies covering only the first one or two years' sickness.

Several other modifications of the Manchester Unity Experience were prepared. One company adopted as a reserve basis Cammack's Table, adjusted on the assumption that sickness rates would increase 1% in each year. Mr. E. H. Hezlett constructed another table, using Manchester Unity rates for the first two years' sickness, with Hunter's Disability Table applied to trace the claims that extended beyond two years. Both of these tables produced reserves somewhat higher than Cammack's Table.

Another table, known as Maverick's Table, was constructed from experience under commercial accident and health policies for the first year's sickness. Sickness beyond the first year was estimated on the assumption that there would be twice as many claims of at least one year's duration under noncancellable policies as under commercial policies and that each such claim would last for five years. The premiums based on this table were, on the average, about equal to those based on Cammack's Table, but the gradient by age was less, with the result that the reserves were lower.

In 1922 a sub-committee of three Insurance Department Actuaries was appointed by the Committee on Blanks of the National Convention of Insurance Commissioners to make recommendations as to the segregation of noncancellable accident and health financial figures in the convention blank and as to reserve requirements.* This committee gave considerable attention to the question of reserves. A questionnaire addressed to all insurance commissioners disclosed that only three states had any statutory basis for noncancellable reserves, but that seventeen had direct or supervisory authority to impose reserve requirements. Only one reply stated that a ruling had been made.

* The report of this sub-committee is printed in *Proceedings*, X.

A questionnaire was also sent to twelve principal companies writing noncancellable life indemnity policies, which included questions as to the reserve basis used. The replies indicated the following standards:

	Basis used December 31, 1921 No. of Companies	Basis contemplated December 31, 1922 No. of Companies
Cammack's Table	2	4
Modification of Cammack's Table....	1	1
Maverick's Table.....	1	1
Unearned Premium plus Special Sum	—	2
Unearned Premiums Only.....	5	2
Not specifically stated.....	3	2

Obviously there was a wide diversity of opinion and practice with regard to the question of reserves.

The committee stated that it did not recommend any fixed reserve standard at the time, but it emphasized the need for adequate reserves. It was recommended that the companies be requested to test the various tables that had been suggested and, if none were found satisfactory, to develop one as soon as sufficient statistics could be accumulated.

Due to the absence of a time tested experience table based on the types of contracts being issued, and to the lack of departmental regulation, some companies accumulated large volumes of business with inadequate reserves. When, in a few cases, reserve requirements were made retroactive these companies were placed at a considerable disadvantage.

Probably because so many companies have discontinued the business, no table based on the joint experience of companies under the noncancellable life indemnity benefit has yet been published. The first general experience on disability insurance in this country was the Inter Company investigation of disability benefits in life policies, published in 1926. The experience was divided into three classes, but general use has been made only of the class showing the highest claim rates. A table known as Class III was based on this experience. This table was adopted by a number of states as the valuation standard for disability benefits issued after July 1, 1930. Little use has been made of it for noncancellable reserve purposes. Although it develops substantially higher pre-

miums than Cammack's Table, the reserves are only slightly higher.

New York is one of the few states having any legislation regarding noncancellable reserves. Section 93 of its Insurance Laws, prescribes a net premium valuation based on the British Friendly Society Tables and 3½% interest. By Departmental Rulings, under the discretionary authority vested in the Superintendent by this law, the requirements were changed in 1926 to Hunter's Table for reserves on active lives and for claims of 27 months or longer duration. In 1931 the ruling was modified to require Cammack's Table for active life reserves and Class III disability experience for the reserve on claims of 27 months or longer duration. For claims of less than 27 months, the reserve is the lesser of the tabular reserve or an amount equivalent to the prospective payments for a period equal to 3½ times the elapsed period of disability, with a minimum reserve of seven weeks' payments. Special standards have been established for some companies, particularly those writing policies with a short aggregate period, for which the above ruling is not applicable.

Information received from fifteen companies indicates that the following bases are now used for active life reserves:

Seven companies use Cammack's Table.

Four companies use their own experience, supplemented in two cases by Class III, and in one case by Cammack's Table.

Hunter's Table, a modification of Cammack's Table, the Class III Table and the 165% Modification of Class III are each used by one company.

Doubtless the uncertainty as to reserve requirements, both from the standpoint of regulation and sound actuarial practice, contributed to the unsatisfactory experience with noncancellable life indemnity coverage.

UNDERWRITING TRENDS

Perhaps the most significant change in underwriting rules is in regard to overinsurance. Limits of issuance have been reduced from as high as \$1,000 monthly indemnity in the early days of the business to \$200 or \$250 today. Limits of participation are generally not over \$500 per month, whereas, in the past, some

insureds have been able to accumulate as much as \$2,000 or even \$3,000 of monthly indemnity by taking the limit in each of several companies.

Most companies now require that at least \$1,000 of accidental death and dismemberment benefits be included in any policy. This is in contrast to the earlier attitude, one of the recommendations made in 1921 by the Underwriting Committee of the Bureau being that no principal sum benefits be allowed under noncancellable policies. Companies which have restricted the principal sum to \$5,000 or \$10,000 have found this feature profitable and satisfactory.

FINANCIAL EXPERIENCE

In order to obtain a proper view of the underwriting results, it is necessary to divide the noncancellable business into two groups, life indemnity forms and aggregate forms. It was found that four companies which have written principally the aggregate form and nine companies which have written the life indemnity form carry over 85% of all the ordinary noncancellable business in the country. As figures on these companies were available back to 1924 from the New York Insurance Reports and other sources, aggregate statistics covering this period were compiled for the two groups of companies. These statistics are presented in the following table.

TABLE IV

Year	NET PREMIUMS WRITTEN		LOSS RATIO (Incurred Basis)		LOSS RATIO (Adjusted)	
	Nine "Life Indemnity" Companies	Four "Aggregate Indemnity" Companies	Life Indemnity	Aggregate Indemnity	Life Indemnity	Aggregate Indemnity
1924	\$4,820,809	\$5,511,000				
1925	5,438,615	6,286,341	116%	70%	109%	69%
1926	6,042,802	7,052,946	103	66	98	65
1927	6,382,936	7,760,745	91	67	85	66
1928	6,958,957	9,519,935	88	64	82	63
1929	7,571,106	10,725,831	87	58	81	57
1930	8,366,305	11,184,940	95	59	89	58
1931	7,641,678*	11,119,529	112	62	105	61
1932	7,379,065	9,845,385	126	67	119	66
1933	6,771,995	8,594,308	186	62	175	61
1934	6,663,706	8,837,149	155	57	146	56

* The drop in premiums in 1931 resulted from the transfer of approximately \$1,000,000 of premiums in one company from the accident to the life department.

The loss ratios were computed according to the formula set forth in the underwriting exhibit of the miscellaneous convention blank. By this formula the increase in the noncancellable reserve as well as the increase in unearned premiums is deducted from the written premiums to obtain the earned premiums. As part of the reserve increase is created from interest earnings, this formula overstates the true loss ratio. Accordingly, an approximate adjustment based on $3\frac{1}{2}\%$ interest was made. The adjusted loss ratios are shown in the last two columns of Table IV.

It is obvious from the above table that the experience under life indemnity coverage has been extremely unsatisfactory. Since the expense ratio has averaged over 30%, this type of insurance has resulted in an underwriting loss during each of the past ten years. Not only have the losses been high for the companies as a whole, but each individual company has shown losses, at least during the past few years.

On the other hand the experience under the aggregate indemnity forms has been satisfactory. To a casualty insurance man, the loss ratio may appear high. However, the contract is not for a one-year term, but covers a long period. This reflects a saving both in commissions, which are lower on renewals than for the first year, and in the expense of issuing policies. As a result expenses may be held at a lower level than is generally possible in other casualty lines.

Included in the figures above for "aggregate indemnity" companies are the results of the company mentioned earlier, which limits each claim to a specific indemnity period without a collective limit on all claims. The loss ratios on the business of this company have been lower than the averages shown for the four companies.

PRESENT TYPES OF COVERAGE

The policy forms now issued by the seventeen active companies vary considerably. To present in full the details of all these policies would require many pages, and would probably be confusing rather than illuminating.

However, an analysis of the provisions of nineteen currently issued policy forms shows that they may be classified in five

general forms, which are listed below in the order of their frequency.

- (a) Policies with an aggregate limit of two years or less and with short waiting periods.
- (b) Policies with an aggregate limit of from 50 to 100 months and with waiting periods up to three months.
- (c) Policies with a limit of two years or less on each individual claim, but with no aggregate limit on all claims.
- (d) Policies paying life indemnity.
- (e) Policies paying indemnity for duration of disability, except that indemnities payable after Age 55 are reduced and no payments are made after Age 70. Only one company issues this type but it is mentioned because of its similarity to the coverage sold in Great Britain.

Premiums for forms (a) and (c) are generally the same for all ages, but with an increase at attained Age 50 regardless of age at issue. On the other forms premiums are graded by age at issue.

An outline of the usual provisions of these forms together with the principal variations follows in Table V:

TABLE V
 OUTLINE OF PROVISIONS OF NINETEEN CURRENT NONCANCELLABLE
 ACCIDENT AND HEALTH POLICY FORMS

Item	Form (a)	Form (b)	Form (c)	Form (d)	Form (e)
Number of Policies	7	5	3	3	1

TYPICAL PROVISIONS

Time limit on Total Disability—Accident Sickness	{Aggregate Limit	{Aggregate Limit	2 years 15 months	{Duration of disability	{Duration of disability to age 70
Time limit on Partial Disability—Accident Sickness	½ rate for 6 mos. Not covered	½ rate for 6 mos. ½ rate for 6 mos.	½ rate for 6 mos. Not covered	½ rate for 6 mos. ½ rate for 6 mos.	2/5 rate for 6 mos. 2/5 rate for 6 mos.
Aggregate Limit Elimination Period	2 years 5 days sickness only	50 months 3 months	None 3 days	None 90 days	None 3 months
Renewable to Benefits at older ages	Age 70 ½ rate after 60	Age 60 No reduction	Age 70 ½ rate after 60	Age 60 No reduction	Age 70 Graduated reduction after 55

VARIATIONS FROM TYPICAL PROVISIONS

Limit of coverage or Aggregate limit	One year, 60 weeks	5 years, 100 months	15 months, 16 months	—	—
Nonconfining sickness	—	—	—	—	—
Reduced rate and limit	3 policies	1 policy	1 policy	1 policy	—
No restriction	4 policies	4 policies	2 policies	2 policies	1 policy
Elimination Period	None to 14 days	None to 3 months	None to 28 days	14 to 90 days	3 to 6 mos.
Renewal Age	60 — 2 pol. 70 — 5 pol.	55 — 1 pol. 60 — 4 pol.	70 — 3 pol.	60 — 3 pol.	70 — 1 pol.
Hospital Benefits	7 policies	2 policies	2 policies	1 policy	1 policy
Nurse Benefits	4 policies	1 policy	1 policy	—	—
Accident Reimbursement	—	1 policy	—	1 policy	—
Elective Indemnities	2 policies	—	—	—	—
No extra benefits	—	3 policies	1 policy	2 policies	—
Definition of Total Disability*	—	—	—	—	—
Type A	4 policies	3 policies	2 policies	2 policies	1 policy
Type B	3 policies	—	1 policy	1 policy	—
Type C	—	2 policies	—	—	—
Prorating Clauses**—	—	—	—	—	—
Std. Prov. No. 1	5 policies	5 policies	1 policy	1 policy	1 policy
Std. Prov. No. 17	3 policies	3 policies	—	—	1 policy
Std. Prov. No. 19	—	1 policy	—	—	—
Average Earnings	1 policy	2 policies	—	—	1 policy
Non-prorating	2 policies	—	2 policies	2 policies	—

* DEFINITION OF DISABILITY—

Type A—Inability to perform the duties of *his* occupation.

Type B—Inability to perform the duties of *any* gainful occupation.

Type C—Same as Type A as to the first year of disability, with Type B applying thereafter.

** PRORATING CLAUSES—

Standard Provision No. 1 prorates the indemnity in event of a change to a more hazardous occupation.

Standard Provision No. 17 prorates in event the insured carries similar insurance with other companies, without disclosing this to the insurer.

Standard Provision No. 19 prorates for concurrent coverage in the same company.

The "average earnings" clause generally restricts the indemnity to the proportion of the insurance that the insured's average earnings during the preceding two years bears to the combined coverage in all companies.

Among the variations from the standard types is a policy which returns to the insured, after twenty years, the excess of one-half the premiums paid over the total claims paid. This policy also contains a nonforfeiture provision in the form of extended insurance. Another policy provides a cash value after premiums have been paid for five years. One life indemnity policy reduces the income 50% after Age 60.

Mention should also be made of the miscalled noncancellable policy which may not be cancelled during the term for which it is written, but which is not guaranteed renewable.

COMPARISONS WITH DISABILITY BENEFITS CONTAINED IN LIFE INSURANCE POLICIES

The subject of disability insurance has been discussed so fully that I will make only a brief review of its history. The benefit was originally introduced by Fraternal Orders. In 1894, the organization of a company which was to specialize in permanent disability insurance was commenced but never completed. Two years later the Fidelity Mutual Life Association, an assessment company which changed to the legal reserve basis in 1899, incorporated the first disability provision in a life insurance policy. This provision granted the insured the option of either a life annuity based on the face amount of the contract, or a fully paid up life policy, either option being in lieu of the other benefits of the policy.

The Travelers Insurance Company originated the waiver of premium benefit in 1904. Other companies adopted the benefit in 1910, and later added provisions for cash benefits in event of total and permanent disability. The various types of benefits were as follows:

Waiver of interest—premiums waived and income payments made to the insured were charged as non-interest bearing loans against the policy.

Annuity certain for twenty years, the total payments aggregating the face of the policy. In event of death within the

twenty years the present value of the unpaid installments was paid in one sum.

Maturity of the contract, the proceeds being paid as an annuity certain or as a life income with a certain number of payments guaranteed.

In 1916 one company adopted a provision granting an annual income of 10% of the face amount of insurance payable for the duration of disability without reduction of the life insurance coverage. This benefit was soon offered by other companies. The income payments were increased to 1% monthly in 1920. Up to this time the benefit was payable only in event of total and presumably permanent disability. Because of the difficulty in establishing permanence several companies changed their clauses in 1921 to provide that total disability of three-months' duration would be considered permanent for the purpose of determining the commencement of liability. The practice of making payments retroactive to the beginning of the three month qualification period was started in 1926. The "professional men's clause" defining disability as inability to perform the duties of *his* occupation was introduced in 1922. In the same year several companies commenced a plan which provided for an increase in the disability income with duration of disability.

During this period of liberalization and rapid growth of the disability provision several unsatisfactory conditions had arisen. Premium rates originally charged were found to be inadequate and as a result disability came to be a losing proposition in many companies. Partly from desire to furnish the broadest possible coverage, and partly in an attempt to outdo competitors, a great variation in policy provisions, underwriting and claim administration had grown up.

In order to standardize the coverage, the Superintendent of the New York Insurance Department appointed, in 1928, a Committee of Actuaries to study the problem. Later in the same year the National Convention of Insurance Commissioners appointed a Committee of Department Actuaries to confer with the New York Committee. The recommendations of the committees were approved by the Convention in 1929. These recommendations, which included a list of standard provisions, were soon adopted

by nineteen states. Following this action the companies generally changed to a four-month qualification period, without retroactive income payments, and adopted substantially higher rates.

It was thought at the time that the disability benefit had been placed on a sound basis, but it was soon found that the new rates were inadequate in the light of current experience. In 1932 drastic revisions were made. Many companies discontinued the income benefit. Others adopted a six month qualification period, reduced the monthly income to $\frac{1}{2}\%$ of the face amount, and based their rates on the 150% or 165% Modification of the Class III Table. At present less than 40% of the companies issue any income benefit and these write it on a very conservative basis.

First year premiums received in 1934 for disability benefits amounted to about 13% of the 1930 receipts. Since most of the 1934 premiums were for the waiver benefit the decline in new disability income business has been greater than this comparison would indicate.

In contrast with the volume of disability benefits written the amount of noncancellable accident and health insurance appears relatively small. The following table shows the noncancellable accident and health premium income of thirteen companies carrying over 85% of the business, and the disability premium income of twenty-five life insurance companies transacting approximately the same proportion of all life business in the country.

TABLE VI

Year	NET PREMIUMS RECEIVED FOR		Percentage of Noncancellable to Disability Benefits
	Total and Permanent Disability Benefits	Noncancellable Accident and Health Insurance	
1915	\$668,030	\$5,000 Est.	1%
1920	7,631,415	3,600,000 Est.	47
1925	25,893,224	11,724,956	45
1930	66,916,861	19,551,245	29
1934	55,436,206	15,500,855	28

The 1915 disability premiums were mostly for the waiver benefit. In the succeeding years shown, until 1934, the income benefit assumed an increasingly large proportion of the total.

The experience under disability benefits in life policies has

been substantially as unsatisfactory as that of the noncancellable life indemnity policies. While the disability benefit was being liberalized doubts had already been raised as to the soundness of the noncancellable accident and health policy, which was being restricted or discontinued entirely. It was thought, however, that there would be distinctly less selection against the company under the disability provision because it was sold only with life insurance and represented, in terms of premiums, only a small percentage of the total coverage. However, even though the insured may have thought little of the benefit when the policy was taken, he soon learned its value. In some cases, the distinction between insurability for life insurance and insurability for disability benefits was overlooked, and often borderline disability risks were accepted to avoid the possibility of losing the life application if disability benefits were denied. The combination coverage placed the applicant in a good trading position, and probably created more underwriting problems than it solved.

It was not until 1928 that efforts were generally made to tighten up on disability practice. Then a vicious cycle set in. As rates were increased and coverage restricted, adverse selection was created. Stricter underwriting requirements rendered the provision less popular with the agency forces, with the result that it was more often bought and less often sold.

While the disability benefit was generally unprofitable, there are a few companies which have not experienced unfavorable results. These companies adhered to conservative underwriting methods and claim administration and generally charged more than the prevailing rate.

One company, which had not previously adopted the disability benefit, brought out a unique form in 1929. It provided that disability which resulted in a reduction of 75% or more in actual earned income, for a period of four months, should be considered total disability. The income under this contract is prorated so that the indemnity payable under all types of disability coverage may not exceed 75% of the average earned income during twelve months preceding disability. While it is too early to draw any definite conclusions regarding this type of benefit, it is significant that the company issuing it has reported a profit from disability in each year since the benefit was first offered.

REASONS FOR UNSATISFACTORY EXPERIENCE WITH LIFE INDEMNITY COVERAGE

The reasons most often cited for the adverse experience under disability benefits and noncancellable accident and health insurance are:

1. Overinsurance at issuance or as a result of curtailed incomes.
2. Inadequacy of premium rates due to the lack of any proper experience tables.
3. Competition in coverage, underwriting and claim administration.
4. Liberalization of the benefits by legal interpretation.
5. The tendency, noted in England over nearly a century, for sickness rates to increase as mortality improves.
6. Education of the insured public to advantages and potentialities of the coverage.

Opinion is divided as to whether, (1) the poor results were chiefly due to improper underwriting and inadequate rates, or (2) disability is a hazard that cannot be insured except within narrow limits. The generally satisfactory results under benefits for waiver of premiums only suggests that overinsurance and selection against the company played a great part in creating the heavy losses. Whether the use of a prorating clause based on average earnings would have materially reduced the losses remains a moot question, as relatively little experience has been accumulated under policies containing this provision.

Two observations may be drawn from the experience with disability benefits and noncancellable accident and health insurance. (a) The concept of the coverage as indemnity for loss of earnings was often disregarded in underwriting the benefits. (b) A policy which guarantees an insured a secure income payable as often and so long as he is disabled places him under a temptation to "enjoy" disability that is often difficult to resist.

FUTURE PROSPECTS FOR NONCANCELLABLE ACCIDENT AND HEALTH INSURANCE

The rapid growth of both noncancellable accident and health insurance and disability benefits during the period that they were

freely offered indicates a real demand for permanent protection against loss of time from sickness and accident. That insurance against this loss has its place in our social order cannot be disputed. To what extent it can be underwritten by insurance companies is debatable.

The view held by many insurance executives, that it is not a proper line for a life insurance company to carry, has the weight of much evidence and sound logic. The underwriting and agency problems seem to arise chiefly from the fact that a prospect insurable for life insurance is often uninsurable for disability benefits, while the reverse is not often the case. It follows then that the disability benefit cannot be treated as a sideline or incidental.

The human equation is involved in the conduct of disability insurance more than in any other line. The principal problems of the business are administrative, rather than technical. The moral hazard, which cannot be eliminated by home office underwriting, must be minimized by selection at the source, through competent, trained and conscientious agents. If disability or noncancellable insurance is an incidental line sold by the general insurance agent, or if it is an adjunct to life insurance which means only a slight additional remuneration to the agent, it will be sold too often to applicants seeking this coverage. In order to secure the broad selection needed for the protection of the company, it is necessary that this business should constitute the agent's principal line. When the agent's livelihood depends upon the sale of this coverage, there will be fewer cases where it is bought by applicants who see the possible advantage to be gained from its abuse.

It is doubtful if a company can successfully write both cancellable and noncancellable accident and health, unless the cancellable contract is distinctly inferior, in scope of coverage, to the noncancellable contract. Otherwise adverse selection will be experienced. Another difficulty in the concurrent issuance of the two types is in the commission scales. Commissions on cancellable insurance are customarily higher, on the average, than on noncancellable. If a company pays a larger commission on cancellable than on noncancellable business, it will be subjected to adverse selection. If it increases the noncancellable commis-

sions, competition will be difficult to meet. If it lowers the cancellable commissions, its business from this source will be curtailed.

The companies which are now successfully writing the bulk of the noncancellable accident and health insurance today, and which will probably continue to do so for some time in the future, are making it their main line. Several of the companies write life insurance, but in these cases the tables are turned, for the noncancellable accident and health is the leading line and the life insurance is supplementary. Since almost any risk acceptable for noncancellable accident and health insurance is insurable for life coverage, the internal problems that have beset the life companies through their disability benefits are not encountered.

If these views are borne out by future experience, it is likely that the noncancellable accident and health business will continue to expand, but it will be written by accident and health companies. The coverage will also be restricted as to the amount of benefits allowed and the length of time for which they will be continued and will only be extended gradually on the basis of mature experience.

It is unfortunate that so little has been written regarding the experience under noncancellable accident and health insurance since the days of its early popularity. As a full account of this subject is desirable for the benefit of the students and for those who might consider venturing into this field, it is hoped that further information will be brought out in the discussion of this paper, and that any wrong impressions will be corrected by those who have followed the experience of noncancellable insurance since its origin.

In gathering the material for this paper a questionnaire was sent to all companies which had written noncancellable insurance. I am indebted to the officials of these companies for their generous cooperation in furnishing the information requested.