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Some Aspects of Sickness Insurance

BY

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Some Aspects of Sickness Insurance.

(Read before the Actuarial Society of Edinburgh, 8th Feb. 1900.)

A QUESTION OF NAME.

ALTHOUGH the subject we are about to discuss is frequently referred to as "Health" Insurance, I venture to submit that as a mere question of exactness Sickness Insurance is the correct term. The common method of naming systems of Insurance is not, however, too exact, but that is no sufficient reason for being inexact where exactness is possible. Insurance against fire, insurance against accident, and insurance against sickness are expressions, each of which carries with it a precise meaning; but to speak of "insurance against health" would be a contradiction and an impossibility. In Life work we refer to Life Assurance, while in reality we mean insurance against death, and in respect of this particular business, whoever may have been responsible for the primary use of the term was wise in his generation. To write or speak perpetually upon the subject of death even in its relation to insurance would be a lugubrious vocation to engage in. The subject itself would not only be uninviting but repellent, and therefore as far as possible men would seek to avoid its discussion. For the same reason I imagine "Health" Insurance is preferred by some to Sickness Insurance; but the description cannot be supported by the same reasoning, while, as I have said, it is incorrect and therefore unnecessary.

THE NEED OF SICKNESS INSURANCE.

It might seem at first sight to be a work of supererogation for me to urge the need for, or the value of, Sickness Insurance, and I should have taken it for granted that this was acknowledged, but for the fact that even in the insurance world Sickness Insurance is still looked upon not only as occupying the subsidiary position which it actually does, but also as being in itself rather a subject for academic discussion than for practical treatment. Something has been done in recent years to remove that notion, but the educative work is by no means complete. The objection, it should be explained, relates only to a provision against physical incapacity through sickness for the mercantile and professional

classes of which it is the main purpose of this paper to treat, and the question arises, Do these classes need such a provision? An artisan, it may be and sometimes is argued, should secure an income during sickness by whatever means are available, for with him it is no work no wages; but business men and those following professions, who earn larger incomes, are differently situated. If difference there be, it is a difference of degree only, not of kind. If the income of the professional man is larger than that of the industrial worker, so also is his expenditure. A merchant may be earning £1000 a year while a mechanic is earning only 30s. per week. But in each case the outgo bears some sort of relation to the income, and relatively there may be a wider margin upon the smaller than upon the larger earnings. It is after all purely a question of margin. The man of large or small income who is living up to his earnings cannot but feel the stress and strain of a period of sickness, with all its attendant losses and expenses. Each has to bear the financial burden caused by incapacity, and for each, therefore, any provision that may be made in times of health and strength for times of incapacity is surely worth more than a passing thought. An American writer on the subject, Mr. Ralph Butler, has lately been giving his opinions in the Insurance Press, and his observations on this aspect of the topic may be worth quoting.

“Known quantities,” he says, “are not insurable. The unknown and the unexpected only are proper subjects for insurance. Does the individual man know his tendency to sickness from his past experience? We think our reader will answer for himself that there are no doubt many men with such knowledge; men suffering from no particularly diseased condition ascertainable by medical examination, but men whose vital forces seem to wear out every year or two, and who must lay up for repairs. Nature calls a halt, and the doctor, his medicines, and rest are needed to restore such people to their normal condition. Such a condition is more or less a known quantity; such men will naturally seek health insurance.”

But if known quantities are uninsurable, and the condition described is a known quantity, it follows from the argument that the search for insurance should be fruitless.

It is not a very logical, and, logic apart, it is not a very exact statement. The normal physical condition of many men is fairly well described by the statement that every year or two they have to “lay up for repairs,” but this is not the class of people for whom Sickness Insurance can well be provided. It would be almost as reasonable for the property owner to look for adequate fire insurance whose premises periodically suffered from the flames. Fire insurance companies would fight shy of these risks; a sick-

ness insurance company must fight shy of the class of men of weak physical constitution who recuperate only to speedily exhaust their strength again.

The American writer, however, proceeds to argue that "some people are seldom, if ever, sick, and they know it. Their unknown quantity or chance of loss of time seems to be from accident, or from sporadic diseases that may be not improperly called 'accidental' diseases." The flaw in this statement is that the past and the future are practically the same. If the writer referred to had argued that some people have seldom, if ever, been sick—confining his statement to the past—it would have been a mere truism; but when it is gravely argued that the risk in the case of these is only that of sporadic diseases or of accident, and that the whole artillery of the ills to which the flesh is heir may be levelled against them during the remaining years of their life without any serious danger of their falling victims, facts are ignored which one would have assumed are patent to every one even though not gifted with more than common observation.

SELECTION.

In no department of insurance is selection so consistently and persistently against the Company as in that we are now discussing. In the field of Life Assurance this adverse factor has been largely in the past, and to a considerable extent still must be taken into account, but its degree must depend upon the form of assurance preferred. The provision offered by a whole life policy is chiefly taken advantage of by those who desire to make the largest immediate provision for their families at the smallest possible cost, and the fact of the uncertainty of life is much more readily accepted by the man who is conscious of inferior vitality than by him who possesses and is conscious of a robust constitution. The investment element which bulks so largely in Endowment Assurance obviously operates to some extent against the element of adverse selection, but in Sickness Insurance there is little of this element to be found.

The man who enjoys good health not uncommonly scouts the idea of his ever being sick. He looks at his future solely through his past; and even if that has not been altogether free from flaw, he may perhaps have descended from parents who have lived to a good old age, and so he fancies that in this respect at least he has entered into a reliable heritage. What then, he urges, could an illness or two mean to him compared with all the saving he will effect by not contributing an annual premium for a Sickness Policy.

It is, of course, a superficial as well as an utterly fallacious mode

of reasoning, but it is reasoning that we have nevertheless to reckon with, and so the healthy man remains both unconvinced and uninsured; or if he should be persuaded to effect an insurance against sickness, possibly as the result of a warning received through a temporary indisposition that after all he is not invulnerable, he soon forgets the warning and gives up the policy when he has resumed his normal condition of health. The man of weaker physique, on the other hand, is not only conscious of that fact, but he is conscious also of other and equally important facts which are closely related to it. He realises the more than possibility of his being invalided, and thus compelled to neglect his business or professional duties; and he at the same time foresees that losses and expenses together or separately may involve him in pecuniary difficulties which he cannot face unaided. On the ground peopled by men of this stamp the outside official's work is comparatively easy, and if the acceptance of a proposal should follow, the policy will not readily be relinquished. Hence it follows that selection must be rigorous, and the pruning knife used freely on the proposals submitted, if the Company would avoid a register of invalids, and secure such an average of risks as has been contemplated in the computation of its premiums.

When we come to deal with the consideration of individual cases, we are met by one of the practical difficulties of this special class of business. While all sickness does not necessarily shorten life, it does involve a claim under a Sickness Policy. There are many illnesses which, from the point of the duration of life, a medical man will treat as carrying no deteriorating effect at all. There is no illness in connection with Sickness Insurance which can be ignored, and so it must happen that many lives which will be accepted at ordinary rates for Life Assurance will require to be rated up for the purposes of Sickness Insurance. Here it is that special experience is needed, and here it is also that medical opinion requires to be specially informed and trained. It will serve to illustrate my meaning if I quote from certain medical reports and medical recommendations which have come under my own personal observation.

Case No. 1.—Manufacturer. Medical report showed that proposer had suffered from a tumour on the bladder, which was removed a few weeks prior to the proposal. A trace of albumen was found in the urine at the time of examination. Recommendation of local medical examiner:—"Unexceptional Life."

Case No. 2.—Clerk. A cloud of albumen found in the urine. Local medical examiner's report:—"This life may be considered

fair average, with no special liability to sickness." The chief medical officer's opinion was that the proposer was suffering from severe kidney congestion, and that the life was uninsurable.

Case No. 3.—Solicitor. Local examiner's report stated:—"During the last five years I have attended the applicant on several occasions for attacks of bronchial catarrh accompanied by asthma." The risk was classified as, "Fair average" for the purposes of Sickness Assurance.

Case No. 4.—Commercial Traveller. Local examiner's report stated that proposer had just had an abscess at the back of the right hip "which is not yet healed up." Classification also, "Fair average" for Sickness Assurance.

These examples, which might be multiplied to a surprising extent, will be sufficient to show that the local medical practitioner's view of the relation of physical condition to risk is far too frequently quite uninformed, and that it must therefore be closely scrutinised through the facts elicited.

A MEDICAL VIEW.

Dr. C. E. Milnes Hey, Chief Medical Officer in London for the Association with which I am connected, has lately favoured me with some observations bearing upon this question of selection that are so much to the point that I have ventured to quote them at some length.

He begins by stating that the object to be aimed at in the examination is to estimate the probabilities rather of health than those of life, for the one does not invariably mean the other. Dr. Milnes Hey attaches, and I think it will be admitted rightly, great importance to the qualifications of the examiner. He points out, however, that degrees or diplomas in themselves "may mean much or nothing, for it does not of necessity follow that a man who has satisfied some Board of Examiners on knowledge acquired from books, the class-room, or the hospital, is therefore the man most fitted to act as Examiner and Adviser to an Insurance Office." It is further pointed out that the training given to the medical student is given with a totally different aim and object from that of Insurance; and however capable he may be afterwards in grappling with the intricacies and difficulties of treatment for a sick person, this does not necessarily make him an expert examiner of presumably healthy candidates for Sickness Insurance. The writer proceeds: "The opinion required by an Insurance Company of the Medical Adviser is simply this, Is the physical condition of this applicant such at the present time

as will justify this office in accepting him for the benefits of insurance at the ordinary rates that we quote? Has his past history been in like manner satisfactory? Does his family—paternal and maternal—show any record of disease likely to be transmitted to offspring? Do the applicant's mode of living, work, recreation, and surroundings, appear likely to affect in any way his physical well-being? Now, in order to be able to form a correct estimation of the foregoing, the Medical Examiner must possess the power of ACCURATE OBSERVATION. This is a natural faculty and cannot be taught, though the education received in the medical profession may greatly train it, where it naturally exists. One must rapidly recognise Cause and Effect. The mere seeing that the back surface of the right hand cuff of a man's coat is shiny is of little real value unless it be at once connected with its probable cause, a considerable amount of writing, from which an inference can naturally be drawn that the man's occupation is of a sedentary nature."

Proceeding, Dr. Milnes Hey points out that the Examining Medical Adviser should bring sound common sense and logical reasoning to bear upon the case. This means that he should have a real knowledge of men as they live and as they work. In short, he should be possessed of a considerable share of the "detective faculty," noting as well as the physical characteristics brought out by the examination, the applicant's dress, manner, speech, and much else that will help to reveal the whole man.

It is true all this applies also to Life Assurance and nearly with the same force, but that only helps to emphasise the importance of applying every test to the selection of risks in Sickness Insurance that would be applied before a Life Policy could be issued, and occasionally something more. This is a point which, if Sickness Insurance is to be a permanent institution, cannot too often be repeated or emphasised.

A FALLACY HARD TO KILL.

It probably will seem to you a proposition so self-evident as to require no proof, that the liability to sickness increases with the increase in age, just as does the liability to death. And yet, while the latter is conceded without question and universally, the former is strenuously contested by many who can neither be suspected of a deficient general education nor held devoid of reasoning power. And this fallacy is hard to kill. The Friendly Societies are not so much responsible for it as they are founded upon it. Not only the majority of the older Societies, but many of the more recent creations also, have proceeded upon the fact

as established, that the liability to sickness between certain ages is the same for the entire group. The man of 30, it is urged, is not more liable to ill-health than the man of 21, and probably as an isolated fact this is true enough. But the admission that it is an isolated fact is at the same time an admission that any insurance system based upon it rests upon a tottering foundation. If increasing age does not in the earlier years show a large actual sickness ratio among healthy selected lives, it must of necessity have brought the average life nearer the time when infirmity must be looked for with tolerable certainty. Hence any system which does not, out of the contributions of the earlier years, accumulate a sufficient fund at a sufficient rate of interest to meet the growing claims of later life is, as surely as if it did so deliberately, preparing for itself the Nemesis of a searching retribution. No more convincing statistics as to the truth of this contention could be found than those furnished by Friendly Societies, every one of whose members is assured for a sum at death along with the provision against sickness. The experience of the Hearts of Oak Society over a period of 20 years will be found in Table A. It will be seen that although the proportion of claims for death to that of claims for disablement is not uniform throughout, the variations are rather in the direction of a higher sickness than a reduced death ratio.

TABLE A.—*Showing proportion of Sickness and Death Claims to Income during the 20 years ended December 31, 1898.*

Year.	Sickness claims per cent.	Death claims per cent.	Year.	Sickness claims per cent.	Death claims per cent.
1879	40.53	9.74	1889	39.75	9.22
1880	39.95	9.57	1890	46.63	9.93
1881	41.10	10.15	1891	47.10	10.58
1882	39.11	9.56	1892	50.36	9.54
1883	39.53	9.82	1893	50.24	10.28
1884	39.72	9.74	1894	44.41	9.01
1885	40.91	10.01	1895	49.66	8.73
1886	43.50	9.62	1896	42.27	8.71
1887	41.25	9.58	1897	43.91	9.13
1888	41.17	9.26	1898	42.62	8.50

A final proof—if proof is needed—of the growth of the sickness risk with age, and therefore of the palpable unsoundness of any system of rating which makes no distinction of age, will be found in Table B.

TABLE B.—*Giving the Adjusted Rates of Sickness at Various Ages of the Friendly Societies, 1876-1880, compared with those of the Manchester Unity of Oddfellows, 1866-1870.*

The Table shows the number of weeks of sickness per member per annum.

Age.	First six months.		Second six months.		After twelve months.		All Sickness.	
	Friendly Societies.	Manchester Unity.	Friendly Societies.	Manchester Unity.	Friendly Societies.	Manchester Unity.	Friendly Societies.	Manchester Unity.
20	.775	.662	.045	.028	.067	.012	.887	.702
30	.779	.742	.055	.060	.123	.065	.957	.867
40	.997	.908	.086	.096	.285	.171	1.368	1.175
50	1.396	1.294	.160	.211	.622	.483	2.178	1.988
60	2.116	2.144	.402	.508	1.803	1.381	4.321	4.033
70	3.441	3.680	1.221	1.421	7.576	4.982	12.238	10.083
80	3.387	3.971	1.730	2.660	19.955	14.087	25.072	20.718
90	<i>nil.</i>	3.214	<i>nil.</i>	1.892	44.953	25.426	44.953	30.532

This Table was prepared by Messrs. R. Watson and Son, Actuaries to the Manchester Unity. The Friendly Societies' rates are based upon the analysis prepared by Mr. Sutton, to which reference will subsequently be made. The Actuaries call attention to the fact that the new experience exhibits a greater amount of sickness at all ages than prevailed in the Manchester Unity in the period covered by Mr. Ratcliffe's investigations.

A KNOTTY POINT.

We pass easily from the study of these Tables to the consideration of a difficulty which I think may safely be said to be the greatest with which any office transacting Sickness Insurance business has to contend. It is that of fixing the conditions under which compensation shall be payable, which conditions shall, at the same time, sufficiently protect the office itself, and reasonably

satisfy the demands of a somewhat exacting public. The demand for Partial Disablement Benefit is continuous and persistent; but no person demanding this stops to consider the provision as part of a possible system. He only looks at it from the point of view of his own physical condition at the moment of demand.

It would probably be regarded as rashness, in this age of enterprise, to predict that any particular condition would never lend itself to insurance treatment, but if an exception to an otherwise wholesome rule, viz., not to prophesy before you know, could be made, I should venture to claim that this exception must be that of providing partial disablement benefit under a Sickness Policy. It is a multiform condition capable neither of precise statement nor of treatment from the insurance standpoint. Any man is partially disabled who suffers from any disability whatever, and the area of this partial disability may range from a trifling cold to a condition of serious weakness disabling him from attendance upon his business for more than an hour or two per day, or for an hour or two occasionally.

It may seem hard at first sight to deny to the one in the condition last described the privilege of compensation for the loss he actually sustains, but it must be remembered that he cannot be looked upon as a unit or treated as such. The system can only be framed upon general lines, and it can only provide, therefore, for entire disablement. What is to constitute entire disablement can only be determined in each individual case; it cannot be absolutely provided for by any set formula of words.

Almost as much will depend upon the mental as upon the physical constitution of the assured. One will be so interested in, and absorbed by, his calling as to force himself to do his work, or the major part of it, in spite of his weakness; another of a more nervous temperament will keep to the house or even remain in his bed on account of much more trifling ailments. The first of these will be unable to claim any compensation at all, the latter will have an acknowledged claim for total disablement.

Then again the conditions of employment must always be taken into account. An employer may satisfy himself with an hour or two of daily supervision, while the employed must either perform a full day's work or proclaim himself unable to work at all. The employer has the incentive to remain on duty as long as possible through the interests of the business being his own, while the employed, especially if his salary goes on during illness, is the more easily reconciled to absence from duty by the fact that the interests he would promote if at work would be chiefly those of another.

How is this conflicting condition of things to be met? Obviously a policy definition of disablement, however carefully drawn,

could not be applied according to the letter without involving injustice to one or other of the contracting parties. The difficulty can only be met by an administration that recognises the condition of the assured as of more concern than the mere phrasing of a policy.

It must not be inferred, however, that the policy condition is of little or no moment. On the contrary, no class of Insurance policy needs to be drawn with more care, and, perhaps I should add, with more stringency. In this respect, the Friendly Societies are much more effectively equipped than is possible in the case of an Insurance Company. Their Lodge system operates as a wholesome check upon malingering. Members are told off, or, to dignify their work, are appointed to offices whose chief duty is to periodically visit claimants and certify as to their condition. More than this, members are more or less known to each other, and each member has a personal interest in preventing a serious depletion of the funds of his lodge or branch by indolent and designing members who would rather be in receipt of sick pay than work. The Insurance Company's clients will, in the nature of things, be widely scattered. No policyholder will act the part of a member in a Friendly Society in checking improper claims. To have them dealt with by the Branch organisation would involve an expenditure so heavy as to more than neutralise any advantage gained, while to leave the matter in the hands of the *average* agent would be to invite a ratio of losses that would be simply ruinous.

We are thrown back then almost wholly on the medical certificate, and a doubtful quantity it is. No medical man can pronounce a patient fit for work who declares himself utterly unequal to any part of it; and in any case the medical man, being employed by the claimant and not by the Company, has no special incentive to examine too closely into a claim upon a mere Insurance Company. This rule has its exceptions, but these only serve to bring out the dangers that lurk under the rule itself.

ORIGIN AND GROWTH OF FRIENDLY SOCIETIES.

The oldest existing Friendly Societies, in which form Sickness Insurance took its origin, were, according to Mr. Edward Brabrooke, C.B., founded in 1687, 1703, and 1708, among the Huguenot refugee workmen in Spitalfields. Parliament recognition was given to them in 1793, when an Act was passed for their encouragement. Since then the growth of these Societies has been continuous. At first the idea took root slowly. Its expansion was probably due more to the pressure of necessity than to the

spread of principles of thrift. But in later times Societies and Branches have so multiplied that the number now established in the United Kingdom and Ireland is about 24,200—a Branch being treated as a separate Society for the purpose of these returns. The membership is nearly $4\frac{1}{2}$ millions, and the accumulated funds amount to upwards of £23,000,000.

The first attempt to calculate rates for Sickness Insurance was probably that made by Dr. Price (whose connection with the Northampton Mortality Table is so well known) in 1771. But it was fifty-four years later, viz., in 1824, before any actual sickness experience was published. In that year the combined experience of seventy Friendly Societies in Scotland was issued under the title of the Highland Society's Table, and for some time afterwards it was accepted as the standard for newly formed Societies. Unfortunately the sickness rate allowed for was much too light as events proved, and ultimately the table was withdrawn, but obviously the mischief caused by it could not be so quickly undone.

Other tables were subsequently published, but do not appear to have been treated as of much account, with the important exceptions of Neison's, published in his work on Vital Statistics in 1845, A. G. Finlaison's and Ratcliffe's. Finlaison's tables were compiled at the request of the Lords Commissioners for the reduction of the National Debt, and the experience of 4291 Friendly Societies was drawn upon for the purpose. These tables, however, did not include cases of chronic or prolonged sickness, and hence would prove an unsafe guide for Societies or Companies insuring against sickness of all kinds. Ratcliffe's tables were based entirely upon the experience of the Manchester Unity of Oddfellows (of which Order he was Secretary), and comprise three sets, the first published in 1850, the second in 1862, and the third in 1872. Separate investigation and calculation preceded the publication of each set, and the experience related to different periods of time. It may be mentioned that the 1872 tables were based upon the experience of 1,321,048 years of life, and what was of equal value, they presented the sickness experience in periods, thus enabling calculations to be made of the effect of a reduction in benefits after a given length of illness. These tables acquire additional importance from the fact that they are accepted by the Treasury as the standard for the valuation of Friendly Societies. The following Table C contains some suggestive figures as to the position of Friendly Societies at the present time. These are taken from the most recent returns issued by the Chief Registrar. The figures relating to the Oddfellows do not include those of the Manchester Unity.

TABLE C.—*Summary of Valuation Results of various Friendly Societies.*

COURTS, ETC., SHOWING SURPLUS.

	Number of Courts, etc.	Funds.	Present value of		Surplus.
			Benefits.	Contributions.	
Oddfellows,	108	£104,182	£291,450	£200,791	£17,072
Foresters,	933	1,319,499	3,622,722	2,683,289	325,551
Shepherds,	50	33,363	100,988	79,427	6,978

COURTS, ETC., SHOWING DEFICIENCY.

	Number of Courts, etc.	Funds.	Present value of		Deficiency.
			Benefits.	Contributions.	
Oddfellows,	1686	£706,899	£5,692,054	£3,357,149	£1,620,386
Foresters,	3038	2,720,219	14,525,691	9,056,151	2,788,157
Shepherds,	852	273,756	2,449,629	1,686,123	523,538

In this connection the following observations by the Chief Registrar in his Report for 1898 have appeared to me worth transcribing. "During the year 1898, 436 returns were received from Friendly Societies, in 109 of which the aggregate estimated surplus amounted to £75,485, while in 327 the aggregate estimated deficiency was £593,331. In 338 instances, or about 77 per cent., the Societies charged uniform contributions for all ages. The returns of these Societies almost invariably disclose large deficiencies, attributed by the valuers generally to want of properly graduated tables of contributions according to age at entry, and sometimes to heavy sickness experience.

"Of the 436 Societies, 348 granted sickness and death benefits, and the remaining 88, death benefits alone. During the five years an aggregate sum of £321,412 was paid in contributions by the members, and an aggregate sum of £350,542 was received by them in sickness benefit alone.

“The majority of Societies where actual expenditure in sickness claims exceed the expected have a larger number of members than the average, which may indicate that effectual supervision over sickness claims becomes more difficult as the number of members increase.”

THE FEMALE RISK.

It has occurred to me that special interest would attach to the female aspect of the Sickness Insurance question. It has been for a long time common belief that the sickness experience among females is considerably greater than that among males, but so far sufficient data have not been obtainable for putting this opinion to a decisive test. Those who desire to study the question with some minuteness could not do better than turn to the Report of Mr. William Sutton, Actuary to the Registrar of Friendly Societies, published in 1896, which gives the largest female experience that is available. The number exposed to risk at the various ages is unfortunately very small. At no single age does it exceed 3500 persons. The conditions of assurance are not stated, but they are no doubt very widely varied; hence the result shown would require to be accepted with very considerable care by any Society seeking to deduce premium rates from them. The experience shown is that under two years and over two years, and the total number sick is compared with the total number exposed to risk at the various ages stated.

In the year 1886 Mr. J. J. W. Deuchar, F.F.A., was engaged by the Sickness, Accident, and Life Association, Limited, to consider the question of extending its system of insurance to females, and made exhaustive inquiries into the whole question. Ultimately he was enabled to obtain the experience of the Church of England Friendly Society, whose headquarters were at Macclesfield. Mr. Deuchar spoke of the Society as consisting of about 1000 members, nearly one-half of whom were females. He gave it as his opinion that the Society was well managed, and therefore the experience adduced was of considerable value. That experience was unfortunately limited to the years 1880 to 1885, and being drawn from a female membership of about 500, it naturally shows certain disparities which must be kept in view when the experience is considered as a whole.

Tables D, E, and F show side by side the Sickness Rates actual and expected during the first six months in the case of both males and females for the purpose of better illustrating the differences in risk.

TABLE D.—*Sickness first six months.*

Age.	Males.		Females.	
	Actual.	Expected.	Actual.	Expected.
16-20	49 ⁶	70.1	46	47.3
21-25	117 ⁶	154.7	100	53.1
26-30	102	152.1	90 ³	103.3
31-35	76 ⁶	169.2	183 ²	134.6
36-40	212 ²	246.5	283 ⁶	214.4
41-45	337 ⁵	359.6	198 ¹	307.5
46-50	167 ⁵	335.9	388 ⁶	506.0
51-55	215 ⁶	340.8	553 ⁵	435.9
56-60	246 ⁵	233.0	442 ²	518.1
61-65	75 ³	123.1	516 ²	542.3
66-70	59	71.0	123 ⁶	336.6
71-75	74	35.8	81 ³	135.2
76-80	0	0	2	32.6
Total,	1735 ²	2291.8	3012 ¹	3366.9

It will be observed from this Table that while sickness among the male members was about 25 per cent. under the expectation, that among the female portion was only about 11 per cent. under the amount expected, the calculation being made, it should be explained, according to the Manchester Unity Tables. The actual rate in the female section exceeded that in the male section by about 17½ per cent.

TABLE E.—*Sickness after first six months.*

Age.	Males.		Females.	
	Actual.	Expected.	Actual.	Expected.
16-20	0	.9	0	.6
21-25	5	16.3	76 ³	5.4
26-30	10	20.9	9	14.4
31-35	19	39.1	28	30.8
36-40	33	60.5	91	52.6
41-45	152	117.5	437	100.5
46-50	257	157.6	548 ³	236.7
51-55	111	222.5	385 ³	284.6
56-60	120	166.5	1183	370.1
61-65	9	123.2	1875	542.9
66-70	50	98.2	1118	465.1
71-75	125	82.3	313	310.9
76-80	0	0	118	111.4
Total,	891	1105.5	6182 ²	2526.0

Table E gives the sickness excluding the first six months of disablement, and one or two striking features are exhibited by it. While in the first six months' sickness shown in Table D it was 11 per cent. under the amount expected, in sickness after the first six months it is nearly $2\frac{1}{2}$ times the expectation.

It will be observed that the actual sickness recorded was 6182 weeks, while that expected was 2526 weeks only. As contrasted with this the male experience on the other hand exhibits very nearly the same relation to the expectation as shown in Table D, the actual sickness being 20 per cent. under the amount expected against 25 per cent. under the expectation in the first mentioned Table.

Table F gives the experience of the two last mentioned Tables combined.

TABLE F.—*Sickness complete.*

Age.	Males.		Females.		Ratios to 100 expected.	
	Actual.	Expected.	Actual.	Expected.	Males.	Females.
16-20	49 ⁶	71.0	46	47.9	69	96
21-25	122 ⁶	171.0	176 ³	58.5	72	303
26-30	112	173.0	99 ³	117.7	65	85
31-35	95 ⁶	208.3	211 ²	165.4	46	128
36-40	245 ²	307.0	374 ⁶	267.0	80	140
41-45	489 ⁵	477.1	635 ¹	408.0	103	156
46-50	424 ⁵	493.5	937 ²	742.7	86	127
51-55	326 ⁶	563.3	939 ¹	720.5	58	131
56-60	366 ⁵	399.5	1627 ²	888.2	92	184
61-65	84 ³	246.3	2391 ²	1085.2	34	220
66-70	109	169.2	1241 ⁶	801.7	65	155
71-75	199	118.1	394 ³	446.1	169	89
76-80	0	0	120	144.0		84
Total,	2626 ²	3397.3	9194 ³	5892.9		

It should be kept in view in determining the value of the foregoing Tables that the female section of the Society included married women. Possibly a portion of the excessive ratio would be due to childbearing, and it is also probable that some part of it must be due to ailments peculiar to females; but, as was suggested in the Report to which I have referred, the excess of the female sickness experience over that of males is such as to point to a radical difference between the male and the female constitutions, enabling the one to recover from serious illnesses with greater rapidity and certainty than the other.

If there was, as is probable, an exceptional amount of malingering-

ing, that might be accounted for by the married women being able to remain absent from work without suffering any serious deprivation, while at the same time drawing even a trifling, though to them appreciable, benefit from the Society.

Among those to whom Sickness Insurance in the wider sense of the term would apply, this latter danger need not require to be faced; but evidently the female risk, from whatever standpoint it may be judged, is so much greater than the male risk, that a very material addition to any scale of premiums applied to males would have to be made to leave any prospect of a profitable business being transacted.

OCCUPATION AND HEALTH.

One of the weaknesses in the Friendly Society system, and from which any plan adopted by an Insurance Company should be freed, is that of rating practically all occupations alike. The miner, the dock labourer, the artisan, the clerk, and the shop assistant usually pay the same premiums for the same benefits, but a little reflection will show that between the various occupations a wide distinction ought properly to be made.

Owing to this method of classification there are no very full data available for fixing these distinctions with precision; but anything that might be said upon the general records issued by the Registrar-General has already been anticipated in the very full and able paper prepared for the Actuarial Society by Mr. J. J. M'Lauchlan, F.F.A., a little over a year ago. It is true that Mr. M'Lauchlan's figures and classifications have been primarily made with a view of exhibiting the mortality in the occupations stated, but the conclusions reached may be accepted as a fairly safe guide to the amount of sickness that must be looked for in the respective occupations also. Alcoholism, gout, phthisis, diseases of the nervous, circulatory, or respiratory systems, or indeed any other form of illness which, for example, in the case of those engaged in the sale of intoxicants produces a mortality rate varying from 1348 in the agricultural districts to 1948 in the industrial districts, as compared with 953 of all occupied males, will produce not less, but probably more, than the corresponding ratio of sickness where Sickness and not Life Assurance is in question.

The same may be said of cutlers, file-makers, potters, glass manufacturers, bricklayers, etc.; and considerable additions to the rates calculated for non-hazardous occupations must be made to cover these augmented risks where proposals for insurance from workers in these trades are accepted.

CONCLUSION.

I must now leave the subject with you. I trust that what has been said will be helpful to a more thorough understanding of it on the part of those who are engaged in insurance work, whether on its theoretical or on its practical side. Signs are not wanting that the real foes of sound Sickness Insurance are most likely to be those of its own household. In some quarters already it has been assumed to be similar to and has been dealt with after the manner of Accident Insurance in all its essentials, while potentially, as I have endeavoured to show, it is Life Assurance. As it is, the public are always too ready to form wrong conclusions where insurance matters are concerned; and therefore a warning note may fittingly be raised where any tendency is shown in insurance circles not to correct but rather to pander to and accentuate these errors.