ABSTRACT OF THE DISCUSSION OF PAPERS READ AT THE PREVIOUS MEETING

ON THE USE OF JUDGMENT IN RATE MAKING—(PRESIDENTIAL ADDRESS) G. F. MICHELBACHER

VOL. XII, PAGE 1

WRITTEN DISCUSSION

MR. FREDERICK RICHARDSON:

The President is to be congratulated on his choice of subject and the skilful way in which he defends the statistical method. That method has not always produced results which could be termed comforting to underwriters and for that reason has been under fire.

It might not be out of place at this time to express our sense of satisfaction and our fellowship pride in his recent appointment to a still more eminent position in the world of insurance. His entry into the arena of practical and competitive business has some significance for us, and will, moreover, have an influence upon his own views concerning the aims and ambitions of Insurance Companies. Doubtless he will continue to seek the lofty and hyperborean atmosphere of these assemblies, here to renew and refresh his spirit in studying and admiring the lambent fires and coruscations that play about the *aurora borealis* of abstract mathematics. Be assured he will need that refreshment, for in the daily march he will be following, like others of us, the will o' the wisps that hover over the dismal swamps of a militant and sometimes dangerous enterprise. In that region one is pursued by swarms of hungry mosquitoes athirst for blood. *Our* blood and not somebody else's. And what a difference it makes! Here we can gather together with our a's and our b's and our x, y, z's and our graphic outlines to postulate the cost of this and the incidence of that, and if our calculations happen to go awry, we, individually, are not a penny the worse. The burden of the experiment falls upon others. Of course, it is always better to be the doctor. One has the satisfaction of knowing what the patient died of! Therefore, being one of your

round-about patients, I view with unfeigned joy the passing, one by one, of our fellows into active and responsible positions in the business for which this Society hopes and deserves to provide the theoretical background.

The President says that judgment in rate making should be eliminated as far as possible. He admits that rates should keep pace with experience, but if needs be, at a distance and in automatic, analytical fashion because experience is particular and not general. It is not one problem but a number of problems each of which must be solved if justice is to be done.

And there precisely is the rub. Questions involving strict justice are of interminable solution. Something may be done with individual risks where they are large enough, but even then it is difficult in practice to overcome the natural tendency to ignore the "ups" whilst giving credits for the "downs". Analysis must stop somewhere, otherwise synthesis, which is the really important scientific process, will never begin. In 1916 dealing with some phases of rate making in a paper "Casualty Insurance, Probable Development and Need for Scientific Treatment of Statistics" I said, "Classifications must be broad or they are not classifications at all. There must be some room for the oscillations of experience. In the final analysis no two objects are absolutely alike, not even two Ford cars or two peas in a pod. A measure of uniqueness resides in all things. But we shall never get anywhere if we allow ourselves to be drawn into a wilderness of distinctions and minutiae. As well hope to catch ostriches with bird-lime or elephants with mole-traps as to hope to measure insurance averages in pint pots. We would lose sight of the larger game in beating out every little side-trail. So the fewer classifications and the fewer exceptions the better. Genius has been said to be the gift of seeing the similarities in things apparently dissimilar. It is able to devise universal laws from seeming contradictions. And this is precisely what the insurance principle does."

Personally I should say that the exercise of scientific judgment is paramount in these matters. There can be no dispute concerning the necessity for fairness and reasonable stability in rate making, but it is safe to conclude that there are greater disparities between individual risks in their groups than there is between groups, and it is scarcely to be doubted that with broader groups,

more scientific classification, and intelligent anticipation of conditions there would be more stability than is provided by the automatic method. I am disposed to think that our analytical basis is by no means final and we shall find it necessary to revise our views regarding the form analysis should take. We may be on the wrong track. We started out with a purely arbitrary basis because it was the only practical thing to do, but with the volume of experience behind us we might derive some notions as to whether there may not be a better way. Classification is not an easy thing even when you are dealing with comparatively fixed characters as in zoology, botany or chemistry. How much more difficult when you are dealing with characters not fixed? Still it probably took some imagination as well as systematic knowledge and scientific judgment to fix the family relationship of a humming-bird with a night hawk, or a stinging nettle with an elm tree. It is in the nature of things to classify themselves under a proper analytical method and this inherent quality may be present in the objects of our studies in rate making. It might take considerable time to establish relationships but it probably can be done. Claims afford the real basis for analytical treatment, their frequency and severity determining the main factor. Relationships of frequency and/or severity would be increasingly manifest as time went on so that groups would finally be formed by their own reactions. Any risks that showed persistent characters of severity and frequency which were not native to their groups would be thrown into higher or lower groups for observation. We might thus preclude the absurdity of a Superintendent of Insurance declining to let a risk carry a higher rate with the consent of the assured on the ground that to take it out of its classification would be in violation of the law. We might even settle the everlasting argument regarding experience rating!

A simple calculation made from numbers of severity and frequency will, of course, give a quick indication of any important change in the general experience. The following tabulation of compensation experience of my own company on a policy year basis from 1914 to 1924 inclusive, tells its own story. The average cost includes unallocated claim expense to disclose the gross loss ratio. There has been a consistent underwriting policy from 1917 on.

	Notices per $1000 E. P.	Average cost inc. unallocated	Loss ratio
1914–15–16	26.6	29.2	77.67
1917	18.9	32.3	61.04
1918	15.8	34.1	53.88
1919	13.8	40.9	56.44
1920	9.5	56.3	53.48
1921	12.7	59.6	75.69
1922	13.1	59.0	77.29
1923	12.7	58.6	74.42
1924	13.4	54.8	73.43

It has not been difficult to forecast for twelve months in advance the probable number of notices and the average cost per claim. Moreover, in 1921 it did not take us long to realize that a radical change had taken place.

Frankly, would it not be useless to pursue such admirable studies as those contributed by Mowbray and Voogt and Leslie L. Hall to our last *Proceedings* if we are going to stand by the automatic method and eliminate judgment as far as possible? Surely it is not suggested that there is not a continuous shuffling of rates among the numerous classifications that we now have, so that the supposed requirements of absolute justice and stability are far from being met. The test of anything is whether it works, and a rating system which does not catch up with losses for several years, and does not stop excessive charges quickly, is not responsive enough for practical purposes. It attempts to hit a moving target at long range with a point blank weapon and affords no place for the use of our higher mathematical equipment. The increase of 15% made in compensation rates in 1917 was necessary at that time and could very easily have been modified in 1919 without injustice to any one. When we are talking of fairness, what fairness can there be in letting present employers have their insurance at less than cost because employers six or seven years ago paid too much. It smacks of the German system whereby present-day industry is burdened with the cripples handed down by a previous generation of employers. Correlations between claims frequency plus claims cost and wage levels and commodity prices are most significant, and it would not have been beyond our powers in 1921 to have applied a factor which would have enabled us to get much closer to the mark than we have actually been able to do by the automatic method, and with it changes in rates would have been less frequent.

Every now and then there are dangerous oscillations of experience which are capable of being recorded scientifically just as movements of the earth's crust are recorded by the seismograph. There are ascending and descending factors which are relative, so that the actuarial equipment is not complete unless a careful study has been made of the levels of moral hazard, of commodity prices, of the cost of repairs and reconstruction, of the scale of personal indemnities and the rise and fall of unemployment and the corresponding operating density. The actions and reactions can be promptly observed and precautions taken, and although our methods may be empirical at the start we shall soon refine the instruments. We are at present going through a secondary period of deflation which may become acute and it is already indicated that recent increases in compensation rates are not going to bring the loss ratios down to a proper level. Bear in mind that experience is not stationary and, therefore, all measurements are relative. If you scale down the low classifications too finely you will find that experience later on will not justify your conclusions. It is the principle of insurance to bring disparity to parity and that can only be done by a broad treatment. What does the National Bureau want with 540 statistical territories under observation? Any one who studies weather statistics sometimes finds that one station reporting a higher average normal temperature than another will have a late last frost date and an early first frost date, reducing the growing season to a smaller number of days than that of the station recording a lower average temperature. This is a vital point in agriculture. There are similar vital points in insurance classifications which will from time to time upset our fine calculations. Rate making may safely become automatic when we know all about it, but at present the exercise of constant judgment is imperative. There is no wide disagreement between Michelbacher and myself. We are both in favor of more statistics and more accurate instruments, but as insurance rates are anticipatory anyhow, I believe more ardently than he does in the use of intelligent anticipation instead of following a blind formula that puts rates down when they should be going up, and up when they should be going down.

As for the Commissioners and other authorities who make objection to increases in rates, they will be convinced of their

necessity when we show them that we know our business and when we all speak in the same accents and with the same voice. And if you are conservative enough to require precedents to be convinced of the soundness of my arguments I would call your attention to the greater stability of compensation rates in Pennsylvania with fewer classifications, and also to the fact that Personal Accident Insurance provides coverage for many kinds of occupations and all sorts and conditions of men in so few classes that you can count them on the fingers of one hand.

As for the idea of long term average there may be something in it, but there is no doubt it calls for extraordinary powers of endurance and unusual resources if insurance companies are to stay the course. Since 1921 it has been more like a cyclone than a cycle! We could all become rich if a formula would tell us what was going to happen, and then, of course, nobody would be rich at all! But fortunes have never been built up on statistical theories. They have been built up, like everything else worthwhile, on judgment *and* experience.

MR. C. H. FRANKLIN:

The discussion of any paper prepared by Mr. Michelbacher requires a certain amount of courage because he is such a past master in all matters which appertain to rate making and bureaus, that it is usual to assume he is correct in his views and generally speaking, he is. However, while in theory the views expressed in the above paper may be correct, still we know as a matter of practice that some of the results of past rate making have been very unfortunate for the companies. The results of the workmen's compensation business during the past three or four years have been so disastrous that no further proof is required of the necessity for improvement of the present rate making methods. For the year 1923 according to the New York Casualty Experience Exhibit, the earned compensation premiums were $93,050,646, the losses incurred were $62,891,225, showing a loss ratio of 68%. The 1924 New York Casualty Experience Exhibit gives workmen's compensation earned premiums of $108,520,507, losses incurred $77,659,492, which shows a loss ratio of 71%. For 1925, with a premium of $126,703,111 the loss ratio is stated to be over 69%. For the past three years the companies reporting to the New York Insurance Department

have suffered an underwriting loss of about $30,000,000 on their workmen's compensation business. Now, if the present methods of rate making be correct, then, I submit, those results should be impossible.

Our Past President states there are two methods of making rates, the first depending primarily upon the use of reasoning power and instinct, and only secondarily, if at all, upon statistical facts concerning the cost of insurance in the past. For these persons judgment is the guide. At the other extreme are those who feel that judgment should be eliminated entirely and that rates for the future should be obtained by a more or less mechanical process employing known statistical facts.

Mr. Michelbacher states that his preference is for the statistical method. I submit that there must be a middle path which should combine the advantages of both with a minimum of the disadvantages of either. It is apparent, and I think, requires no proof, that rate making must start from the knowledge of past experience. However, after we have obtained that past experience there is no reason we should blindly follow it. If the path that it marks leads to a precipice there is no reason we should tumble over the precipice. I submit it is reasonable to assume that a Great Creator has endowed us with such intelligence as we possess so that we can properly appreciate what past experience means, apply that knowledge to present conditions, and do in rate making what the business man is doing every day. It is frequently argued as a reason for applying the statistical formula procedure that it is easy to explain, but even that argument fails in view of troubles that have been experienced in various states, in meeting refusals to adopt the rates submitted upon grounds which may or may not appear good and sufficient upon examination.

In workmen's compensation business it is apparently a well known condition that the same law under exactly similar conditions costs a trifle more each year of its operation. Take the medical cost for instance. There has been a marked increase in medical cost during the few years prior to 1923, yet in making rates for 1926 the medical cost for 1923 is taken. Would it be unreasonable or unfair, would it be beyond the powers of the English language to explain, if an increase factor were applied to this 1923 medical cost in the same proportion as it had in-

creased over previous years? On the contrary, I believe it would be the only reasonable thing to do and yet under the formula system it is not done.

To sum up, in the workmen's compensation business the formula system has been tried, weighed in the balance and found wanting. Therefore, whether the injection of some judgment into the system such as I advocate is correct—there is one thing certain that the present method is incorrect—the theory does not square with the facts.

To come now to automobile business. At the present time this is as important or more important than the workmen's compensation business. In this case, strange to say, there is a little judgment introduced and this by the very Association with which our respected past president was connected. The automobile experience is largely based upon the pure premium of the last four years, then an average is taken, then that average is loaded, and I assume this loading is for the purpose of elevating the pure premium to where it should be. To this extent it would appear that the rate making in the automobile business has advanced beyond the rate making in compensation business. It has some proportion of intelligence injected into it, it is not the dry dead bones of the past experience, rattling out an unfortunate experience on present business. This method used in the automobile business supports my contention, that the injection of judgment into rate making is a proper, reasonable and more than that, a necessary thing. Everyone knows that the automobile business taken as a whole has been good. For the year 1923, according to the New York Casualty Experience Exhibit, the auto liability earned premiums were $70,079,499 and the incurred losses $31,949,464, and the net gain from underwriting $4,455,560, showing a loss ratio of 45% and a profit ratio of 6%. For 1924 the auto liability earned premiums were $87,033,991, the losses incurred were $41,441,008 showing a loss ratio of 47%; the net gain from underwriting was $6,107,997 giving a profit ratio of 7%. Now, why has it been better than the compensation? Why haven't we suffered the same loss in the automobile business as we have in the compensation? The answer I believe is to be found in the little leaven of judgment which has permeated one might say the whole loaf of automobile rate making in the past.

However, I believe that a tendency may be observed in the automobile business of making the lines of rate making in the two classes of business meet and I am sorry to see that the tendency is to screw the rate down. Whatever reasons may be underlying this, and we assume there must be some good reasons, the present automobile rates are, I should think, in proportion to the hazard, lower than they have been during the past few years. The reason for this may be the endeavor to meet the competition of the mutuals, reciprocals and that class of insurance. If one may judge from past history, there are always people who will insure in mutuals and reciprocals regardless of the rate difference. There has been one recent unfortunate reciprocal failure in the city of Chicago. Assessments are being made on the members and demand is also being made for return of dividends paid, but are the stock companies finding that they are increasing their business and taking it away from mutuals and reciprocals because of this? I do not think so. Insurance, even in liability lines which are admitted to be among the most difficult classes of insurance, is usually accepted by the public as being one of the easiest businesses possible. Anybody can run an insurance company. Mutuals spring up over night. When a man has failed in everything else he starts a mutual and succeeds so far as getting the premium income is concerned. There are many mutuals and reciprocals now transacting business which could not do it if they were under the same laws as stock companies. However, whatever the reason may be, the tendency seems to be to keep down the rates to as low a figure as possible. If a suggestion is in order it would be well in the future to apply as much benevolent judgment in the automobile rates as has been applied during the recent years—I would leave out the last year—because if the present methods are followed it appears to be the judgment not alone of the writer but of many men better qualified to speak and to give an opinion on this subject, that we are likely to encounter in the automobile business a period of disaster such as we have had in the compensation business.

It is stated that rate making should meet the tests of consistency, responsiveness and stability. In workmen's compensation insurance the rate making has been consistent and stable in producing a loss. Away with such consistency and stability. Let the rate makers be fair to the companies. The various reports

of the casualty companies have only to be examined during recent years to show how bad the business has been; it has only been saved by the stock market and the bond market. In a paper like this it would be out of place to refer to individual companies but the majority of the companies' reports show an underwriting loss, some of them quite large. If there should be a drop in the stock market and bond market at the 31st of December 1926 as compared with the 31st of December 1925, this question of rate making will become a very imperative one. The results to the insurance companies of the past methods will be felt decisively. It will not be possible to cover them up by increase of values of investments and by interest earnings.

We appreciate the difficulties in workmen's compensation business particularly. We know that it is in politics but it is a serious question whether the companies are justified in going along as they are now producing rates which are practically admitted to be insufficient. I am always glad to fall back on a reliable authority, and here I have the pleasure of quoting Professor Whitney of national fame as an insurance expert. On the present rates and possibilities of profit he states as follows:

"Rates in workmen's compensation insurance for instance are predicted upon experience which is as much as two years old when the rates are used, even when based upon loss ratios. Studies have been made in the attempt to correlate the hazard with business conditions but the result has been so unsatisfactory that rates have sometimes been reduced when they should have been put up and vice versa. The actuaries are about ready to conclude that a practical solution of the problem of bringing rates up to date cannot be had, at least at present. If this is admitted we must face the condition of having to use rates that are always behind the times. However, even if satisfactory projection methods could be devised, it is doubtful if state officials having the approval of rates under their jurisdiction could be persuaded to allow such methods to be used in general as a basis for rate determination. These officials are gentlemen who are inclined by nature to have more confidence in figures themselves than in actuarial theories however sound, and it may be taken for granted that the rates that they approve will be pretty close to the actual experience, particularly if the loss ratio appears to be rising. If this is the case, however, a rising loss ratio can mean only inadequate rates and it is therefore hard to see how the companies can possibly make any money, at least in the workmen's compensation field, under such a condition."

I humbly agree with him. As I look at this question of rate making, it is just the same as any other business. The way to make money is to use brains, not beef. The statistics are the beef of the rate making, and when we use the beef only—the senseless, unreasoning figures—we get what we deserve as exemplified in the workmen's compensation business; but if we use brains as have been used in the automobile business, and which I fondly hope will continue to be used, then we get better results.

In conclusion, I would refer to the very strongest criticism of the past methods of rate making in workmen's compensation, namely, the action of the companies in appointing a committee to consider the situation. This has occured within the past few weeks. It is apparently the fond hope of the companies that something can be done to correct the purely statistical method of arriving at workmen's compensation rates, and if this is done we may have hopes for the future. If the statistical method pure and simple would still be adhered to it is hard to know how the companies can be helped except say by such a serious matter as another war, which would be buying the profits of workmen's compensation business at too dear a cost. Let us have sweet reasonableness on this rate making business.

MR. GEORGE F. HAYDON:

As might be expected, bearing in mind the years which he has spent in his particular sphere of usefulness, Mr. Michelbacher's conclusions naturally gravitate to awarding the "plum" to a mechanical system of rate making as opposed to the use of judgment. But despite this Mr. Michelbacher leaves nothing to the imagination. His presentation is well thought out, he has established his ground work and then proceeded to fix up the borders and generally lay out the pathways of its intricacies in a manner which I am tempted to say defies competition or criticism. In fact, with the exception of his rather fanciful differentiation between underwriters and rate makers, I am in rather general agreement with him; consequently this paper then resolves itself into merely confirming to a great extent the hypothesis upon which Mr. Michelbacher's address was built.

About the only silver lining which Mr. Michelbacher holds out for the advocates of judgment rating is contained in Chapter

VIII, but even then he witholds the cup just as he is about to present it, for, while admitting that judgment should not be eliminated entirely and thereby giving hope and comfort to his colleagues of the opposite viewpoint, he proceeds to discard his apparent friendly gesture and intimates that, while it is true judgment may be used, it is only in connection with the selection of the proper mechanical formula to be adopted. We of the mechanical school, as a matter of loyalty to the cloth and in defense of our everyday activities cannot, even though we might desire, take any exception to Mr. Michelbacher's treatise. However, at more or less frequent intervals, in fixing rates for individual risks, we individuals operating in regulated states, will run into the situation where the rate indicated by the established mandatory practice looks wrong, feels wrong, and probably is wrong. It is in such cases, that those of us who, largely by virture of the summers which have been vouchsafed us, are more or less tainted or troubled with the "old school" principles, thresh against the bars and temporarily yearn for more freedom and latitude; which, again may merely represent an unexpected phase of the penalty of age.

Before the days of dependable statistics, naturally, the only principle which could be adopted and followed was that of judgment on the part of the underwriters who, as Mr. Michelbacher remarks would have to be "captured while young" and subjected to a protracted period of intensive training. As Mr. Michelbacher further intimates, about the only good thing which could come out of such a system was "responsiveness". And, unfortunately for the permanent success of the scheme, the responsiveness did not always respond. Furthermore, underwriters were made up of individuals just the same as every other profession, with their varying degrees of mental make-up; so that we had underwriters who were aggressive, underwriters who were conservative, and underwriters who were mere egoists, and, unfortunately, it was the latter type who were liable to be the freest in the profession. Such a condition could hardly exist in a mechanical procedure, wherein I would say, the only loop-hole for judgment would lie in those cases where, as a matter of good public policy, sharp fluctuation in individual rates should be guarded against despite the breadth of experience; and in those cases where the breadth of experience is insufficient or where there

seems to be sharp differences in the results and indications as between territories. I am satisfied that Mr. Michelbacher agrees with this conclusion.

Still continuing to confirm Mr. Michelbacher's findings, resulting from the regime of state control which is rapidly being fashioned throughout the country, certain criteria have to be met, and it is difficult to conceive how this can be brought about without resort to, and the extensive use of, some principle which will lend itself to visualization and measurement. In tabulating his important practical considerations which must be viewed in collaboration with the necessary criteria, Mr. Michelbacher awards first place to "consistency in method". I take it that Mr. Michelbacher refers to an ultimate goal rather than an expression of fact, for, as we look back upon the last decade and observe how we have gradually emerged from a condition not far removed from a stygian pall, and we trace our steps to our present halting place, which, if not the perfect light, is at least the corona, we are forced to admit that consistency was not our outstanding virtue. However, might it not be admitted that the facility to adopt new ideas and to effect almost chameleon changes, is in itself a noteworthy and praiseworthy symptom, and a tribute to an elasticity of mind leadership, thus holding the promise of a solution which can only be made possible and permanent by experimentation. However, be the facts as they may, the principle is regarded as a beacon, and past hopes seem to be very close to crystallizing into a future tangible worthiness.

The single noticeable flaw involved in the process of mechanical rate making lies, as Mr. Michelbacher states, in the somewhat difficult problem of bridging the gap between finished experience and current requirements, wherein it is possible for trend to mislead or be misinterpretated, or for a given cycle to fail to repeat itself. This objection would become a real difficulty in the event of the occurrence of a national disturbance, at which time, if any semblance of responsiveness in rates be retained, then, to continue on a strict mathematical schedule would invite disaster, and it is manifest that, under such circumstances, the injection of a judgment stabilizer would become necessary. This might be construed to be a point in favor of judgment rating: however, while not denying the possibility of such circumstances,

still the probability is sufficiently remote to warrant its exclusion from any consideration in rate making.

In summing up, it appears to me the time is now here when judgment as a sole principle in rate making is rapidly becoming discredited, and any attempt to satisfactorily demonstrate "method and results" could not withstand the standard of today's test. On the other hand, however, I am not prepared to say that the way should be entirely barred to the use of pure judgment or response to instinct, but, I will say, that such means should not be resorted to except in those cases where the measuring stick obviously fails.

MR. R. A. WHEELER:

We can scarcely do other than concur with Mr. Michelbacher's very logical deduction that personal judgment as a factor in rate making should be eliminated so far as possible, duly recognizing however, that it cannot be dispensed with entirely. Personal judgment, indispensable in the pioneer stage of every business, must in the development of the business give way to facts developed by experience. It is essential to progress that the scientific method should replace the judgment method; otherwise we would be devoting our time to re-deciding matters that at great saving could be submitted to statistical and mathematical demonstration. It is only by this process that we are able to build upon past experience and knowledge, thereby liberating judgment to explore new fields and solve new problems.

Rate making in casualty insurance has already witnessed the transition from personal judgment methods to the scientific methods; in fact each year has marked a trend towards the ultimate goal of mechanical rate making, and the displacing of personal judgment. Nevertheless, the fact remains that the complexity of factors affecting the cost of casualty insurance, the inherent difficulties of correlating the future with the past, the ever present problem of adequacy of exposure, have necessarily in the past given personal judgment a wide range of freedom.

To minimize the exercise of judgment under these conditions it has been found necessary, in compensation insurance, to restate the problem of rate making. This has been done by starting with the single basic assumption that over a period of years

the future will reproduce the past, and translating this assumption into a mathematical formula by which the rates for a given year will be based upon the experience of certain specified years in the past. By this procedure there is a reasonable assurance that a consistent and continuous application of such a formula will produce rates, over a period of years, which will meet the requirements of adequacy, reasonableness and stability, although as Mr. Michelbacher points out it may sacrifice responsiveness. Hence the method places an added responsibility upon the companies to conserve the profits of profitable years to meet the losses of the unprofitable years. In short, it places upon the companies the necessity of insuring their aggregate business as between years as well as between risks and classes of business.

Progress has likewise been made in compensation insurance in eliminating the exercise of personal judgment in the matter of adequacy of exposure. Formulae have been constructed by which definite weights may be assigned to volume of exposure, between a state's experience and national experience.

We may sometime be able to make an absolute correlation between the past and the future, but even in this event it is doubtful if we should avail ourselves of this correlation as a basis for future rates, because of the resulting lack of stability in the rates from year to year. It is also possible that by somewhat radical revision of our present statistical methods, the present lag in our knowledge as to recent past experience may be reduced to a negligible factor. It may or may not be desirable to adjust our procedure to this later knowledge. In any event, research as to the correlation between the future and the past and as to the exact financial condition of a casualty company, up to the date of determining such financial condition should be undertaken if for no other reason than that knowledge of the extent of cycles of losses and profits is essential to the continued soundness of the companies. The greater knowledge they have regarding these matters, the better able they will be to adapt themselves to the rates projected in the future.

The ultimate goal of casualty insurance rate making should virtually be in the form of a contract between the companies and the public whereby certain agreed upon and recognized principles may be incorporated into mathematical formulae which shall be applied uniformly and consistently by states and

by classifications for an indefinite period in the future. Such an arrangement accompanied by appropriate administrative machinery for applying the rates will give assurance to both the companies and the public that rates over a period of years will be adequate and reasonable, equitable and non-discriminatory with a justifiable compromise between stability and responsiveness.

INDUSTRIAL ACCIDENT RATES IN THE BUSINESS CYCLE—W. G. VOOGT & A. H. MOWBRAY.

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WRITTEN DISCUSSION

MISS O. E. OUTWATER:

The study which Mr. Voogt and Mr. Mowbray have made and have described in their paper presented at the last meeting show intensely interesting and significant results, which should also prove to be of great value if they succeed in instigating more wide spread and more extensive studies along the same line. But compensation rate making has passed through an experience which no one wishes to have repeated. Any new theories affecting the determination of rate levels must be well grounded before becoming acceptable for actual use. Moreover there is another mooted point which must be settled before the relationship between industrial accident rates and the business cycle, even though proved, can be applied. If the relationship can be measured so as to admit of practical application, the result will be to secure greater responsiveness and therefore, less stability; and there seems to be disagreement in the minds of underwriters and executives as to which of these qualities is more desirable. Apparently some are not yet quite ready to admit that they can't have both, yet the actual loss ratios of some states in recent years look anything but stable. The authors have well pointed out, however, that the theory is of significance not only in determining rate level but in connection with various features of the experience rating plan as well. Moreover, a better understanding of the fluctuation of accident rates is bound to be helpful in unforeseen ways and such investigations often develop facts entirely unlooked for.

As to changes in the methods of using the available data, we have no improvements to suggest. In many cases the results are approximate, it is true, but we believe they are quite accurate enough for the purpose in hand. Should it come to the use of data to determine actual measures for rate making purposes, some change in method and, more probably, some change in the data required might be necessary, but, for the present, we are thankful for statistics that are sufficiently complete for the present purpose.

Unfortunately for scientific purposes, there seems to be a fear in the minds of company statisticians that any new theory which requires more detailed statistics for proof, is likely to mean in the end more work and more cost for their departments and it is not, therefore, given a very cordial welcome. This is not a criticism of the statisticians. They have our sympathy as well as our thanks for the hard work they have done and are doing to meet the increasing demands for detailed information, but we have wondered if the monthly payrolls, so important in the proof of the theory, would be necessary in the later application of the theory. If not, perhaps such investigations might receive a little more encouragement from the guardians of the records.

Although the authors expressly state that they prefer to defer discussion of the significance of the results of their work for rate making purposes, still we wish they had gone just a little farther and compared the accident rate curve obtained with California loss ratios for corresponding periods. We realize that such comparison to be of value might involve numerous adjustments but we'd like to see it just the same.

It seems to us that Chart III follows the theory so beautifully that one feels like jumping at conclusions, drawing a sine curve, or one of that general shape, to represent the business cycle and then another flattened curve with both peak and trough modified and crossing the other about half way up and down each wave and then declaring that we have the accident rate curve. But experience has made us more cautious and instead we call attention to the hump in 1921 which the authors tell us was undoubtedly due to the revival of building activity. If our accident curve is so responsive to a single industry, surely we must go carefully in drawing conclusions and making application. Evidently data used for an investigation must be

uniform as to distribution of industry throughout the whole period studied, or else indicative results cannot be expected.

The results are so encouraging that we would like to urge the authors to extend their investigation as soon as later data is available and give the Society the benefit of the results. Still more we would like to urge upon any who are interested in the subject, a careful review of the sources of such statistics in an effort to obtain material of a similar sort, but for a different distribution of industry and, having found the material, to see that it is used to extend our information on this subject.

Is there a definite upward trend in some jurisdictions that does not exist in others? Will the same tendency be shown for all industries and if so, won't some lag behind others? In manufacturing industries will the labor saving factor described by Mr. L. L. Hall in his paper* presented at our last meeting enter to such an extent that its influence may be seen in the curve? These and many more questions arise as we study this subject so that the possibilities seem unlimited, but—we must first find more material.

STATUTORY REQUIREMENTS FOR CASUALTY COMPANIES—THOMAS F. TARBELL

VOL. XII., PAGE 29

WRITTEN DISCUSSION

MISS M. E. UHL:

Mr. Tarbell introduces his subject by stating that his purpose in preparing the paper "Statutory Requirements for Casualty Companies" is to provide an outline to which students may refer when preparing for examinations of the Society. He has undertaken this work because of the lack of suitable texts dealing with the subject and the length of time which will be required for the preparation of such texts.

The comprehensiveness of the subject with which Mr. Tarbell deals makes it impossible for him to present more than a general outline as many of the topics covered would in themselves each furnish material for an entire paper. A great deal of careful research has apparently been done by Mr. Tarbell on this subject

*On the Tendency of Labor Saving to Increase Compensation Costs. Leslie L. Hall, *Proceedings*, Vol. XII, p. 62.

and a vast field of legislation has been covered in a general way.

Students who are preparing for the Fellowship examinations of the Society, as well as others who may have occasion to study this subject, should find this paper valuable. One student in speaking of Mr. Tarbell's paper referred particularly to the opportunity which it affords for comparisons between the statutes of the different states.

Mr. Tarbell has dealt with the state laws by topics beginning with "Incorporation" and following this by more than a dozen other headings which taken together cover the most important statutory requirements. An excellent method of developing many of the topics has been employed, namely, quotation from a state law selected for each topic because of its peculiar fitness as an example of the requirement under discussion accompanied by some comments upon the statute quoted and those of other states. Quotations from the New York law are used as the principal illustrations of provisions relating to the incorporation of stock casualty companies and capital requirements; the Oregon statute is given as an example of the anti-compact laws; the Connecticut statutes are quoted to illustrate anti-discriminatory laws, bankruptcy or insolvency liability laws, resident agent laws, agents qualification laws and reciprocal laws; and a quotation from the Pennsylvania statutes illustrates the retaliatory laws. Some of the topics are developed in a more comprehensive way by giving a rough summary of the state requirements in general. Mr. Tarbell's paper is replete with quotations from the state laws throughout and where it has been impracticable to quote appropriate statutes, definite references to the laws and other sources of information are frequently given. Thus the needs of the student have been constantly kept in mind.

One point which occurred to me when reading the paper under discussion is the extent by which insurance statutes are in actual practice supplemented by ruling of state insurance departments and other supervisory bodies and officials. Consider, for example, the requirements for the filing of rate manuals and rating plans with state authorities. The statutes of the states give only part of the story of the requirements that are actually in effect. In some states the requirements for the filing of rates rests entirely upon departmental rulings, while in others, the time

of filing, the form in which rates must be filed and other matters of procedure are established by rulings.

With regard to the presentation and study of some phases of state regulation of casualty insurance and casualty companies, I wish to point out here the advantages of digests of statutes and rulings compiled in tabular form. We have, in our office, made such compilations of the state laws and departmental rulings relating to the filing and approval of rates and the filing and approval of policy forms. Compilations in this form are very convenient for reference. Judging by the extensive subscription lists which have been developed by the demand for our digests, I should say that such compilations meet a real need.

Another subject which would lend itself particularly well to compilation in tabular form is "Taxes, Licenses, Fees and Assessments". I have seen some indications of the need for a digest of such provisions in a form more concise and convenient for use than any that is now available.

The Chamber of Commerce of the United States has made some studies of special state insurance taxes which should be both interesting and instructive to students of the Society. These studies have been published in the Insurance Bulletins of the Chamber of Commerce of the United States, Numbers 12, 15 and 21.

AUTHOR'S REVIEW OF DISCUSSION

MR. THOMAS F. TARBELL:

The two points brought out by Miss Uhl in her discussion are well worth bringing to the attention of our membership and prospective members. Departmental rulings constitute an important feature of the broader subject of State Supervision, of which Statutory Requirements or Provisions furnish the foundation. The evolution of insurance legislation has been a slow process and has not kept pace with changing conditions and the requirements of the business. It is impossible to cover every feature and detail of State Supervision by specific statute and consequently certain discretionary powers are enjoyed by supervising officials either as a result of statutory provisions, statutory implications or court rulings. The attitudes of courts on this subject has been to uphold the rulings of supervising officials provided the same are not contrary to statute law, non-discrimi-

natory and are issued in good faith. The extent to which courts have gone in this matter is illustrated by Connecticut where the Supreme Court of the state has held that the statutes vest the Commissioner with a wide range of discretion, with the exercise of which the courts will not interfere (45C.381) and that the powers of the Insurance Commissioners are administrative or quasi-judicial, rather than ministerial (60C. 461).

Compilations and digests such as those mentioned are very helpful aids to those whose work brings them in contact with state departments. A compilation of data relative to "Taxes, Licenses, Fees and Assessments" was recently made and issued by the Association of Casualty and Surety Statisticians and has proved very valuable.

I am indebted to Miss Uhl for pointing out a typographical error in the paper which I am glad to have the opportunity to correct. In the table captioned "Capital Requirements" on page 44, the parenthetical phrase following the word "Burglary" in the fifth line and reading "including jewelers' block" should read "excluding jewelers' block."

A STUDY OF JUDICIAL DECISIONS IN NEW YORK WORKMEN'S COMPENSATION CASES—LEON S. SENIOR

VOL. XII, PAGE 73

WRITTEN DISCUSSION

MR. JAMES G. HIGGINS*:

Perhaps some actuaries and statisticians may have a justifiable mistrust of the so-called subtleties and the paradoxical refinements of reasoning sometimes found in the Law.

Nevertheless, Mr. Senior's comprehensive and appropriate treatise upon the importance to the actuary of knowledge of court decisions in compensation matters has accomplished two things admirably. It has shown that illumination of the actuarial field in this quarter does depend to some extent upon the light shed by the pronouncements of our highest courts. It has also provided a sound summary of the leading cases upon most of the chief phases of the statute, digested and analyzed without bias, for the purpose of indicating the judicial trend.

First, then, what of constitutionality? This is *the* subject

*Assistant Claim Auditor of the New York State Insurance Fund.

of paramount importance. When the legislature enacts a law, we must be certain it is a valid law before existing rights are altered under its provisions. It is impossible to challenge either the appropriateness or the significance of the cases cited by Mr. Senior in connection with his review of this factor.

However, Mr. Senior observes that we have an "imperfect appreciation of the part played by the courts in changing the scope of the law." To gain a better appreciation we must inspect the background of the constitutional question.

Our legal system is both novel and complex. It is not the ancient Justinian code system defining rights and remedies which survives in various forms upon the continent of Europe invariably promulgated at the will of the sovereign monarch without reference to the wishes of the people. Neither is it the common law system of England under which the courts and the judges wrestling with questions of human rights through many centuries have formulated sterling principles in their decisions and opinions. Unaided by any legislature, they resisted any semblance of invasion of natural and acquired rights in such set manner as to almost mark them as simply jealous, narrow and reactionary. This was an unfortunate result of their peculiar double function of lawgiver and dispenser of justice. Yet, history shows that the system is sound, and although loath to part with venerable forms and rules, the common law courts do adjust themselves to the spirit and the innovations of the times.

The distinctively American system is hybrid or rather, conglomerate. In it the people themselves have established written constitutions as the basic controlling law, and all rights not conferred specifically by the constitutions are reserved by the people. In addition we have inherited the common law system and it still prevails except where the constitutions and enactments thereunder have supplanted it. Our jurisprudence even reverts to the common law for rules of constitutional interpretation whenever the written constitution does not provide them as needed. In brief, then, our legal system consists of written constitutions, common law precedents, statutory enactments which are declaratory definitions of certain phases of the common law and in addition original enactments which introduce novelty into the existing system. The compensation law is in the latter

class but its interpretation must be grounded upon the reasonable dictates of construction found in the common law. In view of what has just been set forth, it is of course "not difficult to follow the evidence of juristic writers to the effect that the process of lawmaking goes on continuously in the courts to a greater extent than in the halls of the legislature."

Truly, "the workmen's compensation law is a piece of creative legislation to be credited to the legislature and not to the Courts", and Mr. Senior gives a very interesting outline of the genesis of this statute beginning with the case of *Ives vs. The South Buffalo Railway Co.* which nullified the original New York State Compensation enactment of 1910 on constitutional grounds. In that very case Judge Werner reviewing the constitutional obstruction to the direct fulfilment of the widespread popular demand commented, "We have already admitted the strength of this appeal to a recognized and widely prevalent sentiment but we think it is an appeal which must be made to the People and not to the Courts."

No one dares deny that the injustice fostered by the old common law system in negligence cases cried for radical change but the system with supporting statutes was an essential part of our constitutional development so that when public clamor in 1910 stampeded the legislature to passage of the first workmen's compensation act in this State, it was only sound judicial action for our highest courts to point out that the legislature had done something totally unauthorized. Our constitution defines the sphere and orbit of the legislative as well as the executive and judicial branches. Just as often as legislatures overreach, just so often do the courts repress. This is not at all because the courts are inherently narrow in view or unduly jealous of the prerogatives of the other dominant branches of the government, it is because the courts with trained mind desire order and not chaos. So it happens that while the first effect of the action of the courts in a matter of this kind is apparently to defeat the popular will, the end result is otherwise. The courts having shown the absence of foundation for the construction desired, the builders adopted the proper means of laying the foundation, hence the nineteenth amendment to the New York State constitution, and the enactment of the present law.

Mr. Senior makes the conclusion that the courts are guided

by conservative legal principles applied in a liberal spirit and it would seem that no question should arise concerning this conclusion. The only difficulty is met in the application of the adjective "conservative" to the noun "principle." Must we say that the courts have conservative principles because they follow exact, well defined and clearly recognized rules? I think not. As indicated before we must recognize that the courts have had already established in their mass of precedent definite rules for the interpretation of statutes. So we find in early compensation annals the dictum that a presumption "does not permit the words of the statute to be warped from their usual and ordinary meaning," *Tomassi vs. Christensen*, 171 A. D. 284.

Wherefore, it at once becomes apparent that in considering the trend of judicial decisions we must remember not only the history of the legislation involved but we must bear in mind the fabric of the statute and the origin and relation of its amendments. Practically every amendment of our compensation statute has been due to the fact that a sound and reasonable court decision has exposed a deficiency or weakness in the original law, as a result of which the public voice sounding in the labor organization, in the political forum, in the industrial lobby, in the very halls of the Industrial Board and the Labor Department, or recorded in the public press has fashioned an amendment of elaboration or of extension or one of greater comprehension so that if at first blush certain court decisions appear narrow and restrictive, it is merely because the courts have conscientiously discharged their proper function with reference to a statute.

As mentioned before the fabric of the statute must always be borne in mind. An indication of the liberal spirit of the statute is found in the presumptions of Section 21 and the most interesting decision anent the application of these presumptions is found in the case of *Collins vs. The Brooklyn Union Gas Co.*, 171 A. D. 381. In this case a foreman collapsed upon the street and the evidence indicated that the fall was due to internal causes. The Commission found as a fact that the fall was due to tripping over an obstruction in the street. The court pointed out that the record was devoid of any proof that such an accident could have taken place and accordingly reversed the award. Now, does it not seem quite fundamental where the statute specifies accidental injuries as the basis for compensation that

the court should have pointed out the necessity of at least establishing *proof* of an accident before permitting the application of this most liberal legislation? If this fundamental restriction had not been pointed out, what end to fraud and chicanery?

Indeed the statute is liberal. Section 118 declares that technical rules of evidence or procedure shall not be required and expands this by saying that the judicial officer involved "shall not be bound by common law or statutory rules of evidence or by technical or formal rules of procedure." However, in the case of *Carrol vs. The Knickerbocker Ice Co.*, 169 A. D. 450, 218 N. Y. 435, where hearsay was the only foundation for the award, it was held that no award should be made unless supported by at least a residuum of legal evidence. Surely common sense again declares that the courts while apparently speaking in a restrictive sense indicate the minimum foundation for a claim where less would be an absurdity. Does this indicate that the court determinations are narrow or illiberal because in orderly fashion they perform their wonted duty of placing essential landmarks? "Is thy eye evil because I am good?"

Now both decisions last mentioned are procedural in scope and there are other procedural decisions which must be of interest from an actuarial standpoint because they bear upon the value of other cases. It may, therefore, be permissible to digress slightly from the essential subject matter of Mr. Senior's paper to indicate some of these cases.

Section 14 of the statute outlines formulae for computing weekly compensation rates. The section, however, says nothing as to whether the week to be considered should consist of 5, 5½, 6 or 7 working days. So it is interesting to note that in the case of *Beers vs. Beers Bros.*, 180 A. D. 760, the courts drew the conclusion that "the wages are earned in 300 days and, therefore, exclude Sundays." This is a common sense conclusion drawn from the intrinsic statute but the statute itself was not sufficient in completeness to determine that fact. In the same section the case of *Roskie vs. Amsterdam Yarn Mills*, 191 A. D. 649, by reversion to common law precedent established the rule that inasmuch as the common law did not recognize fractions of a day and the injured worked some part of each of 6 days, whatever he could earn in that time represented the weekly wages of the employment for a 6 day week.

Section 22 of the workmen's compensation law reads in part, "No such review shall affect such award as regards any moneys already paid." In the case of *Solotar vs. Neuglass Co.*, 228 N. Y. Rep. 508, the court laid down the rule that even though a change of conditions or new evidence discovered after payment of an original award should justify a higher rate in the case, no increase could properly take place in connection with payments already made prior to the date of the determination. Obviously this decision covers the legislative intent and precludes a great amount of confusion and readjustment of reserves and valuations.

The case last mentioned was also responsible for an amendment to the compensation law by pointing out another defect. Under Subdivision 5 of Section 14 the statute permits consideration of the normally expected increase of wages of an injured minor and the validity of this section was sustained by numerous decisions. However, the Solotar case, cited *supra*, made it clear that no injured minor could receive an upward revision of his compensation rate upon moneys already awarded and paid him. As a result the legislature amended Section 22 by adding the following words:—

> "Except that an award for increased wages under Subdivision five of Section fourteen may be made effective from date of injury."

Again, the courts have expressed sound and liberal judgment in those cases where, in addition to the existing wage, tips, bonuses and other emoluments are received, by holding that these constitute an essential part of the employee's wage and numerous decisions have upheld computations based upon such items, *Sloate vs. The Rochester Taxicab Co.*, 221 N. Y. 491; *Ciarla vs. Solvay Process Co.*, 226 N. Y. Rep. 566, etc.

Still another case of the procedural type which may be considered with profit is that of *Perino vs. The Lackawanna Steel Co.*, 241 N. Y. 312. The only point in that case was whether the single word "future" in Section 17 of the compensation law meant installments in the future as of the date of computation or in the future as of the date of death. Under an age honored rule of the Commission and the Industrial Board it was held that the word "future" related to the date of death. This interpretation was tested in the Appellate Division and was there affirmed with leave to go to the Court of Appeals. The

Court of Appeals in this particular instance saw fit to follow the rigorously exact application which the very word and its context indicated. Judge Lehman says in part, "An award which covers a period already passed is itself an adjudication that the right to compensation for that period had already accrued and the amount thereof may not be regarded as 'future installments' of compensation." This is an instance where we may fairly differ with juridical reasoning. It seems hard to believe that the legislature intended to put a premium upon alien non-residents remaining in this country *just long enough* to collect their full compensation under an award. Yet, such is the result of the Perino decision. This decision had an immediate and profound effect upon the loss reserve of practically every compensation carrier in New York State in this respect. It made necessary an upward retroactive revaluation of many cases in which for all intents and purposes properly fixed and legal valuations had been established for some time past.

We may now revert to the specific cases cited by Mr. Senior. We have already met upon and covered the ground of constitutionality with especial reference to New York State. I shall make no attempt to follow the order of sequence of subjects which Mr. Senior has adopted but I shall endeavor to group those cases which deserve comment as aptly as possible for the purposes of this discussion.

With reference to the exclusiveness of remedy of the compensation law, all who have carefully read the Shanahan case cited by Mr. Senior, must realize how completely it covers the field. It declares in substance that just so long as a contract of employment is in existence and the relations of master and servant prevail, just that long does the compensation law become the entire remedy for disability and for death arising out of and in the course of such employment. It is striking to note in this connection that the illegal employment of a minor is employment none the less and requires application of the workmen's compensation law as the exclusive remedy. *Noreen vs. Vogel*, 213 N. Y. 317.

Whenever the subject of coverage is broached, there arises in contemplation the idea of the courts seeking to make a path in the shadowy borderland and it is especially in these borderline cases where the question of coverage under the law is raised that we receive our clearest manifestation of the real trend of the

courts. As to injuries received on the way to or from work, in addition to the cases of Pierson, Urban, McInerney and Parramore, all appositely cited, I must advert to the case of *Littler vs. Fuller Co.*, 223 N. Y. 369. In this case the claimant was injured while riding from the place of work to a train upon an automobile furnished by the employer to transport employees between the job and the railroad station. Judge Pound said:—

> "The place of injury was brought within the scope of the employment because Littler, when he was injured was 'on his way * * * from his duty within the precincts of the company'."

This novel idea has otherwise been expressed as the theory of extension of the employer's premises.

Another case recently determined which tends to liberalize application of the law along the same lines is found in the matter of *Lynch vs. The City of New York*, Court of Appeals, decided February 24, 1926. The claimant was a helper in a hospital on Welfare Island owned by the City of New York. The claimant lived on the island and on February 21, 1924 after completing her day's work, she went to the nurses' home about 500 feet from the hospital where she worked and prepared to leave the island to go to New York. While she was on her way from the nurses' home, some snow upon the passage way which was her proper route caused her to fall and be injured. An award was allowed her overruling the Appellate Division. The Court evidently realized the fact that the City was the employer introduced an element of complication as it specifically notes that "the rule stated here would be pushed to illogical and absurd extremes if it were applied to all the sidewalks of New York over which city employees might pass on their way to and from their work." The rule which the court indicates it has followed is found in the case of *Kowalek vs. N. Y. Cons. R. R. Co.*, 229 N. Y. 489, *i. e.*, "It is a general rule that if an employee is injured on the premises of the employer in going, with reasonable dispatch and method, to or from actual performance of the specific duties of the employment by a way provided by the employer or reasonably used by the employee, compensation must be awarded. The going to and from the actual work and the risk involved in it are reasonably incidental to the employment."

An extraordinary instance of judicial liberalism is found

in the case of *Mason vs. Scheffer*, 203 A. D. 332. In this case the claimant who was a confectionery store salesman who also made outside collections of money for his employer and who held overnight moneys collected each day on his person lost his eye by a gun shot wound inflicted by a bandit at the claimant's home door five miles away from the place of employment one hour after stoppage of work and when only a few dollars of the employer's money were in the care of the claimant. The decision of the court granting compensation was by a vote of 3 to 2 overruling a dismissal of the claim by the Industrial Board. If it may be fairly said that the injury here occurred in the course of employment, it is equally difficult to find a ground upon which to predicate the idea that the assault arose out of the employment.

Rydeen vs. Monarch Furniture Co., 214 N. Y. 295, is still another instance of the extreme of liberalism to which the court will extend the right to compensation. A quarrel arose over the manner of working between two men in a common employment. The majority of the court held that the accident arose out of the employment if it was connected with the employer's work and in a sense with his interests. In the very able dissenting opinion written by Justice McLaughlin sustaining the views of the Industrial Board and the Appellate Division it is, however, pointed out that the appellant followed the man who assaulted him away from the place where he worked to another part of the employer's premises and there provoked the assault by applying to his assailant a most vile and insulting epithet. It is of course fundamental that mere words never constitute an assault so we cannot fairly argue that Rydeen was the aggressor. Nevertheless, it seems far fetched to permit a man to receive compensation after he has gone out of his way to provoke a quarrel even in connection with his work.

On the other hand as an example of a more restrictive determination of our highest courts we may note the case of *Scholtzhauer vs. C & L Lunch Co.*, 233 N. Y. 12. In that case the deceased, a waitress, was shot to death by a negro fellow worker whose attentions she had spurned. The court said, "To justify the State Industrial Board in making an award, the injury complained of must have arisen both out of and in the course of the employment. It must have been received while the employee was doing the work for which he was employed. It must be one of the

risks connected with the employment, flowing therefrom as a natural consequence and directly connected with the work." To those conversant with early decisions, the quotation just given will strike a familiar note.

In connection with the subject of disease or infection as the result of accident, the recent case of *Lerner vs. Rump Bros.*, 241 N. Y. 153, calls for comment. In this case it was alleged that death was due to pneumonia which was the result of repeated exposure to excessive cold in the employer's icebox during the course of regular employment. The Court of Appeals found that the circumstances narrated gave ground for no conclusion that there had been an accident within the meaning of the law. The Lerner case gives food for reflection when compared with the Connelly case quoted at length by Mr. Senior.

There would be no difficulty in multiplying examples showing beyond dispute the wholesome trend of the impulse of our courts and the very fact that in an impartially selected group of leading decisions we find one or two of conservative type serves by contrast to prove the rule. But there are other considerations which also support a conclusion of almost unqualified liberalism in the courts. For example, upon the subject of extraterritoriality covered by Mr. Senior with thoroughness, the courts have utilized what would appear to be extremely frail supports for their determinations. Having found jurisdiction of the res of the contract of employment entered into within the territorial confines of New York State, they reach abroad solely by authority of two brief phrases in the law, namely, the first presumption of Section 21, "That the claim comes within the provision of this chapter;" and the language of Subdivision 4, Section 2, "in the service of an employer * * * * or in the course of his employment *away* from the plant of his employer."

In concluding, Mr. Senior says, "It is not surprising that the courts steeped in traditions of the common law should have been slow in yielding to the new social philosophy and slow in accepting it as part of the American jurisprudence. As it emerged from the hands of the legislature, the figure of the new goddess was blurred and indistinct. Now the mist is clearing away; the many puzzling questions have been answered." May we not add to this the earnest observation that the clarity and the generosity

of the answers have called into being a smile of approbation upon the face of the goddess?

THE STATISTICAL SURVEY OF THE MASSACHUSETTS COMMISSION INVESTIGATING THE QUESTION OF OLD AGE PENSIONS—

EDMUND S. COGSWELL.

VOL. XII., PAGE 97

WRITTEN DISCUSSION

MISS M. A. BURT:

Since Mr. Cogswell presented his paper in which he described the statistical investigation which was made by the Massachusetts Commission investigating the question of old age pensions, the report of the Commission has been printed as Senate Document No. 5 of the Massachusetts Legislature, dated November, 1925. This report is a very substantial contribution to the information on the subject of old age pensions.

The paper gives a condensed summary of the statistical findings of the Commission and the methods employed in obtaining them. As Mr. Cogswell was in active charge of the work we have an authoritative summary by one entirely qualified to present the results. His paper together with the more detailed description of the investigation as given in the Commission's report will be of real value to anyone who may be called upon to deal with the problems relating to old age pensions.

Old age pension schemes, as thus far established in this country, appear to be quite different from staff pension funds. Under the staff pension fund an attempt is made to distribute part of the income earned during the productive years of a group of employees over the non-productive years which follow. If rightly constituted, such plans promote thrift. The old age pension plan may operate in a corresponding way with the entire population taken as a whole, or it may work in almost the reverse manner, in that it may take from the thrifty to reward the thriftless, or from one group of productive members of society to pay the non-productive. In other words, under a staff pension plan, all of the members of the active service contribute either by direct deductions from compensation or by indirect contributions provided for by an adjustment of their compensation, so that all who live may be entitled to claim pensions in old age. A plan which gives all of the accumulated contributions of the active

members who reach old age to those of the group who have no outside savings, or who are dependent, might be termed unfair and would hardly encourage thrift among the employees. Yet in the case of old age pensions, most of the states have apparently gone on the theory that all of the members of the population should contribute toward old age pensions during their productive years and then the entire contributions should be used in providing pensions not for the old members of the group who made the contributions but only for those members who have no other savings, or who are dependent.

If there is any justification for a system which apparently works as unfairly to the thrifty wage earner as many of the old age systems do, then it must be on the ground of charity. Figures such as Mr. Cogswell has presented, will eventually indicate whether the public, if it is to extend its support to dependent old age, can do it more effectively by means of properly organized institutions where comfortable living may be provided at a minimum of overhead expense or whether subsistence is to be supplied to the dependent aged in the form of cash payments,to be disbursed by them on an individual basis for the necessities of life.

Reports on old age pensions so frequently attempt to organize statistics apparently for the purpose of justifying some conclusions independently arrived at, that figures such as Mr. Cogswell presents are welcome. His figures are presented in an unbiased way and he does not indicate the conclusions which he himself has reached in the matter of old age relief. In fact, the five members of the Commission were divided in their recommendations, three members signing the majority recommendations, while two members including the chairman signed the dissenting recommendations of the minority.

Mr. Cogswell seems to have kept to his roll of technical assistant to the Commission and in that capacity to have furnished facts rather than opinion.

STATE REGULATION OF INSURANCE RATES—CLARENCE W. HOBBS

VOL. XI., PAGE 218

WRITTEN DISCUSSION

MR. HERBERT HESS:

This article cannot but commend itself to the thoughtful reader. It is a paper which, in a very splendid way, attempts to

trace the history and growth of state regulation of premium rates and contains a summary of the laws enacted by the various states to regulate premium rates. It is, however, a paper one would look for in the proceedings of a society devoted to the study of political science rather than the *Proceedings* of our society which is devoted to an exact science.

It is the opinion of the reviewer that no one will dispute the state has three alternatives by which it can observe corporations, *viz.*, supervision, regulation and administration. We have had supervision with us, we are entering into state regulation, and the proposal was recently made for the state to participate in the administration of insurance companies.

The entire paper is devoted to state regulation of rates and leads the reader to believe the legislatures of the various states were compelled to enact such legislation for the public weal, and for the further reason that prior to state regulation of premium rates we were witnessing the very horrible results of "unrestricted competition."

By reading this paper, one would believe the mortality and casualties of the insurance carriers on the battlefield of "unrestricted competition" were as great as those on the battlefields of Flanders during the World War. The insurance carriers, according to Mr. Hobbs, were in dire straits, most of them insolvent and many of them ready to sink into oblivion, despite the prosperity enjoyed by other industries throughout our country.

I wonder whether Mr. Hobbs is correct in his diagnosis of the condition of the insurance carriers prior to the advent of state regulation of premium rates. I have reviewed the condition of the companies prior to that time and although my observation covers a period of the past twenty years, I am unable to bring myself to the conclusion he arrives at.

It seems very unfair, as well as inconceivable, that the insurance business be compared with the public utility business, any more than an automobile or bus manufacturer can be compared with an insurance carrier, or a clothing manufacturer can be compared with a banker. As long as there is money to be made in the insurance business, capital will always be attracted to it and no monopoly will ever exist, but public utilities are what we may term "natural monopolies." Since the comparison has been

made of insurance carriers with public utilities, it might be well to examine how these two different types of business operate under state regulation of rates.

In the paper under discussion, the danger of inadequate rates being promulgated is very lightly dismissed with the assurance that should the state ever promulgate a rate which would produce an underwriting loss, the insurance carrier can obtain relief from the courts, the same as a public utility does, because any rates promulgated by the state can be reviewed by the court to determine whether they are reasonable or confiscatory. It is a very grand picture, one which might lull the companies into a false sense of security if it were not examined carefully as to the results of its practical application to insurance carriers. Therefore, let us assume the state promulgates a grossly inadequate rate.

The procedure of the insurance carrier would be to appear before the court, ask for relief by an increase in rates, claiming that the rate promulgated produces a loss and therefore is confiscatory. After argument, the usual procedure for the court is to grant a temporary increase in the rate, but the money so received is impounded because the court must first determine for itself whether the rates are adequate or inadequate.

In order for the court to determine the reasonableness of the rates, it appoints a referee to take testimony, employ experts and perform such other work as is necessary for the proper determination of the facts, and to report his findings to the court. Upon the findings of the referee, the court issues its final decree.

Investigations of matters of this character usually take over a year, and sometimes years, to complete. In the meanwhile, the company has obtained an increased rate, but the money so received is "trustee funds" and does not belong to the company until the referee has reported to the court and the court issued its final decree. How will this benefit the company when the time for filing financial statements is at hand? Let us assume the company, through inadequate rates has lost tremendous sums, sums which might not alone impair its capital, but entirely wipe it out. It is true the company has received additional premiums through the court's orders, but these premiums are "trustee funds" and it seems inconceivable for a supervising official to permit the company to take credit for funds which

do not belong to it, especially when the supervising official either promulgates the premium rates or is desirous of maintaining them.

In view of these facts, the company would not alone be compelled to discontinue writing business, but might be thrown in the hands of a Receiver for liquidation, pending the outcome of the court's decree as to the disposition of the funds obtained through the increased rate.

No insurance company can continue business while its capital is impaired, nor can it carry on its business while in the hands of a Receiver. A public utility can continue its business, even though its capital is impaired and is in the hands of a Receiver. Therefore, due to this one important dissimilarity alone, it is unfair to compare the public utility business with the insurance business.

Let us assume a reverse case—that the state promulgates a rate much higher than it should be. What will be the ultimate result? It is my judgment that the large assureds will become self-insurers because the rate being too high, they can rightfully, and have demonstrated their ability to, carry their own insurance. The desirable small insurer, by reason of seeing the fabulous dividends being declared due to the high premium rate, will seek his insurance from participating companies. The pure stock companies, offering nothing in return as a refund on the premium, will thereby be deprived of desirable business, and the undesirable business will gravitate to them.

Under these conditions I wonder whether a pure stock nonparticipating company could appear in court asking for relief on the grounds that the rate is too high and therefore confiscatory. As Mr. Hobbs compares the insurance business with the public utility business, we are obligated to look for a precedent for this novel situation. I do not know of any similar circumstance where a public utility company appeared before the court and demanded that the regulatory powers be compelled to reduce the rates. It surely would take a Blackstone to argue that because the rate is too high, it is confiscatory.

For the sake of an example, let us assume a stock company has appeared before the court and the court has appointed a referee to take testimony and to determine the facts for the court to act upon. While the referee is engaged in his studies the stock

companies would be required to charge the premium promulgated by the state and would in my judgment by reason of this fact have extreme difficulty to induce the insuring public to place the business with it, even though a promise was implied or made of a refund, depending on the court's decision. It, therefore, appears possible for state regulation to effect the retirement of non-participating carriers from the business world.

Referring to "unrestricted competition" and to the doleful condition of the insurance carriers resulting therefrom, as pictured by Mr. Hobbs, it seems to me that during the past twenty years we have never had "unrestricted competition", unless you wish to define "unrestricted competition" as covering premium rates charged and acquisition costs. We have had "unrestricted competition" as regards these two factors, but combined with this we always have had state supervision, and it is maintained that as long as there was state supervision, "unrestricted competition" in its true sense did not exist.

Let us observe how the life insurance business is being transacted. Life insurance has operated and is today operating under Mr. Hobb's interpretation of "unrestricted competition", and no one will dispute the fact that the life insurance business of this country is on a sound financial basis and is being conducted according to the best business standards. As for myself, I think the life insurance business is one of the very great achievements of America, not alone as to its size and financial stability, and its manner and methods of transacting business, but to the contribution it is making to the economic welfare of our country. If life insurance can be conducted and can prosper under "unrestricted competition," then there seems no reason why the casualty business cannot operate under the same rules as govern life insurance.

The life insurance business is being transacted under strict state supervision. It is required to file with the state authorities copies of its premium rates and policy forms. The state properly compels the life insurance companies to maintain adequate reserves on all policies issued, in order that when a claim matures the company will be in a financial condition to meet its policy obligations. This is the primary function of the state—to protect its citizens.

As the life insurance companies are given the greatest freedom

in operation and can charge whatever rate they deem proper, but at the same time are compelled to maintain proper reserves, so likewise should the casualty companies be governed. The casualty insurance carriers should be required to file with the state, a manual of their rates, their schedule and experience rating plans, and a copy of their policy contracts. In turn, the state should be in a position to promulgate adequate reserves necessary to be maintained on all policies issued, so that the casualty insurance carriers can meet their policy obligations as they mature. The state in so doing, discharges its primary obligations to its citizens, *i. e.*, to protect the insuring public so that when it purchases a contract of insurance from an insurance carrier licensed by the state, it will be reasonably assured that whenever claims occur the insurance carrier will meet its contractural obligations.

As the state is able to promulgate adequate premiums, it is also able to promulgate adequate reserves (due to the efforts of the members of this society). Therefore, if through competition companies charge inadequate rates, but are compelled to maintain adequate reserves, it is apparent that such companies charging inadequate rates cannot do so for any great length of time. The state, therefore, by requiring companies to maintain adequate reserves will obtain the same, if not better results than by promulgating rates; and will accomplish this result without resorting to regulation.

To summarize, it seems almost apparent that with the state promulgating a uniform rate, the final result will be the elimination of non-participating insurance. The non-participating stock companies have and are rendering a real economic service and its elimination would be a sad commentary on state regulation. With the elimination of non-participating companies, it can easily be foreseen that competition will no longer be based on initial premium cost but on ultimate premium cost. Hence, the future competition between companies will revolve around dividend payments to policyholders.

It requires very little imagination to see the innumerable possible schemes to concoct for the calculation of dividends when we take into consideration not alone the fertile brains of the brokers, agents and insurance officials, but the 800 different

classifications in the principal (workmen's compensation and automobile) lines of casualty insurance.

State regulation of rates leads to this form of competition. Is this form of competition superior to "unrestricted competition?"

AUTHOR'S REVIEW OF DISCUSSIONS

MR. CLARENCE W. HOBBS:

I must own to a feeling of gratification at the length and painstaking character of Mr. Hess's discussion, and appreciate the complimentary nature of the introductory sentences. The concluding sentence of the first paragraph on the other hand, awakens emotion of a very different nature. "It is" says Mr. Hess "a paper one would look for in the proceedings of a Society devoted to the study of political science, rather than the proceedings of our Society which is devoted to an exact science". If I have been guilty of the high offense of discussing an unsanctified theme within hallowed precincts, I am properly contrite. But I am by no means sure that Mr. Hess has correctly interpreted the direction of our Society's devotions. Within the small space of my own experience, the Society has devoted much time to problems of statistics and of rate making, and if either of these subjects comes within the category of exact science, it is news to me. I also recall to have heard discussions bearing on legal decisions and statutes, not strikingly dissimilar in kind from the paper I have presented. May I trust, therefore, that Mr. Hess's condemnation does not so reflect the sentiment of the Society as to leave me absolutely out of court.

As to the substance of Mr. Hess's discussion, I am somewhat at a loss to see how he extracted what he apparently did out of my paper. That paper was designed to set forth the present situation as to the attitude of the states towards insurance rates and the legislative theories involved in the various types of legislation. He apparently interprets this as a partisan brief in favor of state regulation of insurance rates: a view which the concluding paragraph of the paper should have effectively negatived. He charges me with having painted a lurid picture of the ills of insurance companies prior to state regulation of rates, and questions the accuracy of the diagnosis. This is, I think, a pure misapprehension based on a very general statement as to possible results of

unrestricted competition. Most branches of insurance have had, and are still having, competitive spasms, not in all lines at once, nor in all states at once: and while Mr. Hess's investigation of twenty years is not such a very long period as American insurance goes, yet even that period includes some insurance history decidedly interesting from the underwriter's standpoint. It is not such a very long while ago that rate competition in surety business reached a point that left several large companies in a rather shaky position: but competition has never gone to the length of bringing the business generally to the condition which Mr. Hess charges me with describing. Nor was such a condition the proximate cause of state regulation. Instead, competitive losses led in the first place to gentlemen's agreements as to rates and rating practices and to the establishment of rating organizations, or at least furnished a very effective inducement toward participation therein. One casualty executive described the usual procedure somewhat as follows: "When things get very bad and we all are losing money, then we all realize something must be done, and are able to get together. Then when conditions improve and we all are making money we begin to drift apart, and to disagree and to trim, and presently we are all fighting again, and conditions get bad, and finally we appreciate generally once more that something must be done, and are able to get together again".

It was these private rating agreements that led to the first legislative action; namely, anti-trust laws. The rating laws, properly so-called were based on a legislative conviction that the rating organization was necessary, and on the further conviction that unless controlled, it might be used unfairly. In some cases they were used to supplement anti-trust laws, in other cases were enacted independently of such laws. I doubt if actual distress among the companies was a compelling motive, generally speaking, toward their enactment.

It is clear enough that Mr. Hess is not content with these laws, and has a very different conception of the duty of the state. He devotes much space to argument against the unfairness and inconceivability of comparing insurance companies with public utilities. Now there exists a well marked line of cleavage between the two classes of companies: but it remains a fact that as regards their rates the regulatory powers of the state are as to

both classes substantially identical. This is a fact by reason of the decisions of the Supreme Court. I take it that Mr. Hess is not challenging this fact, but arguing against the enactment of legislation irrespective of the right to enact it.

I am unable to discuss at length the points of legal procedure raised by Mr. Hess. There is a remedy through the courts against unjust rating decisions on the part of state authorities. It is undoubtedly a somewhat tedious and difficult remedy, which may or may not accomplish entire justice. There seems, however, no reason to apprehend a worse situation than in the case of public utilities. In fact the practical situation of the companies is on the whole better. A single rating decision affects at most the rates in a single state and on one kind of insurance. If a company possesses, as it should, a well varied business, and one distributed in many states, a single rating decision will not affect more than a fraction of its business. Moreover, it is not tied down by franchises and ponderous masses of equipment and construction to operate in a particular state. It has to be sure an investment: but it can quit a state or at least curtail its operations without suffering a damaging loss, and so can avoid the evils which Mr. Hess portrays. Possibly he has in mind a one line company doing business in a single state: but such companies, are, after all, rare.

I will not dwell at length upon Mr. Hess's description of the ordinary course of procedure in a rating case, though sorely tempted to do so. He is clearly wrong in his description of the character of interlocutory relief granted by the courts, and also in his conception that a sequestration of premiums is inevitable: but these inaccuracies are after all of slight importance. His point that in case a state establishes an excessive rate, a stock company is at a distinct disadvantage is not without force: but the company is by no means without effective redress. It could not of course maintain that an excessive rate was confiscatory. A policyholder could, however, raise the question of confiscation. Up to date, however, no serious trouble has been engendered or is likely to be, by excessive rates forced upon the stock companies: nay, there are even a number of stock companies which would revel in that form of compulsion. Inadequate rates are a more serious menace: but on the whole, difficulties with state authorities over rates are not a serious matter. I doubt in any event if a

state legislature would withhold its regulatory hand merely because the companies subject to the law would find difficulty in obtaining redress for administrative injustice.

Mr. Hess's main point, however, appears to be to urge for casualty companies, the same style of regulation as applied to life companies. His idea is that the life companies are required only to file copies of premium rates and policy forms and to maintain adequate reserves. "As the life insurance companies are given the greatest freedom in operation and can charge whatever rate they deem proper", he says, "but at the same time are compelled to maintain proper reserves, so likewise should the casualty companies be governed". That companies subject to section 97 of the New York law enjoy the greatest freedom in operation is a concept decidedly new and novel. Also under section 85 of the same law, the preposterous reserves required the moment the rate dips below the net premium according to the mortality tables prescribed for setting up the reserve, make the statement that they can charge whatever rate they deem proper, hardly one which should be made to a society which shortly before was described as being devoted to an exact science. As a matter of fact the life companies had their session some twenty years ago with the legislatures and have been pretty well tied up ever since. Their prosperity is certainly not due to a minimum of legislative and administrative interference: rather to the fact that having obtained general legislative recognition of the American experience table and effectively prevented rates being cut much below the net rates based on that table, they could hardly do otherwise than prosper.

Undoubtedly, as Mr. Hess states, the primary function of the state is to protect its citizens. Protection against loss by insolvency of insurance carriers is one function which the state discharges with a fair measure of success. But is that the only protection the citizen is entitled to? Mr. Hess seems to think it is.

It is at least arguable, however, that insurance companies should in equity play fair with their policy holders, extending to one just as favorable treatment as another so long as they present the same conditions of hazard. But when rate competition exists, the big risks usually command much better treatment than the little risks. It is arguable with more force that if a

company or a bureau makes an excessive or arbitrary rate there should be some method of securing relief. And it may be observed that with free competition permitted the company with ample resources is in a position to put the small company out of business. None of these evils are corrected by the very modest measure of administrative regulation which Mr. Hess allows.

Now it may be observed that in some states the necessity of enacting legislation to effect this protection does not appear. When the worst effects of competition have been done away by agreement, and when the companies and their organizations are reasonably responsive to public opinion and willing to meet state authorities half way in the settlement of complaints, there is no particular need of going further and complicating the rating machinery by an additional cog. Most state departments are not eagerly thirsting for entrance into a technical and difficult field, requiring that they equip themselves with expert assistants, and spend much time in passing on questions intricate in themselves and not infrequently charged with a distinctly personal and political quality. But when companies fail to impress their policyholders and their competitors with their equity and moderation, it is difficult to avoid bringing the state in as the natural party to secure a justice not voluntarily accorded.

AN EDUCATIONAL PROGRAM IN ECONOMICS FOR INSURANCE STUDENTS—EDWIN W. KOPF

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WRITTEN DISCUSSION

MR. WILLIAM B. BAILEY:

A few centuries ago the security of the average individual depended upon his feudal chief or the organizations which were formed for mutual support. The serf or retainer looked to his lord for assistance in time of trouble. Through a mutuality of rights and duties the lord demanded certain services from his men and in return granted them certain privileges including assistance in time of need.

The guilds of one sort or another safeguarded their members against the ordinary vicissitudes of life. The industrial life of the communities was extremely simple and the existing rights and

duties were intelligible and based upon assumptions which were quite reasonable at the time.

The discovery of gunpowder which destroyed the supremacy of the armed knight on horseback made it increasingly difficult for the lord to protect his people; while the application of steam to the engine dealt the death blow to the handicraft system. These changes were so violent and far reaching that they have been given the name of the "Industrial Revolution".

Toward the end of the 18th century several social and economic changes became apparent. The specialization and growth of industry developed the separate functions of employer, laborer, and capitalist. The introduction of power machinery made possible the employment of women and children, since brute strength in labor was no longer a prime requisite along many lines. The fact that these power driven machines never grew tired increased the apparent desirability of long working hours and the theory became prevalent that the profit was all made in the last hour. These machines were relentless in their power and brought with them a train of fatal and dismembering accidents. The risks of industry and occupation became increased and more or less centralized. The development of the spirit of individualism which followed the French revolution placed the responsibility pretty squarely upon the worker. This was reflected in the economic doctrines of this period with the emphasis upon "laissez faire".

Gradually the injustice of this view became apparent and the assumption of risk was slowly passed to the industry and employer. He was allowed to pass this on to the consumer who ultimately foots the bills. European countries, accepting this premise, concluded that if the community pays the bills, the state should furnish the insurance against the hazards which accompany modern industrial life. The United States has not accepted too readily the doctrine of state responsibility. With the wonderful opportunities of this undeveloped territory the American has been more willing to claim his rights and accept his duties. Wages have always been relatively high in this country and an abundance of cheap land has made for a wide distribution in the ownership of real estate.

Initiative and thrift have always distinguished our people. The visible wealth of our country to-day is witness to the fact that

we have constantly spent less than our incomes and from this surplus our buildings, bridges, highways, railroads, and canals have grown. With almost complete freedom of initiative there is no submerged group in this country but social classes are in a state of continual flux. With this opportunity for marvelous success, we accepted the possibility of failure.

Industrial accidents which are to a certain extent the result of chance and beyond the power of the individual to avoid, we have frankly placed upon industry; but even here we go back of the aleatory element and through inspection and education try to reduce its toll. Sympathy for the unfortunate nowhere meets a more ready response than in this country and we are unwilling as a nation to allow the victims of misfortune to be thrust upon the state.

The phenomenal growth of insurance in this country during the past few decades gives ample proof that our people are resolved to make provision against their own days of adversity. The proportion of the savings of the people which are being entrusted to the care of insurance companies is continually increasing. The hazards of industry and modern life are being placed in the hands of strong and growing casualty companies which are amply secured to safeguard us. It seems inevitable that anyone who enters the employ of one of these great companies with the hope that he will ultimately attain to a position of responsibility is false to his trust unless he becomes grounded in the fundamental principles of economics and acquainted with the economic and industrial history of Europe and America during the past two centuries.

With the tremendous responsibility and confidence which our people are placing in these companies the least we can demand is that those responsible for their management shall not be following too many false economic gods, and thereby endanger the security of the savings which our people have entrusted to them against the hour of need.