

TEN YEARS OF RATES AND RATING BUREAUS IN  
ONTARIO, APPLIED TO AUTOMOBILE INSURANCE  
PART II

BY

JOHN EDWARDS

INTRODUCTION

At the last annual meeting of the Society the writer was privileged to read a paper on this subject now printed in *Proceedings*, No. 39, Volume XIX, Part 1, pages 22-64, November, 1932. The nature of the subject and printing space limitation rendered it impossible then to describe in detail the precise nature of the actuarial and statistical research undertaken by the Ontario Royal Commission of 1929-1930 or the result of the Commission's work as reflected in the administration of the new law respecting automobile loss-cost experience data since it became effective three years ago. It has been suggested to me that it would be valuable if, accordingly, a second Part could now be written dealing more particularly with the technical aspects of the rate inquiry of 1929-1930 and describing the research work undertaken by the Ontario Insurance Department in the administration of the new Act during the past three years, together with the rulings and decisions given, for which the writer, as the casualty actuary of the Department, has been largely responsible. This the writer has now found it possible to do and it is with pleasure that the following is submitted as Part II of the original paper.

The material in this Part is divided under two main headings:

- A. Technical aspects of the Royal Commission inquiry into automobile insurance premium rates in Ontario, 1929-1930.
- B. Research work of Ontario Insurance Department, 1931-1933.

It is assumed that the readers of this Part have already familiarized themselves with Part I.

A — TECHNICAL ASPECTS OF THE ROYAL COMMISSION INQUIRY  
INTO AUTOMOBILE INSURANCE PREMIUM RATES  
IN ONTARIO, 1929-30

1. *Appointment of Royal Commission: Preparation and Submission of Experience Data.*

The circumstances under which a Royal Commission was appointed in February 1929 to investigate the reasonableness of automobile insurance premium rates in Ontario, together with the incomplete nature of the loss-cost experience data submitted by the Canadian Automobile Underwriters' Association (hereinafter referred to as the "Bureau"), were described in the November 1932 *Proceedings*, pages 36-39.

At the opening of the inquiry the Commissioner took the position that the reasonableness of the 1929 premium rates should be established by those who instituted them and who had the necessary technical information. Witnesses representing both Bureau and Non-Bureau insurers gave evidence and the Bureau undertook to prepare and submit material in justification of the rates fixed and promulgated by it for use in 1929. A part of the information so produced was an exhibit containing detailed figures compiled and tabulated by the Bureau during 1928 showing the loss-cost record of Bureau insurers for the complete policy years 1924, 1925 and 1926 and for the incomplete policy year 1927. The exhibit included the experience record for the whole of Canada. Ontario experience was shown in its relation to the countrywide experience.

It was brought out in evidence that the loss-cost experience available to the Bureau in 1928 represented only some 40 per cent. of the total experience of the insurers which were members of the Bureau in 1929, and that the experience of insurers which wrote a total volume of business approximating the remaining 60 per cent. and which were not members of the Bureau in 1926 and 1927, was not included in the exhibit. During those years these insurers did not charge the same rates as member insurers, nor had they any statistical system enabling them to report promptly their experience in the form required for rate making purposes.

This circumstance became a controlling point in the procedure of the inquiry. The government actuary reported that on the

basis of the statistical evidence then available it would be impossible to form a judgment concerning the reasonableness, or unreasonableness, of the rates and that in the absence of further data the actuarial evidence before the Commissioner would of necessity be negative in character. After giving all insurers affected and government counsel an opportunity to be heard, the Commissioner issued an Order requiring additional loss-cost experience data to be compiled and submitted by Bureau and Non-Bureau insurers. All insurers transacting automobile insurance in the province were required to file complete loss-cost experience with the government actuary covering the 24 months of policy year 1927 and 1928, and the 12 months' experience of 1929, all tabulated in accordance with the statistical plan of the Bureau. (See November 1932 *Proceedings*, pages 39-41.)

The volume of experience data which thus became available to the Commissioner indicated that the more recent data obtained through the instrumentality of the Commission was, for example, for public liability coverage on private passenger cars, nearly five times as great in volume as that available to the Bureau when the 1929 automobile insurance premium rates were determined.

In June 1930 when the new data thus ordered was ready for submission the government and bureau actuaries agreed as follows:

1. That pure premiums by class and territory (e. g. six for private passenger public liability and property damage) should be developed and shown in an exhibit for each of the years 1927, 1928 and 1929; for the combined 1928 and 1929; and for the combined 1927, 1928 and 1929. Such pure premiums were to be computed by applying to the average Ontario pure premium (for each year or group of years, as the case may be) class and territory differentials.
2. Class differentials and territory differentials were to be based upon the average three years' experience.
3. Correction factors were to be computed and applied back to eliminate any distortion of "actual" losses for the province as a whole.
4. The pure premiums calculated as above were to be shown in a schedule of the form attached, which schedule was to exhibit

also the corresponding pure premiums underlying the 1929 manual rates.

SPECIMEN OF EXHIBIT—PURE PREMIUMS

Terr.	Terr. Diff.	Manual Class	Class Indicated Diff. of 1927	Pure Premiums of 1928	Pure Premiums of 1929	Experience			Pure Prems. Underlying 1929 Manual Rates
						1928	1927	1929	

It was also agreed by the actuaries for the Government and the Bureau that where possible an appropriate test of the rates for any coverage would consist of a comparison between indicated pure premiums and the pure premiums underlying manual rates.

Respecting the private passenger collision experience as tabulated, it was found that details were lacking for adequate analysis upon which to base conclusions as to the meaning of the indicated pure premiums. A distribution of exposures based upon 1929 writings was, however, available for each Ontario territory and for each collision coverage separately. For the purpose of developing average pure premiums underlying the private passenger collision 1929 manual rates of the Bureau it was agreed that the 1929 cars written distribution should be multiplied by the manual rate applicable to each class, territory and coverage, and the weighted result "unloaded." The figure of comparison used in connection with such average pure premiums was obtained by developing for each year and combination of years, previously agreed upon, average pure premiums for each coverage and territory through the use of dominionwide average pure premiums for collision business as a whole and of differentials for coverage and territory based on three-year average results.

Concerning private passenger cars insured against fire and theft, the actuaries assumed that the premium rates charged for 1929 by the Bureau were also the rates collected which was equivalent to adopting the Bureau insurers average earned premium (shown in the experience compilation for 1929) as being the equivalent of the weighted average premium obtained by applying against the numerous subdivisions of exposure the specific manual rate corresponding thereto. This abridged procedure was adopted for the fire and theft private passenger coverages because it was found that such experience was homogeneous. It was also found for example, in the fire coverage, that the experience represented 99 fire rating groups and two class divisions making in all 198 subdivisions of exposure. In many of the subdivisions the exposures were negligible. The same conditions were also found

in the theft experience. The presentation of results with respect to the two coverages referred to was to be in the same form as to individual years and combination of years as was agreed to for the preparation of the public liability and property damage experience.

It must be pointed out that fire and theft insurance in Canada on private passenger vehicles is written on the "actual cash value at time of loss or damage" basis only.

The actuaries representing the government and Bureau further agreed that the commercial public liability, property damage, fire and theft should be treated in exactly the same manner as private passenger car fire and theft rates and that the commercial collision experience should be taken on the loss ratio basis, since the number of exposures were found to be very small. The remainder of the experience covering busses, taxis, garage and dealers contracts, fleet rated cars, etc., was reported on the loss ratio basis by agreement.

## *2. Presentation of Government Actuary's Findings.*

On September 24th, 1930, the government actuary presented to the Commission reports containing pure premiums based upon the experience of complete policy years 1927 and 1928 and incomplete policy year 1929 purporting to be compiled in accordance with his agreement with the Bureau actuary above described, together with a report furnishing an interpretation of such consolidated loss-cost experience. Thereupon counsel joined in asking the Commissioner to make a ruling upon the two following questions:

1. "Is the reasonableness of the 1929 automobile insurance premium rates to be determined, having regard to, and giving proper weight to, the experience of 1927, 1928 and 1929, or to that of 1929 alone?"
2. "Should the experience of 1927, 1928 and 1929, or of 1929 alone, have regard to that only of the Bureau companies in those years, or that of all companies?"

The Commissioner ruled as follows:

"To now disregard the whole of the complete experience of 1927 and 1928 in favour of the actual results shown by the immature year of 1929, after going to the trouble and

expense of obtaining them, and set those up as the sole test of the reasonableness of rates fixed on the 1st February 1929, and exacted from, and paid by, insureds throughout that year and 1930 as well, is to misread the whole purpose and conduct of the inquiry. That purpose is not to find out whether, at the end of 1930, or in 1931, when all losses have been ascertained, the companies have justified their foresight based on past experience by showing that they have come out just about even for the year 1929, but to ascertain whether the rate they fixed and used on the 1st February 1929 (as well by them as by all other companies as a basis) was a reasonable one at that time, and proper to be charged for probably two years thereafter."

"The rate determined by the Bureau companies alone was fixed as part of their rate making function. This function has been granted to them and the Bureau is allowed to exist as a combine or monopoly, subject to their being prepared to justify the quantum of the rate as reasonable to be charged to the insured, not, however, after the lapse of two years, during which they have been exacting it, but as of the date they imposed it."

"This is quite another question from that which will arise if the rate is found to be unreasonable, that question being, what penalty or refund should be decreed?"

"In answer to that the facts shown when the 1929 losses are completely settled and ascertained, say, six months after the end of 1930, may be pertinent, but only in conjunction with the records of other companies who followed, in whole or in part, the standard set by the Bureau. As to question number two, this question is practically answered by what I have said under number one."

"I do not understand that the experience estimated or considered, on which the Bureau fixes insurance rates, is intended to be confined to the experience of its members only for 1927, 1928, 1929, or for 1929. Their duty as I view it, is to have regard, not only to the Bureau companies' experience, but to all available insurance experience, wherever it may arise, and certainly that of Non-Bureau companies doing business in the same field."

"I am unable to consider the experience of the Bureau companies as other than as part of the evidence on which I have to decide."

These preliminary questions having been finally determined, the method or procedure adopted by the government actuary for testing the loss provision in the 1929 manual rates of the Bureau was investigated. It may be synopsized as follows:

*Private Passenger Cars—Public Liability and  
Property Damage*

The actual pure premiums based upon the experience of complete policy years 1927 and 1928 and 12 months of incomplete policy year 1929 of all insurers in Ontario were developed from the province-wide pure premiums for each of the two coverages through the use of Bureau class differentials, based on dominion-wide data for the three years—1927, 1928 and 1929. Concerning territory differentials, no agreement could be reached, since the experience filed with him indicated a greater difference between city and country premium levels than did the experience of the Bureau. He decided in favour of territory differentials based upon the experience of all insurers in the province only for the three-year period rather than Bureau territory differentials based on dominionwide data.

The actual pure premiums so developed were then compared with the pure premiums underlying the 1929 manual premiums of the Bureau showing the difference expressed in percentages. He stated in his report that the public liability private passenger three-year experience indicated that the provision for losses contained in the 1929 manual rates of the Bureau was 4 per cent. in excess of loss requirements and 18 per cent. in excess of loss requirements for the private passenger property damage (also based on the three-year average).

*Private Passenger Cars—Collision*

Because of the very small number of exposures for this class he was unable to arrive at a conclusive opinion. The total collision exposure for individually-rated cars insured against collision (all collision coverages) for the three years was only 50,815 car years. He stated, however, in his report that the tests which had been applied indicated that the provision for losses contained in the 1929 manual rates of the Bureau was either 9 per cent. or 12 per cent. in excess of requirements, this depending upon the method used in testing.

*Private Passenger Cars—Fire and Theft Coverages*

While the aggregated exposures of these groups was large, he found it necessary, because of the great number of subdivisions used in rating, to resort to a still different procedure, namely:

For the purpose of computing the average Bureau manual premium on 1929 business the data of Bureau insurers only was used. This assumed that the premiums which were written for fire and theft by the Bureau insurers had been at full manual rates without deviation. As the Bureau used a 50 per cent. loading for expenses and underwriting profit it was assumed that 50 per cent. of the average premium written in 1929 so calculated represented the provision for losses contained in those rates. This figure was brought into direct comparison with the average pure premium indicated by the experience of all insurers (Bureau and Non-Bureau) for the three years 1927, 1928 and 1929.

He then reported that the provision for losses contained in the 1929 manual rates of the Bureau concerning private passenger individually rated cars insured against fire was 26 per cent. in excess of requirements and 48 per cent. in excess of requirements for the theft coverage which conclusion was also based upon the method described in the previous paragraph.

#### *Commercial Cars—All Coverages*

His method of procedure in the case of all commercial coverages (excluding fleet rated cars) was identical with that used in testing the loss provision in the Bureau manual rates for private passenger cars insured against fire and theft.

The results of the three years were consolidated in order to arrive at the average pure premiums which were then compared with the average pure premiums underlying the 1929 Bureau manual rates.

He then stated that the average pure premiums underlying the 1929 Bureau manual rates by coverage were as follows:

Commercial public liability, 105 per cent. of the pure premiums indicated by the actual experience of all insurers. Commercial property damage, 76 per cent. of the pure premiums indicated by the actual experience of all insurers. Commercial collision, 72 per cent. of the pure premiums indicated by the actual experience of all insurers. Commercial fire, 72 per cent. of the pure premiums indicated by the actual experience of all insurers. Commercial theft, 112 per cent. of the pure premiums indicated by the actual experience of all insurers.

This was equivalent to saying that compared with the actual



three years' experience of all insurers the loss provision in the 1929 Bureau commercial car rates was 5 per cent. excessive for public liability, 24 per cent. short for property damage, 28 per cent. short for collision, and fire, and 12 per cent. excessive for theft. It appeared quite evident that the loss provision in the Bureau manual premium rates for commercial cars was greatly maladjusted as between coverages.

The remaining part of the experience was not available on an exposure or loss-cost basis. Concerning fleet rated cars, he stated in his report that the fleet experience of Bureau insurers reported contained only a part of their total fleet experience, namely, that part which was reported on the "Ontario basis" schedules. It appeared that the remaining fleet experience of Bureau insurers in Ontario was consolidated with fleets written in other provinces and was not separable. The experience on fleets reported for Ontario by insurers which were members of the Bureau showed a loss ratio of 112.50 per cent. (losses incurred to premiums earned) for the complete policy year 1927 and 96.63 per cent. for the complete policy year 1928. The Non-Bureau insurers reported a loss ratio of 83.10 per cent. for the complete policy year 1927 and 77.81 per cent. for the complete policy year 1928 which, in all, significantly showed that fleet business had been written by insurers at a substantial loss.

### *3. Objections of the Bureau to Commission Actuary's Report.*

Immediately after the filing of the government actuary's report respecting the reasonableness of the loss provision in the Bureau's manual rates with the Commissioner, Bureau counsel commenced to cross-examine him as to his findings.

His conclusions were first attacked on the grounds that they were based upon the loss-cost experience records for the complete policy years 1927 and 1928 and the incomplete policy year 1929, in the manner in which a rate maker might deal with the experience record for the purpose of making premium rates for a future period. It was contended by the Bureau that such procedure was improper, for the purpose of testing the loss provision contained in the 1929 Bureau manual rates. It was urged that the study of the results for the year 1929, so far as they were known, were more reliable in order to determine the question as to the defi-

ciency or excess provision for losses in such 1929 Bureau rates. Objection was also made concerning the fact that the government actuary had used the loss-cost experience of all insurers (Bureau and Non-Bureau) rather than the experience of Bureau members only in testing the loss provision in the Bureau rates. The reply of the Bureau continued to be based primarily upon the objections which were urged upon the submission of the report and expressly decided by the Commissioner adversely to the contentions of the Bureau. See pp. 109-110, *infra*.

A schedule was presented by the Bureau wherein the results of the incomplete policy year 1929 (of the members of the Bureau) were shown. This schedule dealt only with experience of the one incomplete year 1929 and showed a deficiency in the loss provision of premiums charged in 1929 for private passenger and commercial cars of \$135,639. It was claimed that such deficiency was equal to 10.7 per cent. of the total loss provision in such premiums, or 5.4 per cent. of the earned premiums charged in 1929. The deficiency in the premiums charged in 1929 for private passenger cars, commercial cars and fleets respecting insurer members of the Bureau was claimed to be \$255,209 on the basis of the single incomplete policy year experience of 1929, which, it was stated, produced a deficiency of 17.2 per cent. of the loss provision in such premiums or 8.7 per cent. of the earned premiums charged in 1929.

The foregoing results referred to premiums actually charged in 1929. During the month of January 1929, Bureau insurers continued to charge 1928 manual rates for automobile insurance. The 1929 Bureau manual rates became effective February 1st, 1929, and were charged during the remaining months of that year. It was further stated by the Bureau that if their 1929 manual rates had been in force for all the business written in 1929, the total deficiency in the loss provision of those premiums for the 1929 incomplete policy year experience for private passenger and commercial cars combined would have been \$100,279, which was 7.7 per cent. of the loss provision in such premiums or 4 per cent. of the total earned premiums on a manual rate basis and for private passenger and commercial cars and fleets combined, the deficiency would have been \$213,774, which was 14 per cent. of the loss provision in such premiums, or 7 per cent. of the total earned premiums, on a manual rate basis.

On the basis of these results the Bureau contended that their 1929 manual rates were deficient in the loss provision element in the premiums to provide for the losses actually experienced by Bureau insurers, as shown by the 1929 incomplete policy year's experience, which it was claimed, formed a fair estimate of the results anticipated for the 1929 complete policy year.

### *Three-Point and Five-Point Coverage Policies*

The 1929 manual rates of the Bureau provided for a discount of 5 per cent. when public liability, property damage and collision coverages were written under one policy. A discount of 10 per cent. was allowed when public liability, property damage, collision, fire and theft coverages were written under one policy. These discounts referred to, were applicable only to individually written private passenger cars. Objection was voiced by the Bureau actuary that the government actuary's report did not take into account the effect upon the loss provision in 1929 manual rates of the discounts allowed by Bureau insurers on these so-called "three-point" and "five-point" coverage policies.

### *Use of Countrywide Data*

The Bureau actuary also objected to the government actuary basing his conclusions on the experience for the province of Ontario only, without regard to the effect on this experience, of rates and the rate indications for the dominion as a whole. He pointed out that the Bureau was responsible for making rates for the whole of Canada, and that no reasonable estimate could be made of the rate indications in the Province of Ontario, without also considering the effect thereon of the dominionwide rate making programme.

It was claimed by the Bureau actuary that in the remainder of the dominion there were a number of territories which were too small to allow full weight to be given to the loss-cost indications of those territories. Under the Bureau system of rate making, territorial differentials were calculated for those territories on the basis of their own experience indications. Since these loss-cost indications would not necessarily truly reflect the

underlying hazards intended to be insured in such territories, it became necessary to compare these loss-cost indications by territory with the dominionwide loss-cost indications. By such comparison, a new set of territorial differentials was established and by this process of adjustment, indicated average premium rates were prepared for all the territories in the dominion. These rates are then applied to the exposures to produce an aggregate result, which approximated the actual results experienced during the period under observation.

By reason of the adjustments, however, correction factors must be introduced and were obtained by the Bureau through a measurement of the difference between the aggregate calculated experience and the aggregate actual experience for the dominion as a whole. These correction factors were then applied to the indicated territorial average rates and the resultant average territorial rates were used by the Bureau as the basis of specific manual rates by application of classification differentials. The latter differentials were also obtained by the Bureau from the experience of the dominion as a whole.

It was also pointed out that if the territorial differentials outside Ontario, on the whole, produced aggregate calculated losses less than actual experience results, this deficiency would be required to be distributed over all the territories in the dominion and would naturally increase the level of all territorial differentials. For example, territorial differentials for one of the territories in Ontario, based on actual experience results, of say 1.08 might conceivably require a calculated differential of 1.08 to be increased to 1.15. Should the aggregate calculated losses for the territories be greater than actual experience results, the corrected territorial differentials for Ontario territories would be lower than those based on the actual experience of the territories in Ontario. The Bureau actuary claimed that in his opinion no sound rating system could be devised for the Dominion of Canada which did not take into account dominionwide experience in ascertaining rates to be charged in any territory within the dominion and that no reliable indications concerning decreasing or increasing loss-cost trends, which must be taken into account in the ordinary process of rate making could be obtained from the study of the experience of any one territory, or any one province alone.

#### 4. *Government Actuary's Reply to Bureau Objections.*

The government actuary would not agree to the contention of the Bureau insurers "that their rates should be tested by the result of the incomplete policy year of 1929 so far as it was known and by the experience of members only." He said such contentions were unsound; that the 1929 rates of the Bureau should be tested by reference to all the loss-cost experience available, i. e., that reported by all insurers in the province for the three years. Necessarily it afforded the most reliable standard of measurement. In support of this claim he urged that the problems which confronted a rate maker differed from the problems facing an investigator into the reasonableness of rates currently applied, only in degree; that both of necessity must deal with the experience record of the past because current experience was not available unless the investigation was made as of a period at least eighteen months after the close of the year in which the rates were being applied—a situation unprecedented in the field of practical affairs. The only difference he saw was one of advantage to the investigator over the rate maker in that the former frequently had at his disposal reliable past experience of a more recent date than that available to the latter.

The unusual circumstance that there was presently available for the purpose of inquiry the experience of the incomplete policy year 1929—a possibility not contemplated in February 1929, when the Commission was appointed nor in May 1929 when the insurers were ordered to compile their experience for the complete policy year 1927 and the incomplete policy year 1928—seemed to afford no justification for disregarding the reliable experience of the past (complete policy years 1927 and 1928). In view of these circumstances the government actuary thought it reasonable to give the current, i. e., 1929, experience the same weight as the past experience in the average of all the experience available, and to base conclusions on the loss-cost indications so developed.

#### *Bureau Experience Versus Combined Experience*

The fact that the Bureau in the past did not have available in its rate making procedure the experience of all insurers transacting the business, did not (in the government actuary's opinion) warrant discarding the experience of insurers which were not members of the Bureau in developing loss-cost indications of past

experience in Ontario in order to determine, as accurately as possible, the cost of insurance in Ontario for 1929. He took the view that the question "did the Bureau act reasonably in fixing the rates it did in the light of the information it had when the rates were fixed?" was irrelevant. The real question was "Were the 1929 rates of insurers, Bureau and Non-Bureau, in fact reasonable?"

An examination of the data of individual insurers satisfied the government actuary that the most reliable loss-cost indications could be developed from the combined experience of all insurers, without unfairly discriminating against any particular group of insurers, such as the members of the Bureau. This conclusion was reached because wide fluctuations in the loss-cost of individual insurers were apparent in the Bureau group as well as in the Non-Bureau group, and because, although the average loss-cost of the latter group appeared lower than that of the former group, it was likewise indicated that the loss-cost of the new Bureau insurers (the 31 which joined the Bureau in 1928) was substantially lower than that of the original insurers.

Further, almost all the Non-Bureau insurers were charging Bureau rates, or rates based directly (a percentage discount) on the Bureau rates, issuing the same forms of contract, and conducting business through the same kind of agency and office organization as the Bureau insurers. Membership in the Bureau, which was voluntary, was of a highly fluctuating character.

Only 63 of the 100 insurers which were members of the Bureau in March 1929, were members on January 1st, 1927. On April 1st, 1928, 31 insurers joined the Bureau and at least two of the Bureau insurers resigned from their membership during the inquiry. Under the circumstances the cost of insurance in Ontario could, and should, he claimed, be established by reference to the data of all insurers combined and he was of opinion that the cost so established did not discriminate unfairly against any particular group of insurers, such as the members of the Bureau.

#### *Alleged Deficiency in 1929 Premiums*

As to the deficiency in the 1929 rates alleged by the Bureau, the government actuary stated that he had no reason to doubt the results described if one allowed credibility to the indications

of the incomplete policy year 1929 only. Nevertheless he contended that the Commissioner was engaged in an inquiry into the reasonableness of the 1929 *rates fixed* by the Bureau and other licensed insurers and not endeavouring to determine the reasonableness of the *premiums charged* by insurers, either individually or as a group, or the extent of the profit or loss earned or suffered by such insurers.

He said there was evidence that the premiums charged by insurers (including members of the Bureau) in 1929 were lower than the premium rates fixed by the 1929 rate manual, but that the difference could be accounted for in a number of ways. For example, the 1929 rates were not effective until February 1st, 1929. The Bureau actuary referred to this consideration and admitted that it accounted for more than \$40,000 in the alleged total deficiency of \$255,209.

Other equally important factors, the effects of which were not so readily measured, such as rate cutting resulting directly from failure to charge the promulgated rates, or indirectly from experience rating plans (as applied in Ontario to fleets, for example) were claimed by the government actuary to be frequently present even in the best regulated lines of insurance business. Competitive conditions were usually such that practically every variation from the rate fixed (manual, experience, etc.) had a tendency to depress the earned premium level. He frankly admitted that, inasmuch as the premiums charged by Bureau insurers were in certain instances less than the premium rates (manual, experience, etc.) fixed by the Bureau, it was quite possible that there might exist a deficiency in the loss provision in the premiums charged at the same time an excess provision for losses in the manual rates was indicated.

However, the government actuary was of opinion that the figures presented by the Bureau could not be even taken as establishing a deficiency in the loss provision in the premiums charged, because exclusive reliance was placed upon the indications of the incomplete policy year 1929. He argued that the uncertainties inherent in the experience of an incomplete policy year had been fully explored and were in his opinion no more reliable for the purpose of determining the reasonableness of the loss provision in premiums charged in 1929 than they were for determining the reasonableness of the loss provision in the manual rates for 1929.

*Three-Point and Five-Point Coverage Discounts*

In reply to the contention of the Bureau that no account had been taken of the effect upon the loss-cost provision in the 1929 rates of the discount of 5 and 10 per cent. allowed on private passenger "comprehensive" policies, the government actuary said this point had been considered by him in the course of the preparation of his report and his decision had been not to take the discount into account for the following reasons:

The loss-cost indications for the complete policy years 1927 and 1928 did not include the experience of the insurers under the comprehensive forms of policy, because the data did not show the experience under such policies on a loss-cost basis. Accordingly, the Bureau actuary's criticism was only applicable to the loss-cost indications of the incomplete policy year 1929.

Concerning the experience of incomplete policy year 1929, he said the data filed with the Commission did not disclose significantly different loss-cost indications as between the public liability and property damage coverages written at the regular manual rate, and the same coverages written under the comprehensive form at the discounted rates. For this reason, inasmuch as it was the purpose of the government to establish the cost of insurance in the light of all available homogeneous material, he felt it had been proper to combine the experience under the ordinary forms of policy.

Concerning the reasonableness of comparing the loss-cost so determined with the loss provision in the undiscounted manual rates, he pointed out that the Bureau did not attempt to justify the discounts on the ground of any saving in loss-cost and was of opinion that the discounts could not be justified on that ground. Thus he concluded that although the 1929 rate manual made provision for the issue of three point and five point coverage policies at discounted rates, this fact did not need to be taken into account in the development of public liability and property damage loss-cost indications.

*Use of Countrywide Data*

In conclusion the government actuary saw nothing inconsistent or irreconcilable between the contention of the Bureau that, it had to make rates for all of Canada, and the position of the



government that it was not essential, however desirable it might be for certain limited purposes, to have regard to dominionwide data in order to develop loss-cost indications. He said the cost of insurance in Ontario could, and should, be based on the experience of insurers in Ontario alone. If the Bureau in the course of its dominionwide rate making, found it necessary and desirable to compare and combine Ontario's experience with experience elsewhere in Canada for certain purposes, e.g., in the private passenger collision coverage, where the loss-cost indications of Ontario data only are unreliable by reason of the limited character of the experience, no objection could be made.

Such calculations ought not, however, to displace reliable indications developed out of the Ontario experience only, e.g., in the case of the private passenger public liability and property damage coverages, where ample Ontario data was available to develop reliable average loss-cost indications. Thus the government actuary concluded that the fact that the cost of insurance might be higher or lower elsewhere in Canada ought not to be allowed to influence the Commissioner's determination of the cost of insurance in Ontario, or of the necessary provision for loss in the manual rates for the province of Ontario.

##### 5. *Expense Costs of Automobile Insurance*

The reasonableness of the expense loading in the 1929 manual rates was the subject matter of independent reports and statements submitted by the actuaries and other witnesses. In the original case presented by the Bureau at the opening of the investigation it was stated that their 1929 premium dollar for automobile insurance was made up of the following elements:

Loss-Cost (including allocated claim expense).....	.50	
Unallocated Claim Expense.....	.06	
Total Loss-Cost .....		.56
Acquisition Cost (including agency commissions and field supervision expenses).....	.30	
General Administrative Expense.....	.09	
Taxes .....	.025	
Underwriting Profit .....	.025	
Total Expense and Profit.....		.44
Total Premium .....		\$1.00

The government actuary offered a rearrangement of this allocation. He associated the item "unallocated claim expense" with

the other items of expense rather than with the loss cost item of .50, and realigned the items of expense as follows:

1. Acquisition Cost .....	.30	
2. General Administration .....	.09	
3. Unallocated Claim Expense.....	.06	
4. Taxes .....	<u>.025</u>	
Expense Loading .....		.475
Add for Underwriting Profit.....		.025
Add for Loss-Cost.....		<u>.500</u>
Total Premium		\$1.00

(a) *Government Actuary's Conclusion on Expense Loading*

In his report on expense loading the government actuary said that the contention of the Bureau in support of an expense loading of 47½ per cent. was based upon evidence given largely in an exhibit entitled "Statements Showing Estimated Underwriting Profit or Loss on Automobile Business (Bureau Companies) for the years 1923-1928 inclusive". He took exception to the construction of the Bureau exhibit with reference to expense cost and referred, for example, to the statement filed by the Bureau which showed commissions reported by member insurers as 26.40 per cent. of the earned premiums for the year 1928. He contended that the commission should have been calculated on the written premiums and not on the earned premiums, thereby reducing the percentage from 26.40 per cent. to 24.60 per cent. for that year.

The government actuary stated that no directly comparable figure was available from England but that the maximum agency commission in England was reported to be 15 per cent. in contrast to the Ontario local agents commission of 20 per cent. He also referred to the rules regarding acquisition and field supervision cost for casualty insurance in the United States pointing out "that the conference sets a maximum of 25 per cent. for acquisition cost".

In conclusion the government actuary stated that he was of opinion that the 1929 Bureau manual rates in Ontario should have been erected by loading the loss-cost by only 45 per cent. instead of by 50 per cent. of the premium rate; in other words, that 45 cents, instead of 50 cents, would have been an adequate provision in the premium dollar for expenses and contingencies or underwriting profit.

(b) *Bureau Reply to Government Actuary's Conclusions on Expense Loading.*

In reply the Bureau pointed out that there was disagreement as to the reasonable amount or rate to be allowed in only one item of the expense loading, viz., acquisition cost. It contended that 30 per cent. of the premium was reasonable and that even the government actuary had agreed that the charges which the 30 per cent. represented, had actually been disbursed. The Bureau further claimed that insofar as 1929 premium rates were concerned, it was necessary to provide in the premium rates an item for the expense of acquisition cost equal to the rate payable under the commission rules for the period in which the rates were to be applied. This rate was 30 per cent.

In conclusion the Bureau pointed out that if the allowance for acquisition cost had been set at 25 per cent. (as recommended by the government actuary) it would have been necessary to reduce the rate of remuneration payable to insurance agents for services rendered to the business.

6. *Final Report to Commission.*

The final report of the Ontario Commission which was dated December 20th, 1930, and is referred to at length in the November 1932 *Proceedings*, pages 45-54, contained an Appendix which showed the actual 1929 Bureau private passenger car manual premium rates (under investigation) in comparison with estimated premium rates calculated by adding to the necessary provision for losses, i. e., pure premiums, a 45 per cent. gross premium expense loading and also the premiums chargeable in each case.

The pure premiums used as indicating the necessary provision for losses were taken from the combined average experience of all insurers in Ontario calculated by giving, upon the instructions of the Commissioner, double weight to the 12 months' experience of incomplete policy year 1929 and single weight to each of the complete policy years 1928 and 1927. On this basis the amount of excess premiums for private passenger cars written by Bureau insurers in 1929 worked out at \$654,318.

Further particulars of the final report of the Commissioner, including comments upon the reaction of the insurance business thereto, may be found in Part I of this paper (1932 pp. 47-54).

B — RESEARCH WORK OF ONTARIO INSURANCE DEPARTMENT,  
1931-33

1. *Developments Subsequent to Termination of Commission.*

It was explained in Part I (page 55) how the 1930 amendment to the Ontario Insurance Act requiring all insurers to file with a statistical agency designated by the Superintendent punch card records of their automobile loss-cost experience in the province was recommended and enacted. It was designed to furnish the government with complete information by which to judge at any future time the reasonableness of automobile insurance premium rates in the province without incurring again the loss of time and needless expense which had characterized the investigation of the Royal Commission. The following is the full text of the amendment:

69a (1) Every licensed insurer which carries on in Ontario the business of automobile insurance shall prepare and file when required with the Superintendent, or with such statistical agency as he may designate, a record of its automobile insurance premiums, and of its loss and expense costs in Ontario, in such form and manner, and according to such system of classification, as he may approve.

(2) The Superintendent may require any agency so designated to compile the data so filed in such form as he may approve; and the expense of making such compilation shall be apportioned among the insurers whose data is compiled by such agency by the Superintendent, who shall certify in writing the amount due from each insurer and the same shall be payable by the insurer to such agency forthwith.

(3) The provisions of subsection 2, 3 and 5 of section 69 shall apply *mutatis mutandis* to the provisions of this section.

The automobile statistical plan which was approved for use pursuant to this amendment has been described in Part I (pp. 56-7). This Plan has been effective in Ontario since January 1st, 1931. It is also used by the Bureau insurers in the development of their dominionwide data. Recently it has been adopted by the provinces of Manitoba and Saskatchewan under legislation enacted in 1932 and 1933 comparable to the Ontario amendment of 1930.

Every effort is made to assure complete accuracy in the data developed by the Plan. Each insurer in reporting its experience monthly to the statistical agency is required to complete and forward a monthly report blank which is appended hereto as Appendix I. At the end of the calendar year all insurers are required to prepare and file with the statistical agency a statement reconciling the total of the cards furnished monthly for twelve months with the figures reported in the government annual statements.

This plan of reconciliation was adopted in order to insure accuracy in the reporting of all experience since previously it had been found that some of the insurers had failed to report all of their experience. In one case it was found that a whole year's business of an insurer's underwriting agency had not been reported.

The form of reconciliation statement is appended hereto as Appendix II. The outstanding losses are required to be reported to the statistical agency semi-annually, June 30th and December 31st in each year, in accordance with schedule "M" of the statistical plan which is also appended hereto as Appendix III. Inspectors of the insurance department and the statistical agency, acting under instructions from the casualty actuaries, visit the insurers' offices from time to time to check up on the work and give such instructions as may be necessary.

During 1931 and 1932 numerous changes were made in the statistical plan, although most of them were of a minor character. They consisted principally of code numbers for the new car models and additional coding instructions designed to amplify instructions already furnished.

One major amendment was made to the plan effective January 1st, 1932 providing for a segregation of losses "resulting from bodily injury to or the death of any person being carried in or upon or entering or getting on to or alighting from the automobile and/or of any allocated claim expense incidental thereto". This amendment was made because the standard automobile insurance contract excludes so-called "passenger hazard" claims unless coverage is expressly granted by endorsement for an additional stated premium. This standard policy form is, pursuant to Statute, mandatory in all the provinces of Canada excluding Quebec.

2. *Filing of Automobile Experience with Insurance Department*  
—January 1931.

Reference has been made in Part I (page 58) to the tabulation of the experience by the statistical agency covering the 24 months' experience of 1929 policy year and the 12 months' experience of incomplete policy year 1930 pursuant to the instructions of the Superintendent of Insurance given in March 1931. Similarly the tabulation of the experience covering the 24 months of complete policy year 1930 and the 12 months of incomplete policy year 1931 was directed in February 1932. About the same time a supplementary statement covering loss development subsequent to 24 months was required.

It has been the practice in Canada to consider 24 months of a policy year as a complete policy year. Accordingly the Ontario Department concluded to request a loss development (of a complete policy year) beyond the customary 24 months and the actuary for the statistical agency upon receiving instructions called for the necessary data and filed a statement showing a comparison of the 1929 policy year incurred losses valued as of December 31st, 1930, with the 1929 policy year incurred losses valued as of December 31st, 1931, i.e., 24 months as against 36 months. This statement showed that in the case of Bureau insurers the 36 months' valuation for Ontario was 100.5 per cent. of the 24 months' valuation. In the case of the Non-Bureau insurers, the 36 months' valuation was 97.8 per cent. of the 24 months' valuation. The experience of all insurers in Ontario (Bureau and Non-Bureau) combined showed that the 36 months' valuation of losses for policy year 1929 was 99.78 per cent. of the 24 months' valuation. This statement was accepted as confirming earlier tests that, in so far as Ontario was concerned, there was ample justification for accepting a 24 months' development of a policy year as complete. There are attached hereto as Appendix IV statements recently prepared by the statistical agency on the instructions of the Department showing the development of outstanding losses for policy years 1929 and 1930 as at December 31st, 1932.

In this connection it may be stated that at the time of the Royal Commission the government actuary found that there was little or no variation between 24 and 36 months in the loss development. It would seem that claims are settled and paid more promptly in Canada than in the United States.

What has been noticed particularly in Canada is a wide variance in the pure premiums of a 12 months' incomplete policy year compared with a complete year of 24 months. This condition was found to prevail for two successive years. Pure premiums for the 12 months of an incomplete year were found to be somewhat lower in the public liability and property damage coverages than the pure premiums for the 24 months of the same policy year. The reduction factors which were used to reduce the car years written to an earned basis for the twelve months incomplete year were thought to be at the root of the trouble. Perhaps the car years earned for the incomplete year on a twelve months' basis had been taken at too high a figure, thereby having the effect of reducing the pure premiums unduly. The Bureau actuary (who is also in charge of the statistical agency) made an exhaustive study of the situation. Inasmuch as the Bureau was required to make rates for its members throughout the Dominion of Canada, in addition to being the statistical agency designated by the Superintendent for the compilation of the automobile experience affecting all insurers in Ontario, he was anxious to arrive at a more accurate method for obtaining pure premiums from the data of an incomplete policy year. His study brought some unusual developments.

In June 1932 he urged that the Ontario Insurance Department should change its instructions respecting the tabulation of the experience of the incomplete policy year 1931, directed to be compiled on a twelve months' basis and permit it to be compiled on an eighteen months' basis. He proposed the tabulation of 1931 incomplete policy year as of June 30th, 1932 in lieu of a tabulation as at December 31st, 1931. After an investigation by the Department he was informed that the use of 18 months' experience of the incomplete policy year 1931 in substitution for the 12 months' experience could not be authorized by reason of the fact that there was not sufficiently reliable data with which to work. At the time the combined experience of the policy year 1930 alone was available on an 18 months' as well as a 24 months' basis, although the 18 months' experience for the policy year 1929 of Bureau insurers only was also available. He was accordingly advised by the Department that, while there appeared to be nothing inherently unsound in the development of a policy year experience at the end of 18 months the experience

of all insurers in the province for at least two policy years on this basis, was necessary, in order to justify its use, particularly when it was proposed to abandon the 12 months' development for the same policy year. Thereupon the Bureau actuary proceeded to prepare schedules which showed the results of the 18 months' experience of all insurers in Ontario contrasted with the 24 months for the 1929 policy year. The experience for 1930 on the 18 months' as well as the 24 months' basis had already been prepared. Thus two years experience was made available.

Upon investigation the Department found that with respect to policy years 1929 and 1930 the 18 months' development for each of the policy years contrasted with the 24 months' experience for each year proved to be far more accurate than the experience on the 12 months' basis. The principal reason for the experience on the 18 months' basis proving itself to be more accurate and reliable than the 12 months' basis (when compared with the complete year results) appeared to be that the percentage of outstanding losses to the total incurred losses was very greatly reduced. Moreover on the 18 months' basis the uncertainty of the reduction or development factors applied to the exposures was materially reduced since only 6 months of the policy year remained according to practice in Canada unearned.

In connection with this development it should be remembered that the compilation of experience on the 18 months' basis could not inconvenience the insurers, since individual punch cards are automatically filed monthly, 30 days after the current months transactions. The Bureau in its rate making had found it possible to have the last incomplete policy year results as of June 30th ready for the consideration of their rates committee by the end of October following.

One objection was voiced against the method of developing experience on the 18 months' basis. It was suggested that the losses had a seasonal variation and that, in consequence, the experience of the last 6 months might affect the results. A thorough examination of the experience available on the 18 months' basis furnished no evidence to support this objection.



3. *Department Analysis of Automobile Experience, Policy Years 1928-31 inclusive. (Private Passenger Cars.)*

The province of Ontario, by reason of the Royal Commission investigation and its statutory statistical plan, is the only jurisdiction on the continent where all the automobile insurance loss-cost experience covering all five coverages (P. L.; P. D.; Coll.; Fire and Theft) of all insurers stock and mutual (about 150) transacting business in the province has been uniformly compiled according to a mandatory statistical plan under government supervision for five complete policy years (1927-31 inclusive) and filed with the Superintendent of Insurance. Although premium rates are not fixed or otherwise directly controlled by the government the casualty actuary of the insurance department is not only responsible for the supervision of the work of compilation of this experience but he is also responsible for reporting to the Superintendent from time to time upon the cost of automobile insurance in the province as indicated by the experience. For these reasons a brief review of the loss-cost indications of the Ontario experience data for private passenger cars by coverage should be of more than ordinary interest to the Society.

(a) *Public Liability*

The complete policy year results of 1931 in Ontario again show an increase in the public liability average pure premiums. Policy year 1929 showed an increase of 17 per cent. over 1928. Policy year 1930 showed an increase of 3 per cent. over 1929 and complete policy year 1931 now shows an increase over 1930, slightly in excess of 6 per cent. The progressive increase in the average pure premiums for the four year policy year period is slightly in excess of 27 per cent.

The claim frequency for 1928 was 2.83 per cent. compared with 2.27 per cent. for the complete policy year 1931. The indicated average claim, however, rose from \$258 in 1928 to \$410 for the complete year 1931—an increase of 60 per cent. for the period. The percentage of losses incurred to premiums earned follows: policy years 1928, 68.98 per cent.; 1929, 58.10 per cent.; 1930, 58.77 per cent., and 1931, 68.37 per cent.

In connection with the last complete policy year 1931, the pure premiums indicated a remarkable difference between the experi-

ence of Bureau and Non-Bureau insurers. The Bureau insurers average pure premium was \$10.58, calculated on 98,963 earned exposures, whereas the Non-Bureau insurers average pure premium was \$7.69, calculated on 76,803 earned exposures. Both classes of insurers issued substantially the same forms of policy. The lower average pure premium experienced by the Non-Bureau insurers appears to be largely accounted for by a proportionately larger volume of profitable rural business. For example, the rural districts accounted for 49 per cent. of the total Non-Bureau exposures at an average pure premium in such rural districts of \$5.30, whereas the rural business accounted for only 34 per cent. of the total exposures reported by Bureau insurers, at an average pure premium of \$9.36.

#### (b) *Property Damage*

The property damage experience does not follow the indications of the public liability coverage. Here the most recent two-year trend is downward since 1929. Policy year 1929 showed an increase of 8 per cent. over 1928. Policy year 1930, however, showed a decline from 1929 of 11 per cent. and 1931 indicates a further decline of nearly 13 per cent. from 1930. The experience indicates that the property damage average pure premiums in Ontario for the complete policy year 1931 are more than 16 per cent. lower than in 1928.

The claim frequency in 1928 was 13.56 per cent. compared with 11.56 per cent. for the complete policy year 1931. The indicated average claim was \$38 for 1928, 1929 and 1930, and \$37 for the complete policy year 1931. The percentage of losses incurred to premiums earned follows: policy years 1928, 61.72 per cent.; 1929, 48.43 per cent.; 1930, 41.84 per cent., and 1931, 41.39 per cent.

The relative experience of Bureau and Non-Bureau insurers in 1931 by groups is less than in the public liability coverage. The Bureau insurers average pure premium for Ontario was \$4.52, calculated on 97,128 earned exposures and the Non-Bureau insurers average pure premium was \$4.03, calculated on 76,377 earned exposures. Here again, the lower average property damage pure premium experienced by the Non-Bureau insurers seems to be due largely to a proportionately higher volume of profitable

rural business. The rural districts accounted for 49 per cent. of the total Non-Bureau exposures at an average pure premium in such rural districts of \$2.98, whereas the rural business accounted for 34 per cent. of the total exposures reported by Bureau insurers, at an average pure premium in the rural districts of \$3.63.

This comparison in the public liability and property damage coverages which is referred to, arising out of the disparity in the loss-cost experience between Bureau and Non-Bureau insurers, raises again the question which the Commissioner had to decide for the purposes of his investigation in 1930: "ought the loss provision in manual premiums for Bureau and Non-Bureau insurers be judged on the loss-cost indications of the combined experience of all insurers or should the manual rates be erected by each of the two classes of insurers on their own class experience?"

So far as the writer's personal view is concerned, he believes that the decision of the Commissioner at this point was sound, that there have been no developments and no new evidence (within the last three years) to support a contrary view and that the reasonableness of the loss provision in automobile insurance premium rates in Ontario should be determined from the combined experience of all insurers.

#### (c) *Collision*

Due to the limited volume of exposure for this class of business (27,324 earned exposures in Ontario for complete policy year 1931) no definite conclusions can be arrived at. The average collision pure premium in 1928 was \$18.58 with an average claim frequency of 21.20 per cent. and an average claim cost of \$88. The comparable average figures for the complete policy year 1931 are: average pure premium \$14.02, average claim frequency of 11.91 per cent. and an average claim cost of \$118. The average collision loss ratios (percentage of losses incurred to premiums earned are) 1928, 56.64 per cent.; 1929, 51.24 per cent.; 1930, 45.61 per cent., and 1931 complete policy year 42.44 per cent.

#### (d) *Fire*

The experience covering fire and theft may be judged on a car year basis in Canada as the insurance for these coverages is not written according to a specific amount of insurance by age of car but on the "actual cash value at time of loss or damage basis".

For rating purposes, however, the statistical classifications are largely based upon car-list-price-new. A very limited amount of theft insurance is written on the \$50-Deductible plan.

Respecting fire insurance the indicated pure premiums by individual policy years are: 1928, \$2.20; 1929, \$2.75; 1930, \$2.66, and 1931, \$1.77 (the last complete policy year based on 172,588 earned exposures). The claim frequency follows: 1928, 1.64 per cent.; 1929, 1.86 per cent.; 1930, 1.87 per cent., and 1931, 1.70 per cent. The average claim cost is, 1928, \$134; 1929, \$148; 1930, \$143, and 1931, \$104. The average ratio of incurred losses to premiums earned is: 1928, 44.72 per cent.; 1929, 53.79 per cent.; 1930, 52.81 per cent., and 1931, 37.29 per cent.

Concerning the disparity in the experience for the last complete policy year 1931 between Bureau and Non-Bureau insurers for public liability and property damage, the automobile fire experience also indicates a slightly lower average pure premium in favour of the Non-Bureau insurers.

The 1931 policy year experience indicates an average fire pure premium for Bureau insurers of \$1.82 based on 92,763 earned exposures and the Non-Bureau experience indicates an average fire pure premium of \$1.71 based on 79,825 earned exposures. In this last experience referred to, the average fire pure premium in the rural districts was higher than in the cities. Bureau insurers' rural exposures accounted for 34 per cent. of the total Bureau reported experience at an average pure premium of \$2.79 in such rural districts compared with Non-Bureau insurers reporting 43 per cent. of their total business in the rural districts at an average pure premium for such rural business of \$2.07.

#### (e) *Theft*

A substantial improvement in the theft experience is noted in the returns recently received for the complete policy year 1931. The province-wide pure premiums for the last four complete policy years are: 1928, \$1.58; 1929, \$1.92; 1930, \$1.31, and 1931, 0.95 (the last year based upon 149,202 exposures earned). The average claim frequency for the same policy periods is: 1928, 3.02 per cent.; 1929, 2.99 per cent.; 1930, 3.02 per cent., and 1931, 3.03 per cent.

The reduction in the indicated pure premiums would appear to

arise from the reduction in the amount of average claim cost, since little variation is noted in the loss frequency over the four year period. The average claim cost for theft indicated for each of the four policy years is: 1928, \$52; 1929, \$64; 1930, \$43; and 1931, \$32.

Ratios of losses incurred to premiums earned for the theft coverage are: 1928, 33.37 per cent.; 1929, 42.34 per cent.; 1930, 29.48 per cent., and 1931, 25.26 per cent.

Concerning the last complete policy year 1931, the average province-wide theft pure premium for Bureau insurers was \$1.08 based upon 77,551 exposures earned and the Non-Bureau experience indicated an average theft pure premium of \$0.82 based upon 71,651 earned exposures.

#### 4. *Approximate Rate Changes Private Passenger Cars 1928-1933.*

Having referred at some length to the loss-cost experience for private passenger cars in Ontario for complete policy years 1928 to 1931 inclusive, a description of the premium rate changes between 1929 and 1933 will prove of interest. Inasmuch as the premium rates of Non-Bureau insurers are almost always lower than the comparable rates promulgated by the Bureau, and because experience indicates that increases or decreases in Bureau rates are followed by closely comparable changes in the rates of Non-Bureau insurers, it is necessary to describe only the rate changes promulgated by the Bureau. Space permits only description of rates applicable to private passenger cars.

On February 1st, 1929, the Bureau increased its premium rates for public liability coverage on private passenger cars by 50 per cent. This increase in rates, along with comparable sharp increases in rates for other coverages, provoked the Royal Commission investigation of 1929-30. After the Final Report of the Commission, on March 1931, the rates were reduced by a net average of approximately 7 per cent. On December 1st, 1932, an increase of 15 per cent. was promulgated in cities and towns, leaving basic rates unchanged in the rural districts, but the effect of this change was greatly modified by the introduction of the "no claims bonus" hereafter described.

Concerning property damage, the Bureau increased its premium rates February 1st, 1929, by 50 per cent. and reduced

them in March 1931, by a net average of approximately 10 per cent. In December 1932, the property damage rates were reduced 15 per cent. in the three highest-rated cities in the province and by 25 per cent. in the rural districts.

The rate changes in December 1932 were modified by a 10 per cent. discount called a "no claims bonus" applied to combined public liability and property damage coverages only based on the experience of the policyholder for a single year. Prior to December 1932, two of the Non-Bureau insurers had been granting so-called "merit rating" as high as 20 per cent. to careful drivers applied to public liability, property damage and collision coverages (not necessarily in combination). The discounts were 10, 15, and 20 per cent. based upon the duration of the policyholder's driving record.

On April 15th, 1933, the Bureau extended its "no claims bonus" to accident-free careful drivers up to 20 per cent. Careful drivers experience of one year, 10 per cent., two years, 15 per cent. and three years, 20 per cent. discount applicable only to the combined public liability and property damage coverages. The two Non-Bureau insurers previously referred to which started the merit rating plan in Canada have now announced merit rating to accident-free careful drivers as high as 25 per cent. discount which may be applied to the five coverages, viz. public liability, property damage, collision, fire and theft (not necessarily in combination). Further, a fire or theft claim does not affect the discount applicable say to the public liability and property damage coverages.

In February 1929, the Bureau increased its private passenger collision rates by 25 per cent. In March 1931, an average net reduction of approximately 6.50 per cent. was promulgated with a further reduction in December 1932 of 20 per cent. in the rural districts. On April 15th, 1933, the Bureau promulgated further reductions of 10 per cent. on the \$25 Deductible, 20 per cent. on the \$50 Deductible and 30 per cent. on the \$100 Deductible coverages, applicable to all the province of Ontario excluding only the very small business applicable to Northern Ontario. No change was made in the full coverage collision premiums.

Respecting fire and theft insurance on private passenger cars, at the time Bureau premium rates for public liability, property damage and collision coverages were increased in February 1929

(which resulted in the Royal Commission inquiry) the fire and theft rates were not disturbed. After the termination of the Commission at the end of 1930 the Bureau announced an average net reduction of approximately 3 per cent. in the fire rates and 13 per cent. in the theft rates. On December 1st, 1932, a further reduction of 20 per cent. was made by the Bureau applicable to the theft coverage provincewide excluding only Northern Ontario. On April 15th, 1933, further reductions were announced. The reduction applicable to these coverages was 15 per cent. provincewide excluding only Northern Ontario.

### 5. Current Bureau Rates.

The following schedule shows the average pure premiums underlying the Bureau premium rates for private passenger cars which became effective on April 15th, 1933. A second schedule shows average pure premiums indicated by the loss-cost experience of all insurers, Bureau and Non-Bureau, in the province for the last complete policy year 1931. Allowance has been made for the operation of the Experience rating plan applicable to fleets of cars and of the so-called "no claims bonus" in the development of the average pure premiums underlying the 1933 rates. The 1931 experience only is used for convenience and its use is not to be deemed to imply that in the writer's opinion the Bureau should base its rates on the experience of the last complete policy year only.

#### PURE PREMIUMS UNDERLYING 1933 BUREAU MANUAL RATES

Terr.	Public Liab.	Prop-erty Damage	COLLISION				Fire	Theft
			F. C.	\$25 Ded.	\$50 Ded.	\$100 Ded.		
A	\$ 9.15	\$4.91	\$56.28	\$26.33	\$16.66	\$ 8.66	\$2.19	\$1.58
B	7.15	4.48	40.56	15.81	11.54	7.56	2.19	1.29
C	5.79	4.35	40.56	17.57	14.42	10.80	2.62	1.90
D	5.40	4.11	32.45	12.65	9.23	6.05	2.19	1.29

#### PURE PREMIUMS INDICATED BY COMBINED EXPERIENCE ALL INSURERS POLICY YEAR 1931

Terr.	Public Liab.	Prop-erty Damage	COLLISION				Fire	Theft
			F. C.	\$25 Ded.	\$50 Ded.	\$100 Ded.		
A	\$10.88	\$5.01	\$35.73	\$17.42	\$10.25	\$ 6.16	\$0.97	\$1.10
B	10.65	4.79	38.89	15.13	12.92	6.46	1.65	1.14
C	5.99	9.79	77.33	34.56	19.88	5.91	7.91	1.01
D	7.22	3.28	45.36	15.90	11.16	6.42	2.41	0.65

Territory A includes the cities of Toronto, Hamilton and Windsor, and suburbs immediately adjacent thereto. B—consists of 18 smaller cities. C—covers a very limited volume of business in Northern Ontario and D—remainder of Ontario.

The foregoing description of the loss-cost indications of the last three policy years together with the Bureau premium rate changes since 1929, and the current Bureau rates, shows that maladjustments in rate as between coverages continues to exist and indicates that "competition" rather than "experience" is still the prime consideration in the formulation of the rating policies of the Bureau. The private passenger car accounts for more than 75 per cent. of the premium income of insurers and the public liability and property damage coverages combined represented in 1931, 65 per cent. of the total private passenger premiums. The loss provision in the current Bureau manual rates for these coverages combined is apparently inadequate. The indications of the collision experience continues to be unreliable. On the other hand the loss provision in the fire and theft rates is apparently excessive. Only time will tell how the rates work out in practice in terms of the underwriting accounts of insurers. Having regard to the fact, however, that approximately 45 per cent. of the business in the province is now estimated to be written by Non-Bureau insurers all of which are charging Bureau rates or rates lower than Bureau rates, it would seem that automobile insurance is being provided to private passenger motorists in this province at less than cost. Experience of individual insurers will, of course, vary considerably from the average.

#### 6. *Statistics of Motor Vehicles Department.*

There has been some attempt to explain the recent reductions in premium rates in the province by claiming that cars are not being driven as much or as many miles per annum as formerly, i.e., that the exposure per car is less than it was three or four years ago. The following figures have been furnished by the Department of Highways for Ontario relating to total motor vehicle registrations and gasoline consumption in the province for the period 1928 to 1932. These figures would appear to indicate that the reduced exposure is not so great as some people have estimated.



Year	Gas Consumption in Gallons (Imperial)	Per cent. Change from Previous Year	Total Motor Vehicle Registrations	Per Cent. Change from Prev. Year
1928	184,224,121		490,618	
1929	229,381,449	24.5 Inc.	545,110	11.1 Inc.
1930	244,801,895	6.7 Inc.	569,617	4.5 Inc.
1931	251,732,261	2.8 Inc.	572,212	0.5 Inc.
1932	238,517,497	5.2 Dec.	544,595	4.8 Dec.

### 7. Rating practice in Canada.

A word as to the present method of developing rates for collision, fire and theft insurance on private passenger cars.

The present rating system of the Bureau for private passenger cars insured against collision, fire and theft does not permit any individual make of car to get out of its class and secure a lower rate to which its experience may entitle it. It may be said that the arbitrary grouping of cars into price groups for rating purposes is a method used to obtain a degree of uniformity and, at the same time, a measure of credibility on the larger number of exposures as applied to this country. Nevertheless, if some reliable system of rating could be erected which would show to an automobile manufacturer that the premium rate charged is a direct indication of experience by make of car, that manufacturer would have some interest in improving his cars respecting the physical hazard. It is conceded that if pure premiums are developed by grouping cars into price groups the total individual group forming a part of such price group will vary considerably compared with the average of the total cars within the price group (considering that a price group may embrace ten or a dozen makes of cars).

It might be worth while to tabulate pure premium figures by make of car over a period of policy years in order to see just what changes do take place in such pure premiums from year to year to be compared with the pure premiums which would be developed from all the experience within the price groups. It must also be remembered that in Ontario all insurers, Bureau and Non-Bureau, report to the designated statistical agency monthly their individual punch cards for checking and periodic tabulation, pursuant to the Ontario Insurance Act, so that in order to develop experience by make of car this would be accomplished by suitable amendments to the statistical plan.

In connection with used cars, the Bureau practice or method

of rating would appear to be discriminatory in the insuring of private passenger cars against collision, fire and theft. For example, on a Plymouth or a Pontiac car, the rate manual shows a flat premium rate by territory for the various collision coverages and the same thing applies in the fire and theft coverages, without regard to the age of such cars.

The theory has been advanced that with respect to the fire coverage the hazard increases as the value from year to year decreases. To a certain degree this appears to be true but the theory cannot be applied to collision and theft. Granted that the brakes on a new car will be superior to those on an old one (which would affect the physical hazard respecting the collision coverage) it must not be overlooked that today, in many jurisdictions, brakes require to be tested periodically to meet a certain standard of efficiency. However, so far as collision insurance is concerned, it would be reasonable to assume that new cars predominate in the insurance experience.

#### 8. *Recent Developments in Department Regulation.*

On pages 54 and 55 of the November 1932 *Proceedings* a summary of the law appertaining to "Rates and Rating Bureaus" was given applicable to the province of Ontario as of June 1932.

On May 25th, 1932, a representative special Committee of Underwriters was appointed to review automobile insurance returns of premium rates and rules filed pursuant to the rate-filing section of the Insurance Act. A special blank form of return was prepared by the committee which was to be completed and filed by Non-Bureau insurers. Members of the Bureau were required to file an affidavit stating in effect that the rates and rules as filed by the Canadian Automobile Underwriters' Association were the rates of that particular member insurer. The filing of the Bureau was a complete one and the form of standard return which was prepared by the Committee of Underwriters for the Non-Bureau insurers followed largely the form of return which was filed by the Bureau.

The formation of this Committee came as a result of the suggestion of a group of prominent company executives. It was anticipated that such a measure would tend to stabilize the business even though the Insurance Department had no authority to pass upon the reasonableness of the rates charged or upon their

discriminatory character. All that insurers were required to do was to make a complete filing of automobile insurance premium rates and rules fixed, made or charged by them in Ontario, verified before the effective date and thereupon adhere to them. The Act required ten days' notice of any change in the schedules filed also verified before the effective date.

On April 6th, 1933, the Superintendent of Insurance advised all insurers that the requirement authorized to be imposed by the rate-filing section of the Act was formally withdrawn until further notice. The text of the Superintendent's memorandum is attached hereto as Appendix V.

It will be recalled that the Bureau in January 1931 voiced objection to the approval of premium rates by the Department (as recommended by Mr. Justice Hodgins in a memorandum which was presented to the Ontario government). Consequently the section dealing with the approval of automobile insurance premium rates was not brought into force. It is still a dormant section of the Insurance Act which, however, may be brought into force by Order-in-Council signed by the Lieutenant-Governor at any time.

In trying to administer the rate-filing section of the Act the Superintendent found it impractical to enforce the requirement with its related prohibition against deviations from filed rates, by reason of the fact that it involved the Department intervening between the insurer and the insured, after the preferential rates had been given. The Superintendent concluded that an impossible situation was thus created and could not be continued.

Nine days after the Superintendent revoked the filing of automobile insurance premium rates the Bureau announced premium rate reductions for the private passenger coverages, public liability, property damage, collision (except full coverage) fire and theft, effective April 15th, 1933.

Later, when prosperity returns, the problem confronting insurers will be to know just how to increase automobile insurance premium rates without running into a public demand for government control of rates. Until a majority of most influential executives in the business desire government control of rates, and so long as insurers provide insurance at cost or less than cost to the average citizen, there is not likely to exist any government control of rates in this province.



APPENDIX II  
Schedule L  
RECONCILIATION BLANK

.....19.....

Canadian Automobile Underwriters' Association,  
200 Bay Street, Toronto 2, Ontario.

Gentlemen:

Below please find a reconciliation of the figures reported to the Association and those included in the Annual Statement to the Government as Canadian business for calendar year 19.....

Premiums	Direct Business Including New- foundland	Reinsur- ance Ac- cepted In- cluding New- foundland	Total	Govern- ment Annual State- ment Ex- cluding New- foundland. Except Lines 6, 7, 17 & 18
(1) Gross Premiums Written .....	\$	\$	\$	\$
(2) Return Premiums .....				
(3) Gross Less Return (1) — (2) ..				
* (4) Net Premiums ceded in Re- insurance .....				
(5) Net Premiums (3) — (4) .....				
(6) Newfoundland Net Premiums Reported to the Association .....	X X X X X X	X X X X X X	X X X X X X	
(7) Total Net Premiums (5) + (6) ..				
<b>CLAIMS</b>				
(8) Gross Claims Paid .....				
(9) Salvage Received .....				
(10) Gross Less Salvage (8) — (9) ..				
(11) Net Claims Outstanding on De- cember 31st .....				
(12) Total (10) + (11) .....				
(13) Net Claims Outstanding on Jan- uary 1st .....				
(14) Gross Claims Incurred (12) — (13) .....				
(15) Reinsurance Recovered as Re- ported in Annual Statement .....				
(16) Net Claims Incurred (14) — (15) .....				
(17) Newfoundland Net Claims In- curred .....	X X X	X X X	X X X	
(18) Total Net Claims Incurred (16) + (17) .....				

\* Canadian Companies should state all Reinsurance; British and Foreign Companies only Licensed Reinsurance.

NOTE—(a) The reconciliation should be made for companies, members of the C. A. U. A., on the basis of Dominionwide figures. If, by arrange-

ment with the Association, a company reports only part of its Dominion-wide experience a separate reconciliation blank must be forwarded containing the business not reported to the Association.

(b) The reconciliation should be made for companies, not members of the C. A. U. A., on the basis of the Province of Ontario figures only.

If, by arrangement with the Association, a company, not a member of the C. A. U. A., who belongs to any one of the Western Associations, reports the experience for any other provinces in Canada than Ontario the business in these provinces should be included in the reconciliation and a separate reconciliation blank be made up for the provinces not included in the report to the Association.

This reconciliation blank duly completed should be filed with the Association not later than March 5th.

Company Number.....

Company Name.....

.....  
*Signature for Company*

## APPENDIX No. III

*Schedule M*

## REPORT OF ESTIMATED AMOUNT OF CLAIMS OUTSTANDING AT

.....19.....

In accordance with the provisions contained in the 1931 Automobile Statistical Plan all outstanding losses on business reported to the C. A. U. A. either by statutory provision, 69(a) of the Ontario Insurance Act, or by voluntary agreement, must be reported semi-annually.

The present circular shall be considered as the official request for a report of all losses reportable under the Plan and outstanding at....., 19.....

The report should, if possible, be made by way of individual standard punch cards prepared in accordance with the instructions contained in the Plan.

Estimates for allocated claim adjustments should be included with the estimates for outstanding claims.

If it is impossible for you to report on punch cards, the outstanding claims should be listed on report forms, facsimile of which is to be found in Schedule M of the Statistical Plan. A supply of these forms will be sent upon request.

The total amount represented by the cards or forms should be given on a separate form, facsimile of which is contained in Schedule M of the Plan.

The complete report should be furnished not later than....., 19.....

## OUTSTANDING LOSSES

## REPORT OF TOTAL AMOUNT

.....19.....

The Canadian Automobile Underwriters' Association,  
200 Bay Street, Toronto 2, Ontario.

Gentlemen:

We are forwarding { enclosed  
under separate cover } automobile statistical report-  
by express  
ing (cards) (forms) representing outstanding claims at.....,  
19..... in the amount of \$.....

The above figure has been arrived at by summation of the amounts on the (cards) (forms) accompanying this statement, and represents the total amount of outstanding losses at.....19..... on direct business reported to you.

Company Code Number.....

Company Name .....

.....  
*Signature for Company*

NOTE—Companies having no claims outstanding at....., 19..... should return this form marked "Nil".

## APPENDIX IV

STATEMENT AS OF DECEMBER 31, 1932

DEVELOPMENT OF OUTSTANDING LOSSES 1929 POLICY YEAR

BUREAU AND NON-BUREAU COMPANIES COMBINED

PROVINCE OF ONTARIO

AMOUNT OF LOSSES

<i>Private Passenger Cars Individually Rated</i>							
Coverage	(1) Paid During 1929 & 30	(2) Out- standing 31/12/30	(3) Incurred 1929 & 30	(4) Paid During 1931 & 32	(5) Out- standing 31/12/32	(6) Incurred 1929, 30, 31 & 32	% 6 ÷ 3
Pub. Liab.....	705,655	145,129	850,784	133,502	14,470	853,627	100.3
Prop. Dam.....	496,035	33,218	529,253	22,047	88	518,170	97.9
Collision.....	408,497	9,355	417,852	8,528	71	417,096	99.8
Fire.....	344,917	4,375	349,292	3,378	..	348,295	99.7
Theft.....	202,034	4,729	206,763	268	..	202,302	97.8
Total.....	2,157,138	196,806	2,353,944	167,723	14,629	2,339,490	99.4

<i>Commercial Cars Individually Rated</i>							
Coverage	(1) Paid During 1929 & 30	(2) Out- standing 31/12/30	(3) Incurred 1929 & 30	(4) Paid During 1931 & 32	(5) Out- standing 31/12/32	(6) Incurred 1929, 30, 31 & 32	% 6 ÷ 3
Pub. Liab.....	104,631	15,585	120,216	7,446	..	112,077	93.2
Prop. Dam.....	123,960	6,066	130,026	6,304	..	130,264	100.2
Collision.....	47,320	1,001	48,321	1,245	396	48,961	101.3
Fire.....	77,379	2,470	79,849	— 26	..	77,353	96.9
Theft.....	11,685	275	11,960	245	..	11,930	99.7
Total.....	364,975	25,397	390,372	15,214	396	380,585	97.5

<i>Fleets — Private Passenger, Commercial and Public Combined</i>							
Coverage	(1) Paid During 1929 & 30	(2) Out- standing 31/12/30	(3) Incurred 1929 & 30	(4) Paid During 1931 & 32	(5) Out- standing 31/12/32	(6) Incurred 1929, 30, 31 & 32	% 6 ÷ 3
Pub. Liab.....	199,039	75,898	274,937	79,544	7,269	285,852	104.0
Prop. Dam.....	214,319	19,993	234,312	17,294	1,163	232,776	99.3
Collision.....	118,683	3,086	121,769	395	25	119,103	97.8
Fire.....	77,189	1,025	78,214	639	..	77,828	99.5
Theft.....	35,665	214	35,879	126	..	35,791	99.8
Total.....	644,895	100,216	745,111	97,998	8,457	751,350	100.8

<i>Public Automobiles Individually Rated</i>							
Coverage	(1) Paid During 1929 & 30	(2) Out- standing 31/12/30	(3) Incurred 1929 & 30	(4) Paid During 1931 & 32	(5) Out- standing 31/12/32	(6) Incurred 1929, 30, 31 & 32	% 6 ÷ 3
All Coverages.	48,961	1,770	50,731	1,521	..	50,482	99.5

<i>Garages, Automobile Dealers and Manufacturers</i>							
Coverage	(1) Paid During 1929 & 30	(2) Out- standing 31/12/30	(3) Incurred 1929 & 30	(4) Paid During 1931 & 32	(5) Out- standing 31/12/32	(6) Incurred 1929, 30, 31 & 32	% 6 ÷ 3
All Coverages.	80,313	4,365	84,678	15,218	..	95,531	112.8
GRAND TOTAL.	3,296,282	328,554	3,624,836	297,674	23,482	3,617,438	99.8



## APPENDIX IV-A

STATEMENT AS OF DECEMBER 31, 1932

DEVELOPMENT OF OUTSTANDING LOSSES 1930 POLICY YEAR

BUREAU AND NON-BUREAU COMPANIES COMBINED

PROVINCE OF ONTARIO

AMOUNT OF LOSSES

<i>Private Passenger Cars Individually Rated</i>							
Coverage	(1) Paid During 1930 & 31	(2) Out- standing 31/12/31	(3) Incurred 1930 & 31	(4) Paid During 1932	(5) Out- standing 31/12/32	(6) Incurred 1930 31 & 32	% 6 ÷ 3
Pub. Liab.....	1,074,103	220,100	1,294,203	205,766	30,286	1,310,155	101.2
Prop. Dam.....	673,238	38,577	711,815	28,883	2,885	705,006	99.0
Collision.....	426,956	8,093	435,049	2,132	550	429,638	98.8
Fire.....	413,719	2,060	415,779	2,812	200	416,731	100.2
Theft.....	172,180	3,540	175,720	2,564	321	175,065	99.6
Total.....	2,760,196	272,370	3,032,566	242,157	34,242	3,036,595	100.1
<i>Commercial Cars Individually Rated</i>							
Pub. Liab.....	119,426	59,895	179,321	48,916	10,150	178,492	99.5
Prop. Dam.....	163,771	5,307	169,078	7,264	525	171,560	101.5
Collision.....	48,644	399	49,043	1,054	12	47,602	97.1
Fire.....	89,040	1,058	90,098	558	..	89,598	99.4
Theft.....	9,276	33	9,309	30	..	9,306	100.0
Total.....	430,157	66,692	496,849	55,714	10,687	496,558	99.9
<i>Fleets—Private Passenger, Commercial and Public Combined</i>							
Pub. Liab.....	229,051	61,852	290,903	60,410	10,000	299,461	102.9
Prop. Dam.....	216,749	8,854	225,603	5,265	1,700	223,714	99.2
Collision.....	90,391	1,548	91,939	1,405	800	92,596	100.7
Fire.....	61,767	426	62,193	2,707	..	64,474	103.7
Theft.....	10,893	437	11,330	31	..	10,924	96.4
Total.....	608,851	73,117	681,968	69,818	12,500	691,169	101.3
<i>Public Automobiles Individually Rated</i>							
All Coverages.	42,022	2,255	44,277	8,652	..	50,674	114.4
<i>Garages, Automobile Dealers and Manufacturers</i>							
All Coverages.	119,708	3,929	123,637	5,521	..	125,229	101.3
GRAND TOTAL.	3,960,934	418,363	4,379,297	381,862	57,429	4,400,225	100.5

## APPENDIX V

## ONTARIO

## DEPARTMENT OF INSURANCE

C.L.15/1933

April 6th, 1933.

*Memorandum*

To: All insurers licensed to transact automobile insurance in Ontario.  
 From: The Superintendent of Insurance.

Re — Section 273—filing of automobile  
 insurance premium rates.

Section 273 of The Insurance Act, which has been on the statute books since 1924, empowers the Superintendent to require a return of rates fixed, made or charged by rating bureaus and licensed insurers "in such form and at such times as he may require" and pursuant thereto, under date May 6th, 1932, you were required to file a complete new return showing your automobile insurance premium rates and to complete an affidavit wherein you undertook to file particulars of changes therein from time to time. Sections 274, 275 and 275a of the Act respecting unfair discrimination in rates and empowering the Superintendent to order an adjustment in rates "whenever it is found by him that any such rates are excessive, inadequate, unfairly discriminatory or otherwise unreasonable", are not and have not been in force since April 2nd, 1931.

The next preceding occasion when you were requested to make a return of rates to the Department was in February, 1929, and was made to obtain information for the purposes of the Hodgins Inquiry Commission. It was permitted to lapse in April, 1931, upon the termination of the Inquiry. The requirement was only revived last May because a group of prominent company executives assured the Department it would assist to stabilize the business in the province. In other words, the initiative for the requirement imposed eleven months ago came from within the business and not from the Department.

Unfortunately experience since last May has again demonstrated that it is not practical to enforce the requirement and its related prohibition against deviations from filed rates, by reason of the fact that it involves the Department intervening between the insurance company and its policyholder, with the result that a low-premium policy may be cancelled and the policyholder required to pay a premium higher than that offered or charged by the company. This conclusion is in accordance with the experience in Ontario (1924-26) and other jurisdictions and with the views expressed by the late Hon. Mr. Justice Hodgins in his report on this subject (see Interim Report, page 25). So long as the general cost of automobile insurance in the province is not excessive (and complete data as to this is and will continue to be available to the Department under section 69a of the Act). Department intervention so limited would appear to be unwarranted and unnecessary in the public interest.

It would therefore appear that under prevailing conditions in the automobile insurance business in the province no pressing necessity or substantial demand for a continuance of the requirement exists. You are, accordingly hereby notified that the requirement authorized to be imposed by section 273 with respect to the filing of automobile insurance premium rates is formally withdrawn until further notice. In so doing, grateful acknowledgment is made of the helpful co-operation extended by the Committee of Underwriters which has been working with the Department during the past year reviewing the returns filed with the Department and endeavouring to find a way in which the Act could be usefully enforced.

Signed "R. LEIGHTON FOSTER,"  
 Superintendent.